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**TABLE OF CONTENTS**

**ARTICLES**

**Symposium on Deirdre Nansen McCloskey's**  
***Bourgeois equality: how ideas, not capital or institutions,***  
***enriched the world***

The open society as a rule-based order  
**GERALD GAUS**

[pp. 1-13]

Either / Or—why ideas, science, imperialism, and  
institutions *all* matter in the “rise of the west”  
**JACK A. GOLDSTONE**

[pp. 14-24]

A place at the table:  
low wage workers and the bourgeois deal  
**JENNIFER BAKER**

[pp. 25-36]

Dialectical libertarianism: the unintended consequences  
of both ethics and incentives underlie mutual prosperity  
**S. M. AMADAE**

[pp. 37-52]

The bourgeoisie and the scholar  
**JOEL MOKYR**

[pp. 53-65]

Not saving or psychology, or science, but a new liberalism:  
a reply to Gaus, Goldstone, Baker, Amadae, and Mokyr  
**DEIRDRE NANSEN MCCLOSKEY**

[pp. 66-89]

**Original articles**

Axiomatic and ecological rationality:  
choosing costs and benefits  
**PATRICIA RICH**

[pp. 90-122]

Hayek’s “Scientism” essay: the social aspects of  
objectivity and the mind  
**DIOGO LOURENÇO**

[pp. 123-144]

The mismeasure of *Capital*: a response to McCloskey  
**STEVEN PRESSMAN**

[pp. 145-166]

## SPECIAL CONTRIBUTIONS

Reflections on the 2016 Nobel Memorial Prize  
for contract theory (Oliver Hart and Bengt Holmström)  
*NICOLAI J. FOSS AND PETER G. KLEIN* [pp. 167-180]

Justice, markets, and the family:  
an interview with *SERENA OLSARETTI* [pp. 181-195]

## BOOK REVIEWS

Paul Anand's *Happiness explained*  
*TIM E. TAYLOR* [pp. 196-202]

Jason Brennan and Peter M. Jaworski's  
*Markets without limits: moral virtues and  
commercial interests*  
*J. ALDEN STOUT AND AMY CAROTHERS* [pp. 203-207]

Fred Feldman's *Distributive justice:  
getting what we deserve from our country*  
*TEUN J. DEKKER* [pp. 208-212]

## PHD THESIS SUMMARIES

Keynes, Keynesian economics and the political  
economy of power of the postwar world  
*DANIELLE C. GUIZZO ARCHELA* [pp. 213-214]

The language of Max Weber. A sociological enquiry  
*ACHIM SEIFFARTH* [pp. 215-216]

An incrementalist approach to political philosophy.  
The case of heterogeneous rationality assumptions  
in theories of distributive justice  
*ALEXANDRU VOLACU* [pp. 217-220]

# The open society as a rule-based order

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## 1.

My doctoral supervisor, John W. Chapman, spent his career analyzing why Western Europe developed an open, prosperous, dynamic society. In one way or another every seminar was about that, with our readings ranging over cultural history, economic history, sociology, social psychology, psychology and, yes, even philosophy. “What happened in the West?”, he would inquire again and again, seeing parts of the truth in the diverse writings of Douglas North, Clifford Geertz, Zevedei Barbu, Jean Beachler and Fernand Braudel, to name just a very few. In the end, he was never able to weave all the strands into a narrative that, in his judgment, did justice to the problem (or perhaps he glimpsed that it would take over 2000 pages to do so). Deirdre Nansen McCloskey’s three-volume work, culminating in *Bourgeois equality*, is in my view the most compelling grand narrative answering Chapman’s query to date. I am entirely convinced on critical points: that the astonishing betterment since (roughly) 1800 is fundamentally a product of the market-tested innovations of the open society, and of the absolutely critical role of moral and ethical notions of bourgeois dignity and equality. On these and many other matters, I have learned immensely from McCloskey’s great work, for which I am deeply grateful.

To criticize this polymath’s sweeping, learned treatise would seem churlish—and foolish, for there doubtlessly are piles of records and works that show the folly of disputing its claims. Yet, despite McCloskey’s attractive grand synthesis, I remain unconvinced about some important matters. The heart of my worries concern a puzzle posed by McCloskey’s narrative, the puzzle of the place of virtue in a diverse and open society. “From about 500 BCE to about 1790 CE”, McCloskey writes, “the ethical universe was described in Europe as composed of the seven principal virtues, resulting by recombination in

hundreds of minor and particular virtues” (p. 188).<sup>1</sup> And, she continues, “Ethical philosophy since the sudden decline of virtue ethics in the late eighteenth century has focused [...] [on] how we treat other people”, which concerns only part of virtue (p. 190). McCloskey realizes, I think, the importance of rule-based morality for the open society, quoting Milton Friedman on the importance of “conforming to the basic rules of society, both those embodied in law and ethical custom” (p. 231). Still, conformity with the rules of society is distinct from virtue. The puzzle I wish to address, then, is manifest: the liftoff of the Great Enrichment coincided with the rise of other-concerned rule-based ethics, yet at the core of McCloskey’s narrative is the importance of virtue and character, which faded in ethical philosophy just as the Great Enrichment really got going. Perhaps this simply demonstrates how confused philosophical reflection is—abandoning virtue as a core concept in morality just as it was about to change the world. Perhaps just as the owl of Minerva took off, philosophy focused on the poor pigeon of rules of justice. I think not. Certainly a rule-based morality—a social morality based on rules, or social norms, shared by the group to which all expect that others will conform—does not itself make for a prosperous, dynamic, open society.<sup>2</sup> But I am convinced that we cannot have one without it, and such a morality is more important than a socially recognized set of virtues—which we simply do not have in the diverse societies that spurred the Great Enrichment. I do not claim that McCloskey entirely overlooks the rules of social morality but I believe that because the main foil of *Bourgeois equality* is the institutionalist explanations of Douglas North and his coworkers, she tends to underappreciate the place of moral and social rules in the grounding of an open society.

## 2.

**2.1.** Two well-known lines of reasoning have driven most political philosophers and social scientists away from the stress on virtue that characterizes McCloskey’s narrative. Virtue ethics is typically about

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<sup>1</sup> Unless otherwise indicated, all page references in the text refer to McCloskey (2016).

<sup>2</sup> I shall not distinguish what I shall call ‘social-moral rules’ and ‘social norms’ though McCloskey does: “Norms are ethical persuasions, bendable, arguable, interpretable. Rules are, well, rules, such as that bribes are illegal in Delhi, or that jaywalking is illegal in Evanston” (p. 113). I believe social norms are typically rather more specific than this would suggest, but nothing turns here on this point. On the nature of social morality, see Gaus (2011, chap. 1 and 3).

people's character—whether a person is courageous, temperate or just, yet there is strong reason to doubt whether character traits are powerful explanations of what people actually do. Drawing on the work of Lee Ross, Richard Nisbett (1980) and others, fifteen years ago Gilbert Harman (1999, 2000) caused something of a furor among virtue theorists by presenting well-known research showing that character traits are poor predictors of action. More generally, there is a large body of evidence that attitudes—what people approve of—are weak predictors of their behavior (Bicchieri forthcoming). Cristina Bicchieri draws our attention to a UNICEF study on violence toward children, which reported both high rates of caregiver disapproval of punishment (negative attitudes toward it) *and* of high rates of punishing behavior (Bicchieri forthcoming). Similar findings have been reported concerning prison guards (Bicchieri 2006, 180). And, as Bicchieri reports, in some African countries there appears to be a similar pattern concerning female genital cutting—high disapproval rates combined with high participation rates (Bicchieri forthcoming). It is important to stress the issue here is not economistic self-interest versus virtue, but social versus individual factors in explaining action (cf., p. 339). If our concern is the emergence of an open society based on mutual respect of each other's liberty and equality—not a concern simply with what is admirable, but what people *do*—there is strong reason to question the explanatory power of character traits and attitudes. As will become clear, I believe that attitudes and virtues do figure into an adequate account of the emergence of the free, liberal, open society, but they do so in a rather circuitous way, to a great extent through the rule-governance of social morality.

**2.2.** The second line of reasoning that has led many to doubt a strong tie between any virtue ethic and the grounding of a modern, diverse moral order is the very heterogeneity of the open society. Following the great nineteenth century moral philosopher Henry Sidgwick (1962, 105-106), Charles Larmore contrasts the modern conception of ethics—founded on the notion of the right—with the view of the ancients, according to which the good is the foundation of ethics:

If the notion of right is replaced by that of good at the foundations of ethics [. . .] then the moral ideal will no longer be imperative, but rather attractive. His [i.e., Sidgwick's] point was that ethical value may be defined either as what is binding or obligatory upon an

agent, whatever may be his wants or desires, or as what an agent would in fact want if he were sufficiently informed about what he desires. In the first view, the notion of right is fundamental, in the second, the notion of good (Larmore 1996, 20).

As Sidgwick saw it,

[A]ccording to the Aristotelian view—which is that of Greek philosophy generally, and has been widely taken in later times—the primary subject of ethical investigation is all that is included under the notion of what is good for man or desirable for man; all that is reasonably chosen or sought by him, not as a means to some ulterior end, but for itself [...] (1925, 2).

Ancient ethics was teleological, a science of ends and virtue; it concerned what a person properly desires or what a proper, virtuous, person desires, or finds attractive. In contrast, modern ethics concerns what we *must* do—what we are required to do even if we are not attracted to it. The crux of modern “other-regarding” ethics is that it forms the basis of a demand that another, who is often a stranger to me, must act, or refrain from acting, in a certain way whether or not she wishes to, or is attracted by that way of acting. Does she ascribe to bourgeois virtue? I don’t know. Must she act in the required way? Certainly.

The very nature of the open society is that one must deal with strangers, who cherish very different ideals, and whose character traits are largely unknown. Those engaged in a cooperative system must know what counts as cooperation—what responses are expected, what constitutes fair dealing, disclosure, prompt payment, and so on. Although sometimes this can be left to individual negotiation, large-scale cooperation requires knowledge of the moral rules of the game when we confront total strangers. In most cases we know little about these strangers—in particular, their conception of virtue and how well they live up to what they consider virtuous—yet we need to rely on them. How can that happen?

### 3.

It might seem that this line of reasoning leads us to embrace McCloskey’s *bête noire*—“Mr. Max U,” the economic “sociopath” who acts simply to maximize his own utility, with “utility” being understood in terms of self-interest (chap. 21, p. 186). If we are not chiefly moved by

virtue and character, are we then committed to simple self-interest? If we are, it would seem that social cooperation must depend on the development of institutions that channel self-interested behavior in productive ways. While such institutions are rather more important than McCloskey is willing to acknowledge given her apparent antipathy to North's institutionalism, it nevertheless is true that what economists mean by 'institutions' is but one conception (p. 113). In the last fifteen years a large body of evidence has accumulated that the actions of humans are critically sensitive to the normative expectations of others: we care about what others think we ought to do (Bicchieri and Chavez 2010).<sup>3</sup> On Bicchieri's influential, empirically-supported analysis, a person often prefers to follow a social rule  $r$  because he has a first-order belief that enough others<sup>4</sup> in his social network follow  $r$  *and* he has a second-order belief<sup>5</sup> according to which he believes that enough others in the network believe that he ought to follow  $r$ —neither of these imply that he thinks  $r$  is a good, efficient or fair rule. Thus one can follow a social rule of which one does not approve. For a social rule to exist most people have to (i) believe that most others will act on it and (ii) believe that most *others* believe that it ought to be followed. However, (i) and (ii) do not imply (iii) that any specific person actually believes  $r$  is a rule that he ought to follow in the sense that it conforms to his own convictions about virtue or his own personal moral attitudes. A social rule requires that most hold second-order beliefs about what they think others believe they ought to do, but it does not require that all uphold the conception of virtues, or the moral attitudes, expressed by the rule (this accounts for many of the results sketched in section 2).

This, I would conjecture, is an important reason why egalitarian social-moral rules took root so quickly in Western Europe: their emergence did not require that everyone, or even most, embraced the bourgeois virtues or internalized a commitment to bourgeois equality (p. 352). Indeed, no doubt very many did not. It is because we are such deeply social normative creatures, in the sense that we are so attuned to the normative expectations of others, that we can achieve a stable rule-based system of cooperation even when many are not enthusiastic about

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<sup>3</sup> We are also moved—apparently even more strongly—by what we expect others will actually do. See Bicchieri and Xiao (2008).

<sup>4</sup> What constitutes “enough” others will vary from person to person. Bicchieri (2006, 52–54) models each person as having a threshold value that determines when “enough others” are acting on the norm and have the appropriate normative expectations.

<sup>5</sup> That is, a belief about what others believe.



the moral attitudes and virtues that the rules express. And, as I have said, this can be a great thing in an open society, where we are always encountering new people with new perspectives, many of whom do not share our deep commitments to the bourgeois virtues. What is important is that people generally share beliefs about what others normatively expect of them, and they accept these normative expectations as legitimate.

Thus the critical importance of moral indignation and responsibility—something that McCloskey appreciates (pp. 125, 136, and 167); the latter of which, she informs us, is an eighteenth century innovation (p. 375), so perhaps a critical innovation preparing for the Great Enrichment. When no one holds others responsible for rule conformity cooperative social life is greatly impaired (p. 137). Yet, holding others responsible requires shared normative expectations. There is no sense in me seeking to hold you responsible for breaking a rule when you did not know you were expected to conform, as it is counterproductive to experience moral indignation and outrage at actions that others do not think are prohibited. To be sure, rules are often enforced by punishment, and it is easy to think of indignation simply as punishment. One of the things that we have learned from the work of Ernst Fehr and others is just how important punishment is to maintaining social cooperation (see Gaus 2011, 103-122). Yet we also know that when punishment fails to correspond to what people believe are legitimate normative expectations, punishment easily turns into “anti-social” counter-punishment. As Samuel Bowles and Herbert Gintis (2011, 26) stress, effective punishment depends on legitimacy: unless those to be punished and their friends and allies are convinced that the rule being enforced is legitimate, a punishing action taken as a means to protect social cooperation can lead to weakening it. Experimental evidence (e.g., Hopfensitz and Reuben 2009) confirms that attempts at punishment readily evoke counter-punishment when the offender does not experience guilt, which is associated with moral norm violation.

Again, then, we confront the importance of what people consider the legitimate normative expectations of them. We are not talking about “Mr. Max U,” who only obeys the rules of society because it is prudent to do so (perhaps because he will be punished if caught). To be sure, there are always some such people, and any effective system of rules must cope with them, but they are generally at the periphery. But we should not jump to the opposite conclusion that most of those who obey social

rules do so because the rules express their favored moral attitudes and conception of virtues; a critical explanatory variable for many people is their responsiveness to the normative expectations of those with whom they share a social life. I believe that it is, in general, false that everyday moral action requires virtues such as temperance or courage (p. 197), or even the “middling” virtues, except in so far as one must be sensitive to the legitimate expectations of others.

#### 4.

Most, I think, seem essentially driven by what they expect others will do, and what they believe are the legitimate normative expectations of others. There are others—whom Bicchieri calls “trendsetters”—who are much more apt to act on their own moral attitudes and convictions (Bicchieri forthcoming; Bicchieri 2006, 201-205; Gaus 2011, 441-443). Trendsetting individuals are much more likely to act on their own conception of virtue and their own moral attitudes, and seek to shape the social rules of their society to conform to them. They are less sensitive to the normative expectations of others and more devoted to their own moral attitudes. In my view *Bourgeois equality* should be read as being about these individuals—how *these* trendsetters shaped the social rules of northwestern Europe, pushing the rest toward the rule-based “institutionalization” of equal dignity and liberty. It is important that on Bicchieri’s account trendsetters are not usually the highest status people (the governing elite, the clerisy) who are at the core of their social networks, but those closer to the periphery, such as the industrious and innovative bourgeois about whom McCloskey tells us so much.

It is fundamental that these trendsetters did not need to convert anything near everyone to their conception of virtue or induce them to share their personal moral attitudes: the critical point is that they were able to shape the social rules that generated normative expectations supporting equal dignity, liberty, markets and innovation, and that these normative expectations were widely accepted as legitimate. For some, this legitimacy might indeed be driven by the sort of self-interest economists are wont to stress (the rules did indeed have beneficial consequences for many). And for many others sheer conformity may be the most important factor—we should never underestimate just how important conformity is to any culture. Rhetoric and attitude change certainly figure into norm change (p. 509), but other factors can be

critical: for example the changes in norms relating to sexual behavior appear to have been a complicated mix of attitude change and cohort replacement (Scott 1998).

To be sure, as McCloskey so carefully demonstrates, the rhetoric in support of bourgeois virtue and equality thrived in much of the eighteenth and nineteenth centuries (earlier in Holland), and much of this was devoted to inculcating bourgeois attitudes and character. But this does not mean that the success of this rhetorical project required near-universal conversion (which, as we know, never happened) but rather the reconstructing of the “institutions”—the social rules that provide the moral framework for cooperation—that aligned with bourgeois attitudes and character (which, to a large extent, did happen). This fundamentally important point, I think, is sometimes obscured by McCloskey’s ongoing battle with self-interest based institutional analysis, which tends to take other forms of rule-based frameworks off the analytical table.

## 5.

“To employ an old-fashioned but still useful vocabulary, devised in 1861 by Henry Maine,” McCloskey writes, “the northwest of Europe, and Britain in particular, changed from a society of status to a society of contract, at any rate in its theory about itself” (p. 423). The idea of a society based on contract was central to the social contract theories of the sixteenth (Hobbes), seventeenth (Locke), and eighteenth centuries (Kant and Rousseau)—an idea that McCloskey does not adore (a “stream of narrow ethics paired with grand political theory”, [p. 185]). Unfortunately, like so many, McCloskey succumbs to a cartoon version of contract theories, in which John Locke and John Rawls present “boys’ models” of social ethics as “prudence with-a-version-of-justice” (McCloskey 2011, 192). At least in some ways I am an old-fashioned philosopher; to me an *ad hominem* is still an *ad hominem* even when it is ideologically fashionable, so I shall leave rhetoric about guy and gal ethics to others, and instead stress the fundamental contribution of social contract theory to an egalitarian social order.

The social contract insisted that the basic social framework and rules for a society apply universally to the common category of citizen (or, as I have put it in Gaus 2011, chap. 5, “members of the public”). There was not one set of rules for the nobility, another for the merchants, and others for the clergy. Thus Rousseau (1923, 27)—who is

a complex and subtle thinker, and should not be read in terms of “good guys and bad guys in philosophy”—stressed that laws consistent with the general will “must both come from all and apply to all”. A framework of liberal equality embraces this ideal of universal membership in the community: the rules of basic social life apply equally to all, simply as members of a community. Of course the liberal egalitarian order often fell short of its own promise, for rules persisted and still persist that discriminate and illegitimately classify, but this promise has been one of the great sources of moral improvement in liberal society. Recall Martin Luther King Jr.’s (1963) insistence that the American founders issued “a promissory note to which every American was to fall heir. This note was a promise that all men would be guaranteed the inalienable rights of life, liberty, and the pursuit of happiness”. So, King proclaims to the marchers on Washington, “we have come to cash this check—a check that will give us upon demand the riches of freedom and the security of justice”.

In practice, of course, social rules and norms specify various roles (e.g., creditor and debtor) that not all will occupy, and so the ideal of universal membership is more complex than merely acknowledging equal status. The social contract’s “aim is free agreement” (Rawls 1985, 230)—at least to understand what a society that could be freely agreed to would look like. And so even when the basic framework of society defines different roles and responsibilities, the notion of “bourgeois equality” is manifested as a framework that all free and equal members of the public could accept. Again, this is a regulative ideal—a test by which to judge the bona fides of the liberal order. And, yes, there is never such consent to the basic ethical rules of our society. But the contractarian’s inquiry into whether they are fit for such agreement constitutes a public working out of the bourgeois ideal of equality. The social contract’s focus on whether everyone’s basic interests are catered to is not the upshot of a simple-minded view of humans as only concerned with prudence—a view that no social contract theorist, not even Hobbes, ever held—but a recognition that behind the high moral language of so many social orders has been the reality that some have been subjugated so that others could thrive.

## 6.

Although contractarian philosophers come in for rather hard treatment, McCloskey is much kinder to the “blessed” Adam Smith, especially the

Smith of *Theory of the moral sentiments*, which McCloskey depicts as a forerunner of her own work (p. 644). Yet there too Smith insists on the importance of justice: “Justice [...] is the main pillar that upholds the whole edifice. If it is removed, the great, the immense fabric of human society [...] must in a moment crumble into atoms” (Smith 1853, 125). And thus, “[s]ociety may subsist, though not in the most comfortable state, without beneficence; but the prevalence of injustice must utterly destroy it” (Smith 1853, 125). Because Smith saw so clearly the fundamental role of rules of justice, he took pains to consider what types of rules of justice were essential to a free society, stressing (as did Hayek) the importance of negative rules.

The man who barely abstains from violating either the person or the estate, or the reputation, of his neighbours, has surely very little positive merit [virtue]. He fulfils, however, all the rules of what is peculiarly called justice, and does everything which his equals can with propriety force him to do, or which they can punish him for not doing. We may often fulfil all the rules of justice by sitting still and doing nothing (Smith 1853, 117; cf. Hayek 1960, 150).

Once we see the importance of the “rules of justice” for a free and open society, we open up new lines of inquiry. Following Smith’s and Hayek’s lead, we might ask what *forms* of rules are most conducive to a free, open, society. Recent research I conducted with Shaun Nichols (2017) suggests that some ways of teaching moral rules are more conducive to innovation and discovery than others. Rawls notes that although there are, in principle, an indefinite or infinite number of possible moral (or legal) rules, a moral (or legal) conception that seeks to guide behavior supposes a principle of closure or completeness: given such a closure rule, the system of rules can be complete, and provide a full guide to behavior (Rawls 1999, 300-301). Drawing on this idea, John Mikhail (2010, sec. 6.3.1) identifies one closure rule as:

*The Principle of Natural Liberty.* Whatever is not prohibited (and this includes the non-performance of specific acts) is permitted.

On this closure rule, an agent consults the system of rules and determines whether her action is prohibited by some rule in the system; if it is not, then she is free to act. Now as Mikhail notes an alternative closure rule is:

*Residual Prohibition Principle:* Whatever is not permitted is prohibited.

If this is the closure rule, a person is prohibited from acting unless the system of rules permits it. In an obvious sense there is always an onus on a rule-following actor to cite a permission before acting, to show that the Residual Prohibition Principle does not apply.

In a series of experiments, Nichols and I found that subjects taught primarily prohibition rules tended to assume the closure principle of Natural Liberty (if an action is not prohibited, morality allows one to engage in it), while those trained on permission rules tended to suppose that if something is not explicitly permitted, it is prohibited. Thus, we argued, a social morality that stresses prohibitions rather than permissions encourages innovation and exploratory action—the innovator need not show that her innovative activity falls under some preexisting permission, but only that there is no explicit prohibition. And this seems important for markets. As a recent editorial in *The Economist* (2015) pointed out in relation to the liberalization of Cuba,

In place of a ‘positive list’ of permitted private activities, the government should publish a negative one that reserves just a few for the state. All others would then be open to private initiative, including professions such as architecture, medicine, education and the law.

My point here is that the intriguing idea that the *form* of the basic rules of justice deeply matter for open societies and innovative markets does not even occur to the investigator until she appreciates just how important are the rules of justice for an open, innovative, society.

## 7.

John Chapman would have been thrilled by Deidre McCloskey’s learned, innovative and sweeping narrative, providing innumerable insights backed by a diversity of evidence, all tending to show why the West got so rich, so fast. And that ideas, social ethics, and market innovation are at the core of her account would be as welcomed to him as it is to me. “Jerry,” he would have said, “I think she got it right”. Yet after more hard thinking and careful thought, he would inevitably conclude, “Well, perhaps not entirely right”. But surely that is all any of us can hope for.

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## **Either / Or—why ideas, science, imperialism, and institutions *all* matter in the “rise of the west”**

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Deirdre McCloskey has now completed the third (and final?) volume of her trilogy on how the West (from 1800 to 1950) and most of the rest of the world (from 1900 to 2015) grew rich. The message of all three volumes is spelled out in the subtitle: “How ideas, not capital or institutions, enriched the world”.

The latest volume has much that is right, and a few things that are wrong; all are important. The book is also a tribute to the view that history’s finest accomplishments are made late in careers, when one has not only absorbed but mastered a wide variety of materials. In this volume we are treated to McCloskey’s finest displays of erudition to date. Her arguments range from in-depth analysis of English literature (notably tracing the marked differences in attitudes toward the bourgeoisie from Shakespeare to Jane Austen but also including Swift, Addison, Steele, Defoe, Fielding, Trollope, Pepys, Johnson) to philosophy (Adam Smith, David Hume, J.L. Austin, Wittgenstein) to hundreds of modern historians, economists, sociologists, and political scientists. We learn details ranging from the frequency of rape in Papua New Guinea to the controversy over temple distribution as the economic basis of Mesopotamian civilization. It is fascinating, eloquent, and richly entertaining.

Throughout, a simple argument is honed. We are rich, rich, rich, beyond the imaginings of any utopian or scholar, banker or king who lived before 1700. If every peasant in England enjoyed the comforts of a castle comparable to that of Henry VIII, they still would not have had the comfort and light that well-insulated homes with central heat and electric light provide to the modern average North American or

European; they would not have had the variety of food and clothing available to twenty-first century urban Chinese and Indians; they would not have enjoyed the average life-span of today's Nigerians or Ethiopians.

In the last two-hundred years we have created a world in which peasants can use smartphones to learn the market prices and weather affecting their crops, in which craftsmen and shop-owners can fly to tropical vacations on other continents, and in which almost any urbanite in India or China as well as the West can watch television and communicate with friends thousands of miles away. This seems so familiar now that it is easy to imagine this progress as ordinary, slow but steady, and almost inevitable.

Yet McCloskey insists that we recognize how amazing, fabulous, and contrary to all odds this was. It was certainly not inevitable, or a matter of the slow and steady growth of commerce and invention. If it was, those highly commercial Mesopotamians, Romans, and Venetians and highly inventive Chinese and Muslims would have gotten rich hundreds or thousands of years earlier. They did not; so why, in the historical blink of an eye, did the West?

Here McCloskey continues her argument that ideas—or to be more precise, the spread of a specific highly radical set of ideas—was the cause. Not that other factors were not necessary. Private property, limits on the ability of guilds and states to throttle change, reformation in religion, printing, literacy, and even the occasional political revolution all played a role. But none of these were sufficient conditions to create the “Great Enrichment” of the last two hundred years. McCloskey compares all of these conditions, which can be found in many civilizations across history, to the accumulation of dry wood and brush in a forest. To set them alight, not only an initial spark is needed. It is also the case that elites must be unable to keep dousing the fires. What can prevent the elite from preventing change, when the status quo so strongly favors their interests? An insistence that ordinary people should be encouraged to act independently, be respected for originality and innovation, and be allowed to retain (most of) the profits of any activities they offer in free and fair markets.

These conditions too, nowadays seem so pedestrian that we might treat them as commonplace, and look elsewhere for a more dramatic cause for the sudden acceleration of wealth production after 1800. Economists and political scientists look to institutions, claiming they

were radically changed after 1689 in Britain; historians sometimes look to modern science as it emerged after 1500 in Europe; sociologists from Marx and Weber to Wallerstein point to a shift in “capitalist relations” starting around the same date.

McCloskey repeats her criticisms of these approaches from earlier volumes. No, institutions did not change radically after 1689: Kings, lords, and gentlemen still ruled Britain and its shires up through 1832. Modern science had no direct impact on the hundreds of practical inventions that arose in Britain from the spinning jenny, water frame and mule to the steam engine, railroad, rotary saw, cutting lathe, coke-fired steel furnace, macadamized roads, and so forth. As for capitalism, neither the class relations, nor the psychology, nor the gains from long-distance trade changed in a measurable degree before 1800. Since Mesopotamia and Egypt four and five millennia ago, merchants bought raw materials or manufactured goods, employed workers, and sold to consumers, seeking to earn profits on the difference between the final sale and earlier purchases. Whether working in long distance trade (whether taking Chinese manufactures along the silk road, or gold across the Sahara, or horses from central Asia, or European woolens and tapestries to Byzantium and Turkey) or in more local exchanges, the principles were the same and in general, the higher the risks the higher the rewards.

What triggered the change, according to McCloskey, was a revaluation of that humble merchant activity. Throughout most of history and all civilizations, a basic knowledge of economics was sorely lacking. Not understanding how markets in equilibria maximize efficiency among varied producers and consumers, the ability of merchants to grow rich without actually growing or making anything seemed to be some kind of thinly-veiled theft. Farmers could grow food and commercial crops; craftsmen could create clothing, furniture, build churches and gardens, and of course lords could shed blood to win property and loot. But how does trading one thing for another create fortunes? Either the things traded were of equal value, in which case the trade was fair but yields no profit; or the merchant is trading something of lower value for something of greater value, which requires lying or cheating. Hence the typical depiction of merchants in literature as lying, cheating money-grubbers, who only make a profit by being more attentive to and manipulative about values and exchange than befits any honorable man.

With merchant activity so scorned, it was natural for it to be highly regulated and taxed (toll roads and gates proliferated). To be respected, mercantile fortunes had to be traded for respectable offices or military ranks, and children sent to the right schools to “wash off” the stain of merchant origins.

As to the profits from innovation in products or processes, those were doubly damned—first as profits originating in trade, second from innovations that threatened the vested interests of other producers and merchants. Guild restrictions thus specified output and quality and throttled change; innovation and novelty were cursed as undermining the “natural order” (much like genetically-modified crops even today).

Yet somehow—and McCloskey has the courage to say “the causes were local, temporary, and unpredictable” (p. 359)—this changed in Western Europe. First in Venice, then Florence, then Holland, and then Britain, wealth gained by commerce acquired a sheen of respectability and even virtue. New enterprises spurred by invention—Venetian glassworks and paper; Florentine banking and luxury silk and leather goods; Dutch fishing, windmills, textiles, and commercial farming; and British cotton, steel, and steam-power—became routes to wealth *and* respectability. To be sure, in Venice, Florence, and Holland the sparks died out or sputtered to a slow and steady glow: the most successful merchants became regents and increasingly lived as rentiers off their accumulated capital, forsaking innovation and leaving the expanding of markets to others. But in Britain the encouragement of ordinary people to innovate and build and trade and profit continued, producing generation after generation of greater innovations. Instead of retrenching, the hierarchy of rank was weakened and eventually broken, at least in economics (although oddly Britain retains a House of Lords to this day, which was hereditary until very recently). Over the course of six or seven generations, each one doubling the wealth of its predecessor, the riches of the modern world emerged.

In McCloskey’s view, this revaluing of the contributions of ordinary people unleashed such a torrent of innovations and “betterment” that we have all gained a hundred-fold from it. It is a very convincing story, as McCloskey’s hundreds of examples from literature and history make it quite clear that in Shakespeare’s day (and in Imperial China and Shogunal Japan and Mughal India) merchant activity was shameful and scorned, but by the 19th century the same activity was regarded as the

source of national wealth, and something to be honored and deserving of reward. Ideas changed, and the world was transformed.

Yet for all its convincing detail, two questions still nag as one reads this story. First, why did this change in ideas occur? McCloskey cannot say. It seems to have begun many times in history. From Carthage to Tyre, the Phoenicians built an empire on trade and according to the Bible “her traders [were] the most honored men on earth” (Isaiah 23:8, quoted by McCloskey, p. 640). In the 9th-11th centuries, the Persians and Arabs built empires on trade, following a Prophet who was himself a merchant, and pioneered navigational aids and sea routes that linked the Mediterranean and Indian Oceans. Venice, Genoa, Portugal, and Holland all built empires on trade and created “merchant-princes.” The merchants of Osaka ran their own society and at times lorded it over the Shogun of Edo. So why did these examples fade while the shift in ideas in England did not? Why did the shift in rhetoric to value the bourgeoisie in England not simply evolve as it did in all other cases, namely to create an oligarchy of privileged merchants who still derided ordinary citizens? Why in England did the shift continue and go further—as prefigured as early as the 1640s by the Levellers—to full-blown legal equality, religious tolerance, and domination of the House of Lords by the House of Commons, an inversion of the “Great Chain of Being” as it had existed for a millennium? McCloskey, to her credit, does not claim she can give a necessary and sufficient answer. It is enough to clearly demonstrate that this revaluation occurred, that it was sustained only in Britain after 1700, and that this change was the only change sufficiently rapid and radical to account for the sudden onset of exponential economic growth.

Second, one also has to ask, why did the revaluing of mercantile activity and the worth of common individuals suffice to ignite not merely great efforts to create wealth, but an amazing torrent of truly innovative changes in basic products and processes? To say that Thomas Newcomen, inventor of the steam engine (and still derided today by many, including McCloskey, as a merely skilled artisan or tinkerer), or John Smeaton, the first modern civil engineer, or the Reverend Edmund Cartwright, inventor of the power loom (whose mill was repossessed and an early factory using his mills burned down) were more rewarded and respected than the Persian merchants or even Venetian and Dutch manufacturers of old seems just wrong. These men and thousands like them seem to have had a passion for invention, plus

access to mechanical skills and calculations and equipment, that were simply missing in earlier merchant empires. So it could not just have been respect that produced their extraordinarily productive innovations. Something else must have happened as well.

McCloskey seems to believe that if ordinary people are just given the opportunity and encouragement to get rich—let the lords and states and guilds and others who try to fix markets and exclude entry just get out of the way—then productive innovations will flourish. Smithian growth will flow into Schumpeterian growth automatically, and the steam engine and cars and airplanes will be just a few generations away.

Yet can it truly be that simple? One may *want* to innovate to enrich oneself. But if you believe the only way to innovate is to create new styles or colors, or seek out new sources for products, or create a new product or process and then monopolize it, you can still be a fantastically successful merchant (which is what Phoenician, Persian, Venetian, and Dutch merchants did), but you will not set out on paths to the “Great Enrichment”. How does anyone acquire the belief—based on no prior successful examples in history—that the best way to innovate is to perform thousands of experiments to create new products or processes as Wedgwood did to create Jasper blue (as McCloskey points out on p. 522), or Darby did to develop coke-fueled making and casting of iron, or to track the work of scientists in the Royal Society or Lunar Society or other forums of scholars for ideas (as Newcomen did through family and neighborhood connections to the Careys and the Hartlib circle [Greener 2016])? McCloskey cites Macaulay in 1830 prophesying that “in the year 1930 a population of fifty million, better fed, clad and lodged than the English of our time, will cover these islands [and] that machines constructed on principles yet undiscovered will be in every house” (p. 64). This radical technical utopianism seems to be something quite separate and distinct from the mere granting of respect to merchants and innovative artisans.

Indeed, by the end of the book, one may well end up asking—why does it have to be ideas OR institutions and capital? Why not all three plus more besides? After all, if the “Great Enrichment” is so remarkable, amazing, and new, unlike anything begun or produced in any time or place in history, why should it have been produced mainly by change in just one dimension of social life? Why not a host of linked changes, to ideas, institutions, and capital that created a virtuous circle of cross-fertilization without a single primary cause?

McCloskey here seems caught up in the mirror-problem affecting many scholars. If Acemoglu and Robinson, or North, Wallis and Weingast, focus on institutions and deny the role of ideas, then we will deny the role of institutions to show them that ideas *really* are what matters. McCloskey's claim that institutions did not change, or did not change fast enough or far enough to ignite the "Great Enrichment" rings hollow. If institutions did not change, then how could a change in rhetoric and ideas have had any impact in the real world? McCloskey tells us that innovation was constantly throttled by state interference, guilds, legal and religious hierarchy, and the absence of rights for ordinary individuals. A shift in ideas would not change any of these things unless institutions changed as well.

For what are institutions? They are not natural resources or geography or other objective entities unchained to thought (although even what counts as a natural resource or as geographic facts are also shaped by ideas). Institutions are simply ideas of proper behavior that have been codified by law or custom to become normative behavior. If ideas for what is proper normative behavior undergo a major alteration, then institutions should change as well.

Between 1620 and 1720, England experienced two revolutions, major changes in the rights and role of Parliament and the toleration of religious sects (codified in the Acts of 1688-89), the development of Whig and Tory parties, two changes in ruling dynasty, one a Dutch ruler who imported many Dutch practices and the other a German, non-English speaking king who increasingly relied on ministers and Parliaments to manage state affairs. Not incidentally, the period also saw the rise of the Royal Society and Gresham College, numerous provincial scientific societies, the Union of England and Scotland, the founding of the American colonies, and major victories over Spain and France that shifted the balance of power in Europe and established Britain as a major power. It is hard to argue that Britain thus had no significant or rapid institutional changes prior to the "Great Enrichment", or that none of these institutional changes mattered for the history of ideas in Britain, or mattered for subsequent economic growth. McCloskey's bourgeois revaluation may have been necessary, even vital, to unleashing the creative powers of the many; but the history is just too complex to say that institutions mattered not at all.

Similarly, the claim that capital was irrelevant because capitalism had always been present (contra-Polanyi) does not do the job of

excluding capital from any role. It depends on what is meant by ‘capital’. Accumulation by market means is as old as civilization, as McCloskey rightly insists. But the specific instruments of capital have changed. The progression from stone axes to forged steel swords, from horse-drawn pumps to windmills and steam engines, and from building in wood and stone to brick and iron are all fundamental changes in the *composition of capital* that are not captured simply in terms of “capital accumulation”. The same is true for human capital. Literacy may not have been greater in 17th century Britain than in contemporary China. But unlike in China, thinkers and craftsmen in Britain had new tools to work with, including skills in experimental apparatus and observing instruments; new calculating tools such as logarithms and mastery of Arabic numerals; and a novel blending of geometry and algebra in Cartesian coordinates.

One could also turn McCloskey’s bourgeois revaluation on its head—instead of asking why it was that ordinary merchants and tradesmen were granted more respect, one could ask why Kings and nobles were granted less. What undermined the authority of the great hierarchies that had dominated religious and political power for a thousand years in Europe? Why did popes and bishops and kings cease to be able to shape thought and command obedience such that between 1640 and 1848 waves of anti-monarchical and anti-clerical revolutions spread across the continent?

One part of the answer of course lies with the Reformation. That shift in ideas, impelled by Martin Luther’s revulsion at the corruption and hypocrisy of the Catholic hierarchy, undermined numerous prelates and monarchs and unleashed new egalitarian politics from Scotland to Geneva. Yet the egalitarian force of the Reformation was largely blunted by 1700. The restoration of Anglican monarchy in Britain, and the rise of strong monarchies in Lutheran Sweden and Prussia, restored much of the old order under a new state Church. Even in the Netherlands, by the early 18th century the dominance of the increasingly exclusivist Dutch Reformed Church diminished tolerance of religious sects and minorities.

Perhaps equally important was the loss of confidence in the classical edifice of knowledge inherited from the High Middle Ages. The medieval scholastics labored long and hard over a difficult problem—how to reconcile the revelations of the Bible with the newly retrieved works of classical authors flooding into Europe from Spain and Byzantium? In the crowning work of St. Thomas Aquinas, Plato was subordinated to



Aristotle, and Aristotle's works were reconciled and integrated with the Bible and Church Fathers. Ptolemy, Galen, and other ancient masters were also absorbed and reconciled with divine text. The Renaissance didn't challenge this process, but rather amplified it. The increasing familiarity with and admiration for ancient authors and their accomplishments in art, architecture, philosophy, politics, mathematics, astronomy and geography cemented the union of the two strongest foundations for authority—divinity and tradition. By the fifteenth century, European universities had a rigorous curriculum based on theology and classical philosophy, joined with mathematical and empirical classical learning.

Yet in the sixteenth and seventeenth centuries, this edifice was shattered in a way unlike that in any other civilization. The discovery of the New World may not have done much to directly enrich Europe, as the new calculus of imperialism discussed by McCloskey has shown. But by exposing Ptolemy's geography as radically incomplete, it raised the possibility that ancient learning was flawed. Further scientific discoveries—Vesalius's anatomy, Harvey's demonstration of the circulation of the blood, Brahe's and Kepler's accounts of supernovae and comet's orbits, Galileo's analysis of projectile motion—all demonstrated that Aristotle's view of nature was as false and incomplete as Ptolemy's geography. Copernicus's solar-centered model of the planetary orbits, strengthened by Kepler's observations and then elegantly explained by Newton, wholly undermined both the Biblical and Aristotelian/Ptolemaic cosmography. The amazing success of Newton's gravitational model in explaining everything from the motion of projectiles and centripetal forces to the shape of the spinning Earth and the tides, and its applications to fluid mechanics by French and Swiss mathematicians, gave 17th and 18th century natural philosophers confidence that modern thinkers could and had surpassed the ancients.

This too was a great inversion; most societies had looked at their past as a golden age, making the idea of 'progress' to a better-than-ever future not only laughable but heretical. But by the time of Francis Bacon, it was possible to conceive of a future in which mankind had amassed more and more valuable and powerful information than ever before. More importantly, along with this conceit came a technique for its realization—the testing of ideas by experiments with apparatus, shared and confirmed by an audience of fellow inquirers. Eighteenth century England was not only more open to individual efforts acquiring rewards;

as Margaret Jacob (2014) has shown, it had dispersed knowledge of mechanics and of experimental methods and possession of scientific instruments to a far wider body of literate men and women than had ever been the case. Enterprising manufacturers and tradesmen like Newcomen and Calley, Darby and Wedgwood and Cort, as well as Arkwright and Crompton and Watt and Boulton, could draw on more precise measurement and experiments, new measuring tools and skills, and shared ideas and criticism, to advance their projects.

England after 1700 thus had a unique confidence and passion for invention, and unique tools and methods to advance invention, creating a situation where for the first time in history invention itself was widely and routinely sought and accessible. And as science advanced, it reinforced and multiplied these trends. The Industrial Revolution, from Newcomen's invention of the atmospheric steam engine in 1712 to the Crystal Palace Exhibition of 1851, was just the warm-up for the "Great Enrichment". In this period, the gains in science had the impact of inspiring a desire for innovation and providing methods for its realization, but not yet of offering discoveries that would transform economies. That changed after 1850, with advances in chemistry, electricity, thermodynamics, hydraulics, and scientific engineering leading to new dyes, artificial fertilizers, lighting and heating, hydroelectric power and eventually flight, radar, radio, telegraphy, and more.

At the same time, the undermining of the authority of Aristotelian and biblical accounts of nature led to a wider skepticism about the faultless authority of popes and the divine rights of kings. The new methods of scientific thought could lead to conflicting views in politics, from Hobbes's deduction that only an absolute sovereign could impose needed order on society to Locke's arguments that sovereignty was only valid if accepted by citizens. But faith in reason to triumph over the old authority of revelation and tradition was now empowered; and from the arguments of the Levellers to those of Jefferson and Paine and Hamilton to the "Rights of Man", indeed the entire Enlightenment project, we see the impact of the discovery of the New World and supernovae and laws of motion on the trajectory of European thought.

Did ideas change the world? Of course they did! But not only ideas of bourgeois revaluation. Also ideas of the power of reason vs. revelation and tradition; ideas of the power of citizens over popes and monarchs and of constitutions and laws and assemblies; and ideas of

how experiment and measurement and invention could create material progress. And not only ideas—voyages of discovery, observations of the heavens, changes in dynasties, victories and defeats in wars, religious wars and reformations and sects, the discovery of atmospheric pressure and the properties of vacuums, the growth of cities, advances in agriculture—all played a role.

The “Great Enrichment” was such a radical rupture with all that had come before, something so improbable and exceptional, that it hardly makes sense to try to explain it in terms of this or that, a “grand cause” producing a grand effect. It was rather the result of a large number of changes that had accumulated over the previous centuries, changes that undermined traditional authorities, kindled a thirst and confidence for innovation, provided new tools for analysis and measurement and new understandings of society and nature.

McCloskey has written a beautiful and engaging book, and done a great service by demonstrating, contra mainstream economists and political scientists, the vast power of ideas to reshape society. Yet we should not err by following her too far. Much yet remains to be done to understand and integrate all the changes that had to arise for the “Great Enrichment” to occur. These involved ideas, politics, science, war, religion, exploration, and more. It is not either/or, but how it all came together, that we must explain.

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## A place at the table: low wage workers and the bourgeois deal

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Though it comes with its own burdens, a philosopher's task is lighter than that the economic historian sets before herself. Philosophers, after all, seek out *the* argument for 'markets' (plucking it out of any which source we please, shining it, propping it up with qualification after qualification, assessing it by just the light available). Deirdre McCloskey, in her magisterial trilogy, does much more than this. She develops arguments, too, of course (making the case for the bourgeois virtues, connecting material advances with equality), but this is done while she chronicles the views that have been maintained about markets for centuries. She also takes it upon herself to convince readers of (even) the fact of the Great Enrichment (work easily done in her hands, but still work). She is still just getting going. In *Bourgeois equality: how ideas, not capital or institutions, enriched the world* (2016), McCloskey not only holds up the Great Enrichment and deems it good, she argues that there is just one explanation of how it came about. Dimming the relevance of alternative explanations for the rise of capitalism (from Tocqueville to Weber to the multi-causal account of the modern day) is very heavy work. And yet? She does it, too, handily.

And how? She does not just wave at 'gains' from capitalism. You will not find her lingering at length on some description of a toaster or an iPhone (as if consumers are not already sold). She knows exactly what to emphasize so that her own thesis is put in the foreground: the preposterous *magnitude* of the Great Enrichment. It is not some mere "doubling or tripling of the material scope of human life" (p. 7). The world became (at least) 1500% richer, and in a very short time, in places that had not been so different prior (p. 7). Other explanations only promise to account for how there came to be, say, a thirty-percent increase in entrepreneurs. Nothing like this is going to be able to account for change "by a factor of thirty" (p. 472). This is the bar which

any causal explanation must reach. It is a brilliant set up: contending accounts can line up to be dismissed at a glance. Authors who fail to express astonishment over the humanitarian boon the Great Enrichment has been (“feel it on your pulse” [p. 7]) have simply not yet grasped the fact of it yet. The right explanation of the Great Enrichment, the “core model”, must reckon with it being like a whole forest having suddenly gone up in flames (p. 473).<sup>1</sup>

And what would work as a global accelerant? It cannot be culture. Or technology. Or institutional change. Still less biology (p. 410). Plausibility requires that the Great Enrichment comes about through a mechanism that is quick, simple and certain. A nod of the head. A yes to a try. It is what she calls the “Bourgeois Deal” and it will be my focus in this response to her most recent book (p. 410).

To me, as a philosopher, it’s a promising type of justification of a political system (I’ve called similar versions ‘first-person justification’ and I think the approach began with the Stoics). But I will not treat it as a (mere) philosophical device. She is, again, doing so much more. If the Bourgeois Deal (the “Deal”) could not have happened (as she conceptualizes it), then the origins of our current system are going to be a murky matter and, perhaps, impossible to get past. Hers is the account that lets us look, instead, to what markets have brought us: according to the Bourgeois Deal, elites were given the chance to consider (as skeptically as they might, she of course chooses the word ‘deal’ to suggest all that it does) *allowing* the bourgeois their projects, on the understanding that the elites will be enriched by them. McCloskey puts the Deal in the mouths of the bourgeoisie: let us try out betterments in the market, we’ll allow for “low-quality competitors” to rush in, driving down prices. Yes, we too might be enriched, in time. We know you don’t like this, but don’t worry, we’ve got very different habits than elites like you. There is nothing else involved other than letting us take this risk for ourselves. We’ll even provide the start-up money. Yes, that is all. Your payoff is that you will become rich and be able to enjoy all these marvelous new things. (Imagine what the elites asked themselves: Is this all there is to it? How much money are we talking about again? So we

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<sup>1</sup> McCloskey writes: “The core model, in other words, should not be nuclear fission, the reaching of a threshold—at which, with the creative people bouncing against each other, the reaction becomes self-sustaining. It was more like a forest fire. The kindling for a creative conflagration lay about for millennia, carefully prevented from burning by traditional societies and governing elites with watering cans. Then the historically unique rise of liberty and dignity for ordinary people disabled the watering cans and put the whole forest to the torch” (p. 473).

will get much richer, and they do the work? I keep my social clubs? My estates? My esteem?)

McCloskey never means, of course, to deny that the Great Enrichment also had “legal, political, personal, gender, religious, philosophical, historical, linguistic, journalistic, literary, artistic, and accidental causes” (p. 410). She is looking for what we can say sparks the flame that burns so rapidly after 1848. It is quick, simple, and certain for those in power to merely say: Yes, you may keep that, you may try that. And as she puts it:

Thank God, then, for the Bourgeois Deal, and its democratic test by consumer satisfaction, and the private profit that so lucidly signals its success. And thank God too for the social gain from reasoning by commercial cost and benefit rather than by first-act equality or national glory or the interests of the *aristoi* or cute novelties in engineering or the number of souls entering heaven (p. 573).

The fire-hazard conditions of the Deal were the “accidental” distribution of “a novel liberty and dignity” that “was slowly extended to all commoners” (though this happened in Northwestern Europe, seeing how markets have taken off all over is her proof that it could have happened anywhere), which allowed the commoners to show off what they could do.<sup>2</sup> Again, there was no psychological change, it was not religion that made the bourgeois so capable, and commoners had simply been held back in the past from furthering their own interests (having been given insufficient liberty and insufficient dignity).<sup>3</sup> Tacking on anything else as strictly necessary to the transformation that was the Great Enrichment would slow down the speed (the efficacy) with which the Deal was taken.

Let me offer a quick list of implausible assumptions the Deal avoids.

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<sup>2</sup> As McCloskey says, “The psychological hypothesis one finds in Weber or in the psychologist David McClelland or in the historian David Landes does not stand up to the evidence, as for example the success of the overseas Chinese...” (p. 413).

<sup>3</sup> I have seen some interpretations of McCloskey’s work suggest that she, bourgeois culture’s number one fan, suggests that particular culture is also necessary to Great Enrichments, but I certainly read her as remaining “pluralistic” about the motivations of those who contribute to general affluence. Bourgeois values are very much suited to the market, and they are praiseworthy, and they help, but that is all. For example, McCloskey critiques Weber for trying to offer an over-tidy account of just two influences when it comes to bourgeois motivation. He is accused of using this oversimplification as a way to be “charming” to readers (p. 273).

1. It does not associate capitalism (a trade-tested system of betterment) with any particular culture or era.
2. It does not propose a new type of human.
3. It recognizes that the necessary political rights were in the hands of particular elites, and does not imagine some general consensus has emerged.
4. It does not substitute high praise for markets and bourgeois behavior for the idea that elites have made some kind of sacrifice in power.
5. It requires no sea change of feelings towards the bourgeois on behalf of elites, only bare tolerance of them.
6. It does not require elites to be interested in anything more than wealth for themselves.
7. It does not assume we engage each other philosophically, awaiting the presentation of air-tight arguments concerning our mutual welfare.
8. It does not suggest the needed “animating spirit” (or approving rhetoric) of trade-tested betterment is itself enough to bring about transformative economic change (p. 508).
9. It takes what is said to be “hidden” in very many verbal explanations of the market and suggests it is not. The elites could see what they would gain.

Much of *Bourgeois Dignity* is spent providing details to show why the Bourgeois Deal needed to be struck. Elites have long had scorn for the bourgeois, and McCloskey tracks its display and when there were signs that attitudes were beginning to change. But she is not neutral towards the ideologies of “the clerisy”. From Aristotle, to the Stoics, to Shylock, to *La bohème*, McCloskey does not hold back in pointing out where views have got matters wrong.<sup>4</sup> (I will never casually refer to my style as bohemian again). In doing this, she is treating their views as philosophical. She extracts the arguments instead of just pointing to their influence. And she warns us, at the end of the book, that we must continue to do what she has: supply “fresh persuasions” on behalf of the liberty and dignity of those who make us so well-off (p. 648).

Now, a rhetorician like McCloskey knows exactly what she is doing. With many arrows in her quiver, those she does not use have been left there for a reason. She does not shoot without a target audience, for goodness’s sake. Since her prose is unmatched and her references

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<sup>4</sup> For what it is worth, yes Aristotle is wholly mistaken about the role of profit, but he certainly takes some trade as crucial and necessary. The Stoics, I was sad to see, are taken as anti-commerce because of their ethical ideals, but they are (I argue elsewhere), due to their bi-level account of value, as pro-market as any view might be (Baker 2016).

require a liberal arts education where one did the assigned reading, it is safe to assume she is aiming here to make the “clerisy” less confident (our anti-bourgeois and highly influential clergy, journalists, filmmakers, politicians, novelists and professoriate) and to embolden, also, her bourgeois readers (she at one point refers to us as bourgeoisie because we are reading).

But my question concerns a third audience: low wage earners living in affluent societies. What is their relationship with the Bourgeois Deal?<sup>5</sup> I can see two options.

- 1) Low wage workers are simply at the table on the side of the bourgeois when the Deal is struck, hoping for the same liberty and dignity and betterment. Whether they become low wage workers in one of the more affluent societies is of no relevance. Their consent to “trade-tested betterment” is clear because the poor were already doing as much as they could to better their own situation (just as they would do later in functioning markets). And even if we question how supportive low wage workers have been or need to be, McCloskey settles the issue as follows: the Bourgeois Deal does not “require” the “exploitation of workers” (p. 583). In either case, the bourgeoisie need not be imagined striking a second deal with low wage workers, as low wage workers were not holding the bourgeoisie back. The elites were blocking trade tested betterment, so it was the elites with whom the Deal had to be struck.
- 2) The Bourgeois Deal is not negotiated with the past or present version of low wage workers, but if needed (if low wage workers begin to resist trade-tested betterment) a similar Deal could be drafted. It would require a) different terms or b) *more explanation* than is contained in the Deal proposed to the elites.

I would like to explore this last option. It dovetails with concerns about the rise of what Mark Blyth terms international “Trumpism”. (If this movement amounts to a rejection of the Bourgeois Deal, that is quite a credit to the explanatory power of McCloskey’s account.) But “Trumpism” is not identical to the perspective I want to consider. According to the data by Pew Research Council (2016), support for Trump seems to track feelings about President Obama more than it does income. I want to consider those whose wages are low in comparison to the affluence of their country more generally, to include those who want

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<sup>5</sup>If today’s low wage workers are simply considered bourgeoisie because they live in affluent societies, I would be surprised. I would argue that this is not how the low-wage workers I know and live with see themselves.



nothing to do with a Trump. So, regardless of how we diagnosis the current political situation, are non-elite, non-clerisy, low wage workers satisfied with what they have already received in the aftermath of the Bourgeois Deal? One way to answer is by waiting to see. If low wage workers (in affluent societies) are interested in a) different terms, this will surely be worked out politically, with thousands of policy proposals on offer. So I would like to focus on b), the idea that a mutually satisfying Deal for low wage workers would differ from that which appealed to elites. And I would like to suggest that the bourgeoisie *do* need to address their low wage brethren, whether or not the bourgeoisie fear their power. Such an address requires explanations that have not been explicitly offered yet, both economic (what is hidden by markets and why) and, I want to suggest, *ethical*.<sup>6</sup> Again, elites, in the McCloskey story of the Deal only need to be self-interested. As I will attempt to explain, I do not think the support of low wage workers can be got that directly. Of course an ethicist like me would see a role for ethical explanation, and I am happy to learn if McCloskey thinks it would be abandoning effective rhetoric to do what I suggest.

McCloskey already claims that low wage workers are victims of factual misunderstandings, having been led astray by anti-bourgeois rhetoric. Michael Sandel sings in the anti-bourgeois choir when he writes that Trumpists have

the sense that not only have jobs been lost through various trade agreements and technological developments, but the economic benefits associated with those agreements and those technologies have not gone to the middle class or to the working class but to those at the very top (Cowley 2016).

According to McCloskey, this particular “sense of injustice” (shared or not) is mistaken.<sup>7</sup> Trade-tested betterment has actually given the working classes those preposterous changes in economic well-being. But, how, I wonder, would McCloskey both convince the working class of this, and make them care about it?

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<sup>6</sup> As a practical matter, it would be simply intolerable to propose an ethical argument for markets to low wage workers without at the same time undertaking to do things such as decriminalize poverty. The list is longer, and my hope is that taking an explicitly ethical approach would highlight the urgency of criminal justice reform and the like.

<sup>7</sup> She does worry about corruption, of course, so she could swivel to find common ground there.

Furthermore, read Sandel a bit longer and he brings up lost dignity. “What Trump really appeals to is the sense of much of the working class that not only has the economy left them behind, but the culture no longer respects work and labour” (Cowley, 2016). Is this also merely a mistaken impression? On their blogs, leading libertarians gleefully rip apart adjunct professors for wanting higher wages. Evidence of a terrible disdain for low wage work is as close as a google search. What would it take for McCloskey to agree with the “clerisy” that low wage workers have suffered grave losses of dignity in our current-day society? It is clear that McCloskey sees dignity as crucial. Even though she can be found, cleanly, neatly, suggesting that the only motivation that matters is the timeless one of wanting to better one’s situation (it is certainly not greed that she needs to promote), she does not fail to recognize the role that extra-legal regard plays in the functioning of markets. McCloskey describes dignity as “the social honoring of all people”, even *after* they’ve secured protection by rights (p. 403). Loss of dignity would seem to be a very legitimate concern. For these reasons, let me suggest some five modifications to the original Deal, so that it might appeal to low wage workers.

The first modification to the original Deal that I’d suggest: an explanation of both “what is hidden” by markets and why this is. Why risk ruining the elegance of the Deal as offered to elites? Elites could see themselves maintaining their status, clubs, and lifestyles with the added wealth. The vantage of low wage workers is not the same. To merely argue that the poor have been lifted out of unimaginable poverty is to fail to recognize this vantage. Aware that I am no skilled rhetorician, I would still like to (humbly) suggest that scare tactics is the wrong approach to securing low wage worker approval of our system. If the horrors of present-day Venezuela are used to convince low wage workers that the Deal we have is fair, it is still the case that low wage workers have less to lose in such a transition.

A second modification to the Deal I would suggest is some way of acknowledging the possibility of this: the working class (unlike the elites) are interested in more than the wealth they can expect to achieve after taking the Deal. So many defenses of the market are put in terms of compliments to the wonders of an iPhone and the like. Those addresses are made to only those who have purchasing power. Yes, our low wage workers have, thus far, been very supportive of the luxury

items we generate. But how can praise of material items capture the reasons low wage earners participate in the market as they do?

As Tocqueville pointed out, by ‘interest’ we have never meant just those that are economic. Further, as Gordon Tullock (1985) pointed out, those society brands as non-cooperative (think of felons who cannot get rental agreements after serving their term) are prudent to defect. That was not determined on the basis of how much money is on the table. I can only imagine at what the realistic numbers are, when it comes to what low wage workers will gain through their cooperation (in comparison to what might be got if they ‘negotiate’). But earning 20,000 dollars a year in our society is not so tempting that the issue is settled. To suggest that one’s choice is either the current system or Venezuela strikes me as something skeptical Deal takers should not be expected to buy. So here is a third suggested modification to the Deal: praise for markets and bourgeois behavior cannot substitute for the idea that low wage earners might be asked to make some sacrifice in power.

I would like us to consider that low wage workers already have philosophical commitments, and that these may not be conducive to trade-tested systems of betterment. One example is ideas like: jobs are made secure only through political connections or jobs are property.<sup>8</sup> Another example is inspired by Max Weber’s description of the “spirit of capitalism” (2010 [1905], 9-10). The beliefs and values he associated with it are very familiar to me, a bourgeois person, and very unfamiliar to low wage earning friends. Weber, of course, suggested that the “spirit of capitalism” was a matter of non-believers being influenced by the non-religious content of ascetic Protestantism. Ben Franklin was not an ascetic Protestant, though he exemplified the influence of the ethos in his cheery bromides. The specific normative content in the “spirit of capitalism” as Weber describes it is not replaced in McCloskey’s account. Yet I find it very plausible that Weber identified a set of beliefs that many of us still share.<sup>9</sup> He talks of a suspicion of “spontaneous enjoyment of life” (159) and I recognize myself. He describes the idea

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<sup>8</sup> At one point McCloskey tells us about a “peasant’s” view of “exchange—always cheating, cheating, cheating.” She describes the kind of “cheating magic of trade” that has “long angered people,” as zero-sum is the “default in thinking about my gain and thine” (p. 434). But then, a line or two later, she points out that markets were not in fact beneficial to “peasants” until about 1800. It left me wondering whether a peasant’s view should have been considered anything other than accurate. In other words, is a “peasant’s view” of markets a realistic one (for the time) or not?

<sup>9</sup> I had trouble making sense of the idea that Weber was describing “individual ethics” rather than what is “honored or dishonored by society” (p. 118). Where would the overlap begin and end?

that we have a duty to our possessions, to the extent that we are obedient stewards to them, and I think of the weekly ritual of washing of the nice vehicles (169). The condemnation of dishonesty and “unbridled greed” (170) are part of the ethos, too. That is nearly all toddlers hear from us. Work is considered admirable no matter what level at which it is done, and as a way to improve ourselves, or sort of set ourselves right internally. Isn’t this why so many of us, no matter how many hours we put in at the office, find no excuse to keep an untidy home? And finally, that “the unequal distribution of the goods of this world” is considered to be efficacious for reasons mere humans cannot access is a very particular viewpoint, particularly supportive of trade-tested betterment.

Not all of us believe these things. It is not easy for me to see that this bundled ethos is shared by low wage workers in the US. I cannot guess as to what is cause and what is effect, but that is not my interest. Weber’s “spirit of capitalism” is a way to think, philosophically (enough), about why differences in outcomes are justified in a capitalist system and why one is worth participating in. Those who do not share this particular “spirit” are left to justify the system without the same doxastic resources. McCloskey’s argument, again, nicely avoided any dependence on some “deep” and heavy cultural justification of markets (one of many advantages over the old Weberian account) (p. 509). Yet, she also grants that bourgeois values are not introduced into vacuums; they may exist contemporaneous to non-elite anti-bourgeois commitments. I do not see that McCloskey has yet confronted a non-elite, non-bourgeois ethos as if it had normative content at odds with the terms of the original Deal.

For example, if a person identifies with celebrations rather than work, what kind of offer appeals to them? Add a lack of personal identification with one’s home or possessions or even career (the bourgeoisie may have trouble believing it, but plenty of people are in this position). Then tack on the observation that those with the skill sets to do well in business are (though maybe honest and prudent) a bit wily (“daddy’s boys” is an expression I’ve heard). Imagine seeing one’s work as personally salubrious, but being fully aware that it serves as a punchline for the wealthier. Finally, be assured that the world is wicked and corrupt. You now have an outlook very unlike that of Poor Richard. How do the benefits of trade-tested betterment fair, when thrown into this mix (or any one like it)?

I am not sure. I do not know how McCloskey would write for this audience. I am not even suggesting that low wage workers will not recognize what counts as general betterment. It may be we still all agree there. But I do think, if we imagine low wage workers at the table, we cannot fail to reckon with the role any non-bourgeois values play in how other values (including general betterment) are assessed. Non-bourgeois values amount to a rather intact philosophical outlook, and I think this could function as an “inner obstacle” to seeing the Deal as the bourgeois and (wealth-hungry) elites do (Gerth and Mills 1958, 58).

How to get around this? This is the boldest of my claims, a fourth modification to create a viable Deal with low wage workers: engage with them philosophically. Not over personal values or way of life, but over the issues of our mutual welfare and what we owe others. We were able to avoid this with the elites who deigned to tolerate the bourgeoisie (of course there may have been ethical motivations behind the granting of liberty and dignity, but the final assent to markets was a matter of self-interest). But when we are certain that some market participants will not be living the life we laud as bourgeois, ordered and well-provisioned, why not appeal to them as philosophers? This is better than ignoring them. And my suggestion avoids trying to recommend bourgeois virtues to the uninterested.<sup>10</sup> (I am glad McCloskey lauds these “virtues”, but she too thinks they are not a fit for everyone nor (again) necessary for us to all share).<sup>11</sup>

The argument that is left to be made is that markets bring about the Great Enrichment (see McCloskey to get convinced of this as fact), and if you will tolerate the bourgeoisie and their projects, you are helping the worst-off *in the world* rise up out of dire poverty. This is not an appeal

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<sup>10</sup> My brother-in-law grew up under communism and always wanted to leave. If anyone compliments the system he asks what they like about his grandfather being kept in solitary confinement for wanting to keep a tractor. But his family still says, perhaps in a bit of joking manner, that for his father communism was a good system, because he is ‘lazy’. (I know the man, I wouldn’t call him lazy! He has many qualities I admire, but he was content under the previous system.) Fits like this exist.

<sup>11</sup> I appreciate so much of what McCloskey puts forward, including the limits of the bourgeois virtues. McCloskey is clear that bourgeois values are not for everyone, nor are they as securely fashioned together as we’d find in a more philosophical (or teleological) approach to the virtues. She has ensured that I detect no rivalry between the traditional accounts of virtue (which require a commitment to reordering your goals) and her description of the bourgeoisie. One bit of realism is here: “We (bourgeoisie) grumble. Did I get the best deal I could? Has he made a fool of me? He’s a vicious profiteer. Why doesn’t he gracefully give me a gift? We don’t feel so when we have, in Boulding’s vocabulary, ‘some integrative relationship’ with the other person” (p. 431).

to self-interest. It does, however, give us a way to think of the bourgeois 'haves' in a society. They are a kind of accident of the market (see how I remove the moral compliments, stay with me). Markets just work in this way: they reward those who are well-positioned in an extreme manner. But life remains a challenge, full of tragedy. What is gained is just material wealth but not all the joys of living or our reasons for being here. I of course would insert the ethical theory on which I work to back up this story, but those details can be replaced with others. The idea is to provide the details, sincerely, to have them vetted and checked, as justification for the system we have.

Weber insisted that traditional permissiveness towards an ethos of "take what you can" was "one of the strongest inner obstacles which the adaption of men to the conditions of an ordered-bourgeois capitalistic economy has encountered everywhere" (Gerth and Mills 1958, 58). Though McCloskey too notes a role in the struggle against traditionalism, she does not see the obstacles as "inner", that is to say, held in the form of supporting beliefs about what is right. Commitments to the old system, the disasters, are unendorsed, loose, or venal, disguising self-interest. What I am asking for is that we recognize that the economic roles we play constitute our very self-identity (Ross 2012).<sup>12</sup> So, the final modification I would suggest to the original Deal: something like a change in direction of feeling *is* necessary. Low wage workers are already tolerant of and respect people in business, so the change is not similar to elites being asked to respect rights. But how to think about the 'haves' when you are a 'have not' is missing in McCloskey's approach.

Trade-tested betterment is a system that deserves ethical sanction, but I am seeking an argument that addresses low wage workers when it comes to what they think about their role. This would not be "sociological" in the sense McCloskey uses to describe the Bourgeois Deal. It is psychological (and philosophical). But since people (whether low wage workers or not, so Trump fans and beneficiaries of agriculture subsidies included) can resist trade-tested betterment no matter what we can show them about it, it seems to me it is time to leave the table

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<sup>12</sup> Don Ross has extensively characterized the processes by which people learn, over the course of childhood and adolescent development, to construct narrative selves. One of the properties ourselves have is described as follows: "The dimensions along which their variance is culturally salient form the basis for a prevailing typology of personalities and linked aptitude sets that are normatively and statistically associated with types of economic occupations and social roles" (2012, 25).

where we negotiate rights and turn to how grateful we are to everyone who plays their part in lifting others out of poverty. In other words, it is the indirect benefit to the very poorest that is really of unimpeachable, ethical, merit in our system, and the low wage earners are giving more directly here than the 'haves'. Let's say it. Or sing it, as McCloskey might.

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## **Dialectical libertarianism: the unintended consequences of both ethics and incentives underlie mutual prosperity**

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In *Bourgeois equality*, Deidre Nansen McCloskey argues, as advertised in the book's subtitle, that "Ideas, not capital or institutions, enriched the world" (2016). This ambitious historical project takes its position in opposition to the political left and right. McCloskey understands the left to reflect the opinion that accumulated capital enriched the bourgeois class by exploiting the working class who will only be included in the capitalist vision of perpetual accumulation as a result of state mandated redistribution. She understands the right to be the contemporary neo-institutionalists who argue that economic growth will be achieved with the appropriate incentives to reward rational action. McCloskey's argument is primarily historical. It spans the seventeenth through twentieth centuries, focusing on the European invention of capitalism and what she argues are the attendant bourgeois virtues of prudence, temperance, and justice (p. 189). The strength of the project is its re-visitation of the ideals and development of classical liberalism. Its weakness is McCloskey's failure to engage with or recognize that markets and rationality are historically contextualized cultural forms. Hence latter day late-twentieth century political economy represents a different set of challenges to an advocate of "bourgeois liberalism" than did early modern nobility. The preeminence of rational choice social science threatens the "bourgeois equality" that McCloskey seeks to defend as the basis for a prosperous capitalist global order and it provides the most compelling contemporary rationale for markets and politics.

In view of the current preeminence of neo-institutionalism and game theory, I find *Bourgeois equality* particularly illuminating for reminding



readers of the theoretical principles characterizing modern liberal market theory such as those evident in Adam Smith's *Theory of modern sentiments* (1982 [1759]). Thus, in focusing critical attention on contemporary neo-institutionalism, McCloskey provides the means to clarify the distance between contemporary markets and their classical liberal predecessors. One reward for achieving this understanding is to grasp the significant differences between contemporary market ideology and that of early liberalism. Another is to fruitfully pose the question of whether McCloskey is correct: perhaps, beyond incentives, the motivating ideas and animating virtues of agents are directly correlated to whether a market society generates inclusive prosperity?

In this review, I quickly rehearse McCloskey's historical argument that modern capitalism is best understood as a period of 'Great Enrichment'. I discuss her core thesis that ideals concerning human dignity are fundamental to inclusive economic growth. After this I address McCloskey's particular intervention in rejecting what she takes to be the left's assertion that redistribution is essential (e.g., Thomas Piketty), and the right's focus on institutional structures to facilitate economic growth and inclusive prosperity (e.g., Douglass C. North). I make the following points. First, I agree that McCloskey is correct in arguing that the neoliberal institutionalists concentrate on incentives to the exclusion of ethical reasons for action. Second, I suggest that the neoliberal institutionalists are more accurately viewed as extending from the right to the left sides of the political spectrum. Finally, I investigate whether perhaps the position McCloskey develops may best be characterized as 'dialectical libertarianism' because both ethical ideals and prudential incentives are fundamental to inclusive free market prosperity. Thus, I invite McCloskey to consider whether on the one hand theorists from both the left and right could endorse ideals alongside with prudential incentives. On the other hand, I ask McCloskey to take a position on whether ideals should be accompanied with a commitment to a minimal safety net, to ensure the inclusion of the least well-off in the opportunities for development.

### **THE GREAT ENRICHMENT AND THE IDEALS FACILITATING IT**

McCloskey's initial task is to convince readers that economic growth under modern capitalism, dating from late-eighteenth century, was spectacular and resulted in a world in which "many of us shot up the blade of a hockey stick" (p. 21). By this she means that a period of Great

Enrichment characterizes the nineteenth and twentieth centuries so that many people worldwide experienced abundance to an extent unimaginable and unachievable in the previous centuries. McCloskey has much invested in convincing readers that the free market tempered by bourgeois virtues has been successful in generating phenomenal and *inclusive* wealth over the past two centuries. Her writing is imaginative and blunt, seeking to persuade more by carefully dispersed facts and rhetorical flourish than a comprehensive numeric defense. Some will find this frustrating, and others will find the path through the book's argument trajectory a welcome relief from arid academic prose. Evidence includes observations such as that "The upper middle of the present-day seven billion—perhaps two billion, double the population of the world in 1800—live in countries in the mold of Greece or Taiwan or Israel" where the income is over \$80 per day, over two and a half times the world average, and 26 times the average from 1800 (p. 23). People have electric dyers, or at least about "half a billion worldwide, a group growing rapidly each year in number and in share of the world population" (p. 24). The Great Enrichment sponsors "mass-produced food and mass-produced education" that have mainly "elevated modern life" (p. 25). For those unconvinced of the broadly spread enrichment of modern capitalism, McCloskey goes on to point out that "The English colonists in North America at first lived on \$2 a day [...]. Yet by 2011 the average resident of the United States consumed, correctly for inflation, \$132, sixty-six times more housing, food, education, furniture than in 1690", which she assesses to be a betterment in living quality of 6,500 percent (p. 34). And if we still harbor doubt, we are invited to "Open, then, your own closet", and to "compare it with the volume and quality of clothing possessed by even the richest woman in Plimouth in 1620, or for that matter the above-average woman in Amsterdam in 1800, or all but the extremely well-off in London in 1900" (p. 35). But beyond those who are presumably members of the middle, bourgeois class, living in countries she calls bourgeois, the Great Enrichment also has consistently led to falling rates of poverty in less well-off countries (p. 43).

Here I wish McCloskey had either acknowledged that capitalism is only statistically better on average, and that some people pay the price for economic growth (Hont and Ignatiev 1983), or that she fully accepted the challenge of arguing that *the free market is the best system beyond mere statistical argumentation*. Otherwise it remains unclear whether

she has fully endorsed a version of capitalism in which no set of individuals is called on to fuel economic growth via the suppression of their human rights. This is a crucial point because, for example, arguably the gross injustices experienced by enslaved African-Americans in the nineteenth-century trans-Atlantic trade triangle contributed to the hockey blade's meteoric ascent (Sherwood 2007; Baptist 2014). In a perfect world, free markets would maintain the freedom of all participants, thus condemning the practice of either chattel slavery or contemporary human trafficking. Yet, what if, as during nineteenth-century capitalism under legalized slavery, growth results from some individuals profiting while others shoulder the burden?

In seeking to claim that modern wealth generation has been and is inclusive, it is important to McCloskey to repudiate the position developed by Karl Marx and furthered by the political left that even if economic growth is conceded for some members of bourgeois nations, prosperity was generated by the working class whose surplus labor value was stored in capital and profit owned by the capitalist class. In turn, the left's argument goes, the least well off, including the working poor, only benefit—if at all—by the “trickle down of expenditures from rich people” (p. 40), suggesting that these less-well off individuals will only be on the periphery of the Great Enrichment. Thus she proposes instead the Schumpeterian mechanism that in “the long-run [...] open competition of betterments among the temporarily rich in Riverside orange groves and Manchester cotton mills and Chicago apartment developments and Swedish furniture stores [...] radically cheapens food and clothing and housing and furniture” (p. 41). In essence, McCloskey argues, the cost of living goes down for everyone regardless of socio-economic status due to the efficiency of production in a free market system. The world's least well off do not just benefit from scraps cast down from the tables of their richer brethren, but rather directly benefit by living in a more affordable post-scarcity political economy.

It is further important to McCloskey that the rise in material wealth, once we accept its existence and inclusive quality, also has a spiritual dimension because she attributes the underlying motive force of modern capitalism to be “the expanding ideology of liberty and dignity that inspired the proliferating schemes of betterment by and for the common people” (p. 21). Furthermore, material prosperity not only permits people to rise from “want to security”, (quoting H.L. Mencken)

but also affords people the time to contemplate the meaning of human life (p. 70). She writes,

The sacred and meaning-giving virtues of hope, faith, transcendent love for science or baseball or medicine or God are enabled by our riches in our present lives to bulk larger than the profane and practical virtues of prudence and temperance necessary among people living in extreme poverty (p. 70).

Thus a component of the argument seems to be that higher motives fuel free market liberalism, because “Capitalist ideology entails, most fundamentally, the attribution of value to capitalist activity: minimally, as valuable to ends greater than itself as significant to virtue; perhaps as valuable in its own right; finally, even as value creating” in a non-instrumental sense (p. 503, quoting Michael McKeon). Thus the ideals of human dignity are prior to the market. These ideals provide the inspiration for the animus driving capitalism and give rise to the rule of law protecting individuals’ rights upon which market exchange depends. In turn, this market form provides people with the leisure time to contemplate and generate ideas including liberty, dignity, and science, that in turn fuel prosperity. Bourgeois equality rests on the premise that all people are equal in human dignity, which must be respected in formal equality under the law.

#### **WHAT THE INSTITUTIONALIST RIGHT (AND LEFT) MISSES: NOT ONLY INCENTIVES MOTIVATE**

I appreciate McCloskey’s defense of idealism in the form of ethical principles, as opposed to Marxist materialism, or a conservative realism deferring to brute power as a way of dominating world affairs. Hence she seeks to recapture the role of ethics and innovation as ends in themselves that cannot be reduced to or transformed into a profit motive or incentives characteristic of the contemporary neoliberal practice. Although she equally challenges the social welfarist left and what she defines as the neo-institutionalist right, her critique of the former targets earlier twentieth-century debates, while her argument with the latter addresses contemporary theory. By the “neo-institutional” school she refers to the rational choice approach developed by Nobel Laureate economist Douglass C. North, although other contributors are fellow Nobel Laureates Thomas C. Schelling and Gary S. Becker. According to this view, agents maximize expected utility,

and nothing else (p. 115). Effective institutions impose the appropriate incentive structures to drive economic growth through mutually beneficial transactions. This structure seems to mimic classical liberalism's rule of law, wherein the appropriate institution simply is the correct set of laws to realize efficient markets. However, here McCloskey observes that "The neo-institutionalist economists have not really taken on the idea that ethical ideas can matter independently (sometimes) from incentives" (p. 119). She specifies that key concerns are "sound, pretty favorable ethical ideas about other people acting in voluntary trades and proposing betterments" (p. 120).

On this point McCloskey's position resonates with Adam Smith's *Theory of moral sentiments*, which she engages in detail (pp. 172-209). One way of understanding the philosophical position that ethics cannot be reduced to incentives is to view human action as more complex than satisfying preferences arranged on a single scale. This recognizes that non-consequentialist forms of action, including rule-following, commitment and promising, loyalty and trust, depend on reasons for action independent from satisfying preferences according to an instrumental logic (Sen 1985; Heath 2011; Hausman 2012). Alternatively, although actors combine desire and belief to form reasons for action, preferences may be considered from multiple perspectives such that an ethical stance may contradict and trump mere self-gratification; these preferences exhibit inconsistencies from the perspective of rational choice (Sen 2002, 158-205). Although not engaging in the intricacies of the contemporary debates on this topic, McCloskey acknowledges that deep issues arise. She notes that North concedes that ideas matter, but adds that for him ideas can be reduced to "brain science" because he "takes the mind to be the same thing as the brain, which is the central error of the new phrenology of certain schools of brain science" (p. 121).

Thus, McCloskey firmly holds that materialism, or physicalism, does not do justice to the nature of humans, the power of their mental lives to transform physical reality, or the role of the self-recognition of human dignity to animate an ethical quest for self-betterment. She points out that "Game theory in economics is the claim that we can do without language and language-created meanings" (p. 123). In her challenge of the implications of the rational choice approach, she effectively clarifies that game theory reduces language to signaling. Two points follow. First, game theory ignores the intersubjective role language plays in establishing the context for action. Second, game

theory fails to recognize that meaning is distinct from the physical instantiation of symbols on paper, such as the figure twenty stamped on a piece of paper used to signify \$20. Here she references the philosopher John Searle who developed the concept of a “status function” which conveys the idea that “X is treated as Y in the context C” (p. 123; Searle 2010). This reflects the ability of an individual or object to perform a function over and beyond its mere physical essence because people jointly invest the person or thing with that power. Thus, decomposing a \$20 bill and examining it under a microscope, or explaining its existence according to the laws of physics, will not help us to understand why people will pick it up from the ground more eagerly than a discarded tissue. The role of meaning, along the lines that Searle proposes, is not reducible to demarcated symbols, or preference satisfaction of biological desires potentially visible on CAT scans. Status functions, or the means by which human society ascribes roles to individuals or objects irreducible to the laws of physics, both establish the deontological power of “ought” in institutions, such as marriage or official roles of office, and provide reasons for action that are independent from consequentialist rewards or incentives. McCloskey explains,

Language establishes the meaning of the world ‘bachelor,’ but the extralinguistic context, C, creates the powerful consequences—that only a bachelor, who is treated so under the linguistic convention of the definition of ‘bachelor,’ can marry a woman [...] If he is already married [...] he commits bigamy (p. 124).

Thus, McCloskey’s debate with the neo-institutionalists, which is a significant part of her argument, treads into dense theoretical contestation with the economic mainstream who confine their methodology to rational choice theory. Having identified the power of language to inter-subjectively establish a world of meaning, not interchangeable with mere symbols, she attempts to articulate the role of communication and ideas to transform the world in terms of the Great Enrichment. She refers to this role of language as “sweet talk” in apparent opposition to the reduction of language to “cheap talk”, typical in game theory. The best way to understand this deontic power of communication to convey meaning, rather than the diminished view of economists in which “prelinguistic desires and beliefs” motivate all action (p. 123), is to see how it permits establishing a shared world of

understanding conveying the particular ideas and virtues unique to Adam Smith's bourgeois system of natural liberty (Amadae 2003, 205-212). The argument is that rather than strategic goal seeking preexisting language and relations, instead the common ground underlying communication and exchange are a precondition for purposive action. Therefore, McCloskey argues, "the belief in (that is loyalty to) science, progress [increasingly bettering the conditions of individuals' world wide], equality [in human dignity], individual liberty [unexplained], social dignity, having a go" (p. 506) provides the motive force for market society. By sweet talk, McCloskey refers to various professional roles that produce no value captured by the laws of physics, but animate human social life through law, making contracts, conducting research, and developing a world of culture and literature. Here McCloskey sounds close to, although does not cite, Jürgen Habermas' argument that not only is communication a prerequisite for individuals to form desires and beliefs and engage in strategic competition (Habermas 1984-1987), but moreover that the life-world of dense intersubjective relations and meanings provides the basis for making possible the rule of law, human dignity, exchange, and science possible.

However, this entangled, chicken-and-egg, basis for Great Enrichment is precarious because of the circular relationship between the prerequisite of the post-scarcity leisure time necessary for people to appreciate the significance of human life, and the dependence of economic prosperity on this realization of human dignity. Hence, people with misguided ideas can thwart the institutional framework conducive to mutual prosperity. These leaders could fail to recognize the non-instrumental priority of human dignity on the one hand, and refuse on the other to accept

the Bourgeois Deal of commercial profit and dignity, rejecting tribal protectionism, resisting the temptations of reasonable-sounding 'planning' or 'regulation,' disbelieving the populist/Keynesian claim that free lunches abound, and embracing an ideological revolution toward equality for women and the poor and low-status castes that traditional societies and parts even of the modern societies resist (p. 135).

Thus, according to McCloskey, mutually beneficial exchange requires both proper respect of human dignity and individuals' initiative to better their own conditions within an appropriate institutional framework rewarding work.

So far I find little to argue with in McCloskey's *Bourgeois equality*, beside my wish for her to clarify whether some members of society must pay for economic growth by experiencing the insecurity of unemployment and insufficient resources to rise above poverty. When eventually, for example, Uber replaces the decades old taxi industry in cities around the world with its reconfigured driverless system of transport, it is too easy to argue that the displaced drivers seek a 'free lunch' by lobbying for their industry.

### DIALECTICAL LIBERTARIANISM: BEYOND MATERIALISM AND IDEALISM?

In the remainder of this review, I invite McCloskey to reconsider whether the game theoretic neo-institutionalist school is better understood to range across the political spectrum from right to left, and whether her position could accurately be described as 'dialectical libertarianism'. Let us consider a two by two matrix, with left vs. right as columns, and materialism vs. idealism as rows.

	Left	Right
Materialism	K. Marx Welfarism	D. North Institutions
Idealism	M. Ghandi Ascetism	Fukuyama Neoconserv.

McCloskey describes the Marxist and social welfarist left as being materialist, and the neo-institutionalist game theoretic economists as the right-leaning materialists. She suggests that the idealist left would be a position akin to Mahatma Gandhi whose principles led him to disdain technology and economic growth in favor of ascetic withdrawal (p. 55). The ideational right could include, although it is hard to determine for certain, neoconservatives entirely driven by ideals with less regard for economic realities (Fukuyama 1992). McCloskey is a self-described Christian (p. 530) and classic libertarian, although, especially given her embrace of Adam Smith, she seems to suggest that her position would be acceptable to secular libertarians. In view of her acknowledgement of the crucial importance of ideas rather than economic incentives to be the prime mover in human progress toward



inclusive betterment, perhaps it is best to refer to her position as one of dialectical libertarianism. This follows because McCloskey realizes the necessity of achieving the minimal basis of economic and political security for unleashing the power of ideas, but also argues that the correct virtues of temperance, prudence, and justice in accordance with the historic bourgeois ideal, will lead to raising standards of living around the world.

I am sympathetic to McCloskey's position revealing the insufficiency of game theory's instrumentalism. I have argued that not only incentives and preference satisfaction motivate the actors in Adam Smith's classical liberalism (Amadae 2008), but that, moreover, the contemporary game theoretic approach locks us into a view that only incentives matter, that they precede language and meaning, and that this view negates classical liberal theory and practice (Amadae 2016). I also agree with McCloskey that the game theoretic approach even implies the view that meaning is reducible to symbols, and that game theoretic actors are amoral and can be programmed into artificial intelligence devices. However, McCloskey's identification of the left and right, and her literary dismissal of surgically honing in on the key points of contemporary debate in favor of recounting the history of capitalism, make it difficult to distill from her argument a blueprint for action. Thus, since neoliberal institutionalism spans the left, insofar as Thomas Schelling served under Presidents J.F. Kennedy and L.B. Johnson, and Larry Summers served as the Director of the US National Economic Council for President Barack Obama, and other game theoretic inspired economics including James M. Buchanan are further to the right than Douglass North, arguably it is possible to construe neoliberal institutionalism as an approach that has adherents on both the left and right of the contemporary political landscape. McCloskey ultimately rejects what could be construed as the physicalist or instrumentalist approach to building institutions with the correct incentives that could be advanced by either the left or right.

Similarly, in McCloskey's dismissal of the 'welfarist left' she seems to impugn John Rawls' *Theory of justice* (1971). Yet, at the same time she acknowledges that a minimal social safety net is consistent with classical liberalism: economic security is necessary for human dignity and the right of personhood, a point recognized by John Locke in his argument that property rights are only just insofar as they leave enough in common for those without (1980 [1690], chap. 5, sec. 27). Moreover,

Rawls also concurs with McCloskey, counter to rational choice and neo-institutionalism, that commitment to and voluntary compliance with constitutional rules that one agrees underlies economic prosperity. In this way, I argue that Rawls is much closer to classical liberalism than is the contemporary game theoretic neo-institutionalist approach, a point that McCloskey obscures by her definition of and pursuant arguments against the left and right.

McCloskey thus seems to acknowledge that classical liberalism is permissive of a social safety net, or at least not opposed to it, because it is in line with the idea that individuals are only free if they have minimal economic security. Also, McCloskey acknowledges “the wish of every honest [that is, honorable] man [...] to assist in lifting up those below him” (p. 47). It is true that she opposes redistribution, yet at the same time one could read into her argument as an endorsement of normative bargaining, in which individuals reach agreements according to mutual respect and recognition, rather than via coercive bargaining by de facto threat advantage more typically endorsed by game theory (Binmore introduction to Nash 1996). Game theory normalizes that individuals profit by externalizing costs, hence they impose ‘externalities’ on others, even on those they engage with in interaction (Schelling 1973).

I think McCloskey recommends instead an individual ethos according to which individuals seek self-betterment without imposing costs on others in keeping with the neoclassical economic concept of the Pareto principle. The original concept of classical liberalism to unleash individuals’ power of self-betterment to transform the world from rags to riches depends on every individual’s commitment to uphold the perfect duty of refraining from harming others, or making others worse off. This concept was refashioned into the neoclassical Pareto principle which stipulates as a condition of market exchange that every interaction should make at least one person better off and no one worse off. A primary distinction between classical liberalism and neoliberal institutionalism is that where the former holds individuals accountable to the elementary no-harm principle, under strategic competition every actor promotes self-gain without constraint, regardless of whether others are harmed. Even if one is not always perfectly clear on what the line of harm is (see Nozick 1974, 26-53, vs. 175-182), the point is that in the classical liberal world at least actors act with the intention not to harm others and thus seek to establish what this commitment entails. With this in place, then likely McCloskey

can successfully argue that everyone will advance because in every interaction at least one person's condition is improved and no one's is impaired. Thus she opposes the neo-institutional prisoner's dilemma argument for governance that requires a strong state or vigilant norm-enforcers to apply the correct incentives to counter the fact that strategic rational actors most prefer to free ride and cheat rather than voluntarily keep agreements made and contribute their fair share to common goods (e.g., Mueller 2003, 9-12). Moreover, a social system that functions according to the logic of coercive bargaining, as opposed to normative bargaining consistent with the no-harm principle, permits a retrogressive social contract because coercive force can be used to enforce any terms of exchange (Amadae 2016, 175-192). Given a system of justice that respects individuals' rights and an inclusive safety net, all will benefit through the indirect impact of lower prices, higher levels scientific and cultural goods, in addition to the direct mechanism of having enhanced opportunities for development and contribution.

At times McCloskey's appears to share ground with Rawls. This she may deny given her apparent support of Robert Nozick (1974) and his rather thin reading of John Locke's proviso, that property rights must leave enough in common for those without, but only at the point of the extreme emergency of famine or other immanent death (p. 50). Perhaps McCloskey will clarify if she favors any type of safety need or elementary access to basic goods and services for individuals in a state of destitution. However a more worrying concern is that Rawls had to renege on his position in *Theory of justice* because, in view of the prevailing strength of game theory, he was unable to defend political obligation to principles of government consented to (fair play) (Amadae 2003, 258-273). Rawls developed a rescinded position in *Political liberalism* (2005) that yields universalist claims in favor of suggesting that each community will develop its own self-vetted principles of justice which could diverge from the familiar western bourgeois ideal favored by McCloskey. Indeed, the rational choice position that morals and ethics, if they exist, are part of individuals' preferences over outcomes currently prevails among economists (Hausman 2012, 34). This is the position McCloskey attributes to the neo-institutionalists and seeks to counter with Searlean social ontology and commitment to the virtues and ideals she sees as giving rise to the rule of law and serving as the basis of free markets. If McCloskey's goal is simply to make clear

the differences between her and the neo-liberal institutionalists, then I applaud her effort.

However, if her alternative ‘dialectical libertarian’ vision is correct in accounting for the rise in prosperity as she claims, then it would be useful to have a template for action in addition to a rich text revealing differences. Here I worry that McCloskey is insensitive to the rising economic insecurity of the middle and lower socioeconomic classes that, as she argues, must have minimal security to have the latitude to be animated by ideals over and beyond pursuing the physical amenities necessary for economic survival in the twenty-first century. Thus, while elites achieve if not the deontic, then surely the de facto, power of property rights over increasingly disparate shares of earth’s resources and society’s wealth, McCloskey does not explain how they, and all levels of society for that matter, will be inspired by the “bourgeois deal” and values. In fact, toward the end of her six-hundred page exposition on the power of ideas, while defending inegalitarian pay and the hierarchical structure of capitalism, she makes the case that unequal pay is necessary to send the correct signals about individuals’ worth (p. 578). However, this admission seems to fall into the hands of the neo-institutionalists who view preference-satisfaction as the function of life, and individuals’ economic value to be equal to their lifetime earnings potential. By this account, those who are higher paid have added more value and merit more earning power because they satisfy others’ preferences to a multiple-digit order of magnitude more than others. This form of preference satisfaction, leaving no independent compass for ethical action, seems to foreclose on respecting human dignity equally, and ensuring that every action is in line with the Pareto principle of making at least one person better off *and no individual worse off*.

While McCloskey’s argument may be incomplete for not fully defining or explaining “liberty”, or human dignity, it is possible to imagine what some satisfactory steps in this direction may be. Let us suppose, for the sake of argument, that intersubjective, linguistically mediated, ‘I-You’ relationships that instill meaning and deontic powers to individuals, relations, actions, and objects are more fundamental than market exchange which must exist within the context of a stable society with a legitimate (mutually acceptable) rule of law to ground mutual prosperity and Great Enrichment. Let us accept that institutions operate both on the basis of incentives, or individuals’ motive to pursue ends,

and in accordance with norms that are not the product of obtaining preferred outcomes but provide reasons for acting. In this way we can understand the norm of accurately counting money or ballots in an election despite participants' perpetual incentive to 'count in their favor'. The rules of counting ballots establish a correct answer, but this outcome may not align with individuals' interests. By Adam Smith's analysis, individuals have two principles operating, both the impulse to self-betterment that is associated with prudence; and the propensity to have sympathy toward others who are wronged, even though this sympathy does not promote the ends of the one who sympathizes. Economists, including Smith, tend to endorse methodological individualism that attributes micro-motives to individuals' behavior, and as Thomas Schelling argues (1978), these result in macro-behavior, or collective outcomes, that are not intended by the individual actors. Adam Smith's invisible hand is often thought of as this type of explanatory device. Economists study, and model, how these micro-motives lead to unintended collective outcomes (Aydinonat 2008).

What Smith, and I think McCloskey, suggest is that individuals are observed to have a moral compass that also can be coherently incorporated into individual decision-making but along the lines of non-consequentialist ethical judgment. Magnified across an entire society this internalized ethical compass reflecting a commitment to human dignity can have systematic unintended macroscopic outcomes germane to the global functioning of a society. Whereas game theorists appreciate the unintended consequences of myopic strategic action, they do not acknowledge that there could be a global impact of the unintended consequences of localized expressions of ethical judgment. Smith argues that there are two principles at work in evaluating individual action. One is the ability to serve as an impartial judge of the rightness and wrongness of others' actions according to a non-arbitrary standard that boils down to the no-harm principle, and the other prudential respect for one's own good. He argues that the former underlies the rules of justice, and the latter the propensity of exchange to lead to mutual prosperity. Both can serve as micro-motives that lead to macroscopic patterns, and neither basis for action is reducible to the other.

McCloskey seeks to argue the case that both individual ethics and the motive of self-betterment ground the Great Enrichment. Thus, she proposes a dialectical structure that places both ethics and tangible self-

betterment on a complementary footing. It will be up to the reader to decide whether, over the course of her argument, she provides sufficient evidence for both the unparalleled *and inclusive* rise in prosperity around the globe during the two centuries of modernity. As well, readers must determine if she offers a compelling case that the existence of “the rules, habits, operations, knowledge, [and] institutions [...] material and spiritual” complement prudence and incentives to account for how modern capitalism succeeded (p. 648).

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## The bourgeoisie and the scholar

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Deirdre McCloskey is a true *sui generis* in our intellectual universe. In the latest (and last, by her own promise) installment of her *Bourgeoisie* trilogy, she had brought together many of the ideas proposed in the two earlier volumes, as well as in a long stream of essays and lectures. She is an economist like no other economist: fiercely opposed to the domination of game theory, vociferously suspicious of the use of mindless statistical significance in empirical work, and resistant to the “institutional turn” in economic history. In these three volumes she effectively demolishes the idea of historical materialism. Economic forces do not determine what people believe and think, she maintains; it’s the other way around. Ideas determine how people act and behave, whether they will invest or waste, accept bribes or serve the public honestly, whether they will be makers or takers, think outside the box or remain loyal to age-old conceptions, and hence whether the economy will be static and stagnant or dynamic and vibrant.

Specifically, she asks this question about modern economic growth, or what she calls “the Great Enrichment” (a term that is to be preferred to “the Great Divergence”, which stresses the gap opening up between East and West in the eighteenth century rather than the miraculous rise in living standards). The argument, in a nutshell, is that in a few core areas in the western part of Europe, the prestige and social standing of economically active and ambitious “bourgeois” agents—merchants, entrepreneurs, innovative industrialists and farmers, bankers and so on—began to increase. The Bourgeois “revaluation” or “deal” is what accounts for modern economic growth. “There was a sharp rise in society’s receptiveness to improvers” (p. 472). Slowly, and in the face of much resistance, people began to shed the notion that trade and

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voluntary transactions between consenting adults were improving for all sides. The world was understood to be positive-sum.

In other words, the culture (a word she eschews, but that seems unavoidable here) of society as a whole mattered, not just the beliefs of the actors themselves. Not much else changed in Europe before the Industrial Revolution, she feels, that would explain the take-off that led into the Great Enrichment. “We must look to ideas, which did change at the right time in the right places, and greatly”, as she puts it (p. 470). I cannot possibly disagree: indeed, my own *Gifts of Athena* (2002) and my *Enlightened economy* (2009) make a similar point. But McCloskey emphasizes a different angle. The hierarchy of values in every society determines what careers young men and women choose and how hard they try to succeed. In a military-oriented society they will stress physical prowess, in a scholarly society they will strive to become learned in the books that matter. In a capitalist society in which commerce and economic success are respected, entrepreneurship and profitable innovation will thrive and economic prosperity will ensue. But profits were not everything, much less the only thing. People are not just driven by greed (“prudence” in her somewhat quaint nomenclature), they have ethical beliefs and care what others think of them. For a scholar trained in modern economics, this is a bold, heterodox thought. But it may have the advantage of being correct.

In making her arguments, McCloskey treads on grounds rarely visited by economists: she cites novelists, philosophers, playwrights, political theorists, poets, *The theory of moral sentiments* (the “other” Smith masterpiece that most economists skip) (1976 [1759]), and what not. If that makes her arguments more persuasive to her fellow economists or not remains to be seen. Indeed, at times her tone slides into a condescension that some readers may find off-putting. I have read all these books in the humanities and philosophy, she says, and “they” have not. So they are in no position to question my conclusions. One scholar is advised by her to re-read *The theory of moral sentiments*—“slowly.” For someone who wrote the book on *The rhetoric of economics* (1985) and who has repeatedly urged economists “don’t sneer”, this patronizing tone is an unexpected and perhaps unwise tactic. Especially the late Douglass North, one of the great pioneers of economic history (and more broadly, social science history), comes in for McCloskey’s scorn. Samuelsonian economics, or “Max U” as she contemptuously calls it—roughly equivalent to the lion’s share of the

practice of economics in academic circles—fares little better under her withering critique. But then, one does not get to be Deirdre McCloskey unless one marches to the beat of one's own drum, even if it sounds at times a bit off to others. McCloskey's idiosyncratic if often endearing writing style, however, should not fool her readers to take her message lightly. This is a book of enormous learning, penetrating original insight, and yet written with a disarming charm, and a good cheer that is often utterly irresistible. All the same, the issues that professor McCloskey takes on are momentous and complex, and she full-well expects others to disagree on some matters—and so I shall.

Professor McCloskey cites me (p. 511) as having written that “economic change depends, more than most economists think, on what people believe”. That message, obvious as it may sound, needs to be stated and re-stated, to rid ourselves of the relics of historical materialism. McCloskey has stated it more eloquently and emphatically and documented it more copiously than I ever can. In her crucial part VIII, chapters 51-55, she states her central position: words and ideas caused the modern world. Moreover, she correctly identifies the critical centuries between Columbus and Newton's *Principia* as the formative years in which everything changed and an irreversible cascading movement toward an increasingly productive technology was set in motion. So far so good. But it is the beginning of a research program, not the end of it.

Where disagreement sets in is *what kind* of beliefs and knowledge mattered here and *whose* beliefs. Professor McCloskey argues that at some point in early modern Europe, society began to honor the “bourgeoisie”—merchants, investors, high-skill artisans, and speculators, giving them a respect and a social standing that later generations, led by a retrograde “clerisy,” no longer could muster uniformly. Instead, left-wing intellectuals, led by Marxists, turned the bourgeoisie into a *bête noire* and a scapegoat for all of society's ills. But by that time the engine of growth had been set into motion, and a series of self-enforcing irreversible changes had occurred that led to the Great Enrichment (McCloskey seems to prefer the term “betterment”—I suspect few will follow her in that; but it is still better than “betterocracy,” a dreadful neologism proposed on page 512). Her argument is supported by an enormously rich and diverse body of evidence from an almost bewildering array of sources, spread over a large number of short but pungently titled chapters. My favorite ones

are chapters 35-36 entitled “The Dutch preached bourgeois virtue” and “And the Dutch bourgeoisie was virtuous”. The Dutch Golden Age is indeed a critical juncture in her account. It was not just greed or profit maximization that dominated this virtuous society, she shows, it was ethics, charity, temperance, tolerance, perhaps even “love”. That is the essence of being bourgeois.

What is missing in her account, quite on purpose obviously, is much attention to the great minds and intellectuals who changed the conversation of learned men and women in Europe in the centuries before the Industrial Revolution. Some of the greatest minds that created the age of modernity—and with it modern prosperity—deserve nary a mention. These choices indicate the strengths but also the flaws in McCloskey’s analysis. On page 501, she provides her list of the people whose rhetoric rang in the age of improvement. They include Enlightenment thinkers such as Hume and Rousseau, politicians such as Pitt and Napoleon, and writers such as Wollstonecraft, Martineau, and Manzoni. Oddly missing are any Dutch names, despite her repeated statements that it all started in the Netherlands and Britain. It is one thing to leave out the great scientists of the age (see below), but for a book so concerned with the rise of modern ways of thinking, how could she leave out a discussion of Spinoza who by many accounts (most recently the massive trilogy by Jonathan Israel) as summarized in Israel (2010) was the “first modern thinker”—and Dutch to boot.

For a book so concerned with ideas, then, it is odd that many of the people whose ideas most influenced the “new thinking” in early modern Europe are remarkably absent: Descartes, Galileo, Huygens, Newton—none of them seem to make much of an impact on her account of the intellectual preparation needed for the Great Enrichment. Part of the reason for this, as she repeatedly stresses, is that she believes that science played no role in the Great Enrichment until it was well underway. This is where this massive and learned tome is at its most vulnerable. McCloskey simply dismisses the impact of science and the scientific revolution as immaterial and of little practical value until “the 1960s [when] we wanted to navigate our way to the moon” (p. 506).

It is never quite clear on what grounds this dismissal is warranted—surely one has to do more than just ask the schoolchild’s question “how much science was needed for a spinning jenny”? There is a serious scholarly literature that discusses this point at great length, yet apart from a nod to the eminent historian Margaret C. Jacob and myself—both

dismissed as mistaken on the matter— there is no serious engagement with the literature that links scientific progress to the Great Enrichment, from Musson and Robinson’s classic *Science and technology in the industrial revolution* (1969) all the way to the more recent books by Floris Cohen (2012) and David Wootton (2015).

Nobody argues that the entire Industrial Revolution is explained by scientific progress, nor that the connection between scientific breakthroughs and technological progress did not become more powerful as time went on in the nineteenth and twentieth centuries. Perhaps the emphasis placed by Jacob and Stewart on “Newtonianism on the shopfloor” (2004) seems a bit overdone. But the dismissal of any role of formal and codified knowledge in advancing technology and the discourse that led to the triumph of the Baconian program in the West is simply unsupportable.

The examples of science in the service of industry as early as the first part of the eighteenth century and with ever greater force during and after the Industrial Revolution are just too important to ignore. The example of the work of French mathematicians and English experimentalists on hydraulics is well known—it led to much improved water mills and later turbines (Reynolds 1983). So, of course is the work of eighteenth-century Swedish and French chemists on the use of chlorine (a recently discovered substance) in the service of the cotton industry. Less well-known but of great importance is research in pneumatic chemistry, which led to the controlled burning of gas and the gas-lighting industry, one of the most successful and dramatic advances of the Industrial Revolution (Tomory 2012). The budding science of geology turned useful when it was realized that fossils could be used to prospect for coal (Winchester 2001). Steam power, of course, presents the odd mixture of formal propositional knowledge and the kind of high level of imaginative craftsmanship that men like Watt, Smeaton and Wedgwood embodied. But without the “experimental philosophy” of natural scientists such as Torricelli, von Guericke, Huygens, Boyle, and Denis Papin, the critical understanding of atmospheric pressure and vacuum would simply not have come about. Even McCloskey’s favorite artisan-inventor, John Harrison, who perfected the marine chronometer to resolve the age-old longitude at sea problem, could not possibly have done his work without the work of mathematically-trained geographers and astronomers—the first one was the Dutch (more accurately Frisian) astronomer and mathematician Jemme Reinerszoon, 1508-1555, known

as Gemma Frisius, who first suggested that what Harrison did was possible.

In short, the kind of formal and codified natural philosophy, that became what we call today “modern science”, arose in the very period McCloskey sees as the time when the conversation in Europe changed. Yes, intellectuals mattered to the Great Enrichment, but it seems almost unimaginable in that context to write at great length about Jane Austen and leave out Joseph Priestley, the discoverer of oxygen, the inventor of carbonated drinks and pencil erasers, a liberal and progressive yet deeply religious enlightenment *philosophe*. Modern chemistry as we know it now was formulated by Antoine Lavoisier. Within a generation his new chemistry already found a myriad of uses through the work of, among others, Lavoisier’s countryman Michel-Eugène Chevreul, who discovered the nature of fatty acids and turned the manufacture of soap and candles from an art into a science. As director of dyeing at the *Manufacture des Gobelins*, he had a direct interest in the chemistry of dyes and colors following the original work on the chemistry of dyeing that had been carried out by his predecessor at the *Gobelins*, Claude Berthollet, the inventor of chlorine bleaching and one of Lavoisier’s most illustrious followers. Long before the twentieth century—when McCloskey concedes that the scientific discourse began to matter—German chemists in Giessen developed organic chemistry with enormous effects on industry and agriculture.

Even more important than the actual scientific insights of the seventeenth century were the meta-ideas that gained acceptance in the intellectual discourse of early modern Europe on how to gather and evaluate propositional knowledge. Among those, the ones with the most dramatic impact for the eventual Great Enrichment were three. First, the triumph of experimentalism, the understanding that results from experiments—contra Aristotle—were a valid way of verifying hypotheses in natural philosophy. Experimental science required precision in both workmanship and materials, standardization of terminology and units, and a clear and detailed communication of experimental work so that it could be reproduced and verified. Second, research became more formal, mathematical, and quantitative. Galileo famously wrote that the book of nature was written in the language of mathematics, and by 1650 it was impossible to do serious physics without a strong training in mathematics. Finally, science developed an inductive side when formal mathematical analysis would not do; plants and planets could be

observed, counted, catalogued, and classified. Patterns and regularities would emerge, perhaps, to show how nature worked.

There is no contradiction between McCloskey's "Bourgeois Deal" and her emphasis on ethical beliefs and the growing influence of the Baconian ideal of science in the service of society. Creative minds wanted to be recognized in society, and the changing hierarchy of values affected the social standing of natural philosophers and intellectuals. Eighteenth century Britain honored Newton more than Marlborough. To be sure, patronage—the driving factor on the demand side of the market for ideas—started off largely as an aristocratic venture, but the urban bourgeoisie and merchants demand for information and interest in science (did "curiosity," once a vice, begin to count as a "virtue"?) added fuel to the engine of progress, as documented by Harold Cook in his *Matters of exchange: commerce, medicine and science in the Dutch golden age* (2007).

McCloskey's "honor to the bourgeoisie" story will be incomplete unless we recognize the great and unique intellectual transformation that set early modern Europe apart from all other societies that preceded it and coexisted with it: it was losing its paralyzing respect for the iron grip of past learning. For some reason, humans seem to be hardwired to honor the wisdom of their ancestors and to feel somehow inferior in the face of past learning. Whether the Talmud, the Koran, Confucius, or Aristotle and Galen, there seems to be a pervasive belief that the truth had been revealed to our ancestors, and that wisdom was to be found by poring over their writings and exegesizing them until the true meaning was revealed. In the sixteenth century, that belief was irreparably weakened. In 1580 an Oxford Don could still be fined five shillings by teaching something that was contradictory to the writings of Aristotle. But Oxford was behind the curve: by that time the classical canon had come under fire from every corner. The intellectual world of the fifteenth century was still in the shadow of classical learning, but in the sixteenth century and beyond, it had morphed in the world of insolent rebels such as Paracelsus, Harvey, Ramus, Brahe, Boyle, and so many others. Driven by new observations and information, they ripped the classical texts in physics and medicine to shreds, and subjugated them to what they believed to be persuasive evidence and logic. A new world of useful knowledge was created.

As professor McCloskey would say, the rhetorical rules of what was true and what was not changed, since they themselves were the subject

of the intellectual discourse. The line “Aristotle (or the Bible) said so, hence it must be true” was no longer acceptable. The famous struggle between the “moderns and ancients” that took place in this period ended with a resounding triumph of the moderns. The works of classical antiquity may have retained a place in the curricula of universities, but as an authoritative source on anything having to do with the natural world they were decisively dethroned. Once the leaden burden of the authority of Aristotle, Ptolemy, Galen, and other classical writers was lifted and the age of *in nullius verba* began, modernity dawned.

McCloskey is of course correct in pointing out that at first the tangible achievements of science were modest. Many scientific areas in which progress would yield its highest fruits in the Great Enrichment turned out to be much messier and more complex than expected. The hopes that eighteenth-century post-Newton scientists had to Newtonize chemistry, medicine, biology, and agricultural science were all disappointed in the short run. Dr Johnson, one of McCloskey’s heroes (chap. 17), writing in *The Idler* (1759), expressed the disappointment of the age:

When the Philosophers of the last age were first congregated into the Royal Society, great expectations were raised of the sudden progress of useful arts; the time was supposed to be near when engines should turn by a perpetual motion, and health be secured by the universal medicine... The [gout] and [stone] were still painful, the ground that was not ploughed brought no harvest. [...] The truth is, that little had been done compared with what fame had been suffered to promise; and the question [“what have you done?”] could only be answered by general apologies and by new hopes, which, when they were frustrated, gave a new occasion to the same vexatious enquiry.

In 1759, as in 1776, the Great Enrichment was still more a hope and an aspiration than a reality. How to make cheap steel, how to tame electricity, how to communicate over larger distances at lightning speed, how to end the scourge of smallpox, and what made crops grow more abundantly and reliably were all still problems with which the best minds of the eighteenth century were struggling. In the century following *The wealth of nations* they were all solved. Can one really tell the story of the Great Enrichment without them?

The other problem I see with McCloskey’s book is the question of “why”. The richness of the literary and historical detail she supplies to

describe and document the rise of the “Bourgeois Deal” should not blind us that, odd for an economist, the main line of the story is under-determined. It is all good and well to focus on “discourse”, rhetoric, and conversation in explaining how attitudes and beliefs changed. But an economist will remain dissatisfied: what is the true driver in this model? Why and how did the discourse change and the “Bourgeois Revaluation” prevail in Northwestern Europe in the sixteenth and seventeenth century? Why not elsewhere, or at some other time? Why in Europe and not in China? And if in Europe, why not in Poland, Portugal, Sicily, or the Balkans? Do we have any kind of model to explain why certain themes and values prevailed and others were discarded? Here I found the 787 pages of *Bourgeois equality* less than helpful. There is description: mental frames were altered, new neural pathways were laid down in people’s brains (p. 525). On page 152, when the question is posed explicitly, the answer given is “the egalitarian accidents of 1517-1789”. It was “a happy accident of circumstances” (p. 465). Or on page 640, the final chapter that is supposed to sum it all up: “Once upon a time a great change occurred, unique for a while to Europe, especially after 1600 in the lands around the North Sea”. Or on page 439: “Europe was merely lucky [that harmful intervention of the state was overcome by] trade-tested, markedly positive-sum betterments”. Chapter 50, which takes on the issue of “why not elsewhere” is uncharacteristically full of words such as “mystery” and “puzzle”. Perhaps a volume 4 of the Bourgeois project is needed, after all.

Yet it is possible to make some progress. McCloskey adopts a concept of ‘trade-testing’ (as in “trade-tested betterment”). In and of itself, I find the qualifying “trade-tested” improvements rather puzzling. Does it mean that they sell? Much improvement, from the works of Spinoza to those of Schubert can hardly be judged as being “trade-tested”. And many things were trade-tested yet hardly qualified as improvements. But what may help our understanding here is the concept of a ‘market for ideas’—a concept proposed as early as 1962 by Michael Polanyi (1962) and later elaborated on by leading economists such as George Stigler (1965) and Ronald Coase (1974). New ideas are placed on the menu of the social conversation all the time. If its proponent, or one of her supporters, persuades another person to change his mind about some belief or supposition, a ‘sale’ has occurred. Of course, no money changes hands in this ‘transaction’. Yet creative intellectuals understand and play the persuasion game all time—



perhaps nobody better than Deirdre McCloskey herself. The most desirable attribute for an intellectual to attain is not to be rich or “trade-tested”, not even necessarily to be ‘correct’, but to be *influential*. John Calvin, Francis Bacon, and Isaac Newton, each in their own way, influenced their times more than almost anyone else. Indeed, in the market for ideas they can be regarded as ‘cultural entrepreneurs’. The test of a well-functioning market is that it allows successful entrepreneurs to come into their own. Paracelsus, Harvey, Descartes, Galileo, and Leibniz were all intellectual superstars, in a world in which the economics of superstars became increasingly applicable. But right behind them marched a small army of thousands of famous and obscure innovators—intellectuals, physicians, craftsmen—who placed new items on the ideational menu. Innovation became attractive, because it held the possibility of fame, and fame meant patronage, security, and ego-stroking. It is the culture of these people, the intellectuals in the upper tail of the human capital distribution, that mattered above all. The culture of open science they created is still with us, and it still serves science and technology well.

The beliefs of the large masses—bourgeois and peasants—obviously mattered, because they set the background parameters in which all entrepreneurs work. But beliefs of the many fewer actual actors may have mattered more. This actually provides some support for McCloskey’s belief that some element of good fortune was involved in addition to circumstances and geography. As David Hume wrote in 1742,

Those who cultivate the sciences in any state, are always few in number: The passion, which governs them, limited: Their taste and judgment delicate and easily perverted: And their application disturbed with the smallest accident. Chance, therefore, or secret and unknown causes, must have a great influence on the rise and progress of all the refined arts (Hume 1985 [1742], 113).

Why, then, did this market work so much better in Europe than anywhere else? As McCloskey points out, following many others, the political fragmentation of Europe ensured a high level of competitiveness and made it practically impossible for any reactionary power, secular or religious, to put an end to heterodox and innovative ideas—including not only the idea that making money through hard work and ingenuity was virtuous, but also that the earth was not the

center of the universe and that organisms did not sprout spontaneously. The reason for this success was that Europe had the best of all possible worlds. Superimposed upon the 156 separate political entities that emerged out of the Peace of Westphalia was a pan-European transnational institution known as the *Respublica Literaria*, a virtual network of communications (mostly through letters) and conversation of literate men and women. The Republic of Letters created an integrated European market for ideas in which intellectual innovations were discussed, vetted, tested, criticized, revealed as fraudulent or hailed as revelations. Its citizens (they actually thought of themselves in those terms) exploited the scale economies that made such an institution work precisely because it was international. The Republic of Letters was the institutional foundation of a well-functioning market for ideas. It did exactly what well-functioning institutions are supposed to do: it created the incentives and rewards for people who came up with ideas that others accepted. If this is what “trade-tested” means, I am all for it.

In my *Culture of growth* (2016), I discuss this market primarily in the context of beliefs regarding natural philosophy and the understanding of the physical and biological world. But McCloskey is correct in pointing out that the Great Enrichment involved a lot more than that. The profound and critical notions that triumphed in the age of enlightenment she lists are essential in understanding the Great Enrichment. First, exchange was positive-sum. If foreign nations gained from trade with your nation, that did not mean that your nation lost: *both* sides stood to gain. Don’t fight with foreigners, trade with them. Trade beats glory. Second, rent-seeking (which was what mercantilist policies were all about) was associated with large deadweight losses. Monopolies, tariffs, subsidies, cozy offices, what the French called *privilèges*, were all leaky buckets in which the gains to the winners were smaller than the losses of those who paid the price. Third, the role of government was not to enrich itself or its cronies or gain glory by hacking other people to death, but to provide the citizens with goods that the free market for one reason or another failed to supply. These are all ideas that should be associated with the European Enlightenment. Those three ideas amounted to the “institutional flip side” of the Enlightened Economy. In the end, the economic triumph of the West and the Great Enrichment cannot and should not be dissociated from the

*philosophes* of the eighteenth century who collectively created the *lumières*. Ideas, indeed, drove the economy.

These disagreements aside, this is a magnificent book, a model of magisterial, interdisciplinary, enviably erudite scholarship. McCloskey's *Bourgeois trilogy* will be regarded for generations as a monument of learning and insight. Writing a review essay that does full justice to 787 pages—let alone 2,000 pages in three volumes—would be a huge task. But we should all be grateful to her for not only refuting much nonsense written about the sources of the Industrial Revolution, for bringing the humanities back into economics, but above all for her celebration of the bourgeoisie, the hard-working, creative, and decent class that has been so wrongly maligned by so many self-righteous intellectuals. It is about time someone spoke up for them—and so eloquently at that.

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## Not saving or psychology, or science, but a new liberalism: a reply to Gaus, Goldstone, Baker, Amadae, and Mokyr

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**Abstract:** The reply to five reviews of *Bourgeois equality* in a symposium in *EJPE* observes that all the reviewers admit the great force of ideas in causing the Great Enrichment. Materialism is dead. Liberalism reigns.

Well, a philosopher, a sociologist, another philosopher, a political theorist, and an economic historian. This is going to be interesting!

Gerald Gaus' over-generous praise startles me—I didn't set out to write a "great work", and am reluctant to think it is anything close (I blush). I merely intended in the trilogy of *The bourgeois virtues: ethics for an age of commerce* (2006), *Bourgeois dignity: why economics does not explain the modern world* (2010), and the present volume to redeem the bourgeoisie and to find out the scientific truth about its role in making the modern world. I thought the job would take one volume. In the end it took some 1,700 pages. The main reason I stopped at three volumes—the present, third volume being even longer than the other two stouts—was articulated by the philosopher of religion Alvin Plantinga justifying stopping at his own third volume, on warranted belief: "A trilogy is perhaps unduly self-indulgent, but a tetralogy [not to speak of the hexology I once contemplated] is unforgivable" (2000, xiv).<sup>1</sup>

You don't write some 1,700 pages of evidence and reasoning about history and economics and ethics and the rest as though writing a bank draft (to quote the young Kant), with a pre-planned and routine outcome. The experience is less like central planning and more like trade-tested betterment. Over the twenty years of thinking and reading, among which the twelve years of writing, I hope I made a few

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<sup>1</sup> I have in the past, without properly checking the source, improved on his remark by remembering it as "but a tetralogy is an abomination". Thus scribal error.

discoveries. The chief discovery, I fancy, is that the one essential cause of the modern world, “the central pole of the tent”, in the old figure of speech, a cause much more important than any psychological change in the direction of better bourgeois behavior (of the sort Max Weber imagined in 1905), was the sociological and political change unique to northwestern Europe of *accepting* the bourgeoisie and its fruits. The change in the ideology surrounding ordinary people, allowing them to have a go—“the liberal plan of equality, liberty, and justice”, as the blessed Adam Smith put it—made people bold (1981 [1776], bk. IV, chap. 9, para. 3).<sup>2</sup> And inventive. And rich. And cultivated. Thus *Bourgeois equality: how ideas, not capital or institutions, enriched the world*.

Yet Gerry Gaus, when he hears John W. Chapman speak out loud and bold, says that I didn’t “get it *entirely* right”. His theme is that I am insufficiently game-theoretic and institutional, missing my own best point. He asserts, against what he thinks is my (1905 Weberian, psychological, *Die protestantische Ethik und der Geist des Kapitalismus*) point, that “there is strong reason to question the explanatory power of character traits and attitudes”.

Yet on the contrary I am saying that it was not the character traits of the bourgeois, but the ideology of those around them that changed (or if you want a word that Marx did not invent, it’s the social *rhetoric* that changed; or if you wish a less contentious word, the social *ethics*).

Gerry’s misunderstanding is surprising coming from someone who never in my experience makes mistakes in such matters. He must have started from some strong prior conviction, which makes it hard for him to discern the present point. What prior? Hmm. He thinks my main opponent is the late lamented Douglass North and his neo-institutional followers. I admit to arguing against Doug in this volume, and in *Bourgeois dignity* and in other essays (McCloskey 2010, chaps. 33-36; 2016a, chaps. 14-15; 2013; 2014a; 2016c; 2016d). But Gaus thinks I am fooling myself by opposing Doug. He wants me to recover North’s focus on “the institutional rules of the game”, by way of Bicchieri’s game-theoretic logic, “the rule-governance of social morality”. He’s slouching towards North. And anyway he’s slouching towards an economistic line of argument that notably neglects the autonomous role of ideas.

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<sup>2</sup> Smith is here attacking Colbert and mercantilism. Speaking of scribal error, I often get wrong the order Smith gave to the three attributes of an unplanned plan of “allowing every man to pursue his own interest in his own way”.

Economism of course has some merit—I do not want my union card as an economist, Harvard Local 02136 and Chicago Local 60637—to be taken away. But game theory is something like the opposite of what I came to argue. Another way to understand the three volumes is the working out in ethics and history and sociology and literature of an escape from the Prudence Only character that lies at the heart of Samuelsonian economics. Despite Doug North’s protestations, he and his followers espouse a highly conventional Prudence Only, materialist, Max U, “neoclassical”, non-cooperative-game-theory notion of people and societies. I wish they wouldn’t. I wish they would grow up and notice that people think and love and argue. It’s the force of language. As Smith said, “every one is practicing oratory on others thro the whole of his life” (1978 [1762-1766], LJA, vi.56, 352).

Gaus declares that “modern ethics concerns what we *must* do—what we are required to do even if we are not attracted to it”. Shades of Kant and deontology. No rhetoric, no oratory, no ideas, no ideology, thank you very much: we are Scientists of society, and don’t deal with such softness. Gaus wants there to be rigid rules, and he wants them to have a no-talk, game-theoretic support. Thus North again, and Avner Greif (2006). “Does [a good person] ascribe to bourgeois virtue? [Note again that he thinks it is the behavior of the bourgeoisie I am talking about, instead of how others value it.] I don’t know. Must she act in the required way? Certainly”. This is Kant indeed, the attempt to build ethics on what every *rational* actor *must* ascribe to. *Sie müssen*.

In the words of an old New Yorker cartoon showing a child kicking at dinner in a high chair: I say it’s spinach, and I say to hell with it.

Though I admire his philosophical history of hunter-gathering, and rely on it in the present book, Gaus is not a particularly historical thinker. That’s all right. One can’t do everything. It’s good to hear for example about the experiment, co-authored with Shaun Nichols, showing that “a social morality that stresses [minimally just] prohibitions rather than [pre-arranged, hierarchically granted] permissions encourages innovation and exploratory action”. It’s an interesting result. And of course, as I said in the book, the same observation about behavior is typical of Hume and Smith and Kant and one side of *Aufklärung*. It is liberal ideology, by contrast with Colbert’s mercantilism.

I do wish Gaus would realize, though, that we need to solve a *historical* as much as an economic problem, namely, why the Great

Enrichment happened when and where it did, in a bit of northwestern Europe in the past two or three centuries. The purely economic arguments, as I showed at some length, especially in the previous volume, *Bourgeois dignity*, have this problem: that China, for example, had coal and India a massive foreign trade and Spain a great overseas empire and the Ottomans the rule of law and France an Enlightenment, yet none initiated the Great Enrichment.

That's the trouble with timeless arguments from game theory, such as Bicchieri's, or North's, or Acemoglu's. In one sense they explain too much, because their mechanisms are universal. In another sense they explain too little, because they do not attend to the ideational peculiarity of the Dutch and English bits of northwestern Europe (namely, the peculiarity of a nascent liberalism). Gaus notes that "in the last fifteen years a large body of evidence has accumulated that the actions of humans are critically sensitive to the normative expectations of others". Aside from noting with some annoyance that we hardly need evidence from "the last fifteen years" for such an ancient and obvious feature of human nature (*Antigone?* The Hebrew Prophets? *The Mahabharata?*), I entirely agree. And it is a quite *different* notion than the Better Bourgeois that Gaus thinks I am claiming. "The critical point is that ['trendsetters', in Bicchieri's vocabulary] were able to shape the social rules that generated normative expectations supporting equal dignity, liberty, markets and innovation, and that these normative expectations were widely accepted as legitimate". Sure.

All right, but then why then and there? That's the historico-scientific puzzle. The Bicchierian logic would apply to the Roman Republic or to early modern Japan, which didn't produce the modern world. My book tries to explain *why* then and there, first in Holland and then in Britain, and finds that it was a close thing, but decidedly ideological, a matter of ideas, which of course themselves had causes, some of them material (European 'discovery' of the New World, European orientation towards the sea, European political fragmentation) but many of them ideational (the Reformation, science, the rights of man). Gaus declares that "A framework of liberal equality embraces this ideal of universal membership in the community: the rules of basic social life apply equally to all, simply as members of a community". But that's the liberal ideology on which I put so much emphasis (wholly justified, natch).

"The moral rules of the game", writes Gaus, channeling North again, "[obtain] when we confront total strangers. In most cases we know little



about these strangers—in particular, their conception of virtue and how well they live up to what they consider virtuous—yet we need to rely on them. How can that happen”?

It happened anciently. It is not true that there was an internal, psychological “development” of honesty, for example. There was in northwestern Europe a new public *honoring* of commercial honesty, which is an entirely different matter, a matter of ideology or rhetoric or ethics, taking place historically and sociologically, not economically and psychologically.

Aside from these textual matters, I must say I find myself repelled by Gaus’ vision of people as cynical conformists: “we are such deeply social normative creatures, in the sense that we are so attuned to the normative expectations of others, that we can achieve a stable rule-based system of cooperation even when many are not enthusiastic about the moral attitudes and virtues that the rules express”. I invite him to re-read Thucydides’ dialogue between the Athenian diplomats and the Melians, and repent.<sup>3</sup> “A critical explanatory variable for many people”, Gaus writes, “is their responsiveness to the normative expectations of those with whom they share a social life”. I agree, and said so repeatedly, though not on the basis of game theory construed as a complete social science (as my friendly acquaintances Gintis and Bowles, admired by Gaus, do so try to construe it). “I believe that it is, in general, false that everyday moral action requires virtues such as temperance or courage, or even the ‘middling’ virtues, except in so far as one must be sensitive to the legitimate expectations of others”. This other-directed, contemporaneous (as against, say, the developmental story of Confucius or Adam Smith), Nash-equilibrium concept of ‘virtue’ is a strange characterization of most of the beautiful minds I know, including that of Gerald Gaus. The courageous pursuit of truth that characterizes his work, for example, would be reduced in his theory to conformist careerism. “We should never underestimate just how important conformity is to any culture”. So Gerry evidently believes, at any rate when he is thinking theoretically. “Most, I think, seem essentially driven by what they expect others will do, and what they believe are the legitimate normative expectations of others”. This, I have to say, is nuts. Or spinach.

Although I admit that the economist in me delights in Gaus/North / Bicchieri / Acemoglu / Gintis games. And I *like* spinach.

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<sup>3</sup> The passage is brilliantly analyzed in White (1984).

## §

I can't possibly claim that Jack Goldstone misunderstands the book. His lucid and elegant summary deserves some sort of prize for scholarly temperance. The economist George Stigler once joked that John Stuart Mill was the only student of the economy to try the experiment of being completely fair to his opponents. The experiment, George continued, was never repeated. Except by the historical sociologist of the economy Goldstone, summarizing my argument:

What can prevent the elite from preventing change, when the status quo so strongly favors their interests? An insistence that ordinary people should be encouraged to act independently, be respected for originality and innovation, and be allowed to retain (most of) the profits of any activities they offer in free and fair markets.

Spot on.

Yet Jack doubts, with Gaus, that I have got it *entirely* right. "Why did the shift in rhetoric to value the bourgeoisie *in England* not simply evolve as it did in all other cases, namely to create an oligarchy of privileged merchants who still derided ordinary citizens"? It's an important question, to which I offered in the book in various places only a sketch of a reply, referring for example to the accidents following on the struggle between Stuarts and Parliament, 1625 to 1688, with a thoroughly bourgeois example of the Dutch Republic at hand. Had Charles I and especially James II not been so similar to their father and grandfather, James VI of Scotland and James I of England, "the wisest fool in Christendom", it might have turned out differently.

The other doubt is more fundamental. Jack asks, "How does anyone acquire the belief—based on no prior successful examples in history—that the best way to innovate is to perform thousands of experiments to create new products or processes as Wedgwood did to create Jasper blue (as McCloskey points out on page 522)"? He argues therefore that "it could not just have been respect that produced their extraordinarily productive innovations. Something else must have happened as well", in particular the new engineering culture that Goldstone and Joel Mokyr and Margaret Jacob have emphasized as special to the Europe of the Scientific Revolution and the Enlightenment. The point persuades, though one wonders at the implicit claim that an obsession with experiment did not also characterize many people in other cultures

(Mayan? Chinese? Byzantine?) whose scientific culture we happen now to know less about.

But wait. Goldstone's first doubt concerning my argument was that the elite would usually stop progress, yet didn't in Britain. But the Bourgeois Revaluation which the book touts did in fact reverse such an ideology of protection, replacing it with an ideology of liberalism. We need to look into how and why it happened. Yet that is what the book does. To the correct observation that Britain is just where the elite did *not* stop progress, the book notes (pp. 629-630, but in numerous other places as well) that an engineering culture has to have a *mass* of innovators, a few of whom rise to the eminence of Newcomen, Smeaton, and Cartwright. Mass innovation requires exactly liberalism as a primary cause, allowing ordinary people to have a go. *Si non, non*. Or more to the point, if not, then not a vibrant Anglosphere but instead a stagnant Italy or France or even (by the 18th century) Holland, all of which had had vibrant scientific and engineering cultures.

"Why not a host of linked changes, to ideas, institutions, and capital", asks Goldstone, "that created a virtuous circle of cross-fertilization without a single primary cause"? I often get the question why I focus on "a single primary cause", to which I reply that in science we are seeking such causes, and if one, or two, or three pretty much suffices, we say so. Because Coulomb's Law implies that the repulsions between positively charged but not massive spheres close to each other are very much stronger than their gravitational attraction, one can ignore the very small offsetting gravitational attraction in calculating the acceleration of the spheres away from each other. I showed in 2010 in *Bourgeois dignity* that the others and materialist explanations of the Great Enrichment, such as institutions and capital, don't work. They were dependent on liberalism or not necessary or had little economic oomph or occurred in various other parts of Eurasia also with suitable "horizontal conditions" (as Nancy Cartwright and Jeremy Hardie put it in their fine application of Cartwright's philosophy of causation [2012, e.g., p. 100]). So we are left with one cause, peculiar to northwestern Europe and especially, by an accident fortunate for we Anglophones, Britain, namely, liberalism.

Jack quarrels with my quarrel with neo-institutionalists such as North and Acemoglu, or in some of their moods Goldstone and Mokyr. He writes, "Institutions are simply ideas of proper behavior that have been codified by law or custom to become normative behavior. If ideas

for what is proper normative behavior undergo a major alteration, then institutions should change as well". His remark well illustrates one of my objections to neo-institutionalism, namely, that it depends on a tautology. Let us define "institutions", Jack avers, as anything that comes out of human minds. Then we can drop changes of minds *tout court* as causal, since *all* changes in ideas must be codified as normative in what we are calling "institutions". So much for the idea of liberalism as causal. QED.

The tautology enables a good deal of hand-waving assertions of causality in neo-institutional circles. In Jack's case, for example, he vaunts the "the founding of the American colonies, and major victories over Spain and France [not finally, actually, until 18 June 1815] that shifted the balance of power in Europe and established Britain as a major power" as evidence that "it is hard to argue that Britain thus had no significant or rapid institutional changes prior to the 'Great Enrichment'". Well. It needs to be explained why the theme of "power and plenty", such as Ronald Findlay and Kevin H. O'Rourke (2007) put forward in an ill-considered book, and which power-politics theorists thrill to monthly in the pages of *Foreign Affairs*, is anything but a category mistake. Being powerful does not make you rich, unless violence against others is enriching. It's hasn't been much enriching in the dramatically positive-sum world since 1800, and in truth was not much even in the old zero-sum world. Conquest is not a good business plan. Ask the Spaniards in the seventeenth century or the Russians now.

Another case of the magic of tautology is the assertion by numerous economic historians that the Dutch-inspired national debt—which allowed King Billy and Queen Anne then the Hanoverians depending, as Jack notes, on Parliament men to wage almost incessant war against Spain and France—made for a capital market. It has never been explained why the issuing of bonds to finance the throwing away of resources in pointless warfare did anything but crowd out civilian investment. The line of argument is: first call warfare or the national debt an "institution", then apply the tautological lemma, and conclude triumphantly that institutions "matter" without having to get into the irritating weeds of economic logic or measurement, not to speak of the development of actual ideas.

But Goldstone is better than this. I have always admired his precision in the use of historical examples, as in his riff here on the Scientific Revolution. He shares with Joel Mokyr, for instance, the

conviction that “by the time of Francis Bacon, it was possible to conceive of a future in which mankind had amassed more and more valuable and powerful information than ever before”. Surely he and Joel are right, although (to repeat) it needs to be acknowledged that we do not at present know enough about science and intellectual life in other places to be entirely sure that the down-playing of tradition was unique to Europe. The experience over the past few decades of having to radically revise the history of Chinese science and technology after Joseph Needham should make us a little cautious about accepting European superiority without enough actual knowledge about the non-Europeans. And anyway, if we suppose that “it was possible to conceive” of progress, are we not then dealing with an ideological change, not an institutional one (at any rate in a non-tautological sense)? I think Jack and Joel would agree. The extant institutions, after all, such as the Church or the monarchies or the older universities, fought the idea of progress to the death. Their death.

A big, big evidential problem with the emphasis by Goldstone, Mokyr, and Jacob on the Scientific Revolution and the Enlightenment is that these were Europe-wide, not special to Britain. Galileo and Catherine the Great, after all, were not British. Yet the Great Enrichment down to 1851 certainly overwhelming was. One must wonder why the Continent, which surely had an Enlightenment, did not therefore have a widespread Industrial Revolution (I use ‘Continent’ in the British sense: “Fog in Channel, Continent cut off”).

Before 1851, Goldstone notes, “the gains in science had the impact of inspiring a desire for innovation and providing methods for its realization, but not yet of offering discoveries that would transform economies”. I quite agree. Against Mokyr, I would date the economically weighty triumphs of Science to the 20th century. Before that: inspiration, yes; economically large impact, no. And even the inspiration and later the impact depended on a massive extension of “having a go”, itself dependent on liberalism, or at any rate (to speak of chairs in chemistry in German universities) an egalitarian policy imposed by tyrants, itself inspired, as Jack says in his peroration, by ideas.

I emphasize liberalism, which has been set aside by most students of the matter since the 1890s, when historical materialism first captured the mind of Europe. In the end I think Jack would agree.

## §

But if Goldstone deserves a silver medal for accurate reading of what I wrote, Jennifer Baker gets the gold. I've dabbled in philosophy, most explicitly in *Knowledge and persuasion in economics* (1994b). But I know very well that I am a rank amateur compared with the genuine philosophers I've known moderately well, such as Bill Hart, John Nelson, Uskali Mäki, Jack Vromen, Richard Rorty, David Schmidtz, or Sam Fleischacker. What regularly astonishes me about philosophers, whether analytic or continental, is their ability to make distinctions, often important distinctions. 'Analysis' comes from Greek "cut apart". The cutting apart makes possible some important distinctions. Baker neatly cuts apart, for example, my argument into nine "implausible assumptions the [hypothesis of the Bourgeois] Deal avoids".

Her own project here is to ask "how to think about the 'haves' when you are a 'have not', which, she says (pretty much correctly) "is missing in McCloskey's approach". "Non-bourgeois values amount to a rather intact philosophical outlook". Agreed, they do, and keep surfacing (as in Donald Trump's views on foreign trade), which is one reason I wrote the trilogy.

"I do not know how McCloskey would write for this audience" of have nots. I admit that I'm writing mainly to the clerisy (get over your hatred of the bourgeoisie) and to the bourgeoisie itself (stop apologizing). But I could write to the poor, too, and, as she suggests, I should. After all, I got into economics and stayed in it to help the poor, and all our honored ancestors, among them mine, were poor, and I've known actual poor people all my life, some of them pretty well. "The unequal distribution of the goods of this world' is considered to be efficacious for reasons mere humans cannot access is a very particular viewpoint, particularly supportive of trade-tested betterment". Yes, it is a view particular to a modern view of economics, Schumpeterian, even. You see it even in Rawls. It doesn't much appeal to actual poor people, only to their *soi-disant* defenders from the right or from the left.

But that is why we need, in getting the poor onto the program, an *ideology* supporting what Hayek dubbed the Great Society. Demonstration effects, such as the utter collapse of the Venezuelan economy recently, or the startling enrichment since 1978 of coastal China, or the American Dream fulfilled even now by many Americans, do support the faithful bourgeois ideology. But, St. Paul observed, "faith

is assurance of things hoped for, a conviction of things *not* seen". Keep the faith. It's hard. After every major financial crash, the worst being after 1929, but now again a pretty bad one after 2007, the fragile faith in what I called the Bourgeois Deal—that "very particular viewpoint"—is challenged, occasionally from the working class itself, and always since 1848, from the left clerisy helpfully telling the working class what to think about the terrible problems of markets, bankers, alienation, inequality, and the lack of jobs for the clerisy to administer the sadly imperfect economy.

Baker thinks there is a problem of the have nots perceiving the demonstrations of the 'particular viewpoint' that seem so obvious to her and me. "If the horrors of present-day Venezuela are used to convince low wage workers that the Deal we have is fair, it is still the case that low wage workers have less to lose in such a transition". I think I see her point. People think *La Revolución* will make them better off. I remember thinking it myself, back in 1960 when I agreed with Bernie Sanders on every point (we didn't know each other, but were ignorant radicals together; the difference is that since 1960 I have continued thinking it through). But in fact *La Revolución* only does so *relatively*, by equalizing misery. Hang the bankers from the lampposts, invade the houses of the rich. And end up as poor as Cuba, in which real income has not risen since 1959. (Yet Baker is right that a few of the have nots, and most of the left clerisy, still think that Cuba is a workers' paradise.)

My claim, and in the end I think Baker's, too, is that philosophy in such matters should be, as Dick Rorty used to say, edifying, persuading people to the good life, and *not* accepting their sin of envy as a given preference of Max U to be honored. "I do not see that McCloskey has yet confronted a non-elite, non-bourgeois ethos as if it had normative content at odds with the terms of the original [Bourgeois] Deal". True. But our task is edification, that is, changing the minds of the poor (and of the clerisy and the bourgeoisie). I want the poor to become bourgeois in spirit, and to admire the bourgeoisie. The egregious Donald Trump is again a good example. Like a peasant admiring the King, the poor American worker in Toledo entranced by neo-fascism in fact admires the Rich Donald.

Yet American workers are commonly *not* envious, which distinguishes the American from the European or Asian or African poor. Americans, it has often been noted, are unusually bourgeois, and even poor Americans are. "Are non-elite, non-clerisy, low wage workers

satisfied with what they have already received in the aftermath of the Bourgeois Deal”? No, of course they aren’t. No one is ever satisfied. I should get more. You, too. But the edifying task is to persuade them to an ideology that enriches the world, not to inflame them with envy or anger, as progressivism or Trumpism does.

“This is the boldest of my claims, a fourth modification to create a viable Deal with low wage workers: engage with them philosophically. Not over personal values or way of life, but over the issues of our mutual welfare and what we owe others”. Yes: edification. “Of course an ethicist like me would see a role for ethical explanation”. Yes. I take the ethical justification to be justifying the ways of God to man, or more exactly justifying the ways of the Great Society to its people.

“I wonder, would McCloskey both convince the working class of this [Great Society of trade-tested betterment], and make them care about it”? I earnestly hope so. Taking on the Baker Critique, I promise in future to think more about reaching the working class. (By the way, I do not think the left clerisy reaches them, actually. The clerisy imagines solidarity, but only on the left’s terms. Consider Leninism, and the leading role of the Party, staffed of course from the clerisy.) I have already, though, one simple thought about reaching the working class. It is something I learned long ago from the political theorist at the University of Iowa, John Nelson, namely, that the popular artists making movies and rock music are where ideology is formed. Professors of philosophy and economics and sociology and political science are swell. But the below-high-brow art is where the rubber meets the road, as we say in country music.

“What would it take for McCloskey to agree with the ‘clerisy’ that low wage workers have suffered grave losses of dignity in our current-day society”? It would take a history that did not in fact happen, the fairy-scary-tale history by Howard Zinn or Charles Sellers (which are suggestively parallel with Trumps’ scare-mongering from the right), because low-wage workers were once *utterly* disdained. Look at blacks. And almost all your ancestors.

Similarly, Baker asks in a footnote, “is a ‘peasant’s view’ of markets a realistic one (for the time) or not”? In a zero-sum society, it is realistic, but only roughly, since even with no growth there is a modest gain to be had from trade. But to get the big positive sum of the Great Enrichment, a factor of 30 or 100, we have to have an ideology supporting trade-tested betterment. The ideology does not necessarily have to be in every



detail correct, but it has to be an ideology nonetheless. As I said at one point,

Marxians call the acceptance of such betterment “false consciousness”, a con job. Ideologies are indeed con jobs, whether good cons or bad. In psychiatry, false consciousness is called “lack of insight”. If you as the patient don’t agree with the psychiatrist’s ideology you are said to exhibit such a lack. But unless the masses in a democracy accept betterment they can be led by populists or Bolsheviks or fascists to rise up and kill the goose. That’s another con job, with worse consequences. Killing the golden goose has never been good for the poor (p. 575).

## §

S.M. Amadae’s point is exactly mine (and so I will merely register our disagreements), namely, to resist what she calls neo-liberalism, namely, the game theory that Gerry Gaus for example favors, and to revive the classical liberalism of Smith and Mill that “encompasses ethical commitment”, as she puts it. “The neoliberal institutionalists”, such as Gaus and sometimes Mokyr, she writes “concentrate on incentives to the exclusion of ethical reasons for action”.

She is of the left. I was once, too. Now I wander uneasily between left and right—in the “dialectic” she helpfully attributes to me. Amadae in effect wants me to declare whether or not I admire Nordic social democracy. I do, at any rate for Nordics and Minnesotans. I’m not so sure it can be implemented without crippling corruption in Italy or Illinois. No reasonable Italian or Illinoisan wants to give her rulers more money and power in order to go on pretending to do lovely things for poor people while Swiss bank accounts and Wisconsin hunting lodges grow fat.

“I ask McCloskey to take a position on whether ideals should be accompanied with a commitment to a minimal safety net, to ensure the inclusion of the least well-off in the opportunities for development”. Glad you asked. The answer is, yes. I am, as I said often in the book, a christian libertarian, or a bleeding-heart classical liberal, or a sisterly enthusiast for free and dignified commoners. Or if you wish, and Amadae does, I am a “dialectical libertarian”. I argue in detail, however, that by far the best safety net is vigorous economic growth, which enriches laborers by much more than any transfer or trade union can. And in any case an enrichment, such as in the notably capitalist and

innovative Swedish economy after the liberalization of the 1850s, makes possible the taxes to pay for a welfare state. That is, it does unless Italian or Illinoisan politicians get to the money first.

It is clear that I need to read Amadae, and I undertake to do so. But I detect in her a (justifiable) annoyance that I haven't done so yet.

On the other hand, it is pretty clear she hasn't read the other books in the trilogy, since many of her points are anticipated or answered by them. When Amadae notes in support of the proposition she and I share, that "non-consequentialist forms of action, including rule-following, commitment and promising, loyalty and trust, depend on reasons for action independent from satisfying preferences" she cites Sen (1985), Hausman (2012), Heath (2011), but not McCloskey (2006), or in briefer form McCloskey (1994a), which were devoted to exactly that proposition, through a virtue-ethical approach more philosophically nuanced than Sen's "commitment". She says that I was "not engaging in the intricacies of the contemporary debates on this topic", which she would have known to be mistaken if she had read *The bourgeois virtues*—unless indeed, as I suspect is the case in her mind, the "intricacies" are to be confined to a narrow group of economic methodologists devoted to certain routine games in analytic philosophy. (And if she had read *Knowledge and persuasion in economics* (1994b) she would know my take on the routine games.) In a puzzling sentence she complains about my alleged "literary dismissal of surgically honing in on the key points of contemporary debate in favor of recounting the history of capitalism". It seems to irritate her that I use evidence from literature and from history, as though routine analytic philosophy is the only way to get at "the key points". I do not think it is. There are many routes to edification.

Further, she makes the same Weberian mistake that Gaus makes in attributing to me the view that the bourgeoisie just got better, exhibiting "the correct virtues of temperance and prudence". No. The bourgeoisie was always thus. It is what one means by a successful merchant in, say, ancient Rome or in present-day New Delhi. What did change was (what she in the same sentence mixes with the Weberian notion) the society's "commitment to human dignity and liberty". In a word, liberalism.<sup>4</sup>

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<sup>4</sup> EJPE'S NOTE: The author, S.M. Amadae, modified her reply in proof and in consequence the first quote of this paragraph has changed into: "the correct virtues of temperance, prudence, and justice". The second quote has been deleted.

Maybe it would have been good to suggest to the reviewers here that they read, or at any rate buy, *Bourgeois dignity*, which gives most of the economics, and also *The bourgeois virtues*, which gives most of the ethical philosophy. But I concede that 700 pages is quite a lot, and 1,700 verges on being unforgivable. (Amadae complains that I do not cite Habermas. She must have missed pages 395 and 555, not to speak of *The bourgeois virtues*, and my writings in the 1980s and 1990s on rhetoric making great use of the honored Jürgen, who is usually unread, because unreadable. But, alas, that's many more pages than one can reasonably expect a reviewer to read.)

Again, Amadae doesn't think I present "a rigorously presented case",<sup>5</sup> which suggests that she has no knowledge of *Bourgeois dignity: why economics can't explain the modern world*—though it could also be, I fear, that by "rigorously presented" she again means routine analytic philosophy, not a serious engagement with all the edifying arguments and evidence. She wishes "McCloskey had either acknowledged that capitalism is only statistically better on average, and that some people pay the price for economic growth". Such talk is that of a political theorist who is not actually open to "mere" quantitative or economic thinking. "Only statistically better on average" means, as I rigorously show throughout, upwards of a 10,000 percent increase per capita, 1800 to the present, which is of such a magnitude as to make it nearly impossible to find "some people" who "pay the price of economic growth". At 100 percent, sure. At 3,000 percent, unlikely. At 10,000 percent, well, you see what I mean.

Therefore, *of course* the Great Enrichment has been "inclusive". Only someone who disdains an engineer's sense of magnitude would think otherwise. The entire income distribution leapt out so dramatically to the right that it is virtually impossible to find someone in, say, Finland who is shorter in height or years of life than her ancestors taken as a group, or more subject to starvation than Finns in 1866-1868, or less literate than Finns before the Compulsory School Attendance Act of 1921. And to think economically, the traditional farmers, say, whose land is bought out by developers, share in the enrichment. And the loss to harness-makers that comes from the invention of the automobile is massively offset by the gain to others, and even to the harness-makers now riding about in their Ford cars. "Merely" quantitative growth made

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<sup>5</sup> EJPE'S NOTE: The author, S.M. Amadae, modified her reply in proof and in consequence this quote has changed into: "comprehensive numeric defense".

virtually all Finns, whether farmers or harness makers, massively healthier, less subject to famine, and 99.98 percent literate.

But I suspect that Amadae will not be easily moved from her apparent acceptance of the conventions of leftish history. She wants me to reply to Marxist history and economics. Doing so in some detail was in fact one of the main themes of the trilogy.<sup>6</sup> As was pointed out as early as Hayek (1954), the left is convinced that there must have been some original sin to explain ‘capitalism’ (the fact of which, by the way, the British did not ‘invent’). So does Amadae. Such a history is defective, as the trilogy shows.

In the Marxist, or at any rate Marxoid, fashion, for example, she criticizes me harshly for allegedly ignoring the slave trade, which criticism suggests again that she is not familiar with the other books in the trilogy. She is confident that “the gross injustices experienced by enslaved African-Americans [...] contributed to the hockey blade’s meteoric ascent (Sherwood 2007; Baptist 2014)”. I know that many people such as Sherwood and Baptist argue that slavery was crucial. I also know that it makes people feel virtuous to rail against gross injustice, as slavery certainly was (or at any rate so we came to think it was after many bourgeois theorists such as Wilberforce instructed us). But the belief that slavery was a crucial cause of the Great Enrichment, despite the noble embodiment of the belief in Lincoln’s Second Inaugural, say, is implausible as economics or as history. For one thing, slavery was ancient but modern economic growth was, well, modern. For another, slavery was not necessary for Western growth, as you can see for example in the acceleration of growth after slavery was abolished. For still another, it was a bourgeois ‘capitalist’ society, especially in Britain and in the Northern United States, that worked to abolish “legalized slavery [under which] some individuals profit while others shoulder the burden”.

Again, she criticizes me for not dealing with inequality. Unhappily, the criticism is still another fashionable and un-self-critical leftism on her part. In fact I deal with inequality massively in the book, and in more pointed form in a long review of Piketty’s book in the pages of this journal (McCloskey 2014b).

Amadae leaves off leftish clichés, though, and really gets going at the very end, in pages I much admire beginning “While McCloskey’s argument may be incomplete for not fully defining or explaining

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<sup>6</sup> A short form is McCloskey (2016b).

‘liberty’, or human dignity” (neither is correct, but I am using the phrase merely as a passage-marker). She correctly notes that Smith had two micro principles, one being ‘prudence’ and the other the ‘impartial spectator’ (not the “impartial judge”, as Amadae remembers the phrase), both having macro consequences. I said this, at some length, calling it “Smith’s other invisible hand, the social one as against the economic. We become polite members of our society by interacting on the social stage—note the word, ‘inter-acting’” (2016a, 204). Amadae views me therefore as proposing “a dialectical structure that places both ethics and tangible self-betterment on a complementary footing”, which suggestion I gratefully accept.

## §

And finally to my beloved *vriendje*, Joel Mokyr. As you might not infer from his sometimes overly sharp comments here, Joel and I agree on an immense amount, substantively and methodologically (if not in every detail politically), in economics and in history and in economic history. I started focusing on the central question of social science—why are we so much richer than our ancestors?—a decade after he did. He has taught me massively. Without his books I could not have written mine.

And he and I with a very few others stand together against idea-less accounts, from Marx to freakonomics. As he writes,

Professor McCloskey cites me (p. 511) as having written that ‘economic change depends, more than most economists think, on what people believe’. That message [the opening sentence of his 2010 book], obvious as it may sound, needs to be stated and re-stated, to rid ourselves of the relics of historical materialism.

Joel and I deeply agree with Goldstone and Jacob and, in some of his moods, Eric Jones—who together constitute a tiny ideational school of economic history just emerging from the unreflective materialism of our less mature years—that ideas were the steam power of the Great Enrichment.

What Joel and I do not *exactly* agree on is whether steam power was its steam power. That is, Joel believes that Science was important early, as for example in making possible atmospheric steam engines once the Scientists had shown that air had weight, and vacuums created by condensing steam could therefore draw a piston in. I believe that if we

do the accounting correctly—admitting that it hasn't literally been done yet, by weighting innovations by their economic importance instead of merely listing them and expressing dazzled admiration—Science does not have much of an economic impact until after about 1900. Most of our riches until then, and quite a few of them down to the present, are the result of technology and technologists, the 'tinkerers' you hear so much about (Peg Jacob detests the word, but on the other hand admires the engineers for doing it).

I use the argumentative capitalization on 'Science' because I want to discourage you from using another and dangerous word, much on the popular tongue, 'science-and-technology'. It is in effect a German portmanteau word, used by Scientists to claim credit for technology, much of which is only remotely connected with their work. High energy physicists at CERN, who should be embarrassed that physics has stagnated for some fifty years, (and who therefore have to call most of matter and energy 'dark'), use science-and-technology to keep the billions flowing.<sup>7</sup> (I do not exempt my own beloved science of economics from such hostile characterization, though the amount spent on it is three orders of magnitude below than what is spent on physics or astronomy.) The STEM fields include in the 'M' the mathematicians chiefly interested in Greek-style proofs in number theory or algebraic topology with essentially no applications to engineering, much less to technology, and much, much less to technologies with a large role in human welfare.

I am not 'against Science'. Let me repeat that. I could hardly be 'against Science', and certainly not against plain old science. Joel and I are both scientists by anything but the peculiarly English definition of the past century and a half, during which sense 5b in the *Oxford English dictionary* became, bizarrely, "the usual sense in ordinary usage", that is, defined as confined to physical and biological 'science'. Earlier in English, and still now in every other language in the world, the science word means "systematic inquiry", as against, say, casual journalism or unsupported opinion. Thus Joel and I delight in the Dutch word *geesteswetenschappen*, 'spirit sciences', which British people call 'arts subjects' and we American speakers call 'humanities'. Mathematical number theory, for example, as a part of *geesteswetenschap*, is endlessly fascinating, though less useful than most poetry.

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<sup>7</sup> For which see Horgan 1996.

I am merely, as a citizen, against the arrogance of a Science demanding support even if it is useless and illiberal. And I am merely as an economic scientist against Science's claims to account for the whole of the enriched modern world of trade-tested betterment. 'Science-and-technology' again.

Or to make a slightly different economic point, I am noting, and did also note in the book, that Science itself would have little of value to show for ordinary human welfare if it had not come to be financed massively during the first couple of centuries of the Great Enrichment, sending German boys to study chemistry at the University of Berlin and American boys to study genetics at Iowa State University, and then even the girls. And the first couple of centuries, down to around 1900, or on a really large scale (penicillin, jet engines) down to around 1950, were attributable mainly to technology, not to the Baconian High Science over which Joel so affectingly swoons. Without doubt, as he writes, "German chemists in Giessen developed organic chemistry with enormous effects on industry and agriculture". But *when* were the "enormous effects"? Unless you think of van Gogh's use of "synthetic lake of eosin color", known as geranium lake, is an "enormous effect", the big effect was not until Haber and artificial fertilizer (and poisonous gas), which indeed was not used enormously until well into the 20th century. As I said.

Joel claims that "McCloskey simply dismisses the impact of science and the scientific revolution as immaterial and of little practical value until 'the 1960s [when] we wanted to navigate our way to the moon'". Here's what I actually said:

Francis Bacon, in Mokyr's account, was John the Baptist to the various messiahs of Science, above all Newton. But the messiahs, and even Newton, performed few practical miracles until late in the game—when, for example, in the 1960s we wanted to navigate our way to the moon. The earlier, technologically relevant miracles happened at the lower level among ordinary religionists of a liberal society and therefore of a liberated technology. The Bourgeois Revaluation liberated and dignified ordinary people making betterments (2016a, 506).

It makes his case easier to portray me as some sort of *maniak* who dismisses electricity, radio, airplanes, artificial fertilizer, catalytic cracking, dye-stuffs, and antibiotics, all of which had heavy inputs from the highest of High Science. I actually said—and I've said it repeatedly to him, in print and in personal correspondence, and indeed in response to

an earlier draft of his comments here, which he forthrightly shared with me—that I reckoned that Science started to matter to a considerable part of the economy, as I said, around 1900. That’s not the time of the moonshots (though admittedly the shots were the biggest ever application of navigation by Newton’s laws of motion). We can find out whether this is true by examining the facts, and do not need to appeal to suggestions that one or the other of us is a *maniak*.

Joel then falls in with the usual indignant defenses of Science, and declares, as though I made such a case, that “the dismissal of any role of formal and codified knowledge in advancing technology and the discourse that led to the triumph of the Baconian program in the West is simply unsupportable”. (I thought perhaps he would next accuse me of believing in fairies and astrology, but he refrained.) I never “dismissed any role” for Science in making us richer. I say to him again: *Lieverd*, what a charge to make!

Joel often in the piece lets his rhetoric get heated in this way for no reason—except the reason, one suspects worryingly, that he is angry that I do not join with sufficiently piety the modern worship of Science. He says for example that I “leave out Joseph Priestley, the discoverer of oxygen, the inventor of carbonated drinks and pencil erasers”. For one thing, I didn’t (2016a, 287). For another, carbonated drinks and pencil erasers make the point against Joel’s it’s-mainly-Science view, namely, that only in a few corners of the economy did Science much matter until 1900.

But of course Joel, as a great economic historian and a great student of the history of technology, does know better. And so he immediately takes it all back, writing,

McCloskey is of course correct in pointing out that at first the tangible achievements of science were modest. Many scientific areas in which progress would yield its highest fruits in the Great Enrichment turned out to be much messier and more complex than expected. The hopes that eighteenth-century post-Newton scientists had to Newtonize chemistry, medicine, biology, and agricultural science were all disappointed in the short run.

I couldn’t have, and didn’t, say it better myself, nor did I know the excellent quotation he gives from Samuel Johnson illustrating the point.

Yet he goes off the rails once more: “an economist will remain dissatisfied: what is the true driver in this model? Why and how did the discourse change and the ‘Bourgeois Revaluation’ prevail in



Northwestern Europe in the sixteenth and seventeenth century? Why not elsewhere, or at some other time"? I reply, "Good Lord, *gekkie*, I give masses of evidence answering the very questions. More broadly, the brief quotations you give of the answers I give are grossly unrepresentative of my argument. My argument is *backed* by hundreds of pages of documentation of one sort or another". The way Joel presents it suggests that I make silly but briefly summarizable claims that are unsustainable and unsubstantiated. My actual arguments are unorthodox, true, and seem from the point of view of the orthodoxy of capital accumulation or institutional accumulation to be crazy. Joel takes rhetorical advantage of orthodox opinion. (It's a pretty cheap trick, dearie.) He says, in effect, 'Everyone *knows* that [such and such a scientifically dubious claim about economic history, which he himself admits is dubious, or has himself shown to be dubious] is so. Isn't it shocking that McCloskey *denies* it?'

I have elsewhere seen Joel admit that the 1830s might be the time by which Science really started to matter much to the economy. I would say the 1890s. It's not a great difference, considering that both of us deny the material causes everyone else thinks are crucial. The way to settle the rather minor scientific disagreement between us, then, is to measure. I've suggested to Joel in correspondence how one might go about it, using random samples of economic activity and then carefully thinking through just how much the insights of Science mattered to each. But in any case (a point that the economic historian Robert Margo has made) economists and economic historians after Robert Fogel's calculation of the social saving from railways cannot leave off their labors by waving at Great Men or Great Inventions or Great Government Intervention and declaring angrily to any doubter that the economy was *obviously* "based" on them. The "based" metaphor is indeed a metaphor, and needs to be cashed in with calculations about substitutes. That's economics. Otherwise one is led to say that the economy is "based" on carbonated drinks and pencil erasers, because everyone uses them: imagine if our carbonated drinks and erasers were suddenly taken away! *Quel désastre!*

Joel says that the Bourgeois Revaluation was important. I invite him to say so forcefully, and to acknowledge that the Scientific Revolution on which he focuses was itself made wide and fruitful by a liberalism that allowed people to have a go--ordinary people, not the cliché of "the

rise of the bourgeoisie”, nor even his scientific or technical elite that mysterious “arises” without political or social support.

## §

In short, we have substantial agreement here. Everyone agrees that ideas mattered, greatly, and in particular the liberal idea making for the technical and scientific and institutional ideas.

The agreement signals a novel scientific advance—or it would be novel, to tell the truth, if it were not in fact the merest commonplace of 18th century liberal thought. The thoughts of the clerisy in the 19th century, by contrast, were novel and became commonplaces, but not good. Nationalism and socialism were chief among them (and if you like these, try national socialism), but they ranged from scientific racism to geographic determinism and the rule of experts. Yet the Great Enrichment itself proved scientifically that, say, both social Darwinism and economic Marxism were mistaken. The genetically inferior races and classes and ethnicities, contrary to Ernst Haeckel, proved not to be so. They proved to be creative. The exploited proletariat, contrary to Marx, was not immiserized. It was enriched. In the enthusiasm for the materialist but deeply erroneous pseudo-discoveries of the nineteenth century much of the clerisy mislaid its earlier ideational commitment to a free and dignified common people. It forgot the main, and the one scientifically proven, social discovery of the nineteenth century—itsself in accord with a Romanticism mischievous in other ways—that ordinary men and women do not need to be directed from above, and when honored and left alone become immensely creative.

“I contain multitudes”, sang the democratic, American poet Walt Whitman. And he did.

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# Axiomatic and ecological rationality: choosing costs and benefits

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**Abstract:** One important purpose of rationality research is to help individuals improve. There are two main approaches to the task of rendering evaluations of rationality that support guidance: the *axiomatic approach* evaluates the coherence of behavior according to axiomatic criteria, while *ecological rationality* evaluates processes according to their expected performance. The first part of the paper considers arguments against the axiomatic and ecological approaches and concludes that neither approach is unserviceable; in particular, each has the flexibility to accept important insights from the other. The second part of the paper characterizes each approach according to the profile of costs and benefits that it accepts, and shows that combining the two approaches in a particular way yields a new approach with a superior cost-benefit profile. This ‘hybrid approach’ uses axiomatic rationality criteria to evaluate processes that agents might use.

**Keywords:** ecological rationality, axiomatic rationality, normativity, heuristics, methodology

**JEL Classification:** A12, B40, D81

## 1 INTRODUCTION

This paper argues that the best approach to normative rationality for the specific purpose of fostering improvements is a strategic mixture of the two strongest contenders. The methods of each exploit particular kinds of information and attain some desiderata at the cost of others; combining them in a particular way results in a ‘hybrid approach’ that offers a better cost-benefit package than either alone.

The battles of the so-called ‘rationality wars’ are as multifarious as they are passionate, with the diversity of goals, methods, and backgrounds

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of rationality researchers leaving every position open to attack from some alternative perspective. At least among well-developed research programs, we should not expect any of the competing paradigms to be unserviceable tout court, but rather better or worse for particular purposes and given particular tools. Each broad program will also have stronger and weaker subprograms. For these reasons, this paper considers competing general approaches to normative rationality, and evaluates them with respect to the specific purpose of guiding individual agents towards greater rationality.

Specifically, I compare the *axiomatic approach* (hereafter ‘AA’) with *ecological rationality* (hereafter ‘ER’) (see, e.g., Gigerenzer and Selten 1999; Gigerenzer et al. 2011). Put simply, an AA practitioner defines rational behavior in terms of conformity to abstract axioms, while ER defines rationality in terms of the “match between mind and environment” (Gigerenzer et al. 2011, xix). More precisely, “[w]hen a decision procedure is well matched to an environment, where ‘well matched’ is defined as achieving good-enough levels on the performance metrics relevant to that environment, then the pair (*decision procedure, environment*) is classified as ecologically rational” (Berg 2014a, 378). AA is the methodology abstracted from existing axiomatic theories (ATs), such as AGM belief revision<sup>1</sup> (Alchourrón et al. 1985) and axiomatizations of rational choice; the use of axioms is the most salient characteristic of these theories, but they have additional common features that will prove important. In contrast, ER is a top-down research program that applies its abstract conception of rationality to multiple types of problems: Gigerenzer and Hertwig run interdisciplinary research centers at the Max Planck Institute with the basic purpose of developing ER (though not necessarily with a normative focus) and applying it to choice, inference, and other tasks.

Important related research programs—such as Kahneman and Tversky’s work on heuristics and biases (Kahneman and Tversky 1973; Tversky and Kahneman 1974; Kahneman 2011)—are not considered as independent candidate approaches because their role is to provide descriptive insights rather than new normative criteria. I also evaluate what I take to be the strongest versions of AA and ER. For one, this means de-emphasizing those sub-approaches that are most easily and successfully attacked and remaining agnostic among the defensible ones wherever possible. For this reason, AA is construed as seeking relatively simple behavioral tests of co-

<sup>1</sup> AGM is the dominant theory of belief revision, named for its developers: Carlos Alchourrón, Peter Gärdenfors, and David Makinson. It axiomatizes the concept of belief revision as the minimal change to a theory or belief set in response to learned, perhaps incompatible information.

herence, with emphasis on observability and minimality. In contrast, uses of axioms that appeal to literal process statements (e.g., “the agent maximizes expected utility”) make much stronger claims that invite additional criticism (see, e.g., Simon 1956), and even if behavioral economics can be given a normative interpretation (cf., Grüne-Yanoff 2010; Berg 2003) its complexity and proliferation of parameters compared to orthodox rational choice theory makes its normative usefulness highly questionable. Secondly, I consider the theoretical commitments of each approach and the best practices that could be carried out within them, rather than the details of existing practice. This means that I take most seriously ER’s basic definitions of rationality—which focus on the degree of success to be expected from using a process, the need to evaluate actual choice and inference mechanisms, and the importance of speed, efficiency, and accuracy—rather than the accompanying biological and anti-orthodox rhetoric (see Hands [2014] for a critical discussion of ER’s normative prospects, including the work done by evolutionary and anti-orthodox arguments). While many examples come from decision theory, the arguments pertain to the rationality of inferences, probabilistic belief and belief revision, as well as to the various types of choice problem. Considering general approaches to normative rationality—rather than individual theories—allows me to draw conclusions with significance beyond localized disputes (e.g., whether it is irrational to violate the conjunction rule in the Linda problem [Tversky and Kahneman 1983]; cf., Hertwig and Gigerenzer [1999] and Sturm [2012]), with relevance for the rationality wars as a whole.

The resultant analysis upholds the view that—contra Berg and Gigerenzer (2006) and Berg (2014a)—both the AA and ER approaches have value and a role to play, even with respect to the specific goal of guiding individuals. The first step in this argument is to examine arguments that one of the approaches is completely unserviceable, and rebut them (the arguments against AA are discussed in section 2, while criticisms of ER are described and addressed in section 3). Simply put, neither approach is unserviceable because both are flexible enough to accommodate all of the features that reasonable people might think matter to rationality. For one, neither requires that rational individuals use a particular, controversial type of mechanism (either simple or complex); AA involves checking for the coherence of outcomes and not how they were produced, while ER’s standard is the performance of the process, so a process that performs poorly will not be judged as rational. Second, both permit agents to have diverse values matching the diversity actually observed; axioms are abstract and make no reference to the content of preferences or premises,

and ER's criterion of 'accuracy' is likewise neutral regarding the content of the agent's goals. Finally, both are able to incorporate sensitivity to features of the environment that legitimately influence people; the AA proponent is free to endorse different axiom systems for different contexts while ER is not committed to a particular way of carving up the space of contexts with respect to which processes are evaluated. At the same time, each approach has value because each has a way to produce concrete evaluations of rationality without dogmatically imposing goals and values onto people.

Despite this shared agnosticism, practitioners of AA and ER have historically had quite different goals in addressing rationality, and these differences are reflected in the methods each uses and the distinct package of costs and benefits each has chosen (see section 4). Section 4.2 addresses the requirement of clear rationality tests to be used in evaluating rationality; in checking the coherence of observed behavior patterns, AA has a straightforward and relatively objective way to render rationality judgments, while a major obstacle to the application of ER is that its rationality criteria are unclear in many cases of interest. Coherence tests are rather weak, though, and do not lend themselves to suggestions for improvement as easily as do ER's comparisons of concrete processes; Section 4.3 argues that ER has an advantage in that its rationality judgments function as actionable recommendations. Section 4.4 discusses how each approach delivers the desideratum of generalizability, but in different ways: AA judgments generalize across all cases in which agents exhibit the same behavior, but do not necessarily tell us much about how a particular agent will perform in other cases. ER judgments only pertain to the specific context-process pairs that are evaluated, but tell us precisely what performance we should expect when a process is used in a context. Broadly, then, AA's use of axioms enables precise, rather scientific judgments on the basis of readily observable behavior at the cost of those judgments being circumscribed and relatively weak. In contrast, ER gets to the root cause of an agent's performance and the most natural target of recommendations for improvement—the process they use—at the cost of having to accurately identify such processes and provide defensible criteria for evaluating them.

Each of these choices could be the more reasonable depending on the particular setting in which rationality is being evaluated, and especially on the accessibility of elusive information about agents' processes, goals, and so forth. Nonetheless, the costs of each are real and are borne only because it has seemed necessary to secure the benefits. I submit that we



can (in many cases) do better: in section 5 I propose a ‘hybrid approach’ that combines AA and ER so as to pay lower costs and reap more benefits than is possible with either alone. This hybrid approach evaluates processes according to their expected conformity to the relevant axioms, thus addressing the root cause of agents’ performance while avoiding ER’s problem of identifying objective standards. While not a panacea, I argue that the hybrid approach—when applicable—is the best we can do given the kinds and amounts of information currently available to us. In promoting a specific method of harnessing the benefits of both AA and ER, I hope to help advance meta-rationality research beyond the long-standing arguments over the degree to which different views can be reconciled and show how the approaches’ differences can actually be exploited to our advantage.

## 2 OBJECTIONS TO THE AXIOMATIC APPROACH

### 2.1 *Mechanisms*

AA is often criticized (e.g., Simon 1956; van Rooij et al. 2012; Berg and Gigerenzer 2010), for an alleged commitment to complex mechanisms such as the maximization of a utility function or the execution of a difficult computation, but the brief descriptions above suggest that it is ER that defines rationality according to the process applied to a task, while AA evaluates the rationality of outcomes. To understand this line of criticism, we must examine some applications of AA and how they have been interpreted.

As stated, when we apply AA to evaluate an agent’s rationality, evaluation proceeds by checking the agent’s behavior (construed loosely to include choices, inferences, etc.) for conformity to a set of abstract axioms, which serve as rules of rationality. Which axioms should be used? Applying AA involves (at least conditionally) endorsing some set of particular axiomatic *theories* (ATs), but an AA proponent is under no obligation to accept any particular AT as normative simply because it purports to provide axiomatic requirements of rationality. Each AT must be evaluated according to its merits, and the way ATs are typically presented and defended can give rise to mechanism-based critiques.

The first step in providing an AT is enumerating the axioms themselves; these should be abstractly stated, simple, relatively few in number, and have strong intuitive force (von Neumann and Morgenstern 1953, ch. 1). Yet listing the axioms is not enough; how do we know each of those axioms should be included, that nothing needs to be added, and that the system captures (axiomatizes) the intended concept? As von Neumann

and Morgenstern (1953, ch. 1) write, a system “is usually expected to achieve some definite aim—some specific theorem or theorems are to be derivable from the axioms”. In the case of Expected Utility Theory (hereafter ‘EUT’), which originated with those authors, the aim is to provide axioms for choice that are jointly equivalent to the choices being representable as maximizing a numerical utility function (and indeed there are many ways of doing this; see Gilboa (2009) for discussion of several axiomatizations). Similarly, discussing the axiomatic AGM theory of belief revision, co-creator Makinson (1985, 350) says that:

When tackling a problem like this—the logical or mathematical understanding of an intuitive concept or process—there are two general strategies that tend to present themselves: postulation on the one hand, and explicit construction on the other. On the former approach, we seek to formulate a number of postulates, preferably of a more or less equational nature, that seem plausible for the process, and then investigate their consequences and interrelations. On the latter approach, one seeks to formulate explicit definitions or constructions of the central concepts, and then investigate how far the concepts thus constructed satisfy various conditions, including in particular those which on the former approach may have been suggested as postulates.

In the case of belief revision, Grove’s (1988) sphere-based modeling provides support for the AGM axioms by showing that revising in accordance with those axioms is equivalent to applying a particular minimal change function to one’s beliefs, given a representation of one’s prior beliefs and revision commitments as a (mathematically defined) system of nested ‘spheres’.

These supporting theorems are known as representation theorems, and while not all representation theorems introduce process language,<sup>2</sup> it seems to arise naturally. For EUT especially, this language is often interpreted literally and the theory is criticized for assuming or requiring that rational agents make choices via the process of calculating the expected utility of each of their options, and selecting the option with the greatest expected utility (see, e.g., Simon 1956, 1957; Klein 2001).

Since EUT is sometimes interpreted mechanistically, there is confusion about its theoretical commitments even though the version of EUT now standard in economics (Mas-Colell et al. 1995, ch. 6) is ‘only as-if’—i.e., the theory says that people choose *as if* they maximized a utility

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<sup>2</sup> ATs for which this is not the case are still subject to mechanism-based critiques, and can still evade those critiques.

function, not that they actually or should do so. ATs more generally follow this pattern, and awareness of this is reflected in the fact that those who criticize ATs' purported mechanisms often criticize them for being 'only as-if' as well (Simon 1957, 1956; Gigerenzer et al. 2011). As noted in the introduction, I aim to evaluate the strongest version of AA, and this is the version that renders many potential criticisms inapplicable by only endorsing the weaker 'only as-if' claims.<sup>3</sup>

Nonetheless, even an 'only as-if' theory is vulnerable to certain mechanism-based objections. Suppose an expected utility theorist (or an AGM theorist) suspects that an agent makes an axiomatically-rational choice (or belief revision) because that agent uses a simple heuristic; the theorist explains or justifies that choice (or revision) by saying that the heuristic *approximates* the ideally-rational mechanism of maximizing expected utility (or applying the minimal change function to some set of spheres). This position does not escape the danger of appealing to implausible mechanisms: van Rooij et al. (2012) argue that the computation that an agent behaves 'as-if' they performed cannot be explanatory if there is no way that the agent could have computed it, even approximately. They essentially prove that if a computation is intractable (i.e., NP hard), we cannot simply find tractable functions—either one or several—to approximate it, for example explaining behavior via a complex calculation and a simple heuristic that we use in its stead. Since there cannot be fundamental inconsistencies between different levels on which we explain behavior, then, "the only way to ensure consistency between algorithmic- and computational-level theories in cognitive science [...] is that computational-level theories posit functions that are tractably computable" (van Rooij et al. 2012, 482).

The lesson is that the proponent of AA should be quite careful to avoid appeals to mechanisms that go beyond their conceptual role in representation theorems and the mathematical power and convenience that they often provide to a theory. The strongest and least vulnerable version of AA focuses all normative claims on the axioms as criteria of rationality; beyond the defensive value of this move, the operationalization of rationality is one of the chief benefits of AA over ER, as discussed in 4.2. A more constructive critique of AA takes the importance of mechanisms as its starting point; such arguments are discussed next, as well as in 4.3 and 4.4.

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<sup>3</sup> See Okasha (2016) for an excellent, clear argument that the behaviorist interpretation is the only tenable *normative* interpretation of EUT.

## 2.2 *Descriptive adequacy*

A challenge to any AT must respect the distinction between descriptive and normative facts—not object to normative claims simply because they are at odds with what people actually do—and a general challenge to AA must reflect the theoretical commitments of ATs rather than perhaps problematic but non-essential views of particular practitioners. The AA advocate can insist on ‘only as-if’ ATs to evade the mechanism-based critiques referred to above, but a different variety survives this move. A compelling argument against ‘only as-if’ theories appeals to naturalism.

Simon and proponents of ER argue that understanding the processes people actually use to choose, decide, and so forth is critical to understanding human rationality. Why would this be true, and why would it cast doubt on an ‘only as-if’ normative approach? Kitcher (1992) provides an answer by defending the naturalist position that “prescriptions must be grounded in facts about how systems like us could attain our epistemic goals in a world like ours” (63); what people *should* do depends on their epistemic goals, cognitive capacities and constraints, and the nature of their environment. Descriptive facts about human choice and inference are naturally viewed as important data points in understanding the nature of human rationality, not only because they can help us to determine what is possible for people (and hence ensure that we respect the *ought implies can* principle in the appropriate way) but also because we want to understand why we perform well, or poorly, when we do. Pursuant to the “meliorative project” that Kitcher advocates and I take as a starting point, understanding *why* someone makes the choices that they do is invaluable to guiding them towards greater rationality. Kitcher thus emphasizes the investigation of *strategies* that may be implemented (see 4.3 for more on this point). I will even argue in section 4 that such process information is more valuable than the actual content of agents’ choices, in a way; hence naturalism provides strong support for ER, which evaluates processes.

This positive argument for ER does not entail that we should reject AA, though, for several reasons. For one, the value of process information and the normative status of abstract rules are not incompatible, and in fact I will argue in section 5 that ATs are well-poised to provide the standards of rationality against which processes are evaluated. If we do not grant them this role, alternative normative standards must be found. I will argue that—especially in the case of choice (as opposed to inference, e.g.)—axiomatic standards are the only kind of standards that we could justify given our current knowledge and capacities for understanding descriptive choice, mainly because axiomatic standards are coherence standards and corre-

spondence standards for preferential choice are problematic (see section 5 for the elaboration of this point).

The legitimacy of evaluating processes—including simple heuristics—using axiomatic standards depends on both the ‘only as-if’ interpretation singled out in 2.1 and the basic coherence I claim for the endeavor. One might worry that many proponents of ATs will not in fact be happy to accept that heuristics could be rational and that ER proponents will likewise resist any attempt to grant normative status to abstract axioms, the rhetorical enemy. Again, though, the issue is not whether everyone working within one approach will be immediately willing to incorporate ideas from the other, or even to grant the other’s value, but instead to ask whether the approaches in fact have value and what role each is best suited to play in achieving our goals.

### **2.3 *Relevance of context***

A more focused naturalist worry, hinted at above, is that ATs are too detached from context and agential capabilities because they provide universal requirements for ideally rational agents (Kitcher 1992). Let’s grant that the context in which a decision, inference, or belief revision is made could legitimately impact its outcome, i.e., that it can be rational to be influenced by contextual features, broadly construed. To give some intuitive Sen-style examples (Sen 1997), one might choose an apple over a pear in a context in which both are plentiful, but choose the pear in a context of scarcity in order to leave others their preferred apples; one might eagerly take the last piece of pizza from the dinner table at home but move on to celery at an office gathering (when different social norms are in effect). The context might also determine how carefully I approach an inference problem and whether I revise my beliefs in response to another’s incompatible assertion or simply dismiss their claim. What is AA’s best response to the charge that abstract axioms formulated without regard to content or context might fail to account for normatively-relevant differences between situations?

The standard response in defense of particular ATs is a good start. The rational choice theorist will note that—since the axioms are abstract—relevant contextual features should be included as part of the content of the choice problem. In the example above, the choice is not just between *pizza* and *celery*, or even *the last slice of pizza* and *celery*; rather, there is a choice between *the last slice of pizza when this violates no social norms* and *celery*, and another choice between *the last slice of pizza when this may appear quite rude* and *celery*. It is not inconsistent to choose pizza over celery in the first but not the second case. The rational choice theorist will

point out that their theory can accommodate anything that an agent cares about in this way (Binmore 2009).<sup>4</sup>

This defense derives from the positive argument in favor of abstract rules: rules should be formulated and evaluated independently of particular applications because our intuitions about particular cases can distract and mislead us. Thus Stalnaker (1998) advocates determining the beliefs rational agents may have at various stages of a game by applying the AGM axioms—which provide abstract, general requirements of rational belief change—rather than reasoning on the basis of the content of the beliefs that need to be revised (pertaining, e.g., to opponents’ rationality) and leaving room for our prejudices to influence our verdicts. Similarly, Dutilh Novaes (2015) argues that abstract rules of inference were originally formulated to provide neutral, public standards by which to judge argumentative moves, helping people to distinguish between valid arguments and arguments with intuitive or appealing conclusions.

A further defense of AA exploits divergence between its rhetoric, its reality, and its principled commitments. Rhetorically, ATs apply without regard to context; their generality is emphasized because it is taken to be a source of potency, for the reasons just given. In reality, a set of axioms is never intended to apply to all situations; their domains of application are simply very broad. A version of EUT may apply only to situations of objectively-quantified ‘risk’ (von Neumann and Morgenstern 1953; Mas-Colell et al. 1995) or to ‘small worlds’ (Savage 1954) (or situations profitably analyzed as such, which is of course a judgment call). Classical logic is almost universally assumed within mathematics, but taken to have less relevance to argumentation or conversation (Grice 1975). Objections to AGM disappear when the requirements of a *revision* context are enforced (Stalnaker 2008). Endorsing an axiom system as providing normative requirements of rationality does involve a commitment to context-neutrality in one sense—axioms give abstract forms of good reasoning independent of the content—but this neutrality only ‘kicks in’ once it has been determined that those axioms apply in the first place. A misapplication of a particular AT poses no problem for that AT itself, let alone to the axiomatic project as a whole.

One may still object that existing ATs do not apply as broadly as is claimed, that they have taken abstraction and generality too far, or that

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<sup>4</sup> This is also the rational choice theorist’s best response to complaints that rational choice assumes agents to be selfish, care only for money, etc. (see Džbáňková and Sirůček [2015] for a recent example, directed towards economics). Generally, the responses to this kind of complaint are similar to the responses to the context-based criticism, and the complaint itself is much less relevant to AA as a whole.

the existing set of ATs leaves too many contexts of interest unserved by a normative theory (while some contexts, e.g., of choice, have a confusing surplus of ATs). Note, however, that these are not theoretical problems with AA, and future development of axiom systems could (and should) remedy them.

A small number of ATs have historically been taken to cover most contexts; yet there is no reason why this must remain the case, as it becomes clear that better coverage of the space of potential rationality judgments can be achieved with more ATs. In fact, we can interpret recent developments within logic in this way: where ‘logic’ once implied ‘classical logic’, there are now logics to meet every need (an early, well-known alternative is *intuitionistic* logic; see Van Dalen [1994] for an overview). This trend has spread from within the mathematical study of logic to the use of logic in normative theories of everyday human activities, with Achourioti et al. (2014) recently arguing for the description of a plurality of logics where the context of the agent’s goals determines the relevant norms. Stenning and van Lambalgen’s (2008) work on the interpretation of conditionals is one example; another is the development of argumentation theory, which seeks to replace classical logic—as a normative theory of arguments—with alternative systems tailored to common real-life contexts (see Zenker [2012] for a survey connecting informal argumentation theory with developments in formal logic, and Beall and Restall [2006] for a defense of logical pluralism). For rationality research more generally, a mapping project—in which ATs are mapped to contexts, and additional, more specialized axioms are mapped to sub-contexts—could be quite fruitful.

Lastly, AA can again be critiqued via a positive argument in favor of ER: if humans do well in the world by using heuristics that exploit regularities in the environment, then addressing this directly and understanding the causes of our success will be valuable (Gigerenzer et al. 2011, intro.). Again, I stress that finding value in ER does not entail rejecting value in AA. Using a contextual heuristic—even a very successful one—does not imply that accepted abstract rules should be violated, and indeed those rules can play an important role in providing the standards according to which the heuristic may be judged successful (see section 5). Once this is granted, we see that we need more axioms—not fewer—so that there are clear standards to use in evaluating more heuristics of interest. My proposed hybrid approach thus makes the project of mapping axioms to contexts much more pressing.

## 2.4 *Critiques of specific axioms or applications*

Our goal is to evaluate AA as a whole (with respect to the goal of fostering improvement), and towards this end critiques of particular ATs or aspects thereof are not necessarily relevant. Nonetheless, a large enough collection of serious problems with particular ATs could well cast doubt on AA's viability, or at least its short-term utility. One might doubt that we could develop ATs with sufficient normative pull absent compelling examples. For this reason, I highlight the best strategies for responding to some of the stronger objections to particular ATs.

First, there are often objections to the normativity of individual axioms. This is especially true of EUT (see Mas-Colell et al. [1995, ch. 6] for the standard modern version), and its independence axiom in particular (which is implicated in the well-known Allais Paradox [Allais 1953]). There are many replies to such objections, and collectively they provide a strong defense. Most basically, to debate the normative status of a particular axiom (such as independence) is to play the game in a sense, to accept that there may be abstract rules of rationality and seek the right ones. AA requires that defensible rules can be found, not that every proposed axiom is in fact normative, or normative with respect to any given context (recall 2.3). While Allais (1953) objected to the "mathematical" approach to rationality itself, others have accepted AA and instead sought ways to weaken or do without problematic axioms. In the case of independence, for example, Machina (1982; 1983) shows that expected utility analysis can proceed with a much weaker requirement (that preferences be 'smooth'), and indeed that this change enables a unified representation of an array of decision "anomalies".

So-called 'technical' axioms (such as EUT's Archimedean axiom)—which are included for mathematical reasons, to enable the proof of representation theorems—can also be controversial. In this case, there is no real cause to worry that including such axioms will result in misleading the agents we wish to advise; it is basically impossible to observe a violation of the Archimedean axiom (or the non-technical completeness axiom, for that matter) (Gilboa 2009, ch. 6.3.2). So the general concern that we will not be able to find axiomatizations of rational choice that are both compelling and powerful enough to place substantial restrictions on rational behavior has not been borne out. (See also Gilboa [2009, ch. 6.3.3] for a nice articulation of the argument for the reasonableness of utility maximization.)

Another important critique applies to the normative interpretation of work in behavioral economics (hereafter 'BE') as part of AA. It is question-



able whether BE should be taken to be normative at all, as researchers within the program have typically focused on capturing descriptive facts (cf., Kahneman 2003; Camerer and Loewenstein 2004) and they have been criticized for retaining the traditional axiomatic normative standard while putting forth new descriptive models (Berg and Gigerenzer 2010). If BE is interpreted normatively, though, there are legitimate worries. BE theories such as prospect theory are not provided with strong defenses qua normative theories (as orthodox theories are) and they are much more complicated than the orthodox theories, with many more adjustable parameters. This additional complexity makes it difficult even to predict behavior for a new sample (see Berg and Gigerenzer [2010] and Brandstätter et al. [2006] for critiques), let alone to impose substantial restrictions on rational behavior that would enable mistakes to be identified for individual agents. For this reason, it is important that the AA proponent need not (and should not) endorse any AT that, like BE theories, invites a lot of criticism without offering greater ability to help people improve.<sup>5</sup>

### 3 OBJECTIONS TO ECOLOGICAL RATIONALITY

#### 3.1 *Making excuses for inferior reasoning*

ER is heavily based in descriptive work, and although proponents endorse descriptive, normative, and ‘engineering’ (i.e., loosely, performance-increasing) goals, descriptive questions have received the most attention. The thrust of ER’s descriptive research is that humans (and other animals) rely on the unconscious application of “fast, frugal, and accurate” heuristics to make decisions and inferences (see, e.g., Gigerenzer and Selten 1999; Gigerenzer et al. 2011). This emphasis gives rise to the complaint that ER loses all claim to normativity in endorsing psychologically plausible, yet overly-simplistic heuristic mechanisms. In other words, ER makes (poor) excuses for humans’ bad reasoning.

According to ER, there is a misconception that they endorse heuristics because they believe people can (and do) use them, even though people would be better off using more traditionally rational methods (Gigerenzer et al. 2011, intro.). By definition, heuristics ignore or forget some informa-

<sup>5</sup> This is not to say that BE research is useless from a guidance perspective;

many of their findings are quite informative and the greatly improved understanding of descriptive choice that has come from their empirical work should surely be incorporated into the meliorative project. For instance, Pope and Schweitzer (2011) show that loss aversion has led to significant financial losses for professional golfers, and Tversky and Kahneman (1981) show that people may be prone to errors on the basis of framing (errors which can be detected by EUT). The point, however, is that orthodox ATs provide a better standard by which to evaluate behavior than does prospect theory, for example.

tion and make relatively few and simple calculations. It was thus natural to assume that their outcomes would be inferior to those of more complex algorithms, even if such losses were worthwhile due to time and energy savings; ER refers to this phenomenon as the “accuracy-effort trade-off”, “believed to be one of the few general laws of the mind” (Gigerenzer et al. 2011, xviii).

Yet this critique of ER is faulty for two reasons. First, ER’s most intriguing discoveries have to do with the potential for heuristics to outperform more complex procedures by uncontroversial standards, mainly by exploiting environmental regularities and avoiding overfitting (see, e.g., Gigerenzer and Goldstein 1996; Berg and Hoffrage 2008). Such findings are very valuable from a guidance perspective because they prove that successful strategies need not be difficult for people to learn or implement. ER does not forsake performance in emphasizing heuristics, although it is more explicitly permissive of trading off some performance for speed and efficiency (hence the list of three criteria—fast, frugal, accurate—for heuristics).

Furthermore, this position no more commits ER to requiring simple mechanisms than AA’s position commits it to requiring complex mechanisms. Gigerenzer et al. (2011, xxi) say as much:

In which environments is a heuristic better than, say, a logistic regression or a Bayesian model, and in which is it not? [...] Once it is understood that heuristics can be more accurate than more complex strategies, they are normative in the same sense that optimization methods [...] can be normative—in one class of environments, but not in all.

In other words, whether a simple or a complex mechanism is more rational in a context is contingent on which will produce better results in that context, a claim that AA proponents—who care about outcomes—should find agreeable. ER studies the processes that we are interested in (for the reasons described in 2.2) without thwarting our normative endeavors by holding us to lower standards than the AA; inferior mechanisms will be recognized as such.

### **3.2 Substantive standards**

How could we answer Gigerenzer’s rhetorical question about when a heuristic is better than a Bayesian calculation? ATs provide clear standards of rationality via their axioms, and those standards are coherence standards. It is less clear what standards ER holds people to—in lieu of coherence—and

whether these standards are substantive and appropriate. What makes a process a “good match” for an environment, or a better match than an alternative process? The short answer is captured by the slogan “fast, frugal, and accurate” (see, e.g., Gigerenzer and Selten 1999): it is rational to apply a process in an environment to the extent that it has these features. More accurately, it is the *expected* performance of the process that matters, since the actual outcome will vary (and as I note in 4.4, this feature is a virtue).

It is fair to ask if this checklist really amounts to *substantive* criteria. Precise definitions of the constituents have yet to be provided, but our concern is whether the criteria *can be* spelled out in a way that is meaningful, useful, and compatible with the goals we think rational agents might have. The meanings of speed and frugality are fairly intuitive, and I would not expect serious difficulties with defining them precisely and sensibly (or objections to their value). In contrast, the meaning of ‘accuracy’ is far from clear and providing an explanation should be a top priority. I explore a few directions here.

For particular heuristics, ER researchers define the “accurate” outcome from their own perspective, and their definitions tend to be uncontroversial because there are clear right answers in most of the situations studied (in the ‘German cities task’, for example, the goal is to choose the city with the larger population [Gigerenzer et al. 2011, ch. 3]). However, we cannot expect this to be true in general: especially when considering situations of risky decision-making or games, as opposed to simple inference tasks, there may be significant controversy regarding the ‘right’ answer or the ‘good’ outcome; indeed, if this weren’t the case, rational choice would be a far less interesting subject. But then there would seem to be two alternatives available to ER: either it can set forth and defend a particular assignment of value to the world, enabling simple and concrete assessments of accuracy, or it can remain agnostic, and define accuracy as most in accordance with the agent’s own preferences.

The first option is untenable from my perspective: philosophers have argued for millennia without settling on an account of what has value and why, or even agreeing that there is anything objective about value in the first place; so it is quite unlikely that an explication of accuracy that depended on an exogenously-given assignment of value could be satisfactorily defended. It is unclear how or why rationality would consist in obedience to someone else’s standards instead of one’s own.

Now, ER draws inspiration from biology, using the ideas of adaptation and evolution to explain why humans rely on heuristics and why those

heuristics work well for us (Gigerenzer and Selten 1999). This suggests defining accuracy in terms of reproductive fitness, as is done by evolutionary biologists using the tools of game theory, and ER does at times identify accuracy with ‘success’ (e.g., in Gigerenzer et al. 2011, ch. 2). But again, this definition would require a convincing argument that rationality requires one to prioritize the success of one’s genes, and such an argument is not forthcoming. (See Hands [2014] and Grüne-Yanoff [2010] for problems with biological arguments for ER.)

The second option avoids these problems by rendering it unnecessary, even inappropriate, to put forth a specific conception of value. An outcome would be accurate insofar as it was in line with the agent’s own goals or preferences—but this is likely to mean adopting the coherence standard of AA when it comes to preferential choice. (Similarly, ER would surely endorse deductive validity as the standard of inference, in the event that the agent seeks classically valid beliefs.) The argument for this hybridization is explicated in section 5.

As for ER’s other main criteria—speed and frugality—these are defensible sources of value precisely because they are inescapably connected to real human preferences; it is obvious that people have a preference for making their decisions in a timely and efficient fashion (and indeed *need* to much of the time). How much these criteria should be weighted relative to accuracy has not been explained, and there might be room for the worry that ER will overvalue them; this would re-invite the accusation of making excuses for humans’ bad reasoning. There is also a worry that—although ER proponents criticize EUT’s implicit exchange rates between different sources of value—ER must itself specify some kind of exchange rate between speed, frugality, and accuracy in order to evaluate the rationality of agents’ (real and potential) trade-offs between them. Again, these problems are best addressed by deferring to agents’ own preferences, rather than exogenously imposing value judgments.

### 3.3 *The generality problem*

ER can be viewed as a generalization of *reliabilism* in epistemology, the view that the reliability of the processes or methods used is an important criterion (or even *the* criterion) for a person’s belief to be knowledge (or to be justified, etc.) (Goldman and Beddor 2016). Considering objections to reliabilism is therefore instructive, and one particular objection—the *generality problem* (Conee and Feldman 1998; BonJour 2002)—is indeed quite pertinent.

The problem is this: suppose I look across my friend’s office and form the belief that there is a copy of *Crime and Punishment* on her desk. ‘Sim-

ple reliabilism' says that this belief is justified iff it is formed by a process that reliably generates true beliefs, but whether this is the case will depend on the level of generality at which the situation is described; my visual processes may be only moderately reliable over the full range of cases they are used, quite reliable for identifying objects around 10 feet distant, very unreliable for identifying small objects such as books at this distance, but perfectly reliable with respect to the singleton 'identifying a Russian novel exactly 10.5 feet away in bright June morning sunshine'. Reliability varies according to the description of the process and context, and there seems to be no non-arbitrary way to single out the 'correct' level of generality at which to describe them.

This problem would seem to affect ER as well, and especially as it is applied to guide agents towards greater rationality. We can understand the ecological position as maintaining that rationality claims are *conditional* claims, i.e., claims of the form "*if* the environment is like this, *then* such and such process is ecologically rational". An alternative phrasing would be "in the class of environments that share such and such features, this process will generally be more successful than alternatives". Yet without a prior reason for studying a particular context or a process that could be used to derive a context, how should the boundaries of the context and process be drawn? What is the best level of generalization? (As with reliabilism, there are problems with both too little and too much generality. See, for example, Lee's [2007] argument that a heuristic as studied by ER cannot even be explanatory until *both* the heuristic and its range of application have been fully specified; Lee suggests that ER proponents address this problem by addressing the methodological questions it raises for them. Similarly, Kitcher [1992, 66] points out the need to characterize a process' target contexts.)

We might try to avoid the problem by acknowledging the validity of the rationality claims at all levels, and leaving judgment to determine the appropriate level of generality for any given case in practice. Still, the existence of multiple, perhaps incompatible evaluations of the same situation is disconcerting. This is an interesting and highly important issue, and it will take substantial work to make headway into an answer. Here, suffice it to say that the problem is bigger than ER, but that the approach should be able to accommodate a solution since it seems to have no principled commitments that would prevent this.

This observation also addresses a related concern, that since ER makes all judgments relative to an environment, there is a danger of losing the bigger picture. ER may focus on the details of a particular situation to

such an extent that no general rules emerge that the agent can use to succeed in a new environment. The ER proponent must acknowledge that rational agents need to abstract *to some extent* because they cannot use (or, especially, learn) the unique ideal process for every situation they encounter (and indeed this “process” would be trivial, simply stipulating the best-response action for the situation). The question is the extent to which agents, and theorists, should abstract. ER proponents should be willing to generalize contexts as far as is sensible, and they have not said anything to indicate that they would do otherwise. Furthermore, the hybrid approach suggests a potentially-useful rule for fixing evaluation contexts: evaluate processes with respect to the context of application of the relevant axioms. If this context seems too broad, the mapping project advocated in 2.3 can be used to refine it.

## 4 THE COSTS AND BENEFITS OF AA AND ER

### 4.1 *Chief differences*

The foregoing shows that both AA and ER escape fatal flaws that would render them unserviceable. Notably, both approaches survive scrutiny because their flexibility allows them to incorporate each other’s insights into their defensive strategies. Although both approaches aim at the same end-rationality judgments—the distinct methods their proponents employ do entail the acceptance of different packages of costs and benefits, and so their judgments differ in particular ways. The chief difference between AA and ER (for present purposes) is that ATs judge outcomes, while ER judges processes. An attendant, less fundamental difference is that ATs’ judgments tend to be all-or-nothing (though AA researchers have sought ways to render more fine-grained judgments; see, e.g., Schervish et al. [2000]; Echenique et al. [2011]), while ER judgments are naturally comparative (“this process is *more ecologically rational* than that one in this context”). The remainder of this section shows how these methodological differences cause each approach to perform well with respect to some desiderata, and less well with respect to others. Again, the purpose with respect to which the approaches are evaluated is that of producing evaluations that can be used to guide agents towards greater rationality.

### 4.2 *Clear rationality tests*

A high-priority desideratum for the meliorative project is clear, relatively straightforward and objective tests for rationality. A prerequisite to telling people what to change in order to be more rational is to identify the problematic aspects of what they are already doing. In order to do this with proper authority and legitimacy, the criteria according to which the per-

son is judged should be as clear and objective as possible; compare giving an agent a short, standardized list of simple requirements that they have failed to satisfy with giving them a long written argument to the effect that you think they have made certain mistakes for various subjective reasons.

With respect to this desideratum, ATs are well served by their axioms and ER pays the cost of judging the rather vague “match between mind and environment” (Gigerenzer et al. 2011, xix), leaving ‘accuracy’ unspecified, and not defining an exchange rate between speed, frugality and accuracy.<sup>6</sup> For AA, once an AT is endorsed for a certain domain, the axioms provide straightforward requirements of rationality and it is fairly simple to check whether readily-observed behavior conforms to those axioms or instead violates any axioms or implications thereof. For example, if an agent makes a series of choices between lotteries, their choices can be represented on a simplex and there is a very easy geometric test for conformity to the EUT axioms (namely that the indifference curves must be straight, parallel lines, or planes, etc.) (Mas-Colell et al. 1995, ch. 6). Especially when the number of possible outcomes does not exceed three, a simple diagram suffices to show whether the choice pattern may be deemed rational. To use a system of logic to judge argumentative moves in a multi-agent debate, one might use natural deduction to show that the claims each agent makes can be derived from agreed-upon premises using the applicable inference rules; indeed, there are now computer programs that will quickly check the validity of an argument whose premises and conclusions are entered in abstract form.

While interpretational problems are not entirely eliminated—we need to identify the correct objects of choice, the implicit premises, and so on—axioms thus provide the most straightforward and objective criteria that could be asked for, given the subject matter. They make the criteria for rationality explicit, and the theorist need know nothing of an agent’s inner psychology to determine whether those criteria have been met. This is not an accidental feature of ATs; rather, concepts of interest (e.g., belief revision, utility maximization) are axiomatized in order to specify and operationalize their meaning. This motivation is manifest in von Neumann and Morgenstern’s presentation of EUT (1953, ch. 3.5.2); the authors expound on the need to make economic problems amenable to scientific treatment by appealing only to observables (for them, choices) and note the desirability of keeping the set of axioms small and uncomplicated.

<sup>6</sup> To be clear, performance criteria are specified for particular problems; it is not impossible to do so. The issue is rather that a general, theoretical explication is lacking and, importantly, there are situations of interest for which the right criteria are far from clear.

The same motivation pervades economics more generally and can even be found in the origins of logic (as noted earlier; see Dutilh Novaes [2015]).

### 4.3 *Actionable results*

A second desideratum for an approach to rationality with meliorative goals is that it produce directly actionable judgments, i.e., that the agent whose rationality is judged be in a position to make real improvements on the basis of the judgment. AA's benefit of clear behavioral rationality tests comes at an actionability cost, while ER's judgments (if prudently formulated for the purpose) are directly actionable.

ER evaluates processes, and its evaluations can therefore be read as recipes for improvement. Processes are *ways to* complete tasks, and these can be taught, learned, and implemented, especially when they are simple (as heuristics are). ER evaluations are also comparative: process A is more ecologically rational than process B, which is more ecologically rational than process C (with respect to a particular task and context). An agent who is told this, and told that they have been using process C, knows immediately that they can make a rational improvement by switching to process B, and an even greater improvement by switching to A. (Of course accounting for the costs—including opportunity costs—of such switches may be difficult, but the point here is that the recommendations for improvement follow directly from the evaluations because the focus is on processes.) One caveat is in order: ER's judgments may be sensitive to whether each process is employed unconsciously or deliberately, because the deliberate application of a process by an agent may take time and energy that would not be needed if their brain implemented it automatically; it is important not to recommend that an agent switch to a process that would no longer be judged superior once the costs of deliberately implementing it were taken into account.

In contrast, there is a gap between AA judgments and implementable recommendations for improvement. If an agent's behavior is judged rational according to the relevant AT, then no action is needed as far as we can tell. If the behavior is judged irrational, though, the question of how the agent should respond is left open. Take the Allais Paradox, for instance: the paradox is that a commonly-displayed pattern of choices between lotteries violates EUT (Allais 1953). As noted, the AA proponent is under no obligation to endorse EUT and may well prefer a weakened theory that permits the Allais choice pattern, but let us suppose that we endorse EUT and aim to help the agents who made the problematic choice to avoid the error in the future. It is easy to see that the axioms are violated, but this does not tell us why the agent made an error, how serious



the error is (though see Zynda [1996]; Schervish et al. [2000]; Staffel [2015] for attempts to address this), or how frequently we can expect the agent to make similar errors (see 4.4 for more on this point). The agent has no recipe for improvement; perhaps they can (and in the Allais case may well) avoid making the error if they face exactly the same situation again, but they cannot hope to avoid similar errors in the future unless it is explained to them why their original choices are problematic and what to do differently (i.e., *how* to choose better). As Kitcher (1992, 68) writes,

The philosophical dichotomies rational / irrational and justified / unjustified may stand in need of replacement rather than analysis. When we note that a student falls short of the external ideal (as we conceive of it), debate about whether the failure to undergo the epistemically optimal process is excusable or not can profitably be sidestepped in favor of a psychologically richer explanation of what occurred. Cognitively inferior performances can be based on laziness, methodological ignorance or misinformation, failure to perceive relevant similarities, lack of imagination, and numerous other kinds of factors.

I do not suggest that the AA proponent would be unable to generate sensible recommendations on the basis of axiom violations, but it is important to recognize that doing so requires going beyond ATs' basic judgments. The appropriate recommendation is also likely to depend on the reasons for the error (as Kitcher suggests), i.e., the process that ER but not AA is explicitly interested in. Furthermore, to the extent that these recommendations remain informal, subjective supplements to the basic axiomatic tests, they are unlikely to inherit the full authority of the tests themselves.

#### **4.4 Generalizable evaluations**

A final desideratum is that evaluations of rationality be generalizable; this is in part an efficiency consideration and in part a corollary of the second desideratum (in that it is useful to be able to generalize from an agent's performance in one case to their expected performance in other cases). Both ATs and ER produce evaluations that are generalizable, but in different respects.

Since ATs evaluate observational records—and features internal to the agent are not considered—their evaluations apply equally to all agents who display the same pattern of choices, inferences, and so forth. For example, all agents who display the Allais choice pattern choose irrationally according to EUT, while all agents who rate the proposition 'Linda is a bank

teller and an active feminist' more probable than 'Linda is a bank teller' (Tversky and Kahneman 1983) make an error according to a straightforward application of probability theory. Axiomatic evaluations generalize across agents when we hold the problem fixed. They do not generalize, however, to other problems faced by the same agent: violating axiomatic requirements in one case does not imply that an agent will violate them in other cases, nor does conformity in one case imply conformity in general. A brilliant reasoner may have a bad day and fall prey to a fallacy, while an agent who makes perfect logical inferences on an exam may (for all the AT user knows) have flipped a coin on the tougher problems and simply got lucky.

ER avoids this problem because processes are judged according to their *expected* performance in a context; the theorist considers (perhaps simulates) the track record of results that the process would yield, and evaluates this bigger picture. The difference between AA and ER in this respect is analogous to the difference between making a prediction on the basis of a statistical distribution and doing so on the basis of a single point sampled from that distribution. While a sample is not uninformative, it can mislead; knowing the full distribution is far preferable.

ER judgments will also generalize to all cases where the same process is used in the same context, just as AA judgments generalize to cases with the same outcomes. But while the possible outcomes are often limited, the space of processes that agents could use is surely infinite and it may be difficult or impossible to determine which an agent uses. In practice, therefore, a particular ER judgment is likely to lack the broad applicability of an axiomatic judgment of a behavioral pattern.

## 5 IMPLICATIONS

The implication of these distinct packages of costs and benefits is that neither AA nor ER should be abandoned in favor of the other, especially once we restrict attention to the meliorative project. The better approach will be a function of the information available in any given situation: ER will be advantageous given insight into the processes agents actually use for a task or given the opportunity to teach agents new strategies, while AA allows us to evaluate rationality in the (exceedingly common) situation in which only outcome data is readily available.

Furthermore, the complementarity of the approaches' costs and benefits suggests a stronger conclusion, namely that we would often be better served by a strategic combination of AA and ER than by either of them alone. ER has a significant strength in using process information when it is available, but the problem of clear rationality tests for those pro-

cesses looms large (recall 3.2). Berg argues that since the true markers of well-being for agents are health, wealth, and the like, our normative projects should assess strategies for achieving those goods (as opposed to behavioral consistency). Criticizing the use of money-pump arguments to defend theories of coherent choice, he writes, “[i]f the compelling normative principle is, for example, wealth, then why not simply study the correlates of high-wealth-producing decision procedures and rank those procedures according to the wealth they produce” (Berg 2014a, 382)? Unfortunately, such an inquiry will not be entirely sufficient. While Berg and colleagues are entirely correct to ask whether and to what extent the traditional rationality (often, coherence) of agents’ choices and beliefs coincides with the success those agents achieve according to independent metrics such as health and wealth (see, e.g., Berg and Lien 2003, 2005; Berg 2014a; Berg et al. 2016), the claim that coherence metrics are essentially useless (Berg and Gigerenzer 2006; Berg 2014a) is far too strong. I side instead with Sturm (2012, e.g., 77-78), who suggests that traditional (often, axiomatic) rationality requirements provide the background standards against which performance (e.g., the ecological rationality of heuristics) can be evaluated. In spelling out a specific way in which axioms can provide background standards, I construct a stronger response to Berg’s challenge than has previously been offered.

Let’s begin by granting the claim (by naturalists, ER proponents, and others) that in order to make useful normative judgments, we should evaluate choice strategies in terms of their expected performance. Perhaps we want to know which investment strategies to endorse.<sup>7</sup> First, we must note that we could not discover the most rational strategies simply by identifying the wealthiest people and studying the strategies they have used, because actual wealth is a product of luck and circumstance as well as one’s own strategy. Instead, we would need to ask which strategies lead to the most *expected* wealth.

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<sup>7</sup> Berg (2014b) himself gets at this question indirectly in a paper showing that the best explanation of entrepreneurs’ business location choices is a simple heuristic model rather than an optimization model; his discussion is highly suggestive of the idea that the heuristic, which ignores or fails to gather much of the available information, can be rationalized by features of the choice environment, which include uncertainty and frequent change. This paper’s analysis is certainly very useful for understanding the factors behind which areas see development, the likely consequences of public policies and taxation strategies, and for providing more evidence that heuristics can lead to real-world success. Nonetheless—as explained below—I would argue that rigorously comparing the rationality of the individuals’ available choice processes requires sensitivity to the individuals’ risk preferences, and hence some appeal to coherence standards. If this is not possible then assessments of heuristics’ *success* must fall short of assessments of their *rationality*.

Second, we must acknowledge that expected wealth cannot be the correct rationality criterion for an old, familiar reason: the conception of rationality as maximizing expected monetary value was replaced with the conception of maximizing expected *subjective utility* for the simple reason that the two differ, and the latter (by definition) expresses the preferences that we are interested in. Daniel Bernoulli discovered this now-obvious fact, and the correctness of his reasoning was immediately apparent:

The price of the item is dependent only on the thing itself and is equal for everyone; the utility, however, is dependent on the particular circumstances of the person making the estimate. Thus there is no doubt that a gain of one thousand ducats is more significant to a pauper than to a rich man though both gain the same amount (Bernoulli 1954, 24).

Bernoulli developed a new theory of expected utility maximization on the basis of this insight, and famously used it to explain the St. Petersburg Paradox, which is set up as follows. Suppose a gamble is available with the payout to be determined by the flipping of a fair coin. Let  $n$  be the number of the flip on which the coin first lands heads; the gambler then receives  $\$2^{n-1}$ . In other words, the gambler gets \$1 if the coin comes up heads on the first flip, with the payout doubling each time ‘tails’ appears. Suppose people have the opportunity to pay in exchange for this gamble. The puzzle is that the expected value of the gamble is infinite, but most people would not pay \$20 for it, and furthermore this choice is intuitively reasonable; but if the rational choice is the expected value maximizing choice, the rational agent would choose the gamble over \$20 for certain. If subjective utility is what matters, however, and the agent values each additional dollar less than the previous one, then it may be rational to refuse the gamble even for \$10.

The upshot is that the expected monetary value of an option may be very different from its subjective value, and we are liable to be drastically misled if we assess rationality on the basis of the former. For example, a strategy that often leads to great wealth but occasionally results in penury may look quite rational from an ‘objective’ perspective that most real agents would reject. Diminishing marginal utility for money is likely to be particularly relevant to major choices—such as investment, insurance, or career choices—which we should be especially concerned to analyze correctly.

Furthermore, there is no canonical utility function that, once discovered, would solve this problem; individuals may legitimately differ in their

subjective valuations of money and their implicit risk preferences.<sup>8</sup> The third step in our argument is therefore to ask how we could determine the extent to which a choice strategy results in choices that agree with an agent's subjective evaluations. The answer provided by decision theory is that, since we cannot observe agents' 'true' personal preferences, we can instead observe their choices and determine whether the agent *could* be choosing what is best by their own lights given *some* preferences that satisfy simple, compelling properties such as transitivity. While it would arguably be better to compare choices to verifiably-true preferences, the decision theorist accepts that this information (if preferences are even taken to be real) is inaccessible to us and moves on, constructing a theory around available observations. The result, then, is that in attempting to replace coherence standards with an independent, external standard of rationality, we find we must fall back on those axiomatic standards if agents' subjective preferences are to be respected.

It is critical not to read too much into the subjective preferences that this argument refers to; adopting the full apparatus of a complete and stable preference ordering would seem to beg important questions. (Utility likewise should not be read in this section as a modern technical term, but rather as Bernoulli would have used it.) While it is quite reasonable to criticize the assumption that people have preferences in the strongest sense, my argument only requires that people have the sort of preferences that figure in folk psychology; such preferences are both harder to deny and a minimum requirement for normative judgments of choice for both AA and ER. Hence, it will not be easy for the ER-purist to reject my hybrid approach on the grounds that agents do not have preferences to which it makes sense to apply axiomatic standards.

In fact, the preferences that EUT must posit are more like folk-psychological preferences than is often realized. On the strong characterization of preferences, a person comes equipped with a complete ordering over all possible outcomes; this ordering is stable over time and reflects their true, inner self. All of the substantial aspects of this characterization can be dispensed with, however. First, regarding stability, EUT permits people's preferences to change over time and from situation to situation; as

<sup>8</sup> Bernoulli (1954, 32) himself defined a unique utility function, the natural logarithm of the objective value, but this function is not taken to have special normative status; it is easy to imagine that different people might care differently about different ultimate levels of wealth as a result of different personal tastes. Even with the Bernoulli logarithmic utility function, it would be necessary to know an agent's initial wealth level to determine their expected utility-maximizing choice. For example, the St. Petersburg gamble would be worth \$2 to an agent with no wealth whatsoever, and \$6 to an agent with \$1000 of wealth.

Ross (2014) explains in his defense, it is a mistake to equate the perhaps short-lived ‘agents’ that EUT refers to with temporally-extended human beings. If my preferences differ from last week’s, then I am now a different agent. This observation limits our ability to apply EUT over extended periods of time, but this is exactly as it should be; if my tastes and goals have changed, it makes no sense to demand coherence between past and present behavior. Second, assuming that preferences are complete is also fairly innocuous; we need not endorse the metaphysical claim that an agent’s mind *contains* a full preference ordering at all times, but only that the person can form a preference when called upon to choose (Gilboa 2009, 62). It is no problem for my argument if preferences are constructed on the fly. Intriguingly, behavioral economics experiments suggest that agents do this, and that the preferences they construct are both arbitrary in an important sense (influenced by irrelevant factors such as priming numbers) and largely coherent (Ariely et al. 2003). Third, these weak interpretations of the stability and completeness requirements already suggest that the idea of a ‘true inner self’ is dispensable as well. Infante et al. (2016) show that this idea is both ill-founded and integral to the project of “preference purification”, which seeks to align people’s actual choices with the idealized preferences of their perfectly-rational true selves. While the authors are right to point out that it is often impossible to determine which particular choice is mistaken in an incoherent pattern—and that indeed there may be no fact of the matter—their attendant critique of behavioral economics’ ‘nudge’ program does not automatically imply a critique of EUT itself. Importantly, we can deem the incoherent choice pattern to be irrational simply because it is incoherent, and not because we think this incoherence indicates a failure of the agent to express their true self in some particular way. Finally, references to risk preferences should not be read as implying that individuals have risk aversion or risk affinity as part of their true natures; as is standard in economics, these labels are merely short-hand for agents who display preferences such that a set payout is preferred or dispreferred to a risky gamble with the same expected value. To have risk preferences in this sense is simply to make choices one way or the other when called upon to do so.

It would be difficult to deny that people have preferences in this weak sense. Freed of their metaphysical baggage, they are simply an experience that people have; in von Neumann and Morgenstern’s (1953, 17) words, a preference is just a “clear intuition” of how two outcomes rank. While the burden of proof is on those who posit (rather than question) preferences in the strong sense, the opposite is the case regarding preferences in the

weaker sense, as they are a basic part of our folk psychology. One might then ask whether preferences in the weak sense are too flimsy to support normative judgments at all; if they might change tomorrow, aiming to satisfy them today seems less important. But if these preferences cannot support normative judgments nothing is left to do so, and surely we do not want to abandon the normative project altogether. Furthermore, as a matter of fact, we respect people's rights to their preferences irrespective of their source or permanence; and we find this natural because our preferences are usually *relatively* stable and grounded in other aspects of our folk psychology. So a reflective agent will be troubled if their current preferences are shown to be basically inconsistent.

Observe that, while the conclusion of this argument—that coherence provides our best test of choice rationality—is controversial and rejected especially by ER proponents, the steps of this chain of reasoning are *not* contested as part of such critiques, are not taken to be controversial in general, and in fact seem quite inescapable. Indeed, in imagining how we might implement the suggestion to evaluate processes or strategies rather than coherence in a concrete setting, we are essentially forced to rehearse the decision-theoretic tradition that culminates in a collection of *axiomatic* theories of rational choice. So if an AA opponent wants to reject this conclusion, it is incumbent on them to explain at which step the argument goes wrong, and how something better can be provided for situations in which the standards of success are clearly subjective.

A hybrid approach which evaluates processes as in ER, but uses AA's method of checking for conformity to axioms, solves this problem. Axiomatic criteria apply to outcomes, but by simulating the performance of a process in its intended context, an expected track record of outcomes is produced. By applying the axiomatic test to this track record instead of to a single behavior pattern, we also avoid AA's generalizability problem. Of course, this hybrid approach can only be applied when processes of interest can be identified, and it is true that the empirical task of identifying the process an agent actually applies is not easy. "Processes of interest" include many more than those that can be definitively ascribed to agents, however: a critical component of the meliorative project is teaching agents *new* strategies for choice and inference, and the theorist can construct and test candidates without knowing precisely what processes they might replace.

An example will help to illustrate the hybrid approach and its virtues. Consider again the Allais Paradox, a sequence of two choices between pairs of lotteries in which the historic modal choice violates EUT (Allais

1953). As discussed above, an AA proponent may apply EUT to determine that this choice pattern is irrational (or apply another AT to determine that it is rationally permitted); thus a clear verdict is delivered but questions about the broader significance of and appropriate response to this verdict are left unanswered. Proponents of ER provide a causal explanation for the choice pattern: Brandstätter et al.'s (2006) 'priority heuristic' is a simple decision procedure for lottery choices—constructed on the basis of the large body of descriptive findings pertaining to such choices—that predicts the Allais pattern and a host of other empirical phenomena. The authors stop short, however, of providing an explicit normative assessment of the priority heuristic, despite the heuristic's prominence in the ER literature and the avowed normativity of ER. ER proponents' emphasis on the success humans can achieve by using heuristics suggests that they view the priority heuristic favorably, but in principle its normative status should depend on the degree to which it is well-matched to its context of application. What could this mean in the case of lottery choice?

As already noted, the performance standards to be applied can neither be biological nor objective. Appeals to biology may be rhetorically useful, but we simply do not think that rationality requires us to maximize our expected number of offspring. The only acceptable performance standard for lottery choice must defer to agents' subjective preferences, and as the decision-theoretic tradition shows, the way to determine whether agents could be choosing in accordance with their subjective preferences is to apply an axiomatic test to their choices. The hybrid approach provides a straightforward way to evaluate the rationality of the priority heuristic: simulate its lottery choices over its purported context of application and calculate its expected conformity to the chosen AT. This procedure yields a numerical measure of accuracy, facilitating direct comparison with other processes. (This is the practical manifestation of the formal compatibility between AA and ER that I demonstrate in Rich [2014].) ER alone cannot deliver this.

The particular strategy for combining AA and ER into a hybrid approach is not just supported by the value of both processes and outcomes, but also by the related interplay between coherence and correspondence criteria. These values have long been seen as competing within epistemology, leading to different theories of truth, knowledge, and justification (cf., Goldman 1967; Quine and Ullian 1970). Berg et al. (2016, fn. 3) credit Hastie and Rasinski (1988) with bringing the distinction between coherence and correspondence into the psychological literature on rational choice and belief. Hammond (1990, 1996, 2007) explores the interplay



between these values in great detail, taking an interdisciplinary viewpoint and with an eye towards real-life choice and inference. As he writes in *Beyond rationality* (2007, xvi),

[Y]ou don't turn to logic to prove that the tree you see over there is larger than the one over here [...] But sometimes there is no "tree" [...] For example, a story told by someone usually offers no empirical criterion for its truth. Then, we can evaluate it by referring to the coherence of the story.

For preferential choice especially, Hammond's "tree" is conspicuously absent—hence the development of coherence standards. Discussing ER specifically, he writes (2007, 98),

There are some judgments—and usually very important ones—that demand justification before the action is taken. However, the justification for correspondence judgments (accuracy, speed, and frugality) can only be determined after the judgment is made. You won't know whether the judgment was accurate [...] until later. [...] Since no empirical criterion for the correctness of such judgments will be available, the justification will have to be made on the coherence of the argument for it, and on the argument's content.

The question often posed to coherentists is what reason we have for thinking that coherence—for example of an agent's beliefs—is an indicator of truth. We can see that this question can just as easily be directed towards the AA proponent—why think that an agent whose choices merely avoid manifest incoherence is in fact choosing what is best by their own lights?—and indeed this concern is an important part of the motivation for ER, which avoids the concern by getting at the source of the choices, in a sense. Yet the critical point, as Hammond argues, is that coherence is often the only criterion we have available; the ultimate goodness of a choice, inference, or belief revision is simply not accessible to us in many situations, and especially in situations of preferential choice. For this reason, even if we endorse naturalism, the meliorative project, and the core tenets of ER, AA will often be indispensable because it provides clear, operationalized coherence standards to which there exists no viable alternative.

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## Hayek's "Scientism" essay: the social aspects of objectivity and the mind

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**Abstract:** In his essay "Scientism and the study of society" Hayek argues that attitudes are central to the moral sciences. Since the natural sciences show that "ordinary experience" often does not reproduce the relations between things in the external world, the understanding of attitudes is possible due to the similarity between the mind of the moral scientist and that of the agent. I argue that Hayek's arguments for the differentiation between the natural sciences and what he calls "ordinary experience" are problematic. I offer an alternative justification by appealing to the manifold goals and social contexts of inquiry. I also elucidate his claim that minds are similar, and how this relates to our understanding of others – both as ordinary agents and as economists. In so doing, I discuss two alternative accounts found in Hayek's work: the first account suggests that understanding is a projection of mental categories from behavioral evidence; the second account—which is found in *The sensory order*—suggests that understanding is the result of a functional correspondence between structures in the central nervous system.

**Keywords:** Hayek, scientism, Sensory order, propositional attitudes, subjectivism, intersubjectivism

**JEL Classification:** B31, B41

### I. INTRODUCTION

F. A. Hayek's (2010a, 2010b, 2010c) three-part "Scientism and the study of society" was part of a wider (aborted) project on what he called *The abuse and decline of reason* (Caldwell 2010, 3). There are so many interpretations of its arguments that Caldwell (2004, app. D) describes it as a Rorschach test. While some see it as a postmodern (Burczak 1994) or hermeneutical exercise (Madison 1989, 1991), others describe it as anti-

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modernist and non-hermeneutic (Caldwell 1994); moreover, while some interpret it as almost positivistic (Lawson 1997, ch. 10), others applaud the soundness of some of its ontological commitments (Runde 2001).

Hayek's manner of writing has led to conceptual and exegetical ambiguity, which is the source of this extraordinary number of interpretations. But Hayek's "Scientism" essay is not a barren mismatch of contradictory lines of thought; rather, it is a long piece, rich with innovative reflections on topics ranging from the philosophy of science to psychology, pregnant with fruitful suggestions that the secondary literature tries to bring to light. It is a singular piece in the history of economic and social thought—in Oakley's (1999) words, "a remarkable series of papers"—and of great importance to Hayek's oeuvre. As Caldwell (1998, 224) writes, it "contains all the essential elements of [Hayek's] methodological programme".

Its kaleidoscopic details notwithstanding, the aim and argument of Hayek's essay is clear: the general success of modern natural sciences has led to the emulation of their methods in other fields, *often without due consideration for the unique properties of their objects of study*. He intends to show why the methods of the natural sciences are inappropriate for social scientific explanation, and the errors to which their adoption in the social or, to adopt his expression, moral sciences leads.

For Hayek, natural scientific explanation begins with the observation that ordinary people classify as similar what turns out to behave differently in similar circumstances, and vice-versa (2010a, 83). In her attempt to objectively explain phenomena, the natural scientist must therefore revise ordinary experience. The moral sciences, by contrast, are concerned with action. Yet, action is related to people's attitudes—i.e., to what they think, believe, desire, etc.—hence, unlike the natural scientist, the moral scientist cannot ignore (much less transcend) the subjective attitudes that govern agents' behaviors. But this raises a problem: if ordinary experience is shown by the natural sciences to misrepresent the relations things objectively hold among each other, the moral scientist cannot ascertain agents' attitudes by merely studying a reality external to them. The solution to this predicament is for the moral scientist to tap into what she has in common with the agents she studies—viz., that she and her subjects have minds.

In this article I will evaluate some of Hayek's arguments in his "Scientism" essay and related works. In so doing, I will demonstrate the importance and fruitfulness of this text as a point of departure for

philosophical reflections on the nature of moral scientific explanation. In particular, I pursue lines of inquiry Hayek initiated but left unexplored and show how some of his most critical insights can be supported by arguments different than his.

The paper has the following structure: in sections 2 and 3 I summarize and discuss Hayek's main argument. In section 4 I argue that Hayek's distinction between ordinary experience and the world-view of science cannot be sustained by his original arguments, *but* that the distinction itself can be defended by alluding to the social aspects of inquiry. I then turn to his thesis that moral scientific explanation is made possible by the fact that the scientist is similar to the agents she studies. In section 5, I elucidate what this similarity could be, and how it affects the scientist's understanding of agency. I discuss intersubjective understanding further than Hayek did, emphasizing the limited evidence available to ordinary people in understanding others, and noticing that their attributions of attitudes to fellow human beings are not made determinate by such evidence. Finally, in section 6 I discuss insights from Hayek's work *The sensory order* to argue that the sort of description of mental states that interests the moral scientist involves properties inextricably linked to the context of social interaction; for this reason such descriptions need have no strict relation to the agent's central nervous system. Hopefully these reflections help to better capture the subjectivity that Hayek argues in the "Scientism" essay to be central to moral scientific explanation.

## II. NATURAL AND MORAL SCIENTIFIC EXPLANATION

According to Hayek, during the Renaissance (2010a, 81) the "ways of thinking" of modern natural science began to "fight their way" against the established, pre-scientific frames of mind. The latter were often anthropomorphic or animistic, and inquiry was mostly limited to the study of ideas, either those of men or God's. Science, he tells us, replaced these ways of thinking with an ambition to "get down to 'objective facts'".

Although Hayek's account of the natural sciences begins with these diachronic observations, his argument focuses on how the natural sciences emerged from dissatisfaction with the existing explanations of phenomena. He writes that the natural sciences "revise and reconstruct" both the concepts and the very sense qualities that result from "ordinary experience", and replace them with a framework that is "based on consciously established relations between classes of events" (84). Their



goal is to achieve generality in explanations, which is to say, to recognize "the particular as an instance of a general rule" (82).<sup>1</sup>

When Hayek turns to the moral sciences, he writes that they are "concerned with man's conscious or reflected action" (88-89).<sup>2</sup> He informs us that it is not the goal of the moral sciences, barring psychology, to explain individual action in detail, but rather, to identify a "sort of order [that] arises as a result of individual action but without being designed by any individual" (103).

Hayek offers a famous example of such an order: the spontaneous development of a path through wilderness (104). Each person trying to get across wishes to follow a route that is safe, fast, and not too tiring. Confronted with virgin bush, the pioneers might have had to think almost each step through. Their behavior left traces of prior human presence: obstacles removed, foliage cut, stones judiciously placed, footprints. The people coming after the pioneers are likely to have seized, consciously or not, the improvements of the pioneers', adding their own traces to those already existing. A few iterations afterwards, all these traces developed into a clear path which any walker traversing the wilderness will identify and follow. No one planned out the path: it is the result of human action but not of design; an unintended consequence of people traversing the wilderness.

In order to explain such unintended orders, Hayek tells us that we must "*understand* what the acting people mean by their actions" (94-95, italics added). In the example of the path, we could not explain its formation without understanding the plight of the traversers, that is, what they were trying to do in the circumstances they faced. What an agent means by her actions, i.e., what her intentions are, is related to her reasons for acting.<sup>3</sup> According to Hayek, action is "determined by the

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<sup>1</sup> This goal of arriving at general rules has been interpreted by Runde (2001, 7) in an article otherwise sympathetic to Hayek's "Scientism" essay as a concession to a "positivist" view of science as "being about identifying and establishing event-regularities". But a striking aspect of the "Scientism" essay is Hayek's insouciance about matters of terminological detail. Over a short number of paragraphs, he breezily goes from speaking of reclassification of events (2010a, 83), to reclassification of objects (84), reclassification of "external stimuli", "phenomena", and reclassification of "sense impressions" (89). We should thus be wary of reading into Hayek any precise notion of event.

<sup>2</sup> For Hayek, not all the sciences that have a social or a human object of study are moral sciences. There are what he calls "natural social sciences" such as certain branches of epidemiology or neurology that could be studied with the methods of the natural sciences (2010a, 88).

<sup>3</sup> The relation between intentions and reasons has caveats which I will disregard, see Davidson (2001c, 79) for a discussion.

views and concepts [the agent] possesses [...] [i.e., by] all [the agents] know and believe" (87). If we interpret Hayek's phrase "determined by" as meaning "caused by", as I believe we should (cf. Caldwell 2004, 245; Cowan and Rizzo 1996, 276f), then Hayek's emphasis on epistemic attitudes (such as *knowing* and *believing*) should be extended to include other attitudes as well. Indeed, reasons involve more than what an agent knows and believes, they also include attitudes like desires—what Davidson (2001a, 3-4) calls "pro attitudes".

Agents' reasons for acting offer a form of causal explanation of their behavior (Davidson 2001a). When Hayek writes that the moral sciences do not explain action, he could be taken to mean that the moral scientist often need not be particularly thorough or detailed in the determination of reasons. In this vein, Caldwell (2004, 246) writes that it is explanation of belief *formation* that Hayek leaves out of the domain of the moral sciences, and Fleetwood (1995, 47) that it is "the question why individual agents perceive the world in the manner they do". In the example of the path, what reasons individual traversers had for crossing the wilderness, what was salient to their perception, or what inferential tendencies they pursued and why, is, in detail, irrelevant. To account for the appearance of the path, all we need to ascertain is that there were people who wanted to cross, that they wished to do so in an efficient manner, and that they had similar judgments regarding which steps to take. This comes from "our general knowledge of how we and other people behave in the kind of situation in which the successive people find themselves who have to seek their way" (2010a, 104).

However, to what level of detail agents' reasons have to be ascertained depends on the purposes of our research and on our questions. If we want to explain not just the appearance of the path but also want to account for its shape, we would have to be more thorough in our understanding of agents' attitudes: were they trying to go as fast as possible, or erring on the side of safety? It would thus be important to know *why* the pioneers were traversing the wilderness—it would not have been enough to know *that* they wished to do so. It is thus misleading to say that the moral sciences do not explain action.<sup>4</sup> Still, even though we can be more

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<sup>4</sup> There are passages in the "Scientism" essay (e.g., 2010a, 88-9) where Hayek explicitly refers to explanation of action in the moral sciences. Alternatively, Madison (1989, 66ff) interprets Hayek's "explain" in the narrow sense of explanation "in physical terms", in opposition to interpreting the meaning of agents' doings. Understood this way, Hayek has a *verstehen/erklären* distinction in mind, and by "explain" he means that an action is subsumed under laws.

or less detailed in our understanding of agents' reasons, when dealing with complex phenomena, as the moral sciences do, the details that must be disregarded by any human mind impose a limit on the strictness of attainable explanations. As Hayek already notices in the "Scientism" essay (106) and later discusses in greater detail (e.g., in Hayek 1955, 1989), only explanations of the principle are possible.

### III. THE LOGIC OF AGENTS' ATTITUDES

Important logical implications follow from the fact that moral scientific explanations are concerned with action and, therefore, with agents' attitudes. One is that the truth-value of statements in the moral sciences is frequently unrelated to the underlying matters of fact. The sentence "it is raining" may be true or false, but it does not explain Jane's decision to carry an umbrella if the sentence "Jane *believes that* it is raining" is false. Clearly, to understand individual action the moral scientist must ascertain the truth of statements of the second kind, i.e., statements involving propositional attitudes (to know *that*, to believe *that*, to wish *that*, etc.) Yet, the truth-value of sentences of the form "Jane believes that *p*" are (logically) independent of the truth-value of *p*. This logical feature is not, however, unique to the moral sciences. Laws of nature, for instance, support counterfactuals: it is true that *if* the distance between the Earth and the Moon *were* half of what it is, *then* the gravitational force attracting the two planets *would* be four times what it is. It is not because of the actual truth or falsehood of the antecedent or of the consequent that the conditional is true.

Hayek does not, however, explicitly discuss statements involving propositional attitudes. Instead, he emphasizes that the classification of entities in the moral sciences often takes agents' attitudes to be essential. He notices that important moral scientific terms "are abstractions from *all* the physical attributes of the things in question and their definitions must run entirely in terms of mental attitudes of men towards the things" (2010a, 91, italics in the original). For instance, something is not a tool because it is made of a specific material or because it has a certain shape. Something is a tool due to its intended use (90). In other words, Hayek is

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Indeed, Hayek sometimes refers to "full explanation" as entailing lawlike reductions to a physical vocabulary, for instance when arguing that the moral scientist need employ a mental vocabulary until the reduction of the mental to the physical were complete (2010a, 87; 1952, 190), which he argued to be impossible.

telling us that physical or structural properties of things are neither necessary nor sufficient for their status as objects of action.<sup>5</sup>

It is also the case that the abstraction from the structural properties of things is not distinctive of the moral sciences, a point already partly made by Rudner (1954, 167) in an early criticism of Hayek's "Scientism" essay. Many, if not all, the natural sciences employ notions that cannot be defined by the structural properties of their tokens. Take sunburns: a sunburn is definable as a burn caused by exposure to the sun. It is conceivable that two burns are identical down to the atom, yet one be a sunburn and the other not. Yet 'sunburn' is a relevant notion for medical science: they are easily identified in clinical settings, preventable and associated with skin cancer.<sup>6</sup> What seems distinctive about the moral sciences is, again, the centrality of agents' attitudes.

Hayek's aim in "Scientism" is to show that the world which the agent "builds up" (2010a, 87) is central to the moral sciences; it is this centrality of human attitudes that establishes the fundamental difference between moral and natural sciences. If, on the one hand, the natural sciences need to revise and reconstruct ordinary concepts and experience to develop general explanations, the moral sciences, on the other hand, cannot understand what agents mean by their actions without some understanding or appreciation for the way they view the world. The reclassification that he observes the natural sciences to require is interpreted by Hayek to suggest that agents' world-views need not reproduce the relations that things hold between them objectively (86).<sup>7</sup>

When discussing the subjectivity of agents' world-views, Hayek often reads as if conveying a distinction between appearances—i.e., between our perceptions of the world—and reality—i.e., how the world is revealed by science to actually be. He writes that "'facts' are different from 'appearances'" (83), he speaks of "'secondary' qualities" (84) and of science's "emancipation" thereof and he mentions "the true nature of the

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<sup>5</sup> Hayek must not be taken to mean that the structural properties of particular things, such as those of this hammer, are irrelevant for concrete moral scientific practice. That there are usually no necessary or sufficient structural properties defining classes of objects of human action need not mean that there are no structural properties that are typically or conventionally associated with such objects (Hayek 1948, 65-66).

<sup>6</sup> The example of the sunburn, used in a different context, is Davidson's (2001d).

<sup>7</sup> For Hayek, this thesis raises important questions. If true, then "the question why [things] appear to us in that particular way [...] becomes a genuine problem" (2010a, 86). Hayek tries to supply an answer in *The sensory order* where he elucidates how the order that we call 'mind' can, in principle, arise from the intercourse of the nervous system with its surroundings.

material thing" (93). He also distinguishes between the "‘objective’ properties of things which manifest themselves in their relations to each other, and the properties merely attributed to them by men" (92).

This appearance-reality distinction is not an explicit thesis, but comes across as an undercurrent to his arguments.<sup>8</sup> Indeed, not only does Hayek employ scare-quotes throughout, but in *The sensory order* he is explicit in rejecting any such distinction (Hayek 1952, 4). There, he writes that he is not "interested in what a thing 'is' or 'really is' (whatever that may mean), but solely in how a particular object or event differs from other objects or events belonging to the same order or universe of discourse".

In view of this, it is tempting to brush the undercurrent aside and take Hayek to be clumsily conveying a differentiation between two orders or universes of discourse, one organized by the relations between things and the other by those between things and people, and a correlative differentiation between natural science and ordinary experience. Whereas natural scientific endeavors have the conscious goal of elucidating the order formed by the relations between things, ordinary experience is simply the result of the relations between things and people.

#### IV. ORDINARY EXPERIENCE VERSUS NATURAL SCIENCE

Indeed, in the "Scientism" essay, Hayek's thesis that agents' world-views need not reproduce the objective relations between things results from his reflections on natural science. He contrasts natural science with ordinary experience, observing that in the natural sciences there is a need to emancipate from the perceptual properties of things and to "revise and reconstruct" (2010a, 81) ordinary experience. He writes that science "begins with the realization that things which appear to us the *same* do not always behave in the *same* manner, and that things which appear *different* to us sometimes prove in all other respects to behave in the *same* way" (83, italics added). He even goes to the extreme of saying that "we have learned that our senses make things appear to us *alike* or *different* which prove to be alike or different in *none* of their relations between themselves, but *only* in the way in which they affect our senses" (92, italics added).

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<sup>8</sup> Madison (1989, 174-176) tries to brush the distinction aside as the result of Hayek's problematic "choice of vocabulary". Fleetwood (1995, ch. 4), on the other hand, disagrees that it is merely an undercurrent.

Interpreted literally, however, the possibility of things being different in no other respect than in their effect on the senses defies credulity.<sup>9</sup> Instead, what I believe Hayek wishes to convey is the observation that two things might have the same structural properties, i.e., the same shape and matter, and yet still be found different by an agent (or vice-versa). For instance, two identical vessels filled with water may be prized differently by an agent, if the water in the one has been blessed by a priest whilst that of the other has not.<sup>10</sup>

It is important to realize that the property of being blessed, although admittedly not a structural property, is still an objective property of the vessel: the truth value of the sentence "the water in the vessel has been blessed" is as independent of anyone's attitudes as that of the sentence "the substance in the vessel is a collection of atoms of hydrogen and oxygen". Moreover, it is noteworthy that there are differences in the relations between each vessel or its contents and other things: not only are there differences in the past, since they are bound to have different causal histories, there are also spatio-temporal differences that affect their relational properties.

What the systematic testing of science shows, however, is that there are differences or effects that may be irrelevant to some science's particular purposes at a particular moment. Relations of similarity are always dependent upon standards, along dimensions, and partaking of degrees. Potassium bitartrate is similar to bicarbonate of soda in that they both conduct electricity when in solution. Yet they differ in that the first can be used to form an acidic solution whereas the second forms an alkaline solution. They are not different or similar *tout court*. The properties that are salient to people—to scientists and to ordinary folk—and the objects individuated by them, adjust to what they are trying to do, to their standpoints and discursive contexts.

For this reason, we must not ignore the social (human) aspects of the several forms of inquiry. Judgments resulting from ordinary experience make distinctions based on the relations between things as much as science does, only such judgments are adjusted to ordinary purposes. They are also subject to revision as such purposes change or new experience accrues, sensory or other (Lindemans 2011, 151ff.). The fact

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<sup>9</sup> Either *they* would not be more than one thing in the first place, or else "perception" would be an irreducible category of being, which is incompatible with the monistic ontology Hayek (1952, 179) defends.

<sup>10</sup> I thank an anonymous referee for this example.

that ordinary distinctions are often not suitable for what the natural scientist is trying to achieve in the context of research should not lead to the conclusion that such relational distinctions are "deceptions" (Hayek 2010b, 112).

Hayek also seems to believe that there is something distinctive about the *methods* of natural science. He writes that natural science revises and replaces not only the concepts formed from ordinary experience but, more importantly, "the very *sense qualities* which most of us are inclined to regard as the ultimate reality" (2010a, 83, italics added). He goes so far as to write that the second form of reclassification is "the most characteristic *procedure* of the natural sciences" (84, italics added). Unfortunately, the examples he gives fail to illustrate any replacement of sense qualities, or anything that is characteristic of science.

The most detailed example Hayek gives in the "Scientism" essay is that of a tasteless, scentless white powder, which may prove to be any number of substances, depending on how it reacts in different circumstances. But a distinction among several powders based on how we observe each to react is hardly an example of the replacement of sense qualities. All that happens is that those white powders were all believed to be the same until someone was led to conclude, certainly by way of sense qualities that are classified the same way they used to, that, say, some powders are good for leavening cakes and the others are not, even though they are all white.

Hayek also discusses unobservable entities such as electrons, waves, and fields (84) that do not have any direct effect on the stream of experience to illustrate the emancipation of natural science from perceptible properties. Hayek finds striking today's necessity of speaking of "'visible light' and 'audible sound' when we want to refer to the objects of sense perception" due to the fact that "to the physicist 'light' and 'sound' now are defined in terms of wave motions" (1952, 3). However, the hypostatization of unobservable entities for making sense of the world is a common expedient in ordinary thought, too (Quine 1980, 45). Electrons have no perceptible properties, but neither does the Wrath of God that some have used to explain meteorological catastrophes.

What Hayek's examples show is not a difference between the ways of science and ordinary experience, but the possibility that our immediate sense impressions do not lead us to posit or distinguish entities that, in different circumstances, are associated with other perceptual effects that might make us revise our earlier judgments. The lesson of the examples

is that the system of classification we employ, the characteristics we find salient, the distinctions we make, and the entities we individuate are subject to revision in view of further evidence from our senses—not that people, much less scientists, should replace “the system of classification which our sense *qualities* represent” (2010a, 83, italics added).<sup>11</sup> Moreover, although Hayek often emphasizes that science replaces perceptions with consciously established relations, it is hard to see how conscious classification could be a distinctive characteristic of science. In fact, Hayek (1952, 145) later uses it as a defining property of abstract conceptualization in general.<sup>12</sup>

It is curious how little Hayek's account of the method of the natural sciences in the “Scientism” essay seems to characterize science, as opposed to inquiry in general. As Hayek in *The sensory order* shows, we do not have a static and well-defined picture of the world: people learn, forget, change their minds, etc. Where they notice differences, they separate, where they notice similarities, they associate. When their expectations are borne out, they reinforce them; when expectations are frustrated, people revise them: they change the distinctions they find important to make or to blur, they induce along other paths, and posit new entities. When they are puzzled they may offer bold redefinitions, and may, as science does, hypostatize all sorts of exotic entities in the deepest parts of their ontologies, be they quarks or supernatural activity.<sup>13</sup>

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<sup>11</sup> In the second part of the “Scientism” essay, Hayek (1943b, 111-112) justifies “the very loose way in which we have throughout [...] indiscriminately lumped together such concepts as sensation, perceptions, concepts, and ideas” by noticing that “*all mental phenomena [...] must be regarded as acts of classification performed by the brain*” (italics in the original). No wonder we are hard pressed to find a difference between reclassification of concepts and the replacement of sense qualities that is supposedly “the most characteristic procedure of the natural sciences”.

<sup>12</sup> An objection might be raised that by ‘ordinary experience’ Hayek was always only referring to perceptual experience, not to ordinary conceptual thought. There are two problems with this objection. A minor one is that it is clear in the “Scientism” essay that Hayek is interested in more than perceptions, for instance when he writes of the struggle of natural science after its “birth during the Renaissance” (2010a, 81). A major one is that the subjective world-view that matters for the moral sciences is not merely a matter of sense perceptions, but of *propositional* attitudes.

<sup>13</sup> Later, cf. Hayek (2014d), he explores the competitive processes that lead to the selection of the mental configurations that promote the survival of the organism and species – the experience of the race, as it were (for a discussion, see Lindemans 2011, 155ff).



Early critics, such as Nagel (1952, 562) and Rudner (1954, 164-67), argued that Hayek's "Scientism" essay failed to identify any methodological difference between the natural and the moral sciences. Popper (1957, ch. 29), at about the same time, also argued for the methodological unity of the sciences. As is well known, Hayek himself moved on to emphasize differences in the degree of complexity of the phenomena studied (cf. 1955, 2014c). Here, I have investigated primarily Hayek's distinction between science and ordinary experience. There are, of course, differences in the purposes, sophistication, contexts, and goals that may justify distinctions between kinds of inquiry, as Rudner (1954, 164) notices. But these are differences in the social aspects of inquiry, not in fundamental method or superior truthfulness of their results.

Indeed, although the arguments Hayek offered for a contrast between science and ordinary experience are unpersuasive once we take the dynamic, social nature of ordinary inquiry into account, the contrast itself can be reinterpreted and upheld from a different, sociological perspective. The differences between the two are not the result of significant differences in method, but social matters of appropriateness to the purposes and contexts of differently motivated people acting in different communities.

However, it is not from the contrast itself but from its supposed implication that ordinary experience is inscrutable to the study of objective reality that Hayek's essay raises the problem of how explanation in the moral sciences is possible at all. He inquires: until the natural sciences are cleansed of "the slightest unexplained residue in man's intellectual processes" (2010a, 87), how can the moral scientist understand an agent, given that the agent's world-view is inscrutable to the objective study of reality external to her? The fact that we can understand and even communicate (92) with others leads Hayek to conclude that people, and thus the moral scientist too, have privileged access to each other's minds: the moral scientist can ascertain attitudes because *she is like the agents she studies*. An important difference between the natural and the moral sciences is thus that in the moral sciences "our mind *must* remain not only data to be explained but also data on which the explanation of human action [...] must be based" (87, italics added).

Again, an alternative argument for Hayek's conclusions is available. All that is necessary is to recall what was pointed out in section 3: that there is no logical connection between the truth of a sentence *p* and the truth of the sentence "agent X believes that *p*". This observation is

independent of the relation between ordinary experience and natural science. We should thus retain the important contribution of the "Scientism" essay, viz., that the distinction between problems whose (non-trivial) answers involve an appeal to agents' attitudes, and problems whose answers are couched in "physical terms" (2010a, 94).

In the next sections, I elucidate what Hayek believes beings with mind have in common, and venture an argument that explains how these commonalities enable interpersonal understanding of action.

## V. UNDERSTANDING AS PROJECTION OF MENTAL CATEGORIES

I have shown that, for Hayek, even though agents' world-views may be inscrutable to an objective study of external reality, the moral scientist can nevertheless understand action because she has, and knows that she has, much in common with her subjects.

One thing Hayek makes clear is that he believes that the evidence we use to understand other people is mostly behavioral, i.e., what we observe others "do and say" (2010a, 91). Accordingly, we interpret such evidence "on the analogy of our own mind" (2010b, 139); to use an expression he employs in *The facts of the social sciences* (1948, 64), by "projecting" onto others "the familiar categories of our own thinking" (2010b, 139). In so doing, we go beyond the immediate evidence, "we add" (2010b, 139) or "supplement" (1948, 64) "what we perceive with our senses" (2010b, 139). He assures us, however, that this procedure leads to a "satisfactory working explanation of what we observe [...] in the overwhelming number of cases" (2010b, 139).

For example, in *The facts* Hayek writes that he "shall, from a few observations, be able rapidly to conclude that a man is signaling or hunting, making love to or punishing another person" (1948, 64). He believes that "we can derive from the knowledge of our own mind [...] an (at least in principle) *exhaustive* classification of all the possible forms of intelligible behavior" (67-68, italics in the original). As Hayek can quickly recognize that what someone is doing is a form of hunting or punishing, so the moral scientist is capable of typifying particular behaviors and utilizing them for the organization of experiences, whose ultimate goal is to account for unintended consequences (2010a, 103).

As discussed in section 2, if a classification of action into broad, abstract types is sufficient for some purposes, we often wish to be more detailed in our understanding of agents' reasons for acting. This is true of the moral scientist and of the average person in her everyday

interactions. We may not recognize a behavior as punishment until we can understand why the punishment is being delivered, or we may not recognize that our friend is signaling if we do not understand what she is trying to convey and why. I think this can be accommodated within Hayek's work if we take his analogy in a broad sense, as a classification of "*types of beliefs or attitudes*" (2010a, 103, italics added). The analogy would enter our accounts of others in the logic it imposes. I can recognize a form of behavior as murder not because my mind operates like that of the murderer in any strict sense, but because I succeed in identifying the murderer's motivations, i.e., by showing that there is a rational pattern.<sup>14</sup> As Oakley (1999, 134) remarks, "it was apparent to [Hayek] that, as analysts, we are required to attribute to the minds of other agents our own cognitive capacities, characteristics and experiences".

We interact with people by talking with them, observing what they do in public, and then trying to integrate this evidence into coherent frameworks that account for their behavior. Naturally, how we go about integrating the evidence is geared to our purposes. If sometimes we will be satisfied with accounting for someone's concrete reasons for concrete actions, other times we wish to develop complex theories about a specific agent, and make sense in a unified way of our frequent interactions—perhaps we want to identify traits of character.

Upon first meeting another, we do not start from scratch. We have a few promising general starting points that are selected based on immediate evidence and context: people's appearance or accent, our location, moods, etc. (Hayek 2014b, 245). These initial hypotheses are what we can come up with immediately, and probably include much of what Hayek intended to convey with his projections. With further interaction, we revise and supplement these broad, subconsciously selected hypotheses and, perhaps if the agent plays a frequent part in our life's play, we turn them into a custom-made theory about this individual person. As these hypotheses are based on our judgments and projections, our theories are bound to have much of us in them. As Hayek notices, in understanding others we always supplement the available behavioral evidence.

Although Hayek does not elaborate, such supplementation involves choice. Choice in selecting candidate hypotheses and choice in the

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<sup>14</sup> See Barry (1979, 26), Brodbeck (1954, 145) or Nagel (1952, 563) for a more critical interpretation of this point. Hayek deals with the objection that his position entails that only a Hitler could understand Hitler in Hayek (2014b, 249-250).

adjustments we make to them. It is a choice because there are alternative hypotheses that we could offer, cumulating in potentially contradictory theories about the agent or action, yet all equally compatible with the evidence available. The explanatory path we follow results from our previous experience as social beings, and bears the signs of our idiosyncrasies and of the social contexts of interaction. There is no expectation that we can uniquely determine our theories with the behavioral evidence available, or reduce the former to the latter: as Quine (1973, 178) and others such as Davidson (2009, 56) notice, there are “irreducible leaps” in theory building.

## VI. WHY WHAT HAPPENS INSIDE OUR BRAIN MATTERS LITTLE:

### THE QUEST FOR A PRIOR STANDARD OF SIMILARITY

There is, however, an alternative current in the “Scientism” essay and related works as to what we have in common. According to Hayek, in addition to the analogies that connect our minds, there is a “mental structure” we have in common (2010a, 87), and he writes that our concepts (97), “knowledge and beliefs” (92) are similarly structured. Hayek writes, for instance, that “to recognize something as mind is to recognize it as something similar to our own mind, and *the possibility of recognizing mind is limited to what is similar to our own mind*” (2010b, 139, italics added). There is thus an indication that for Hayek there is a relation of similarity prior to our intersubjective interaction.

This alternative could be expressed by saying that what people have in common involves a “homeomorphism” (2010a, 86) between their mental structures and, possibly, a correspondence between the categories or attitudes in each brain. This interpretation has textual support in *The sensory order*, in which Hayek expands the view of the mind he offers in the “Scientism” essay that “*all mental phenomena [...] must be regarded as acts of classification performed by the brain*” (2010b, 111, italics in the original; see also Hayek 1952, 16) in order to, in Caldwell’s words, “provide a physiological foundation for subjectivism” (1994, 309).

In order to explain cognition, Hayek (1952) introduces two notions, that of a *map* and of a *model*. The map is the semi-permanent system of classification of impulses, whereas the model is the transient effect which the present situation is producing on the central nervous system (114-5). Hayek writes that the map arises from an individual’s unique causal history with the environment (108-10). Nevertheless, he urges that “the different maps which will thus be formed in different *brains* will be

determined by factors which are sufficiently *similar* to make those maps also *similar* to each other" (110, italics added). To summarize, what we have in common is a similar central nervous system, resulting from our similar histories, that classifies impulses in a similar way.

In Section 4 I argued that we should be wary of any talk of similarity or associated notions (such as "homeomorphism") if they are introduced independently of context or standard. Since it is not Hayek's purpose in *The sensory order* to elucidate how we could go about understanding other people, we should not fault him for not giving any standard that is relevant to anyone but the neuro-psychologist. However, in this work, Hayek makes occasional remarks on the nature of communication. He writes that when someone successfully communicates with somebody else, the "symbols" (1952, 135) used, when perceived by his interlocutors, will "occupy in their mental order a position *analogous* to that which they occupy in his own; and which, *in consequence*, will have for those other persons a meaning *similar* to that which it possesses for him" (135, italics added; see also ch. 5, section 7; cf. 2010b, 110). Successful communication seems to be explained by there being a corresponding placement of shared events in each mind's order, perhaps made possible by the structural similarity that results from similar histories. Later, Hayek (2014b, 251-252) writes that "'to have meaning' is to have a place in an order which we share with other people".

I wish to highlight two theses from this excursus through *The sensory order*. First, since Hayek indicates that communication is a consequence of shared events occupying "analogous positions" in the present mental order, this reinforces the point that he must (implicitly) believe that there is some relation of similarity over (subjective) mental positions that is logically prior to, and accounts for, intersubjective agreement. Second, the account and definition of mind found in *The sensory order* implies that we cannot have differences in the mental order that are not associated with some difference in the central nervous system of the subjects—i.e, it is not possible for two people to be anatomically identical, yet be in different mental states (1952, 110).

The picture that emerges is that of a subject, with a mind dependent on interactions with the environment but independent of other minds qua minds, of a relation of similarity over mental states that is solely dependent on the subjects' present anatomy, and of intersubjective agreement as a correspondence between similar subjective mental placements of shared inputs. Hayek would never deny that interaction

with fellow humans is a crucial part of the causal history with the world leading to present mental states. But the intersubjective, the language game of interaction and interpretation does not, of itself, have any central role in Hayek's account of the mental in *The sensory order*.

But what could such a prior standard of similarity be? If it is to shed any light on how ordinary people in general (and the moral scientist in particular) use a mental vocabulary in understanding each other's actions, it must reproduce the discrimination made by the manifold public standards that are employed to that effect. More than descriptions of reactions or bodily movements, we wish to account for attitudes, those that form reasons for acting and have propositional content. There are good reasons to believe no such prior standard is possible. First, such a standard would have to be based on neuronal evidence that is not available in the public world where our attributions of attitudes and intersubjective understanding arise. Second, the rules of inference and of normatively charged self-extrapolation employed in the interpretation of others have no equivalent in our understanding of brain structures (Davidson 2001b, 222). Hayek correctly notes that we interpret others on the analogy of our own mind, but no such tendency enters our theorizing about the central nervous system. As we may have two bushes with the exact same overall shape without there being any discernible pattern of similarity or "homeomorphism" at the level of the (topological) placement of individual twigs and branches, our unique brains may yet cumulate in what are, for our theories and judgments based on public evidence and self-projecting tendencies, equal attitudes.<sup>15</sup>

The upshot is that if the descriptions we utilize to identify types of mental phenomena, and, in particular, to individuate and characterize the

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<sup>15</sup> The simile of the bush is Quine's (1964). See Putnam (1975) for a thought experiment in which two brains are exactly equal yet intend different meanings by the same sentence. See also Davidson (2001d) for a discussion and another thought experiment with, for the matter at stake here, similar conclusions. Popper (1953, 395) also argues that a "physicalistic causal theory of the human language" is impossible, precisely because the higher functions of human language, viz., the descriptive and argumentative (397), require the attribution of intentionality (401) and other propositional attitudes (402) in interaction in a community of speakers. Popper's article affected Hayek significantly and spurred him to try to meet Popper's challenge by offering a constructive theory of communication in his *Within systems and about systems* (forthcoming in the volume XIV of his collected works). This work was partly incorporated into Hayek (1955) (cf. Birner 1999, 48; 2014, 64-65, 67; for more on this work, see Birner 1999, sec. 7.1 and Caldwell 2004, 299ff.). According to Birner (2014, 68), Hayek's attempts in *Within systems* were not successful, as Popper had predicted, "in getting beyond the lowest two functions of communication" (68).

propositional attitudes, are based on the intercourse occurring in the public, intersubjective world outside an individual's head, then there is no expectation that agent's attitudes and intersubjective understanding could, even as a matter of principle, be explained by appealing to what goes on inside her head. It is rather the other way around: if we conclude that two people are of one mind, then we may, perhaps, say that their neuronal order is similar, homeomorphic, etc.

It is important to realize that nothing I have said invalidates the interest of Hayek's neuro-psychological discussion of the mind in *The sensory order* for the purposes of the psychologist. Moreover, I believe Donald Davidson (e.g., in 2001d) to have successfully argued that the fact that our descriptions and individuations of mental states and events often allude to what is external to the brain does not invalidate the claim that mental states and events are identical with physical states and events—which is fundamental to Hayek's ontology (cf. 1952, 179). It only shows that they need not be identical with states and events in the brain. In other words, our describing mental states and events in ways that suit our intersubjective purposes that are not reducible to neuronal events and states—however complex—does not invalidate the claim that a particular mental event or state is not a complex physical, sometimes neuronal, process. It only shows that the similarities and differences in question are geared to contexts and purposes that are not those of the neuroscientist.

Indeed, what my criticism in this section eliminates is the hope that we will find in *The sensory order* much that will be of service for the intersubjective notion of mind that is central to the moral sciences. At most, this conclusion indicts Hayek as a moral scientist (not the psychologist) insofar as he is interpreted as finding the similarity that is relevant for understanding action as a homeomorphism of structures individuated without explicit appeal to a social context of public interpretation.<sup>16</sup> A similar conclusion seems to have been reached in a recent conversation between D'Amico and Boettke (2010a, 2010b), Horwitz (2010), and Koppl (2010) on the place of *The sensory order* in

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<sup>16</sup> More recent work in the Austrian tradition has precisely emphasized the importance of the public, intersubjective world in the fleshing out of subjectivity. These economists, in exploring the radical subjectivist overtones in the tradition, have been influenced by the hermeneutics of Dilthey, Gadamer, Ricoeur, and Schütz, by the work of Michael Polanyi and Weber, as well as by the anthropology of Geertz. For an overview of this literature, see the articles in Boettke (2010), Lavoie (1991) and Prychitko (1995).

Hayek's oeuvre, which bears on the more general question of the contribution of neuroscience to economics. As D'Amico and Boettke (2010a, 375) write "many economists might not find the conversation in neuroscience—no matter how interesting it is for psychology—to improve the explanatory power of economics", even though few would deny that a study of the brain is bound to shed important light on individual choice behavior (Horwitz, 2010 385).

## VII. CONCLUSION

In this article, I explored Hayek's arguments for distinguishing ordinary experience from the world-view of science. I argued that the distinction is sound, but that it cannot be sustained on differences in method or justifiability. I also discussed Hayek's thesis that people are similar by virtue of having minds, and tried to elucidate how we go about understanding each other, concluding that any notion of mind of interest to the student of action cannot ignore the intersubjective world outside agents' central nervous system.

Hayek's works within the decade of the publishing of the "Scientism" essay did not give a central place to the social context of inquiry, or to the social conditions of objectivity and truth (with exceptions, as in Hayek 2010c, 153). In the "Scientism" essay this is best seen in the neglect for the contexts and purposes of inquiry and for the reasonableness of several similarity scales. In *The sensory order* it is rather seen in Hayek's attempt at describing the development of the individual mind without emphasizing its interaction with other minds qua minds, but only with a normatively amorphous environment. But a mind could hardly develop any notion of objectivity without being a member of a community of fellow creatures. Hayek's arguments thus often rely on an unnecessarily sharp distinction between subjectivism and objectivism, whereas it is more fruitful to think of both as emerging together, in an intersubjective, social world (Davidson 2004). Whatever faults I found are often the result of exploring his suggestions further than he did.

One of the purposes of this article was also to illustrate the fruitfulness of Hayek's "Scientism" essay. Hopefully, it has helped render clearer what the nature of subjectivity is that Hayek identifies as central to the moral sciences in general, and economics in particular; and further, what this entails for the relevant vocabulary for talking about the mind in economics.



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# The mismeasure of *Capital*: a response to McCloskey

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**Abstract:** This paper is a response to Deirdre McCloskey's review essay, published recently in this journal, of Thomas Piketty's *Capital in the twenty-first century*. It argues that McCloskey has set up a number of straw men to attack. Furthermore, her three main arguments against Piketty are flawed. McCloskey wants human capital to be added to Piketty's measure of wealth; she contends that Piketty does not understand the supply-response mechanism; and she accuses Piketty of focusing on the wrong problem—inequality rather than poverty. This paper explains why these are all bad arguments.

**Keywords:** income inequality, McCloskey, Piketty, redistribution, wealth inequality

**JEL Classification:** D31, D63, B41

## I. INTRODUCTION

I have known Deirdre McCloskey for a long time. We used to go drinking at the annual History of Economics Society conferences (beer not wine) in the 1980s. After publication of *The rhetoric of economics* (McCloskey 1985), I wrote a rather critical piece in the *Eastern Economic Journal* (Pressman 1987) that elicited a “disagreeable” response from McCloskey (1987). My main point was that there was a difference between rhetoric and the actual argument, and that we should focus on what is important—the argument. Rhetoric is there only to remind us of the argument. Tjalling Koopmans made a similar point when he asserted that he intentionally wrote badly so that he would not gain an unfair advantage in the marketplace of ideas (Samuelson 1988). Anyone who has tried reading Koopmans can testify to the veracity of this statement. Despite his poor rhetoric, Koopmans had a good case. In her superb book on rhetoric McCloskey pointed out that, contra Koopmans, how

arguments are presented is important; nonetheless, good rhetoric is no substitute for a sound argument.

The review essay of *Capital in the twenty-first century* (hereafter *Capital*) by Thomas Piketty (2014), recently published in this journal, is typical McCloskey. On the one hand, it is well-written, clever, and erudite. Rhetorically it is a gem. Just as Piketty peppers his book with references to the novels of Jane Austin and Honoré Balzac, McCloskey makes reference to Aristotle, to Stephen Hawking, and to Anthony Trollope's delightful political novel *Phineas Finn*. On the other hand, the paper is poorly argued and filled with straw men.

Overall, McCloskey finds *Capital* "honest and massively researched" but flawed because it does not understand "a key piece of economics" and because of a "fundament *ethical* problem in the book" (McCloskey 2014, 94; future references to this work will just contain page numbers). Section 2 below discusses some of the many straw man arguments in the paper. Section 3 then addresses the substantive issues raised by McCloskey. Section 4 concludes.

## II. STRAW MAN ARGUMENTS

Because McCloskey's paper is loaded with straw man arguments I spent some time in the previous section discussing rhetoric. Like Socrates and Plato, I am bothered by a sole focus on rhetoric. Good rhetoric helps us remember key points, but good rhetoric is no substitute for good argumentation. Unfortunately, McCloskey's review contains many rhetorical flourishes that do not address the main arguments of *Capital*. Many are straw men, erected to cast doubt on the analysis and the policy prescriptions of Piketty. They hinder, rather than aid, an understanding of Piketty. We address a handful of these straw men here.

First, McCloskey (75) claims the book contains "leftish worries" about capitalism, something with a long history in economics. She cites the concerns of Malthus about land scarcity and the worries of Ricardo about landowners usurping the national surplus, leaving little for investment and improving living standards. J.S. Mill is accused of worrying about the stationary state being just around the corner. McCloskey (79) contends that these leftists see capitalism as seriously defective and fail to understand its many benefits. She even adds to her list of leftist concerns the worries that many people have about the

environment. McCloskey (81) concludes by accusing Piketty of setting forth a pessimistic message because pessimism sells.

This entire line of attack is rather baffling. How anyone could accuse Malthus of being a leftist is hard to understand. Malthus opposed all forms of government aid to the poor. Instead of supporting peasants or laborers, he defended the interests of wealthy landowners. Nor is Ricardo a notorious leftist. He defended the same capitalist interests that McCloskey (2006) champions. Mill wrote about the stationary state for the same reasons that other classical economists did—this was the logical conclusion of Ricardo's corn model. And Mill was *not* pessimistic; he sought to explain how and why the stationary state might be desirable. As for fears about the environment, it is hard to see this as some left-wing plot. It expresses human concerns about the future of mankind. Little is more conservative than wanting to maintain life, as we know it, on our planet.

Furthermore, it is not clear that pessimism sells. In fact, optimism typically sells. Self-help books are extremely popular. Ronald Reagan's optimism helped him win the US presidency. And while it is hard to evaluate the claim that a work is pessimistic in tone or nature, a good case can be made that *Capital* is not a pessimistic tome. Yes, it recognizes some problems with capitalism. However, after the Great Recession, most people recognize that there may be problems with capitalism. Yet Piketty does not just point out these problems, which would lead to a pessimistic work by most accounts. At the end of his book he suggests several policy solutions to remedy the problems that he identifies earlier. The last part of *Capital* talks about fiscal and monetary policy as well as a wealth tax. Overall, Piketty's vision is close to that of John Maynard Keynes. Like Keynes, Piketty recognizes the benefits of capitalism, but also that problems can arise under capitalism. He seeks to make life better under capitalism so that we don't kill the goose that lays the golden eggs. This is a rather hopeful message.

Second, McCloskey (83) notes that in a broad array of countries it is true that  $r > g$  during the 20th century; however, in some of them (e.g., Germany, France and Sweden) post-tax and post-transfer inequality did not rise inexorably during the late 20th century. McCloskey is correct that in some nations inequality has increased very little, if at all. But this is not because Piketty is wrong about  $r > g$ . Piketty is clear that  $r > g$  holds for *pre-tax* income only. After-tax differences arise because some

countries use government policy to keep  $r > g$  from pushing up post-tax and post-transfer inequality—for example, the progressive tax policies that Piketty advances at the end of *Capital*. High marginal tax rates can also affect the pre-tax distribution of income, not only by affecting work incentives but also because they affect the incentive to extract rents.

Third, McCloskey attributes to Piketty a moral philosophy that amounts to no more than “I don’t like inequality”. Or, as McCloskey (86) sarcastically summarizes this view: “that is bad [...] is his ethical philosophy in full”. Indeed, this line is quite memorable; it is wonderful rhetoric. But it is also a straw man. Piketty is clearly worried about the *economic* consequences of inherited wealth—what this means for people’s standard of living now as well as what it means for the standard of living of our children and grandchildren. He fears the return of the rentier, whose wealth generates few incentives for the wealthy to work (Piketty 2014, 113-115). This lowers current living standards and deprives us of innovations due to these individuals and the resultant increase in future living standards from them. Finally, the last part of *Capital* is an argument for a wealth tax to mitigate the problem of rising inequality. A large literature does exist on the negative consequences of inequality (more on this later). McCloskey is right that *Capital* ignores this. Yet McCloskey ignores this literature as well when she accuses Piketty of only making a moral case against inequality. This literature forms the background to *Capital*. It needs to be understood as such.

Fourth, McCloskey (90) contends that Piketty (2014, 513) does not like high CEO salaries and therefore recommends high marginal tax rates, possibly as high as 80% on top incomes. McCloskey then argues that if Piketty does not like high incomes, we might as well prohibit them or shame compensation committees into lowering CEO pay. As noted in the paragraph above, Piketty’s argument against CEO pay is not a moral argument. Rather, his case is an economic one. The economic argument for high marginal tax rates is well-known. If inequality has large externalities, and if the marginal social benefits of high top tax rates exceed the marginal social costs, there is an economic justification for high rates. Maybe Piketty is right and the benefits exceed the costs until we reach an 80% marginal tax rate. If this is true, there is no case for a top tax rate of nearly 100%, as McCloskey suggests. There can be empirical arguments about the 80% figure and whether this is optimal or not. A large literature already exists on this topic stemming from the work of Frank Ramsey (1927) and James Mirlees (1971). However,

dismissing such literature with the claim that Piketty doesn't like high incomes, and so once we impose high marginal tax rates we might as well set the top tax rate at 100% or prohibit large CEO compensation, is nothing but a straw man argument.

Fifth, McCloskey (91-92) accuses Piketty of not understanding the difference between shifts in curves and movements along curves. She quotes Piketty (2014, 6) as saying: "If the supply of any good is insufficient, and its price is too high, then demand for that good should decrease, which should lead to a decline in its price". When I teach basic supply-and-demand analysis to undergraduates, I do my very best to get students to understand that demand is the curve and quantity demanded is a number. But at times I slip into the usual convention of calling "quantity demanded" just plain old "demand". Piketty does something similar on page 6, but it is something that most economists do (since we know the difference, there is no confusion). This criticism has nothing to do with Piketty's explanation for rising inequality and it has nothing to do with the viability of his main policy prescription. Rather, it is irrelevant to Piketty's argument, and something designed to make Piketty look bad and cast doubt on the logical argument contained in *Capital*. It too is a straw man.

Sixth, McCloskey (88) contends that Piketty defines capital as something that is owned only by rich people. As anyone who reads *Capital* carefully will see, this is not the case. The book documents the rising ownership of wealth by the middle class in the middle part of the 20th century, which then gets reversed in the latter part of the 20th century and into the 21st century. It also seeks to explain this phenomenon. As Piketty shows, over time the middle class has gained wealth mainly through homeownership, but also through owning some financial assets. His concern is that this process began to reverse itself in the 1980s and that this has continued until today. He next explains why he thinks this trend will continue into the 21st century; then he suggests several policies to mitigate or reverse it. Nowhere does Piketty define wealth as something *only* rich people possess. However, he does note that (excluding land and housing) the rich today own a very large fraction of national wealth (stocks, bonds, etc.).

### III. SUBSTANTIVE ARGUMENTS

McCloskey (74-75, 80) praises *Capital* at several points in her review essay. She compliments Piketty for not doing meaningless statistical



tests of significance and for not engaging in existence proofs—two bugaboos for McCloskey.

Nonetheless, McCloskey's review of *Capital* is quite negative; and it does more than just engage in straw man arguments. McCloskey raises three substantive arguments against Piketty. First, she thinks that human capital should be added to our measure of wealth. Second, McCloskey (90) argues that Piketty does not understand the supply-response mechanism. This applies to the high taxes espoused by Piketty, which would slow economic growth. It also applies to the public policies that Piketty advocates; McCloskey worries about the disincentives these policies would generate, and claims that (contra Piketty) the gains from growth far exceed any gains for average citizens from the redistributive policies that Piketty proposes. Third, there is an argument that Piketty has focused on the wrong problem. Poverty rather than inequality is the important issue, according to McCloskey. We address these three arguments below.

### ***Adding human capital***

For McCloskey (88) human capital is a source of future income. It leads to future wage income just as physical capital leads to dividends, interest and capital gains in the future. For this reason, McCloskey believes, we need to add human capital when we measure wealth. Were we to do this, workers would own more net wealth, perhaps a majority of it. Furthermore, McCloskey claims, adding human capital to wealth would make Piketty's problem (that wealth and income inequality tend to rise over time because  $r > g$ ) disappear.

Several problems plague this line of argument.

A first problem is that we lack good measures of human capital, as exist for other forms of wealth. We know the value of stocks and bonds, land and homes, and most other assets that people own. Such information can even be looked up online. It is the information appearing on estate tax returns that Piketty uses to estimate the distribution of wealth (for more on this see Pressman 2015, ch. 3). In contrast, it is not clear how to get data on human capital. Human capital is typically measured in terms of years of experience and/or years of education. But not all years of education and experience are the same; to adjust for this would require using the present discounted value of future income. Besides problems involving the choice of an appropriate discount rate, there is also the problem that future income, especially

income that will be received far in the future, is unknown and unknowable.

Not only are there measurement issues. Another problem is that human capital is unlike physical capital in one important respect. As Piketty (2014, 46) notes, human capital cannot be owned by others or traded on any market. This is the main reason we lack data on human capital. But there are also deeper issues here. If I own a house and don't have sufficient income to support myself and feed my family, I can sell my house and downsize. The extra money from liquidating my wealth will enable my family to survive for several years, maybe much longer. I am unable to do something similar with human capital. I can't sell my college degree to someone else and then use the proceeds to buy food and pay my rent. I can't sell my extensive work experience to someone else so that they can earn more money now. And it is disingenuous to say that I should use my human capital to earn more money. If my income is low, and if I am struggling to pay my bills, my human capital also must be low.

Furthermore, there is a key difference between capital and wealth. In economics, capital is a factor of production; it refers to the plants and equipment used to produce more output. In contrast, wealth includes all the ownership of this capital (through stock ownership and individual ownership of business firms) but also includes other assets owned by households, such as land, rare artwork, government bonds, and assets in bank accounts. Piketty (2014, 47), unfortunately, obfuscates this distinction by using the terms interchangeably. He is really interested in wealth; *Capital* seeks to explain how wealth distribution changes over time and how it leads to income inequality. Given that Piketty is concerned with wealth, it is not clear that we *should* add human capital to wealth. While human capital may be capital, it is not wealth. My wealth has value because it entitles me to the ownership of things with value—e.g., the plants and equipment of firms, future debt payments on bonds, the ability to withdraw money from a savings account, the ability to rent property or live in a home. My human capital is not like this. It gives me ownership of my future income; but I have always had this (although it will likely increase the amount of my future income). Accumulating more human capital does not provide ownership of anything additional or new.

Finally, there are empirical problems with McCloskey's position. Workers have become more educated and have accumulated more

human capital on average over time (Goldin and Katz 2008). Human capital theory entails that wage income should increase as a fraction of national income as workers become more educated (Piketty 2014, 22); yet this is not what we see in the actual data. In most developed countries, the capital share of income has been growing for several decades (Piketty 2014, fig. 3.1, 3.2, 4.1, 4.6, and 4.9).

***Supply responses: growth and redistribution***

First and foremost, *Capital* is about inequality. It shows how income and wealth inequality have grown in tandem in numerous countries over a long time period. It analyzes the causes of rising income inequality and sets forth some policy solutions—higher top marginal tax rates and a wealth tax. The strongest argument McCloskey makes in her review essay on *Capital* concerns the redistributive policies Piketty advances for saving capitalism. McCloskey laments (as noted earlier) that Piketty assumes inequality is bad, and she is afraid that the policies advanced by Piketty would do more harm than good.

McCloskey is right concerning the first point—Piketty does not make a case that there are negative effects of inequality. This is a major gap in his book. But there is a difference between a gap in some argument and a bad argument.

The empirical literature on the macroeconomics of inequality and economic growth seems to have reached a consensus—for developed capitalist nations at least, greater equality is associated with greater economic growth (Alesina and Rodrik 1992, 1994; Benabou 1996; Benner and Pastor 2012; Deininger and Squire 1998; Lundberg and Squire 2003; Ostry et al. 2014; Panizza 2002; Perrotti 1993, 1996; Perrson and Tabellini 1994). This literature has been rather robust, holding true for many measures of inequality, for different time frames and for a number of different nations.

One mechanism by which this might occur is through the impact of inequality on demand. Those with low incomes are more likely to spend their income than save it. This additional spending raises total demand and increases economic growth.

Alternatively, it could be some social-psychological process. The human mind developed over millions of years to deal with specific problems faced by our ancestors foraging in a dangerous and competitive world on the African savannah. Its characteristics are those that best promoted survival in this environment. Above all, our ancient

ancestors required food on a regular basis; when food was available it needed to be shared somewhat equally. When it was not shared equally, this threatened the survival of some and created great stress. Those people who reacted in ways that enabled them to share in the available food supply; these people were more likely to survive and pass this trait on to their offspring. This involved developing predilections for both trust and reciprocity. According to Zak and Knack (2001), these habits also reduce transaction costs and promote greater growth. Empirical results from the ultimatum game provide support for this. In the ultimatum game, two people divide a fixed sum of money. The first subject can propose any division they like; the second subject can only accept or reject that division. If the division is accepted, each person receives the amount of money proposed by the first subject; if the division is rejected, each person receives nothing. From a standard economic perspective, dividers should propose that they get most of the money; the second subject, faced with a choice of little or nothing, should then choose little over nothing. Many actual experiments have been conducted with individuals playing this game for real stakes. In general, dividers make substantial offers and most people reject unequal offers—despite the fact that it is both costly and irrational (in an economic sense). These results hold even when people split amounts that are the equivalent of several months' pay (Henrich et al. 2001; Kahneman et al. 1986; Klasen 2008).

Finally, we know that inequality creates considerable stress for those lower down on the income ladder (for reasons alluded to above) and that stress leads to health problems, which then affects worker productivity (Wilkinson 1996) and thus economic growth.

Inequality can also directly impact worker productivity. Harvey Leibenstein (1966) coined the term “x-efficiency” to indicate that much worker effort is discretionary, and argued that work effort is difficult and costly to monitor. As such, the pay distribution within a firm can determine employee behavior and productivity. Workers who feel that too much income goes to top executives may work more slowly or less efficiently. Large pay differentials may also increase employee turnover (Gerhart and Milkovich 1992), or lead to vandalism, absenteeism, strikes and other forms of sabotage against the firm. Large pay differentials can also create disincentives for cooperation to the detriment of organizational performance. Substantial research has found that when productivity depends upon team effort, unequal rewards hurt

productivity (Bloom 1999; Cowherd and Levine 1992; Bloom and Michel 2002).

McCloskey is also right that wealth taxes have a long and checkered history. During medieval times, they financed the Crusades (Hyman 2014, 604). In 1662, King Charles II imposed a tax of one shilling on every fireplace and stove in England and Wales. This can be regarded as a wealth tax since wealthier families typically own bigger homes, with more stoves and fireplaces, and so pay higher taxes than families with smaller homes and fewer fireplaces. Nonetheless, this tax was extremely unpopular because it required tax agents to burst into people's homes unannounced so that fireplaces and stoves would not be covered up right before their wealth was going to be assessed for tax purposes.

The 1696 window tax in England and Scotland replaced the stove tax as a national revenue source. It was based on the number of windows in each home. The logic behind the window tax was similar to that of the stove tax, but it didn't require revenue agents entering people's homes unannounced to count their stoves; windows could be counted from outside the home. As Adam Smith (1937, 798) noted, this was not a true wealth tax; many wealthy homeowners in big cities had fewer windows than poor rural families. In addition, the tax had a number of rather undesirable consequences. To reduce their tax obligations many people bricked over their windows. You can still see the effects of this in the UK today—there are many places where you can look up at a building and see the outlines of former windows in a different shade or type of brick. The highly unpopular window tax was finally repealed by Parliament in 1851 (Oates and Schwab 2015).

While the US has shunned an annual tax on aggregate wealth, the same cannot be said of Europe. The modern history of wealth taxation is almost as bad as the history of the fireplace and window taxes. In 1990, one-half of the 34 OECD nations taxed wealth holdings. Over the past quarter century, wealth taxes have been abandoned throughout Europe. By 2000 only one-third of OECD nations were taxing wealth. The parade of nations abandoning wealth taxation continued into the 21st century. Finland, Iceland, and Luxembourg all repealed their wealth taxes in 2006. Spain did so in 2008 and Sweden followed in 2007. By 2010 only France, Norway, and Switzerland taxed household wealth (Evans 2013)—less than 10% of OECD nations. It is clear that Piketty is swimming against the tide of history.

McCloskey stands on shakier ground when she opposes other taxes, believing they would do more harm than good. She goes particularly awry when describing the tradeoff between redistribution and growth as some kind of either/or decision. Instead, we face a continuum of options. At one extreme the government can engage in no redistribution at all. This was the policy favored by Malthus. At the other extreme we can redistribute income so that everyone receives the same disposable income.

Arthur Okun pointed out that we can do some redistributing, or find a middle ground between these two extreme positions. He even did a great rhetorical job describing this process as moving income in a leaky bucket from the rich to the poor. He framed the redistribution question in terms of how much leakage we are willing to allow in order to provide some income to those at the bottom of the distribution. Okun (1975, 94) thought we should stop when leakages approach 60%. Certainly, other people will have other intuitions regarding this percentage. John Rawls (1971) would probably stop at something close to 80%. For McCloskey, 10%-20% would likely be optimal.

We can get a sense of what is involved here by using some data from Piketty. The percentage of total income received by the top 10% of households has risen from less than 35% in 1980 to 50% in 2012. Most of these gains have gone to the top 0,1%, those making more than \$2 million. With US national income approaching \$16 trillion, this income transfer amounts to nearly \$2,5 trillion. If the top 0,1% saves 15%-20% more of its income than average, there will be \$400 billion to \$500 billion less spending as a result of rising income inequality. With a multiplier of close to 2, output will be \$800 billion lower, or more than 4% of US GDP. To put this into concrete terms, median income in the US would be around 4% greater if income were distributed as in the post-WWII decades, and if this led to more spending and greater economic growth. This is *in addition* to the income gains accruing to a large majority of the population from having a more equal distribution of income than has existed during the past several decades. Moreover, it is unlikely that redistribution from the top 0,1% to the rest of the population would reduce income (or productivity) growth by 4% a year, especially since productivity growth has been growing at 2% annually for several decades and it grew *faster* when the top 0,1% received a smaller share of total income.

Finally, and perhaps the most disturbing part of McCloskey's argument, may be the assumption that because growth was more important than redistribution in the past for increasing living standards, this must also hold for the future. Even investment prospectuses are required to warn potential investors that past returns are no guarantee of future returns.

Certainly, redistribution was not extensive until the 20th century when the modern welfare state was built. So, looking at the distant past, one sees growth but little or no redistribution. Concluding from this that growth is *always* more important than redistribution for average citizens is surely mistaken; we cannot generalize from history like this.

One reason we may have a new relationship between economic growth and redistributive efforts may be that productivity growth (and hence economic growth) has declined because we have reached the end of the industrial revolution. In his recent book, Robert Gordon (2016) argues that economic growth in the US from the late 1800s to 1940 was driven mainly by technological breakthroughs from the first industrial revolution. The key inventions that improved people's lives between the late 19th century and around 1940 centered around the necessities of life (food, clothing and shelter) and our homes (electricity, central heating and indoor plumbing). The post-war growth spurt was driven by early 20th century technological advances that were not made widely available because of the Great Depression and then World War II. By the 1970s the impact of these advances began to slow. Going further, Gordon forecasts that future US economic growth will be much lower because the most recent inventions and innovations will not spur growth by very much. In fact, he sees little income growth for those in the bottom 99% of the income distribution as we move forward. Redistribution may be the main hope for a majority of the population to experience gains in their standard of living.

Another reason for slower economic growth comes from Baumol's Disease. William Baumol (1967) noted that the service sector cannot yield great productivity increases because of the nature of services—they require human contact and direct human input. His telling example is a horn quintet. Musicians cannot be more productive by playing faster (as takes place when productivity improves in manufacturing) or by eliminating one player (since the piece would no longer be a horn quintet). As developed countries increasingly become service economies (especially as labor leaves a manufacturing sector that requires less

labor), this structural transformation will slow economic growth, just as the movement of labor from agriculture to manufacturing led to improved productivity growth and economic growth.

Due to these two structural changes, future growth rates will likely be lower than past growth rates. In addition, environmental concerns will require slower economic growth in order to ward off climate change (Pressman and Scott forthcoming; Victor 2008). Taking all this together, it seems that redistribution will become *even more important* for improving average living standards over time.

In sum, the case McCloskey makes against redistribution gets a number of things wrong. She is wrong about future sources of economic growth because there is no reason to believe that the future will be like the past and there are good reasons to believe that it will not be like the past. She is also wrong about the impact of redistribution on economic growth. Modest redistribution, returning us to post-World War II levels of inequality, should increase spending and economic growth, but not harm productivity growth very much. There should be net gains for a large majority of the population.

#### IV. THE MORAL QUESTION AND RELATIVE INCOMES

Last, but not least, McCloskey (82) claims that the “focus on *relative* wealth or income or consumption is one serious problem” with *Capital*. She contends (95-97) that Piketty’s moral case against inequality is that it is ethically objectionable that a super-rich woman buys a \$40,000 watch. Going further, she holds that since there is no economic argument for redistribution, the only case for it must be a moral case. To the extent that there is an economic case, it is that incomes cannot be made without social help, so large inequalities have no justification.

The previous section argued that the premise of this argument is false—there is a good economic case for redistribution. McCloskey might not like the argument, and she might not *want to* accept it, but that does not mean that there is no argument for redistribution.

Nonetheless, it is worth considering the ethical case McCloskey raises. For McCloskey (108) the key question is why we should be allowed to take people’s income and give it to others. At the outset it is important to note that this is *not* what Piketty is advocating. He does not push progressive income taxation and a wealth tax to redistribute income, but rather to deal with the problem of rising inequality. Piketty (2014, ch. 16) even talks about using additional revenue to repay



government debt, which arose because governments decided to borrow money from the rich rather than making the rich pay taxes to finance wars, national defense and social programs. McCloskey (108) is also concerned about destroying the signaling function of markets and prices with high marginal tax rates. This case is less compelling when prices are not set in competitive markets but are fixed by oligopolies. It is also less compelling since Piketty makes clear that one reason he wants a wealth tax is that the rates can be low and therefore there will be few disincentive effects (compared to raising income tax rates).

Nonetheless, McCloskey (94) is right about one thing—Piketty does not explain why inequality is bad. As noted above, there is a large literature demonstrating the negative effects of inequality. Like Piketty, McCloskey ignores this literature. Instead, her response is two-fold. First, she contends that inequality can be justified. Second, she contends that the moral problem is not inequality but poverty. We examine these two cases separately.

McCloskey (88) resorts to the Wilt Chamberlain example of Robert Nozick (1974) to justify the high incomes and high rewards received by some people. Nozick argues that if people voluntarily pay Wilt large sums of money each time he plays in a basketball game, then his earnings are justified and we should have no moral qualms about the inequality that results from this process. Taking things a bit further, one can argue that if pay is determined by how much people willingly pay others, the entire distribution of income is justified.

There are numerous problems with the Wilt Chamberlain defense of inequality. Philosophers Thomas Nagel (1975, 138) and Cheyney Ryan (1977, 136) argue that Nozick's case is flawed because of hidden premises in his argument—for example, that individuals have rights that may not be transgressed for any reason. Jonathan Wolff (1991) and the *Arizona Law Review* (1977) symposium (especially the papers by Robert Paul Wolff and George Christie) provide a more concerted philosophical argument against Nozick.

Pressman (2013) sets out a detailed economic argument against Nozick. Here a brief summary will have to suffice. Interested readers can consult the original paper for details. First, the Wilt Chamberlain example begins with an assumption that is unlikely to be true in the real world—initial distributions, stretching far back in history, are by-and-large just. Second, there is a sort of fallacy of composition in Nozick. Wilt is part of a team. If everyone on the team gets paid by individual

fan contributions, and if these individual contributions are all regarded as leading to fair incomes, it does not mean that the overall distribution will be fair. Empirical evidence exists that allowing people to freely contribute to Wilt would *not* yield results that most people take to be fair. There is also empirical evidence that it would hurt others and hurt Wilt (see again pages 152-153 above that discuss the impact of inequality on economic growth). Finally, for John Locke (1980, ch. 5) (who made the case for private property and accumulation) and for the Wilt Chamberlain example, there must always be enough left over for others at the time property is acquired. If future generations are deprived of sufficient property, the Locke-Nozick argument does not hold water.

This last point is the most relevant concerning *Capital*. Piketty contends that wealth has been inherited and that its growth has taken place over many generations. Wealth grows at a faster rate than incomes grow on average, resulting in the very rich (the top 0,1%) owning larger and larger fractions of total wealth and receiving larger and larger fractions of national income. This means that, contra Locke, at some point in the process sufficient wealth will *not* be available for everyone else and insufficient income from wealth will go to average citizens. Consequently, the Wilt Chamberlain example, which rests on Locke's argument for the acquisition of private property, fails to justify the inequality that Piketty worries about. Without this justification, McCloskey's case against Piketty comes close to the straw man argument McCloskey herself uses against Piketty—inequality is good for McCloskey and whatever degree of inequality we find in the real world must be good.

This brings us to the last issue. If poverty is the main problem, rather than inequality, we should focus on policies to address this problem. As such, wealth taxes and other policies to reduce after-tax inequality address the wrong problem. McCloskey (99) contends that poverty rates have fallen recently and that the decline is even greater if we measure poverty correctly. To deal with any remaining poverty she proposes a basic income guarantee; she rejects higher income taxes, which she fears will harm work incentives and economic growth.

Several flaws plague this argument. First, as noted previously, Piketty's wealth tax is *not* intended to redistribute income. Rather, it is to slow down the accumulation of enormous wealth that then gets passed on to heirs who no longer have to work. Piketty is concerned

about the same incentive problems as McCloskey, and proposes a global wealth tax to minimize incentive problems.

Second, it is not clear that basic income guarantees are free of work disincentives. A large basic income to mitigate poverty runs into two related problems—there is no work incentive if people receive a large guaranteed income, and higher taxes will be necessary to provide this income floor. Moreover, if the income guarantee reduces work effort substantially, the money required of everyone else to fund this program will be much greater. In brief, these are the same problems McCloskey raises regarding the tax proposals set forth in *Capital*. Switching from a wealth tax (and a progressive income tax) to a guaranteed income plan does not change this situation. The incentive problem has not disappeared; it still exists.

Third, it is not clear that poverty rates are falling in rich countries “recently” as McCloskey (99) contends. According to the *official* Census Bureau count, 27,3% of the US population was poor in 1959 (the first year for which we have decent data using the Orshansky methodology, which uses fixed income levels to measure poverty). Over the next decade, the US poverty rate fell to 14% in 1969. Since then it has increased to 21,1% in 2014, the last year for which we have data. The numbers do go up and down over time, based on macroeconomic circumstances as well as other variables. Still, the trend is clear—US poverty rates fell in the decade between 1959 and 1969; between 1969 and today, poverty rates have increased. At present they are more than halfway back to their 1959 level. Given this, it is hard to accept the claim that US poverty rates have fallen recently.

McCloskey is correct that poverty is not measured correctly. However, measurement errors do not all fall on one side; actual US poverty rates are not necessarily lower than what the government reports. Several factors make the *official* US poverty rate too *low*. First, there is no accounting for tax payments made by low-income households. Poverty is measured using pre-tax income. Over the past several decades higher Social Security taxes have reduced disposable income for those with low incomes, limiting their ability to purchase necessities. In addition, the Orshansky minimum food requirements (which form the basis for her poverty thresholds) were designed for emergency situations only; they provided a mere 80% of *annual* nutrition needs (Rogers 2000) and were never expected to provide adequate nutrition for an entire year. Yet they form the basis for *annual*

US poverty thresholds. Further, as socio-economic characteristics change, family needs can also change. Child care is not necessary for most families when the family has one breadwinner and one person staying at home to care for the children. With two employed adults, however, child care becomes a necessary expense. Finally, there is the issue of household debt and the interest that must be paid on that debt. Some of this results from borrowing having replaced the government safety net as a way to protect households in difficult economic times. The problem here is that the interest paid this year on past debt cannot be used to buy basic necessities such as food, clothing, and shelter. Pressman and Scott (2010) estimate that just subtracting the interest payments on past debt (and not accounting for any debt repayment) would have pushed up the US poverty rate in 2007 by 1,1 percentage points. And this underestimation of poverty has been *growing* over time as household debt levels have risen.

What is true for the US is also true of other developed countries. Most developed countries do not have official absolute poverty thresholds. Instead, poverty is typically measured in relative terms. Similarly, the Luxembourg Income Study (LIS) provides relative poverty measures for many nations over several decades. The US poverty rate for individuals was 15% in 1979 (using a poverty threshold of 50% of adjusted household median income) according to LIS; by 2013, the US poverty rate was 17%. Similarly, for the UK, poverty increased from 5% in 1969 to 9,8% in 2010; and for Norway poverty rose from 5% in 1979 to 7,4% in 2010. While relative poverty rates have been constant in a few nations (and have fallen in a few), it is hard to make a plausible case that poverty rates have *fallen* in the developed world during the last several decades.

McCloskey (99) has one final out. She contends that if you measure income correctly, and include better working conditions, more years of education, better health care, and improved quality of goods you will see that poverty rates have fallen throughout the world. Contra McCloskey, it is not clear that more years of education should be taken into account when measuring poverty. Poverty lines are supposed to measure the income needed to survive in one year. That was what Mollie Orshansky (1969) attempted to do when she developed the official US poverty measure. If you do not have enough income you are poor, regardless of your education level. The same is true of better working conditions. Education and better working conditions do improve the

quality of one's life. I enjoy many things as a result of the great education I have received over the course of my life. Other people enjoy working in air conditioned offices with magnificent views of the mountains or water. All of this is nice. But it does not put food on the table or a roof over people's heads. These amenities will not matter a great deal for families living below the poverty line and struggling to survive.

Last but not least, we turn to the big issue raised by McCloskey. While there is no way to resolve the dispute over whether poverty should be measured in relative or absolute terms, there are good arguments for adopting a relative definition of poverty. Adam Smith, in the *Wealth of Nations*, held that not being poor meant that one could appear in public without shame, a statement that Amartya Sen (1999, 71) quotes approvingly. Even Orshansky (1969, 37) herself thought that "poverty, like beauty, lies in the eyes of the beholder" and that poverty lines should vary over time and place. Moreover, it seems as though people care about relative incomes, and are ready to act upon these beliefs—sometimes resulting in personal loss. This is one result of ultimatum game experiments (Cameron 1999; Klasen 2008). If our goal is to increase living standards, and if inequality leads to behavior that reduces output growth (revisit the earlier discussion on the economic consequences of inequality), we should measure poverty in relative terms and care about relative poverty.

Employing a relative definition of poverty means that a focus on inequality (which McCloskey opposes) and a focus on poverty (which McCloskey supports) are quite similar. In fact, they are essentially the same thing. Both measure relative incomes, and both seek to quantify the relative position of people making very little money compared to a typical citizen. They are both about where people fit into the socio-economic hierarchy of the nation. Or, to again quote Adam Smith, the issue is whether those with low and moderate incomes are able to appear in public without shame. This requires both a certain absolute level of income (that varies with time and place) and also an amount of income that provides a standard of living that is not too far from what is typical and regarded by most people as reasonable.

Piketty examines the top of the distribution in *Capital* because that is where all the action is and his measure of inequality is easy to understand, especially compared to more complex measures such as the Gini coefficient. If top earners receive a larger share of total income, and

if this share rises because  $r > g$ , it follows that everyone else gets a smaller share of the pie. Putting this in slightly different terms, almost all the income gains of the past several decades have gone to the very wealthy (OECD 2014; Saez 2015). The average worker has not received any extra income from his or her greater productivity. Over a long time period, median household income has fallen and poverty has increased (in both relative and absolute terms).

## V. SUMMARY AND CONCLUSION

Thomas Piketty has written an important book on inequality. *Capital* summarizes the long-term international data on income and wealth inequality that Piketty has developed over several decades. But it does more than just present numbers. It provides an explanation for rising inequality, arguably the most important economic issue of our times. It also provides a simple policy solution, an annual global wealth tax. Certainly, there are flaws in the book, including confusing capital and wealth, failing to explain the long-run empirical result that  $r > g$ , and proposing a policy solution that has a long history of failure and does not seem feasible economically. However, Piketty has made an important case that inequality is increasing in large part because more income is flowing to the very wealthy and that this has been going on for several decades. Perhaps most important of all, the book did hit a nerve and seems to have revived an interest in both political economy and the study of income distribution.

McCloskey has written a clever but misguided critique of *Capital*. She employs bad arguments dressed up in fancy prose that make them sound convincing. Her paper is filled with straw men. It misunderstands human capital and ignores both the economic and moral arguments for greater equality. On the other hand, McCloskey (95, 105) is right that, over a number of centuries, growth rather than redistribution has enriched people's lives. But this does not mean the future will be like the past. Even the past several decades look a lot different from the distant past.

Today, as we approach the limits of the planet to absorb economic growth, and as productivity growth and the growth of living standards slow, we cannot expect large improvements in average incomes through economic growth. As John Stuart Mill urged, we need to learn how to love the stationary state. McCloskey seems to find this morally objectionable; but nowhere does she make this case. In effect, she

succumbs to the same moral posturing that she attributes to Piketty and criticizes him for adopting—and, as this paper argues, Piketty does *not* adopt.

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# Reflections on the 2016 Nobel Memorial Prize for contract theory (Oliver Hart and Bengt Holmström)

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**Abstract:** We briefly summarize the contributions of Oliver Hart and Bengt Holmström, two key founders of modern contract theory, and describe their significance for the analysis of organizations and institutions. We then discuss the foundations of modern contract theory and review some criticisms related to modeling strategy, assumptions about knowledge and cognition, and relevance. We conclude with some suggestions for advancing contract theory in a world of uncertainty, complexity, and entrepreneurship.

## INTRODUCTION

As researchers who focus on the economic theory of the firm we were delighted to see the 2016 Nobel Prize in economic sciences go to Oliver Hart and Bengt Holmström, two of the foremost economists in the areas of contracting, firm boundaries, and organizational structure. Their work has important implications not only for the theory of contracts and the theory of the firm, but also for work in strategic management, entrepreneurship, corporate governance, financial contracting, public administration, stakeholder theory, and much more.

Hart, a British economist teaching at Harvard, and Holmström, originally from Finland and now on the faculty at MIT, are leading practitioners of the formal, mathematical analysis of contracting and organizations. Hart is best known for his contributions to the ‘incomplete contracting’ or ‘property rights’ approach to the firm, while Holmström is considered the founder of modern principal-agent theory.

Both have written widely in these areas; Hart has also made important contributions to principal-agent theory (Grossman and Hart 1983) and Holmström has contributed to the incomplete contracting literature (Holmström and Tirole 1989; Holmström and Roberts 1998). They have written several papers together (e.g., Hart and Holmström 1987, 2010). Both were long considered frontrunners for the prize, although earlier prizes to Williamson, Stiglitz, Spence, Akerlof, Mirrlees, Maskin, and Tirole who work on closely related issues, were often thought to have tempered their chances of receiving it.

While Hart and Holmström are known for their distinct contributions, there are important similarities between their research programs. Features of Hart's best-known contribution (Grossman and Hart 1986) are very similar to the model in one of Holmström's most famous papers (Holmström 1982).<sup>1</sup> Methodologically, the similarities are even more striking. Both writers helped establish and popularize a distinct approach to formal modeling, 'MIT-style theory', that emerged in the late 1970s. This approach uses game theoretical, partial-equilibrium models building on highly stylized, even extreme, assumptions to illustrate a particular mechanism or phenomenon. MIT theory favors parsimony, simplicity, and elegance over the more complex and more interdependent modeling style represented by, for example, Paul Samuelson's *Foundations*.<sup>2</sup>

MIT-style theory, at its best, simplifies complex relationships, highlights the essence of a particular approach, and provides a common language for comparing and contrasting theories (Gibbons 2005, provides an excellent example). At the same time, as we argue below, MIT theory can also lead the theorist astray. Its liberal approach to "shutting off" certain mechanisms and margins tends to result in clever, elegant, counter-intuitive results that are disconnected from reality (Foss and Foss 2000). Moreover, the "closed" modeling approach favored by MIT-style theorists suppresses the important forces of entrepreneurship, creativity, and innovation (Foss and Klein 2005). Entrepreneurship may be present in novel attempts to circumvent contractual restrictions, new ways of being morally hazardous or

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<sup>1</sup> Specifically, focusing on effort instead of investment in the Grossman and Hart paper leads to the problem of aligning budget balance and Pareto optimality in the Holmstrom paper.

<sup>2</sup> As Lones Smith (2014) puts it, MIT theory "means that the paper's triumph is not in the logic or depth, but the construction of the model. A long struggle with a proof is simply a sign that the model has not been set up properly".

opportunistic, new means of economizing on transaction costs, novel organizational and governance forms, etc. We argue below that contract theory ignores entrepreneurship at its peril, and we call for more integration between the study of contracts and governance structures and entrepreneurship.

### CONTRACT THEORY

Contract theory is a subset of the modern economics of organization (which also includes transaction cost economics, information theory, and team theory). Contract theories are partial-equilibrium models examining small-scale interactions, focusing on (explicit and implicit) contracting relations, using non-cooperative game theory, and favoring solution concepts such as perfect Bayesian equilibrium. While emphasizing bilateral aspects of transactions, contract theory plays an important role in general-equilibrium theory. Key to the Arrow-Debreu model is the assumption that markets exist for all goods and services, including arrangements to perform or deliver in the future, contingent on particular states of the world. Put differently, a general-equilibrium model demonstrates the conditions under which organization, motivation, and governance are irrelevant. Research on moral hazard developed out of the recognition in the 1960s that all Arrow-Debreu states of nature may not be observable (or, if they are observable, not verifiable), and hence perfectly efficient incentive contracts are not feasible. Similarly, models of adverse selection and mechanism design start with the assumption that states of nature are known to agents, but not to the auctioneer, another deviation from Arrow-Debreu conditions.

In this sense, modern contract theory stands squarely in the tradition of formal equilibrium modeling and is seen by its proponents as “a natural way to enrich and amend the idealized competitive model in an attempt to fit the evidence better” (Hart and Holmström 1987, 71). Analysis of contracts usually starts with an *ex ante* competitive equilibrium, which reduces “market forces to simple constraints on expected utilities [which] greatly facilitates equilibrium analysis” (Hart and Holmström 1987, 74) of the contracting problem. For example, reservation utilities are given, a property that greatly facilitates analysis. Given this overall characterization, a rough classification is to distinguish between complete and incomplete contract theories. The former includes principal-agent and mechanism design theory, while the latter includes the property rights theories.

**HOLMSTRÖM: THE PRINCIPAL-AGENT PROBLEM**

Holmström is best-known for a specific interpretation of the principal-agent problem (articulated in his most-cited article, “Moral hazard and observability”, Holmström [1979]). Building on earlier work by Wilson (1968) and Ross (1973), Holmström examines a situation in which one party (the ‘principal’) has some task to be performed, but must hire another party (the ‘agent’) to perform the task. Performing the task is costly to the agent, so the principal must provide some incentives to get the agent to do what the principal wants. If the principal cannot observe or understand the agent’s actions directly—which is plausible, otherwise the principal could simply perform the task—then an incentive contract based on some observable, but noisy signal of output is problematic, because it exposes the agent to risks related to the noisiness of the signal.<sup>3</sup> Hence principals face a specific tradeoff between providing incentives for agents (by using performance-based pay) and insuring agents against risks beyond their control (by using fixed salaries). Exactly how this tradeoff should be managed depends on the particulars of the situation, such as the incentive elasticity of the agent’s effort, her risk preferences, the noisiness of the signals on the agent’s effort, and so on.

Most of the applied literature in corporate finance and corporate governance (executive compensation, the structure of debt agreements, board composition, and so on) is based on agency theory. Holmström’s (1979) “informativeness principle” suggests that principals should use all performance indicators that are available at low cost, to provide a more precise estimate of the agent’s (unobservable) effort; this explains why executive compensation agreements tie compensation to multiple measures of performance such as accounting returns, stock performance, sales growth, market share, and the like. Holmström and Milgrom (1991, 1994) explore multi-task principal-agent models that show, as noted above, that pay-for-performance schemes based on objective performance metrics can induce a distortion of effort if some tasks are more easily observable than others. Under these circumstances, subjective performance measures may be valuable when used in conjunction with objective metrics (Baker et al. 1994).

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<sup>3</sup> For example, incentivizing salaried managers by giving them stock options helps to align their incentives with those of shareholders, but exposes them to the risk of market fluctuations that are caused by the macroeconomic conditions, the actions of other firms, or other forces beyond their control.

Contrary to common perception, agency theory does not suggest that principals always use high-powered incentives (or that incentives should necessarily be monetary or tangible). Holmström and Milgrom (1991) show that simple reward systems often outperform complex incentive contracts when employees work on multi-dimensional tasks. In this situation, incentive pay not only influences efforts and allocates risk; it also allocates the effort of agents across tasks. Some possibly essential tasks (or dimensions of a task) may be very costly to measure for the principal; as a result, the principal risks that the agent will allocate all his effort to tasks (dimensions of a task) that are easier to measure. If principals want agents to allocate effort to all tasks (dimensions of a task), they may be better off offering a fixed wage, that is, low-powered incentives. This also provides insights into organizational specialization and roles: tasks that are easily measurable may be bundled and assigned to certain kinds of jobs whereas tasks that are costly to measure are assigned to other jobs.

#### **HART: PROPERTY RIGHTS AND OWNERSHIP**

Hart's work with Sanford Grossman and with John Moore (the 'Grossman-Hart-Moore' theory of the firm) is based on a particular concept of asset ownership. Ownership is defined as residual rights of control—the right to decide how an asset will be used in situations not covered by prior agreement.<sup>4</sup> In a world of perfect foresight (and zero contract drafting costs), individuals could write very complex and detailed contracts about how various resources will be used under particular circumstances. With contracts like these, 'ownership' is vague and indeterminate; it doesn't matter who has formal title to an asset because the asset will be used in exactly the same way. In the real world of uncertainty and imperfect foresight, however, such contracts are impossible, because we cannot anticipate every potential future event and agree in advance on what we would do. In other words, all feasible contracts are 'incomplete', meaning that they contain some omissions or gaps.

Specifically, relevant factors that may influence the contracting relationship are left out of the contract because of bounded rationality, information costs, or the limitations of natural language. Alternatively,

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<sup>4</sup> Residual rights of control are seen as the defining feature of ownership, which also includes other features such as residual cash flow rights; use, exclusion, and alienability rights; and so on.

partners may agree on contract terms, but these may not be enforceable by a third party, such as a court (i.e., terms are non-verifiable). Because complete contingent contracts cannot be written, parties may have to renegotiate after contracts have been signed, either because they encounter states of nature about which the contract is silent or where the contract specifies inefficient terms. Thus, in this framework there is still transactional work to be done *ex post*, at least in some states of the world. In the Grossman-Hart-Moore version of this idea, it is assumed that renegotiation is efficient—the outcome of renegotiation can be foreseen at the time of drafting contracts and does not involve costly bargaining. Nevertheless, the possibility of renegotiation may be enough to cause inefficient levels of investment in relationship-specific assets.

Contractual incompleteness highlights the importance of residual control rights, because these are the rights to control the use of assets in states of nature not described in the contract. Theoretical interest centers on which pattern of ownership rights leads to the most efficient outcome. This depends on the characteristics of the involved assets (e.g., whether they are complementary), whose assets are most important to the joint surplus, and who is most responsive to incentives, because ownership by one of the parties will attenuate the incentives of the other party. The bottom line is that the efficient ownership arrangements primarily turn on the trade-off between incentives for buyer and seller.

The Grossman-Hart-Moore property rights approach has given rise to substantial debate within contract theory. For example, it has been argued that property rights are not always necessary for reaching efficient outcomes, because various mechanisms that do not imply a reallocation of property rights and which are actually employed by real-world agents (say, options contracts) can handle the problems of unverifiable contract terms (Tirole 1999). Relatedly, there has been some uneasiness about the supposedly less rigorous and more *ad hoc* type of modeling that characterizes the incomplete contracts literature relative to the principal-agent literature (Tirole 1999).

## METHODOLOGICAL PERSPECTIVES ON MODERN CONTRACT THEORY

### *MIT-style modeling*

As noted above, the lean and elegant MIT-style of applied theory associated with Hart, Holmström, and colleagues such as Jean Tirole, Eric Maskin, Drew Fudenberg, Jean-Jacques Laffont, and Andrei Shleifer

has costs as well as benefits. All economic theorizing uses abstraction, using various types of “isolations” under which “a limited set of items is *assumed* to be isolated from the involvement or influence of the rest of the world” (Mäki 2004, 320). For example, contract theorists may focus on partial equilibrium (external isolation), suppress entrepreneurship (internal isolation), assume that contract drafting costs are zero (horizontal isolation), or claim that the essence of all economic organization is to align the incentives of the involved parties (vertical isolation). As these examples suggest, one isolates by excluding (Mäki 1992), or by “suppressing margins” (Foss and Foss 2000). The analyst decides that for whatever reason, some margins are unimportant to the model and may be left out.

Isolation may be brought about by “idealizing assumptions” that explicitly mention an item, but choose extreme values for this item ( $X = 0$  or  $X = \text{infinity}$  or  $X = 1$ , depending on the scale). For example, isolation in economics often takes the form of working with “on-off” models in which some variables are “switched off” by assuming that their value is zero, while others are “switched on.” Alternatively, isolation may be brought about by omitting an item without mentioning it (Mäki 2004).<sup>5</sup> Generous use of isolation typically results in a highly stylized, non-cooperative game-theoretic model in which each party’s objectives and preferences, the distribution of information, the sequence of moves, and so on are carefully specified. Modeling then means working “backwards” from the *explanandum* phenomenon to its explaining causes in terms of a “no-fat” model (i.e., models with absolute zero embellishment) (Rasmussen, 1994).

A basic problem with MIT-style theorizing is that such no-fat models provide logically sufficient, but not necessary, explanations for an observed fact. Many other explanations may be possible, though less elegantly described. Explaining by means of no-fat models is almost too easy, so that bad explanations are as easy to construct as good ones (Camerer 1994, 211). Another well-known problem with game theoretic no-fat modeling is the sensibility of equilibria to a multitude of factors, such as information partitioning, the sequence of moves, the number of players, and so on.

A somewhat different critique—more in line with the basic thrust of this paper—focuses on the specific isolations that are common in no-fat

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<sup>5</sup> Long (2006), using Aristotelian language, distinguishes these as “precise” and “nonprecise” abstractions, respectively.



modeling. Although its proponents may argue that no-fat modeling simply reflects fealty to Occam's razor, critics may counter that too much is excluded by means of extreme idealizing assumptions (see Furubotn and Richter 1997; Foss and Foss 2000; Foss and Klein 2012). In the following we offer examples of specific isolations in contract theory, namely those related to cognition and knowledge.

### ***Cognition and knowledge in contract theory***

Contract theory makes very strong assumptions about agents' knowledge as well as their lack thereof and this sometimes produce highly "asymmetrical" models (Foss and Hallberg 2014). To illustrate, in the basic property rights model, agents (but not the courts) are not only symmetrically and perfectly informed, they are also assumed to know the future payoffs from their relationship, even without knowing all the physical characteristics of the good being traded, let alone the kinds of unforeseen contingencies that could occur. Such model features, which border on inconsistency, are the result of on-off models, where agents are perfectly informed about some things (e.g., the distribution of utilities in a relation) and completely ignorant about other things (e.g., the sources of the utility).

To further illustrate, in the property rights approach, contractual incompleteness derives from the assumption that certain actions (say, investments) or objects may be observable by the contracting parties, but not verifiable to a third party. However, while it seems to be reasonable to assume that many things may be hard (i.e., costly) to verify to courts, why assume that some things are *completely* verifiable, whereas other things are *completely* unverifiable (Foss and Foss 2000)? The effect of this on-off approach is to suppress those ways in which contracting parties may try to make some actions or things more verifiable to courts by presenting more information to the court or presenting it in a particular way.

For this reason, Hart's approach neglects the fact that real-world courts try to reach decisions even when particular variables aren't verifiable, and that parties take this into account. What an ill-informed judge will likely decide is more important than whether a contractual clause is completely verifiable. Contract theory's emphasis on verifiability as binary (the judge is either fully informed or completely uninformed) omits the implications of actual court behavior.

Formal incomplete contract theorists have long flirted with bounded rationality (e.g., Hart 1995, 81), but mainly used it as motivation why contracts would be incomplete. Indeed, as Hart (1990) explained bounded rationality isn't necessary, as, for example, non-verifiability (which requires asymmetric information but not bounded rationality) can also make contracts incomplete. Traditionally, economists have been skeptical of bounded rationality, partly because bounded rationality simply seems to mean "behavior that is not given to description in terms of the expected utility model" (i.e., any non-maximizing behavior), and partly because it is not obvious how to build bounded rationality into formal models in a rigorous, non-ad hoc manner. Hart's (1990) argument was therefore a license to not bother with this troublesome notion.

However, contract theorists have become more open to bounded rationality over the last decade or so (see Koszegi 2014). One reason may be that behavioral economics increasingly has become mainstream, and contract theory is certainly not immune to this. Another may stem from the Maskin and Tirole (1999) critique of the standard incomplete contracting model (e.g., Hart and Moore 1990): Given the usual assumptions of this model, it is possible to design ex post message games that ensure that the exact same allocative outcomes can be reached under incomplete as under complete contracting. Incompleteness doesn't matter for outcomes. Neither, and fatally for the theory, does ownership. To find room for ownership and restore the notion of incomplete contracting, it may therefore seem necessary to break with some of assumptions of the standard model, for example, assumptions about knowledge, cognition, and rationality.

In response to this criticism, Hart and Moore (2008) offer a contracting model based on ideas on reference points that have been central in behavioral economics since the work of Tversky and Kahneman in the early 1970s in providing a role for long-term contracts (including employment contract). The idea is that a contract provides a reference point for the trading activity that takes place between two parties because it influences what they feel they are entitled to receive. Parties who feel shortchanged shade on performance. The tradeoff is that contractual flexibility on the one hand allows the parties to adjust to uncertainty, but on the other hand causes inefficient shading.

## CONCLUSIONS

Although contract theories are game-theoretic, partial-equilibrium theories, they are fundamentally rooted, historically and logically, in the

competitive equilibrium model (Guesnerie 1992). Work in contract economics may thus broadly be described as “de-isolating” this model in various ways, so as to bring it closer to reality (Hart and Holmström 1987), relying on MIT-style theory. However, the result of this modeling strategy is often to produce a string of loosely connected on-off contract theory models, in which margins are either completely suppressed or completely open to agents (e.g., agents are either perfectly informed or not informed at all, property rights are either perfectly enforced or not enforced at all, contracts are either fully verifiable or completely non-verifiable, etc.). There is seldom anything in-between these extreme possibilities, and it is often not clear how, and if, the many partial models add up.

It is true that contract theory in many ways have sought increased realism as multi-tasking, constraints on agents’ actions, implicit contracts, private benefits, subjective performance evaluation, hierarchical layers of principals and agents, and much else has been included in the theory (see Gibbons and Roberts 2012). Still, the on-off approach remains, presumably because of its strength as an approach that is generative of new models, albeit typically highly partial models that makes sometimes very unrealistic assumptions about what agents know and what they can do in terms of contracting.

Foss and Foss (2001) argue that because of their extreme idealizing assumptions, practitioners of MIT style theorizing exclude essential aspects of the economic problems facing real word decision-makers. Economists of more heterodox stripes—such as new institutionalists, evolutionary economists and Austrian economists—may balk at the idea that everything but for a few variables is common knowledge. From these perspectives, discovery, learning, and coping with problems introduced by transaction costs constitute the essence of “the economic problem”. Thus, from this perspective, a major problem with modern economic theories of the firm is that they ignore the *entrepreneur* (Furubotn 2002; Foss and Klein 2005): Agents are not allowed to circumvent the constraints imposed on their knowledge and actions by the modeling economist.

A related problem with MIT-style contract theory is that they often seem vulnerable to Coase’s well-known criticism of “black board economics”, which is founded on the notion that “[r]ealism in assumptions forces us to analyze the world that exists, not some imaginary world that does not” (Coase 1981, 18). We take Coase’s

criticism to mean that modeling should not suppress those aspects of reality that in a given explanatory context are essential. While this may sound obvious, it is arguable that contract theory often simplifies too much. To be sure, extreme and, in a sense, overly simplified models and arguments (e.g., competitive equilibrium, the Coase theorem) do have a role, namely they function an *argumentum a contrario*. Thus, they show the conditions that must for obtain real world institutions and arrangements like money, the firm, and the law to have no allocative consequences. However, such models may be questionable starting points for concrete theorizing. The reason is that they get closer to “realism” by throwing a few monkey wrenches into an otherwise perfect machinery, as exemplified by MIT-style on-off models. However, it borders on inconsistency to assume that, for example, agents are only boundedly rational some of the time or with respect to only a few variables or parameters, or that there is only one particular kind of transaction cost present in the economic system.<sup>6</sup>

To go back to the earlier critique—that of ignoring essential aspects of reality—, these models are also ill-equipped to handle a key player in the economy, namely the entrepreneur (Foss and Klein 2005, 2012): Agents are not allowed to circumvent the constraints imposed on their knowledge and actions by the modeling economist. In contrast, Foss and Klein (2005, 2012), building on Knight’s (1912) notion of entrepreneurship as judgmental decision-making under uncertainty, link asset ownership to the nature and boundaries of the firm. In this approach, resource uses are not data, but are created as entrepreneurs envision new ways of using assets to produce goods. The entrepreneur’s decision problem is aggravated by the fact that capital assets are heterogeneous, and it is not immediately obvious how they should be combined. Asset ownership facilitates experimenting entrepreneurship: acquiring a bundle of property rights is a low-cost means of carrying out commercial experimentation. Contracts are thus mechanisms by which entrepreneurs exercise judgment over productive resources as they put these resources into use.

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<sup>6</sup> Furubotn and Richter (1997, 447) completely reject the procedure of selectively introducing a few imperfections into otherwise ‘perfect’ models, and argue that if one admits a role for bounded rationality and transaction costs “[t]ransaction costs must appear *everywhere* in the system because of the nature of the individuals making decisions [...]. Thus, once we reject the notion of the omniscient decision maker who is ‘completely rational,’ the economic model undergoes a basic transformation”.

An entrepreneurial theory of contracting, which focuses on realistic situations of limited knowledge and uncertainty, and focuses on ownership arrangements and actions designed to facilitate exchange, may be a more fruitful path forward than a continued emphasis on modeling elegance and parsimony. While the approach of Hart and Holmström has generated substantial insight into the ways economic actors organize their activities, much more is needed to incorporate these insights into a more general, dynamic understanding of the entrepreneurial market system.

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## Justice, markets, and the family: an interview with Serena Olsaretti

SERENA OLSARETTI (Naples, Italy, 1971) is a political philosopher at Pompeu Fabra University (UPF), where she holds a research professorship with the Catalan Institute of Research and Advanced Studies (ICREA). Before moving to Barcelona, she was University Senior Lecturer at the Faculty of Philosophy of Cambridge University. She obtained a BA, MPhil, and DPhil degree in political philosophy from Oxford University. Her DPhil thesis was supervised by G.A. Cohen.

Olsaretti's research interests range widely, including the ethics of markets, justice and the family, feminist philosophy, theories of responsibility, and theories of well-being. She is the author of *Liberty, desert and the market* (2004), and the editor of *Desert and justice* (2003), *Preferences and well-being* (2006), and the *Oxford handbook of distributive justice* (forthcoming). Her work has appeared in various journals, including *Analysis*, *Economics & Philosophy*, *Philosophy & Public Affairs*, and *Proceedings of the Aristotelian Society*. Olsaretti is one of the editors of *Law, Ethics, and Philosophy*. She is the principal investigator of *Family justice: an analysis of the normative significance of procreation and parenthood in a just society*, a research project funded by a European Research Council (ERC) consolidator grant.

The Erasmus Journal for Philosophy and Economics (EJPE) interviewed Olsaretti about becoming a political philosopher, her work on the ethics of markets and justice and the family, the ERC-project that she directs, her views on teaching, and her advice for political philosophy graduates aspiring to an academic career.

***EJPE: Professor Olsaretti, you studied political philosophy at Oxford University. Which people and writings have had a particular influence on the development of your interests during your studies?***

SERENA OLSARETTI: There was quite a difference between my undergraduate and graduate years. During my undergraduate years, two influential people were Peter Hacker and Gordon Baker, who ran a

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**EJPE's NOTE:** this interview was conducted by Huub Brouwer and Isabella Trifan. Brouwer is a PhD candidate at the Erasmus Institute for Philosophy and Economics, specializing in desert-based theories of justice and philosophy of taxation. At the time of the interview, he was on a research visit at UPF, supported by a Prins Bernhard Culture Fund Fellowship. Trifan is a PhD candidate at UPF, specializing in family justice. She is part of the ERC-funded Family Justice research team.



philosophy seminar on Hume's *Enquiry* (1993) at St. John's, the college where I was a student. The one thing that I remember most clearly from this seminar was Peter Hacker's dreaded 'What do you mean?' question. It was the first time that I was exposed to that degree of high expectations in terms of the clarity of what we said. I was also influenced by Jonathan Glover's lectures on moral philosophy, which really drew me to the topic.

However, on balance, I was more interested in continental philosophy than in analytical philosophy during my undergraduate studies. I was interested in Marxism, critical theory, and Michel Foucault. My first political philosophy tutor was Lois McNay, who worked on Foucault and feminism. For my undergraduate thesis, I chose to write a comparative study of the analyses of power of Herbert Marcuse and Michel Foucault. My thesis was supervised by Leszek Kołakowski, whom I knew as the writer of the three volume-work *Main currents of Marxism* (1982a, 1982b, 1982c). I remember that one of the few, if not the only, substantive comment he gave me on the thesis was: "This is fine, but move on". He thought that it would be fruitful for me to engage with a different type of philosophy, which I did.

When I finished the BA and went on to graduate studies, G.A. Cohen supervised me on an extended essay in methodology. I knew Cohen's work on analytical Marxism and was not very sympathetic to it at the time. When I told him that I was interested in anarchism, he got me to work on Robert Nozick. I found it very hard to take Nozick seriously at the beginning. I had not yet been trained in the habit of really engaging with arguments that I very much opposed. However, I did end up writing my MPhil thesis on Nozick, which was the basis for my DPhil thesis, and in turn the basis for my first book, *Liberty, desert and the market* (2004).

***Given your interest in continental philosophy during your undergraduate studies, how do you view the divide between analytic and continental philosophy? And do you still have some affinity for the continental?***

I kept a side interest in continental philosophy at the beginning of my graduate studies. I went to some lectures by eminent continental philosophers, including one by Jacques Derrida, whose book *Specters of Marx* (1994) I purchased and tried to read. However, my interest in that area faded quickly after that. I do think that a lot of the work that is done in continental philosophy does not aim for the standards of clarity

that we can reasonably demand of each other. Nevertheless, I have learned from engaging with some aspects of Marxism that were not analytical; I have learned from reading Marx, Gramsci, and some aspects of Foucault.

***After finishing your DPhil, you moved to Cambridge University, where you have been a senior lecturer in the Faculty of Philosophy. What made you decide to move to UPF?***

There were three main reasons. The first was that there already were a couple of colleagues at UPF who worked on areas of political philosophy that I was very interested in. So I thought that UPF would provide me with a very stimulating environment to work. Secondly, there was the promise of more research time here than I had previously. Thirdly, I was ready for a different type of challenge. I thought it would be very interesting to see whether we could get a center for political philosophy going here in Barcelona. That is quite different from going to a university such as Cambridge, where the best you can aim for is doing your own work within an apparatus that is already very good at running itself.

***You frequently use a luck egalitarian framework in your work (Bou-Habib and Olsaretti 2013; Olsaretti 2013). You have also read a paper at a meeting of the Aristotelian Society indicating aspects of luck egalitarianism that require further investigation (Olsaretti 2009). Do you identify as luck egalitarian yourself?***

I would have more readily identified with that label fifteen years ago. Debates on luck egalitarianism have made it clear that it really is a family of very disparate views. To just say 'I am a luck egalitarian' could mean substantially different things. Furthermore, I have come to have doubts about some versions of the view. There are aspects of luck egalitarianism that are taken to entail a commitment to holding people responsible for certain putatively harsh consequences of their choices. Like many others, I would reject a view that commits us to that. However, I also think that those aspects are not implied by the view itself. I argue in the Aristotelian Society paper you mention that the luck egalitarian commitment to holding people responsible is quite indeterminate. To just say 'I believe in luck egalitarianism because I believe that people should be held liable for the consequences of their choices', does not tell us very much at all. We need some other

independent view on what those consequences should be. For example, a view on the importance of desert, or of efficiency, or of other forward-looking reasons for holding people liable for certain consequences. Having said this, I am still happy to endorse the two impulses that characterize luck egalitarianism according to Cohen. It is unjust if some people are substantially better off than others through factors that they are not responsible for. It is also unjust, for reasons of exploitation, if people do not bear some of the costs of their choices. But I think that most people are luck egalitarians in these broad terms.

***We would like to home in on two major themes in your research, the ethics of markets, and justice and the family. Let's start with the ethics of markets. In Liberty, desert and the market (2004), you criticize two common arguments that aim to justify free markets. The first claims that the inequalities generated by free markets are just because they are deserved; the second claims that such inequalities are just because they are what people's voluntary choices entitle them to. On your view, both arguments are unsuccessful. Is the market inherently unjust?***

I think there are various senses in which we might talk of the market as being inherently unjust. First, what the market registers and responds to is potentially inimical to justice. It responds, for example, to people's ability to pay, and this ability is often influenced by factors for which it would be unjust to hold people liable. Also, the market registers people's preferences (as this is registered in the demand for one's services) and it can be unjust to allow how people fare to depend on others' preferences. Second, we could have in mind, and this was a big theme for Cohen, and certainly for Marx, that the profit motive that drives market interactions is itself necessarily unjust, as it is a motive that is fundamentally at odds with the demands of fraternity and community. I still have sympathy to both of these claims. However, even though the market does tend towards injustice, it plays vital roles in terms of providing incentives and signals. The market is here to stay. We can make it come closer to justice by regulating it with a special concern for people being in positions to make a range of voluntary and autonomy protecting choices.

***The most important way in which governments implement a conception of justice is arguably through systems of taxation. Hence,***

***if political philosophers are concerned with guiding policy, one would expect them to have developed various general theories about how to shape tax policy. However, such contributions are few (cf. Halliday 2013). Should political philosophers contribute more to debates about taxation in your view?***

It would certainly be valuable for political philosophers to engage more with public policy debates and issues, including tax policy. It is true that, until not so long ago, political philosophers often focused on coercive laws, as opposed to policy instruments such as taxation. People who work at the intersection between philosophy and economics do work on this now. There are, for example, discussions of the merits of carbon tax and of the Tobin tax. Also, you forgot to mention the book by Liam Murphy and Thomas Nagel in your question.

**The myth of ownership (2002).**

Yes, as I recall it, Murphy and Nagel offered a way of reframing public debates about tax. One of their main points is that there is no such thing as pre-tax income that people have a natural right to—the latter idea being especially prevalent in the United States. Property rights are essentially a legal convention, which depends, among other things, on what tax system is in place; we can and should, then, assess the justice or injustice of various tax and property systems, but we should not treat any of them as natural rather than conventional. Their book is an endeavor to reset some of the ways in which we think about taxation policy and especially income tax. It aims to improve the public debate about taxation, although it does not offer specific public policy-guidance.

***Do you think that all political philosophy should be action-guiding?***

An increasing number of political philosophers have become interested in providing policy recommendations after the debate on ideal and non-ideal theory. I do think that giving policy recommendations is one of the important ways that political philosophers can contribute, but I do not think that all political philosophy should be aimed at that level, as opposed to contributing to the general political culture.

***Do you yourself intend to take a more policy-guiding approach than you have done in the past?***

I would love to do it if I knew how to give policy recommendations that I thought were sound. But that is immensely complicated. There are people who are better at doing that kind of bridging work between the more philosophical part and the more applied part. I tend to remain less applied.

***John Kleinig wrote in 1971 that “the notion of desert seems by and large to have been consigned to the philosophical scrap heap” (p. 71). Interestingly, a number of political philosophers have recently attempted to save desert from oblivion (Arneson 2007; Feldman 2016; Kagan 2012; Lippert-Rasmussen 2016; Miller 1999; Mulligan forthcoming; Schmidtz 2006; Temkin 2011). What do you think about this revival of desert?***

Certainly the death that Kleinig anticipated did not occur between 1971 and 2004, when I was still working on this closely. I am not sure, however, that there has been this huge revival either.

***Well, you now have people who are interested in combining desert with luck egalitarianism (Arneson 2007; Dekker 2009; Lippert-Rasmussen 2016; Temkin 2011) and people who develop new desert-based theories (Feldman 2016; Mulligan forthcoming; Schmidtz 2006).***

Yes, maybe the immediate influence of John Rawls’ desert-less theory of justice was to take the concept off the table for a while. That is true. Kleinig probably thought that Rawls’ critique of desert was going to take it off the table completely. But we have to be clear about what kind of desert we are talking about. During the last twenty years in debates on desert, it has become increasingly apparent that although there are many different conceptions of it, only some of them are really distinctive. That is, only some conceptions of desert really pick out something that other principles of justice do not—such as needs or equality. Peter Vallentyne’s (2003) use of prudential desert is what initially made the concept seem attractive to me, but I have increasingly come to see it as unhelpful, as by ‘prudential desert’ he means something like a principle of responsibility. Desert so understood does not have a distinctive normative basis.

***Let us move on to a second major theme in your research. You are the principal investigator of an ERC-funded research project on justice and the family. Why should political philosophers consider the family in thinking about distributive justice?***

First of all, by family I mean any institution in which new people are created and reared. I do not consider various aspects of the family, such as whether the adult members who compose a family are married. The association of the family with gender issues is also not a primary focus of the project, though I do share some of the feminist concerns related to the gendered division of care. So when we understand the project to be about procreation and parenthood, why should theorists of justice be interested in it? The answer is that all societies, including just societies, rely on people having and rearing children. Having and rearing children comes with costs and benefits that are very substantial for all parties involved: those who raise them, those who are brought into existence and are raised, and society at large. If questions of justice arise anywhere, they will arise here as well. I also think there are less immediately evident reasons for why, as philosophers, we should examine the family. For instance, once we start unpacking prevalent theories of justice, many of which have not paid attention to family justice, it turns out that they must necessarily assume some views about it. So in a way, the interest is inescapable. It is not just that theories of justice are being blind to something that they should be interested in; it is rather that they are already implicitly committed to some answers to the questions that I want to bring to the fore.

***Could you say more about the main characteristics and goals of the Family Justice project?***

The entry objective is to bring into view the way in which questions about procreation and parenthood, including about justice between contemporaries and justice across generations, are integral to our discussions of familiar problems of justice. Another key aim of the project is to formulate principles of parental justice that are informed by independent convictions that we have—for example, about whether there is a problem of overpopulation, and if so, how to tackle it. These principles of parental justice ought to be consistent with the other parts of our familiar theories of justice that already assume or imply some views about parental justice. For example, we need a theory of liberal egalitarian justice that does not commit us to thinking that people's fair

shares can diminish indefinitely in line with people's having more and more children; but that, at the same time, does not renounce on the idea that people are tied by egalitarian justice obligations towards one another. It would, for instance, not be good to hold parents liable for all the costs of children, which include the costs they will impose as fellow adults, because this results in a view that effectively cancels the obligations of egalitarian justice that we have towards our fellow citizens. So we do not think that what we are owed should fluctuate entirely depending on people's procreation choices—as it should not fluctuate entirely depending on consumption choices or production choices. But how do we, and how can we, reconcile that challenge with a plausible and attractive view of egalitarian relationships between people?

***In Children as public goods? (2013) you argue that parents, by having and raising children to be law-abiding, productive citizens, create goods that non-parents also benefit from. Centrally, welfare states are designed such that the goods that parents create are socialized through their offspring's contributions to schemes that pay for everyone's retirement benefits, unemployment benefits, and other welfare provisions and public projects. You argue that it would be unfair for non-parents to refuse to shoulder some of the costs of parenting because they would be free riding on parents' efforts. How do you respond to those who challenge your 'children as socialized goods' argument by claiming that parents produce public harm, either by raising their children badly, or by adding to overpopulation (cf. Casal 1999)?***

A disappointing part of the answer is that investigating these questions is one of the key aims of the project. But even now I can say a couple of things that begin to address the sting behind them. First of all, what the public goods arguments and the socialized goods argument show is that at least within certain contexts, leaving aside questions about immigration, there is a case for socializing the costs of children. Now I say leaving aside immigration, but I think that a second implication of public goods arguments is that they may have some role to play even when we stop bracketing off the immigration question. If it is the case that there are reasons to let immigrants in, or indeed that we have an obligation to let them in, public goods arguments imply that the goods produced by immigrants are now the goods that are public or socialized.

The parents of migrants have provided us with these goods. So the argument still has implications in this context.

Now, as potential objections to the empirical premise of some version of the public goods argument (that is, the premise that parents provide a good to everyone by having and rearing children) the overpopulation issue is one thing, and the ‘parents are parenting badly’ objection is a completely different one. We need to know why they are parenting badly. Many people, for example Robert Goodin (2005), think that public goods arguments have the implausible implication that parents of children who are less valuable in the senses identified by those arguments (for example, being less productive) are owed less or nothing. Now it may be true that these arguments taken by themselves have that implication. But again, you have to see them as part of a broader view. And the broader view is likely to say something along these lines: Many parents parent badly because they have lacked certain adequate opportunities or because they are themselves at the short end of unjust inequalities. The fuller picture will say something about *that* being an injustice. So I do not see the objection that appeals to the differential value of children under non-ideal conditions as an objection to the defensibility of public goods arguments as such.

***How do you see your ‘children as socialized goods’ argument being translated into public policy? What sorts of entitlements should parents have?***

It sounds like you are delegates of the research impact committee! Whatever the ambitions of the project as a whole should have, I do not think that specific conclusions of the paper should be seen as translating into policy directly. As is obvious, they suggest that parents have *some* claim to sharing the costs of children, but that is as far as it goes. When it comes to which costs should be shared exactly, that needs to be worked out. And when it comes to the question of how they should be shared, many further questions need to be answered. For example, is it through parental leave policies, and if so, what kind? Or should it be through some kind of earmarked parental salary that nonetheless does not require the parent to stay at home with the child? This is where I retreat to the point of abstract theorizing: I see the paper not as providing direct support for specific policies, but as uncovering certain biases. Public goods arguments of the kind developed by Nancy Folbre (1994) already make perspicuous that rather than being a private



activity similar to a consumption choice, having and raising children actually is socially beneficial. I think even that does not go far enough, because it does not bring to view that redistributive societies are deliberately organizing themselves in such a way as to ensure that everybody benefits from the fact that parents have and raise children.

***A common view is that societal intervention in procreative and parenting choices should be as limited as possible, particularly because of the history of eugenics and of pro-natalist policies in totalitarian regimes. However, a theory of justice giving due consideration to the family may advocate increased state intervention with these choices. How do you think we could have fruitful public debates about family justice issues given the sensitivity of the topic?***

I have already encountered some of the reactions that you are pointing to a fair amount. I do think we should proceed with a lot of caution. The preamble that almost everybody makes in this area, which is the right preamble, is that nothing that one says necessarily supports the view that states may coercively interfere with people's procreative freedom. We are right to be cautious, not just about coercive instruments that interfere with procreative choices through violations of bodily integrity, but also about seemingly more liberty-respecting policies that may be guided by the wrong type of considerations. For example, support for two-parent families may be guided much more by worries about people from certain socio-economic or racial groups having children. Policies directing subsidies or tax breaks to two-parent households may invoke the interests of children when, in reality, they are informed by objectionable agendas, and may actually reinforce some injustices.

What else can one say to smooth the way to debate? These questions, again, are simply inescapable. They are inescapable not only in the sense that they are politically urgent, but also because any view we take on these matters implicitly assumes an answer to them. So it is just hypocritical to say that we are not already taking a stance on these things. We would do procreators, parents, and ourselves much more justice if we discussed the pros and cons of different views openly. Also, notice that although many people cringe at the thought of eugenics, everybody agrees that it would be somewhat problematic if I decided to have twenty children. Or if several of us did, in a situation in which there is no desperate need for more children. So there is the issue of

moral permissibility, and then there is the fact that I would be creating costs for others very visibly, by claiming benefits.

Finally, let me say that, yes, there are reasons to be very cautious with these debates; but remember that this is also the reaction that people had to, for example, the feminist agenda. There have been areas that people thought were off limits for all kinds of reasons, and we have learned to handle and minimize that reaction insofar as it is unjustified.

***Next to research, teaching and supervision also take up a significant portion of the time of academics. Robert Nozick used teaching as a way of working out his ideas, remarking that “If somebody wants to know what I’m going to do next, what they ought to do is keep an eye on the Harvard course catalogue” (Gewertz 2012). What role do teaching and supervision play for you?***

They play a much less substantial role now than they did when I was in Cambridge, where I had about twelve to eighteen hours per week between lectures, seminars, and supervision.

It is true that teaching is a way of working out ideas. First, it keeps a live interest in areas other than the one that you are closely researching in. And that is a good thing in itself, because it is important to keep yourself interested in other topics. But teaching is also important instrumentally. I still think that you are more likely to do good research if you are actively engaging with ideas that are not so close to your narrow area of research. Moreover, teaching has, at several stages, forced me to think more clearly about various topics. When you are talking to people at or above your level, you often can afford yourself some vagueness, because you know the interlocutor will understand what you are talking about. This is not so when you are teaching.

I have had a very different experience teaching at the MA level in Cambridge, from the experience I have here at UPF. In Cambridge I had students who had a very strong background in philosophy, so the challenge was to stay a step ahead, especially in areas that were not my area of research. Sometimes I have worked out ideas thanks to presenting them in lectures and addressing questions I received about them. Here at UPF, by contrast, I often come across students in the MA who either have not done philosophy at all, or have done philosophy of the continental type. This is a different type of challenge. It forces you to spell out and defend some of the assumptions that you normally can just take as given.

***Women and non-white persons are underrepresented in academic philosophy. What was your experience as a woman pursuing a career in philosophy?***

For a long time, my answer to this question used to be, 'well, I have not come across anything that could be seen as an instance of sexism in philosophy.' But then I realized that I come from a sexist country.

During my undergraduate studies and through part of my graduate studies, I think I was not as sensitive to some of the problems that my North American and Northern European colleagues would have been sensitive to. Although I have not had any particularly bad experiences with sexism, I do think that there have been some cases where, if I had had a different set of expectations, I may have found some of the behavior towards graduate students inappropriate. For example, male staff members asking a graduate student to babysit for them, even when the student had expressed no interest in it, and resisted the idea.

I would also like to mention that I derived a lot of inspiration from female tutors I had along the way. Lois McNay, Katherine Morris, and Alison Denham come to mind. I do think that they stood up as figures who brightened and diversified the academic landscape in a very welcome way.

***How do you deal with the lack of diversity in your current position?***

The only active thing that I see myself doing now is that I am more aware of these issues and try to make others aware. Whenever I organize events, I make a deliberate effort to invite women working in the area. The other thing I would like to do is engaging more with ICREA about how to attract more women. We know that in academia, even in areas where there are enough women at the undergraduate level, the higher up you go in terms of the career ladder, the fewer women there are. ICREA, especially with its slant towards natural sciences and mathematics, has too few women. We want to arrive at recommendations that are inclusive, but do not compromise the high academic standards that ICREA wants to maintain.

***If you had to name three philosophical works that any political philosophy student should read, which would those be?***

It depends on the stage of their career. At the early stage of their career, I would recommend John Stuart Mill's *On liberty* (2002), Plato's *Republic* (1991), and Mary Wollstonecraft's *A vindication of the rights of woman*

(1996). It is important at this point to get people to engage with work that they do not find obscure or too distant from their concerns, but that nonetheless contains a wealth of very important, controversial ideas. Across their entire career, it must be Rawls' *A theory of justice* (1999), Rousseau's *The social contract* (1968), and Hobbes's *Leviathan* (1982).

***What further advice would you give to graduate students aiming to pursue an academic career in political philosophy?***

Do not necessarily think of writing a book! Also, commit to writing one or two papers in good journals before you finish. And spend time on the enduring works; concentrate on becoming acquainted with the really good stuff!

One of the really dispiriting facts that all of us have to handle is that we are under increasing pressure to publish and edit. So we all publish, we all edit, and there are so many journals of various degrees of quality now, that it is very hard to be informed about what goes on. It is a hard act to balance. You do not want to start reading too widely because that will eat up all your time and many publications are not necessarily of central importance. But, at the same time, there is this other thing to avoid, which is that many of us publish something without realizing that it has been said months, or a year, or two years before. Referees are often in the same predicament.

Another piece of advice is this: one of the things that helped me most when I was stuck during my graduate studies was reading some inspiring great political philosophers. That always magically managed to make things work again. So if you read some Dworkin, or some Rawls, or some Cohen, you think to yourself, 'I also want to write as clearly' and you get into the right spirit and you can work again. I still find now that reading Jerry Cohen's work liberates and inspires me. So do not lose yourself in reading stuff that is not inspiring.

***What are you most proud of in your career as a political philosopher?***

I am grateful for the fantastic opportunities that I have had, but proud? I have found it very rewarding to have had brilliant students whom I could really see appreciated our conversations and supervisions. Another thing—though, again, I do not think 'pride' is the term I would use to describe the satisfaction I felt—is this: when I was writing my MPhil thesis, and I kept saying things that had been said before about

Nozick, I became very dispirited. Cohen, who was a relentlessly brilliant but not necessarily constructive supervisor, would keep giving me penetrating criticism. It was not clear to him the MPhil thesis would become the kind of work he would want to see to take me on as his doctoral student. I kept trying, and after submitting to Jerry the pre-final version of the thesis with one new chapter that contained my new ideas, I found a phone message from him on my answering machine (in those days I think we still barely used e-mail!). He said: "I've read your thesis, and I think it's brilliant". It was exhilarating, and a huge relief. I do not know if this is the kind of thing you had in mind when thinking about what one might take pride in. But that has probably been one of my nicest moments.

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**Serena Olsaretti's website:**

<<https://www.icrea.cat/Web/ScientificStaff/serena-olsaretti-520>>

**Family Justice project website:**

<<https://familyjustice.upf.edu/>>

**Review of Paul Anand's *Happiness explained*. Oxford: Oxford University Press, 2016, 143 pp.**

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Among the growing band of economists who challenge the hitherto dominant role of GDP as the driver of public policy and advocate more direct measures of happiness or well-being, some have taken a broadly Benthamite approach, embracing the new 'science of subjective well-being' and simply aiming to replace one maximand (GDP) with another (subjective well-being). Paul Anand's approach is rather different. He takes his inspiration not from classical utilitarianism but from the work of Amartya Sen, whose 'capabilities approach'—focusing on what people are able to be and to do—introduced in the 1980s and 90s and since developed by Sen, Martha Nussbaum, and others, provides the theoretical underpinning for Anand's conception of well-being as human flourishing. Much of his recent work has been on 'operationalising' the capabilities approach: finding ways to measure human capabilities for the purposes of informing public policy.

*Happiness explained* provides an introduction, intended for a broad—primarily non-academic—readership, to the notion of human flourishing, the factors which influence it, and its actual and potential influence on government policy around the world.

Anand begins, in chapter 1, by setting out the main reasons why we should not rely upon GDP alone as a proxy for well-being: the weak relationship between economic growth and life-satisfaction; and the fact that GDP does not put a value on externalities or activities which involve no financial transaction, or capture the distribution of income (pp. 3-5). There is then a discussion of criteria that well-being indicators would need to meet, such as validity, comprehensiveness and decision-relevance. They should also be outcome-focused and protected from manipulation; and their construction should take into account public consultation, to foster their acceptance and use. Above all, they need to improve our understanding of what Anand calls 'the well-being space': to throw light on the factors that cause life to go well.

This leads naturally on to chapter 2, where Anand outlines the idea of human flourishing—deriving ultimately from Aristotle, via Sen and Martha Nussbaum—which provides a framework for his preferred approach to the measurement of well-being. He sees flourishing as comprising three broad elements: activity—the things we do and the roles we fulfil; experience—how we feel about our lives (Anand sees life-satisfaction as the best measure of this); and opportunity—the “opportunities, freedoms, constraints and risks that also impact on life quality” (pp. 12-13). This third element reflects the distinctive contribution of the capabilities approach, with its focus on what people are *able* to be and do, as opposed to what they actually are and do. There is also a fourth category—resources, including not only financial but also natural resources, together with human and social capital: things like skills, contacts and trust—which are seen as ‘inputs’ that may (or may not) be converted into valued activity and experiences. Thus, although resources are not seen as integral to flourishing, activity, experience, and opportunity are all, to some extent, dependent upon them.

The next five chapters—the main body of the book—explore the factors which influence human flourishing, by means of a wide-ranging overview of empirical research, publicly available data and other relevant literature. Chapter 3 begins with results of a study by Anand’s own team (pp. 23-27) in which participants give rankings to various things they are able to do at home, at work and in other contexts (incidentally, it is not made very clear whether the participants are ranking the relative importance of these various aspects of life or their level of satisfaction with them). The results are surprising—for example, Americans gave the highest rating to the ability to get their rubbish cleared away. The rest of the chapter, drawing on wider literature, looks at factors which influence happiness and well-being in five key areas: work (autonomy, income stability, the suitability of tasks, the social quality of the managerial regime, and fairness); family life (compatibility, support and fairness within marriage, children and—negatively—domestic violence); social and physical environments (safety, connections with others, involvement in community activities, green space, homogeneity vs. diversity); access to services (fairness, effective political competition); and health—in particular mental health (social skills, autonomy/independence).



Chapter 4 looks at quality of life for those in the early (childhood and adolescence) and later (over 50 years old) periods of life, again drawing on a wide range of studies. Some key themes concerning young people include the importance of good parenting practice to children's development; the benefits of developing personality traits (as opposed to purely cognitive skills) in improving the prospects of deprived children; and the role of connectedness to family and school in minimising problematic behaviour in adolescents. As regards later life, Anand highlights the inadequacy of the traditional biomedical model of life quality, arguing for a broader model including elements such as life-satisfaction and personal growth (pp. 51-53). Autonomy, activity and the ability to socialize remain important even for those near the end of life.

In chapter 5 Anand examines the impact of a number of economic factors upon well-being, beginning with income, noting the complexity of the relationship between GDP and well-being and a link between income inequalities and health inequalities. Unemployment, for the young in particular, seems to have a negative impact on both life-satisfaction and health (p. 59). He notes the tendency of life-satisfaction judgements to adapt to circumstances and reflect comparisons with the fortunes of one's neighbours; and the negative consequences of social inequalities, which often persist over time. He attributes the 'U-shaped' relation between life-satisfaction and age to various factors, including transitions to new freedoms in both early adulthood and retirement. Finally, he argues that it may be counterproductive to place too high a value on material aspects of life quality; counter to long-standing assumptions, productive activity may be more important for happiness than consumption.

Chapter 6 goes on to look at psychological factors, beginning where chapter 5 left off by rejecting overly simple assumptions about human motivation: we are neither straightforward maximizers of self-interest nor bound by Maslow's hierarchy of needs. We display altruistic behaviour, which can be partly explained by the benefits of reciprocity. The various factors influencing the formation of friendships and their contribution to well-being are examined, as is the influence of personality traits such as extroversion and optimism, a sense of meaning or purpose in life, absorption or 'flow', and burnout caused by emotional exhaustion. The structure of social interactions, in which individuals with different preferences need to make joint decisions, can create dilemmas which adversely affect well-being. Strategies such as

'Ulysses contracts' which bind us in advance to a particular course of action may help resolve these. The importance of autonomy for well-being may vary between cultures and circumstances: it is possible to have too much as well as too little choice. Exercise can have psychological as well as physical benefits. The chapter concludes with a discussion of research into the various strategies people employ to pursue happiness, including straightforward hedonism, social interaction and striving for accomplishment. Anand notes that the preferred strategies vary between individuals, and between sexes and cultures, an argument for caution in drawing general conclusions about the best routes to happiness (pp. 89-90).

Chapter 7 deals with fairness and justice. It begins by questioning the view that justice conflicts with efficiency: if we have preferences concerned with (avoiding) inequality, unfair societies which fail to satisfy these should be regarded as inefficient. After a brief discussion of Rawls' theory of justice, Anand examines studies which show that, contrary to traditional assumptions in economics, people (and even non-human primates) are averse to grossly unequal distributions and will seek to avoid them even if this does not maximise self-interest. This trait may have evolved as a way of promoting collaborative behaviour. He discusses studies which suggest that people are not only concerned about outcomes but also about procedural fairness in its own right; and that this has an impact on well-being. He goes on to examine possible reasons for continuing inequalities (in particular gender inequalities, as measured by the Global Gender Gap index) and ways in which these might be addressed.

In chapter 8, Anand discusses some examples of how well-being has influenced public policy and practice. A pioneer in the field has been the tiny Himalayan nation of Bhutan, which uses indicators reflecting nine dimensions of well-being. Denmark scores particularly highly in happiness surveys (as do other Scandinavian countries). Reasons for this may include the relative homogeneity of the population and low levels of inequality and crime. In the United Kingdom, well-being has been factored into the development and evaluation of policy in a number of areas, such as community learning and public health. Examples of the use of frameworks based upon accounts of human flourishing similar to the one set out in chapter 2 are provided by Australia and Mexico. The OECD's Better Life Index, which allows comparisons between countries and over time, is also informed by this approach.

Finally, chapter 9, entitled “Progress and Human Development”, draws some conclusions about the key drivers of human flourishing and how we might promote it. Anand identifies four principles—fairness, autonomy, community and engagement—which bear on what we might do to sustain or improve human well-being. There are things that individuals can do and ways we can think to improve our well-being. As for what society can do to help, Anand argues that the effects on well-being of uncertainty about employment (as discussed in chapter 5) means that we should consider people as workers as well as consumers, which may provide a case for limits on free trade (pp. 119-120). He rejects claims that governments should not monitor well-being or intervene to promote it. There is a need for greater awareness and literacy about well-being to improve decision-making at both the individual and societal level. This can be achieved through education—Anand gives an example of a school which has implemented just such a programme. He ends with the thought that prosperous societies need to “be socially sustainable in the sense of delivering happiness and well-being through communities that provide fairness, autonomy, society, and engagement” (p. 123).

At the very start of the book, Anand explains that he seeks “to show that, instead of focusing on money as our metric of progress, it is possible to go beyond GDP by developing and analysing measures of human well-being” (preface, p. vii). Within the constraints of a fairly slim volume (the main text is just 123 pages), *Happiness explained* does a good job of meeting this aim. It gives a concise and persuasive explanation of why it is necessary to go beyond GDP and a clear exposition of the human flourishing approach. The central chapters provide a good overview of factors influencing well-being, highlighting significant research in the field. The summary of steps taken in various countries to factor well-being into public policy is useful, and Anand’s closing proposals about what individuals and societies can do to promote well-being are plausible and attractive. The book as a whole is clearly and concisely written, and should be accessible to the general reader, providing an excellent introduction to the field, as well as a credible case for a programme of action to promote well-being.

Inevitably, in a book of this length, not all aspects of the subject can be fully addressed. The conceptual question concerning what well-being is, though touched on in the early chapters and the preface, is not

examined in depth. Anand does offer an answer to this question, in the form of the human flourishing approach, which is set out in some detail, but though it is contrasted with the traditional economic focus on income, it is not compared to other theories of well-being itself. A reader new to the subject might gain the impression that, once one has decided to go beyond GDP, the human flourishing approach is the only game in town, whereas in fact it has a number of competitors, such as preference-satisfaction and mental-state accounts of well-being.

Nor is there a discussion of the associated controversies concerning the validity of different types of well-being measures (though there is mention of disagreements on particular issues such as the ‘Easterlin paradox’). This is a little surprising, as the development of the capabilities approach (which provides the theoretical underpinning for Anand’s work), was in part motivated by misgivings about subjective measures of utility in which “deprivations are suppressed and muffled [...] by the necessity of endurance in uneventful survival” (Sen 1985, 22). However, Anand’s acceptance of subjective measures is consistent with earlier work in which he has argued for bridge-building between the capabilities and life-satisfaction camps (Anand et. al. 2009, 147).

Perhaps the debates concerning rival theories and measures of well-being were considered outside the scope of this book, given its intended appeal to non-academic readers. Their omission is in any case of less significance than it might have been, because Anand’s version of the human flourishing approach is very inclusive. Notwithstanding the traditional opposition between ‘subjective’ and ‘objective’ accounts of well-being (human flourishing is normally seen as in the ‘objective’ camp, which Anand seems to endorse, though questioning the terminology [p. 9]), for Anand subjective indicators such as happiness and life-satisfaction are not rivals to but components of human flourishing, comprising as they do the ‘experience’ pillar of its tripartite structure. He notes that the three pillars are interconnected: “[...] there is a connection between opportunity and experience implied by the framework. If better opportunities allow people to engage in a wider set of activities, their measured experiences may well benefit as a result” (p. 23). Thus Anand can legitimately draw on a wide range of research using both objective and subjective measures of well-being.

The inclusiveness of human flourishing as interpreted by Anand means that although it derives from one of several competing theories of well-being, proponents of the others are also likely to find something

they can endorse within Anand's tripartite structure. Whatever its theoretical origins, a broadly-based approach along these lines, with both subjective and objective elements, is surely the right way forward for the measurement of well-being to inform the development of public policy, given that the debate between rival theories of well-being is unlikely to be resolved any time soon.

One disappointment is that, whilst it refers extensively to empirical studies and other literature, *Happiness explained* contains no citations (though there is a selected bibliography). In the preface (p. ix), Anand explains that it is not intended to be an academic book. With that in mind, one can certainly understand why it might have hindered the book's accessibility to the general reader if the text had been cluttered with Harvard-style citations or the pages with footnotes. Nevertheless, a proportion of the book's readers will inevitably be academics, students or others interested in looking more closely at the research that is skilfully summarised in its pages. Although it is sometimes possible to identify from the text which source in the bibliography is being discussed, that is not always the case. Surely it would not have been too obtrusive to include citations in the form of endnotes, or a short appendix to each chapter identifying the references on which it drew.

In summary, this book makes a persuasive case that governments should seek to promote well-being and sets out a clear and plausible vision of how this might be done. It also serves as an excellent introduction to the social science literature on well-being, although without citations it is less useful than it might have been as a starting point for further study.

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**Review of Jason Brennan and Peter M. Jaworski's *Markets without limits: moral virtues and commercial interests*. New York: Routledge, 2016, 239 pp.**

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Recently, ethical analysis of markets has taken a new direction. The current focus can be called the 'commodification debate'. This commodification debate concerns what should or should not be bought and sold. These arguments have direct implications for the scope of markets: if something cannot morally be for sale, then a market for that item is impermissible. 'Anti-commodification theorists' such as Elizabeth Anderson and Michael Sandel argue that there are particular things that ought not be commodified. For example, Elizabeth Anderson argues that commercial surrogacy is an illegitimate form of exchange (Anderson 1990, 71). Michael Sandel's (2013) book, *What money can't buy: the moral limits of markets*, provides further examples.

Jason Brennan and Peter Jaworski's recent book, *Markets without limits: moral virtues and commercial interests* insightfully and systematically critiques anti-commodification theories. The authors argue that whatever may be done for free can be permissibly commodified. One of the book's many virtues involves subjecting this intuition to rigorous analytical critique. Its contribution to the current literatures is so significant that one should not enter into the debate without addressing it.

The authors' central claim is "if you can do it for free, you can do it for money". If you can ethically donate an organ for free, you can ethically sell it for money, if you may provide sex for free, you may provide sex for money, and so on; conversely, anything that is immoral for free, such as murder, would also be immoral for money. The objections that most people have to markets are rarely regarding the actual exchange of money, but the circumstances in which the transaction is made; objections to selling dogs for dog fighting are not

actually about exchanging dogs for money, which would be perfectly moral at a pet store, but to dog fighting itself. Thus Brennan and Jaworski fully acknowledge that commodification can *incidentally* cause exploitation, rights violations, corruption, and so forth, but it does not *essentially* cause them. Importantly, the categories above exhaust the moral framework the authors use to evaluate a market exchange. In other words, if a market transaction does not exploit, harm, corrupt, or result in rights violations, then it is permissible. Limiting their arguments to these categories of wrongs is an important philosophical strategy that the authors employ. The authors frame their arguments relying only on widespread moral intuitions and avoiding controversial political theory. Brennan and Jaworski's overall strategy is to first articulate the anti-commodification theorists' objections to the best of their abilities, then refute them. One of the book's strengths is the justice it does to its opponents' arguments. At all times, it portrays its adversaries fairly and insightfully. By responding to each argument and describing how each controversial market could be tweaked (thus showcasing that said market is only *incidentally* and not *essentially* harmful), their thesis is defended.

Also important is Brennan and Jaworski's claim that the concept of a market ought not be restricted to common examples. They note that there are markets that use barter instead of currency, some markets involve government regulation, others may mediate exchange through a broker, etc. This qualification is important to the argument: Brennan and Jaworski's claim is not that anything can be for sale on any market; rather, anything that it is permissible to do for free may be legitimately exchanged on at least one type of market. The concept of market "dials" are introduced as a metaphor to explain these variations. These seven dials include participants, means of exchange, price, proportion/distribution, mode of exchange, mode of payment, and motive of exchange, and can conceivably be tweaked in any market to satisfy the objections of anti-commodification theorists. When the dials are changed, then certain harms, rights violations, forms of corruption, and exploitation may also be removed. This is an excellent demonstration of the authors' general process for dismantling each anti-commodification objection.

First, the authors select a market which is well-known for being rife with exploitation, notably the sex industry. Many people take issue with this market, and for good reason. Prostitutes are often beaten, raped,

enslaved, or unwillingly pressured by their financial situation into providing sex for money. The authors fully agree that such incidents are exploitative, but not inherently: imagine a prostitute who actively makes their own decision to enter sex work because they enjoy the sex and the pay. This hypothetical prostitute has opportunities for other employment, is not addicted, has not been beaten or enslaved, and finds sex work both pleasurable and personally fulfilling. In this scenario, no exploitation is taking place, and any sex that occurs between the prostitute and their clients stands within a symbiotic agreement between consenting adults.

In the same way, Brennan and Jaworski posit that similar exploitation objections have not to do with the actual exchange of money (or other forms of exchange) for goods or services, but with extraneous properties. By tweaking the market's dials, a situation will certainly arise in which exploitation/corruption/immorality does not occur. It is therefore possible that the exchange can occur sans exploitation, proving that the exploitation is not inherent to the market and in no way that market's product or responsibility. Thus the exploitation objection is defeated, and Brennan and Jaworski's thesis is defended. They continue in the same way throughout the book, working through the "immoral preference objection", the "crowding out objection", and the "selfishness objection", among others, by presenting them in their best iterations and then refuting them (often with their dials as a tool).

These arguments are not designed to be a purely theoretical enterprise. As Brennan and Jaworski put it, "After all, suppose a certain market could, in principle, be permissible, but only under highly fantastic conditions. If so, our thesis would remain intact, but would be significantly less interesting" (p. 41). Their acknowledgement of this worry is well founded. If a vote selling market avoids rights violations only when the market is so precisely constructed that it is unlikely to ever come about, then all that is shown is that there is a possible market where vote selling is permissible, and any actual vote selling market would be wrong. The emphasis on expanding actual markets by critiquing anti-commodification theorists' arguments has a practical aim. For example, they claim that these arguments matter to those waiting for kidneys. If people's repugnance toward an organ market is unfounded and providing such a market would result in a great good, then there are strong reasons to create a market for kidneys. The



twofold aim of showing that limits to commodification are wrongheaded and arguing in favor of the expansion of markets goes hand in hand. This second aim, that is, expanding markets into vote selling, sexual service, kidney exchange, and baby buying, is where we find their arguments much less compelling.

The difficulty is that the authors have not shown that there is a policy proposal that could create a market that would assuage all the worries of the anti-commodification theorists. It may be true that one moral evil, say rights violations, could be fixed by fine-tuning one feature of a market. However, it does not follow that there is a policy that could modify all the market dials in such a way as to avoid the array of moral concerns that motivate the anti-commodification theorists. The challenge for Brennan and Jaworski is made more difficult if we assume that the market dials are interdependent. For example, if kidneys are sold at a price determined by supply and demand, then those who are willing and able to pay will purchase kidneys, thus eliminating the shortage. One worry that an anti-commodification theorist might point to would be that this form of market would only give kidneys to those with greater income/wealth. An anti-commodification theorist may object that the allocation mechanism of this market is unjust. One possible way to solve this issue would be to overcome this problem would be to change the means of exchange. A famous example of this type of market was the ration cards given by governments during WWII (Goodwin et al., 107). Notice that we solved one difficulty caused by one market dial by turning another one. This example is not meant to show that all such markets are doomed to fail or that markets can't be fine-tuned to avoid these problems. Rather, the interdependence of market features makes the task of arguing for these types of markets more difficult. The argument that actual markets could have moral goods while avoiding moral evils needs further support.

As a whole, *Markets without limits* is an insightful book defending commodification, and will no doubt be cited for years to come in regards to the anti-commodification debate. The authors present each anti-commodification objection justly, impartially, and thoroughly. Their responses are exceptionally coherent, clear, and concise (often even with a sprinkling of humor!). Although there are most certainly objections to be raised about the relevance of trivial possible market scenarios to the reality of actual markets, *Markets without limits* is a skillful defense of

commodification, set forth in a manner that is accessible to veteran philosophers and novices and students alike.

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**Review of Fred Feldman's *Distributive justice: getting what we deserve from our country*. Oxford: Oxford University Press, 2016, 288 pp.**

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One of the holy grails of political philosophy is creating a fully functioning theory of distributive justice based on the concept of desert. There are fairly comprehensive and sophisticated libertarian, egalitarian and prioritarian theories that claim to specify, with some degree of precision, how the burdens and benefits of social cooperation should, normatively speaking, be distributed. However, while there are many philosophers who have made impressive contributions to the study of the concept of desert, there is no integrated desert-based theory of justice that can give us some useful guidance on who should get what. This is, in some ways, surprising; as those who work on desert often note, the basic notion that justice requires giving people what they deserve has considerable intuitive plausibility. Fred Feldman's *Distributive justice: getting what we deserve from our country* seeks to take this basic idea and develop it into a theory of distributive justice that compares favorably with familiar theories of justice, such as luck-egalitarianism, sufficientism, libertarianism, and prioritarianism.

Perhaps one reason why desert has not been particularly prominent in discussions about justice is that the basic concept, as it is generally used, is rather stretchable; people discuss it in very different ways. Sometimes saying that one deserves something is to say nothing more than that there is some reason why one should have it. On other occasions, claiming to deserve something involves making a very specific argument about how the virtuous nature of one's actions justifies some reward. Still others invoke desert to claim compensation for losses they might have incurred. These, and other, conceptions of desert mainly differ in three things: the goods or modes of treatment that people might deserve, the reasons why they might deserve them, and who should ensure that they receive them. This basic disagreement about the nature of the concept makes it difficult to develop it into an appealing theory of justice.

Feldman is particularly aware of the need to settle on a specific conception of desert in order to construct a desert-based theory of justice. He distinguishes four main conceptions of desert, and concludes that the most viable candidate for grounding a theory of justice is what he calls political economic desert. In this conception of desert, members of a particular community deserve certain political and economic deserts, namely the goods, rights and obligations that they can only receive from their community and that they need in order to flourish as communal beings. These so-called community essential goods include security, opportunity, political rights, access to healthcare and the like. The reason why members of a community deserve these community essential goods, the political economic desert base, is that these individuals have community essential needs. By this Feldman means that they require these goods in order to live successful lives in a social context. The government, i.e., the political economic distributor, has the duty to make sure individuals have the goods they need to flourish, precisely because they need them in order to do so. This means that, according to Feldman, everyone living in a certain state deserves to have their community essential needs met. In this way, Feldman arrives at the flagship formulation of his theory of justice:

There is perfect political economic distributive justice in a country if and only if in every case in which a citizen of that country deserves a political economic desert in virtue of having a political economic desert base, he or she receives that desert from the appropriate economic distributor (p. 72).

With this theory of justice in hand, Feldman proceeds to demonstrate that it is superior to other, familiar theories of distributive justice. He does so by engaging in the well-known method of reflective equilibrium. This entails describing certain cases or examples of situations in which we must decide how to allocate scarce resources. Different theories of justice can be applied to those cases, and each will recommend a particular way of distributing. Some of these proposed distributions will strike us as unjust or otherwise implausible, while others will match our considered intuitions about those cases. This allows us to test theories of justice against our intuitions, and demonstrate that one theory performs better in describing and explaining those intuitions than others. To do this, Feldman produces a wide range of cases, which his desert-based theory of justice handles

very well, and which embarrass other theories, because they lead to distributive results that strike us as unjust. In this way, egalitarianism (which holds that individuals should receive the same distributive shares), luck-egalitarianism (which holds that individuals should enjoy the same opportunities for certain advantages), sufficientism (which holds that individuals should have enough resources to surpass some threshold), the Rawlsian difference principle (which states that the worst off should be made as well off as possible), extreme libertarianism (which holds that individuals' self-ownership and property rights should be respected), and prioritarianism (which asserts that we should maximize the sum of welfare, where benefits to the worse off count for more than benefits to the better off) are formulated as distributive principles and dismissed. Furthermore, Feldman shows that his desert-based theory of justice is not vulnerable to many of the classical objections raised against other desert-based theories of justice, including those famously made by John Rawls, and thereby demonstrates it to be a viable and attractive theory of justice.

Feldman pursues the task of comparing his theory with its main competitors with a high degree of philosophical craftsmanship and intellectual honesty; the book is a model of how to do analytic political philosophy. It is magnificently clear and utterly rigorous. Every position and argument is meticulously presented, no assumption is left implicit, every inference is justified explicitly, and the theory of justice that is advanced is subjected to the harshest of scrutiny. It is utterly dependable, and is one of the best sustained applications of the method of reflective equilibrium one can find. That makes this book a rare example of a piece of philosophy that both contributes to cutting edge debates and is highly accessible. Determined graduate and undergraduate students would benefit greatly from studying it, in part because it is such a systematic example of how to make and analyze arguments about distributive justice, but also because it presents the competitor theories, which are the most prominent theories of justice in the field, in a very systematic fashion. That makes it a helpful way of immersing one's self into the philosophical tradition to which it belongs.

However, while Feldman's theory of political economic desert certainly performs well intuitively, one can wonder whether it is actually a desert-based theory of justice. On the one hand, when first confronted with the concept of desert, many students of philosophy initially understand it in a way similar to how he sees it. The notion that

everyone deserves the things they need to flourish as communal beings in society simply has great appeal. Who could be opposed to that? And yet, as Feldman notes, every theory of justice is, on some level, desert-based, in that it prescribes who should get what, normatively speaking. What makes a theory distinctively desertist is conceptualizing desert in the general sense, in a particular, more specific fashion. One may of course use the concept of community essential needs to do so, as Feldman does. However, if one understands desert in this way, one is really talking about a concept that is distinct from the kind of desert that many scholars working on the concept are interested in. Seeing need as the primary desert-base and arguing that everyone deserves to have those needs met, is very different from the common notion that desert is about rewarding people for positively appraised behavior or actions. This means that the theory cannot be said to be the elusive theory of justice that many have been seeking, and that the theory cannot be said to embody the powerful idea that what you get in society should depend on the value of what you have done.

Of course, whether Feldman's theory of justice is desertist or not is not the primary issue. What matters is how the theory performs in its own right, and Feldman undeniably shows that it handles many difficult cases very well. But phrasing it in those terms diverts attention from the most innovative and most crucial concepts in this book. For when one reduces Feldman's theory to the essence, it comes down to the claim that people should get what they need because they need it. This is, in a sense, a circular argument. One might suspect that a considerable amount of the intuitive power of the theory comes out of this circularity. Of course, the concepts of community essential needs and community essential goods flesh out these ideas. Ultimately, it is the fact that, as human beings living in societies, we require certain things to flourish and live well that explains why we should have them. But this does not, in and of itself, provide a suitably independent argument for why need should be the appropriate distributive paradigm. Phrasing the argument in the conceptual language of desert unhelpfully diverts attention from the core of the argument that needs to be made; that it is important that human beings living in society flourish, and that this is why they should receive certain goods that only society can provide. That may well be a good argument, but it must be assessed on its own merits, and it requires more defense than is provided.

Coming towards the end of a distinguished career, this book shows all the virtues typical of Feldman's work. It is humane, rigorous, accessible and honest. It showcases analytical philosophy at its best, and is well worth reading and discussing. However, it is not the elusive desert-based theory of justice that will make desert philosophically respectable. Ultimately, it is about the importance of meeting the needs we have as human beings living in a society, what it takes to flourish, and why it is valuable that we do. These are important and powerful ideas. They deserve to be explored independently, not shoehorned into the language of desert.

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**PHD THESIS SUMMARY:**

**Keynes, Keynesian economics and the political economy of power of the postwar world**

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*PhD in public policy, June 2016*

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The economic origins and sociopolitical impacts of what became known as ‘Keynesian Economics’ have not received substantial attention from economists, political scientists, and philosophers about its mode of governance. This thesis explores the rise and consolidation of Keynesianism as a mode of governance responsible for creating collective forms of power relations in the postwar world, investigating the possible effects of economic ideas once they reach the political arena. Specifically, we apply a “political economy of power” (PEP) framework to understand the emergence of Keynes’s economic theory and its transformation into a policy agenda that had specific consequences in terms of power, governance, and regulation of the economy and the population. Whilst chapters 1 and 2 respectively promote a bibliographical reading of Michel Foucault’s genealogy of power and John Maynard Keynes’s economic, philosophical, and political foundations, chapter 3 introduces a historical investigation based on primary sources and official documents about the absorption and acceptance of the Keynesian economic theory in post-war’s economic policies. Our PEP framework developed throughout chapter 4 deploys a dual-historical approach, combining institutional and genealogical aspects to analyze the transformation of Keynesianism into a policy agenda between the end of the 1930s and beginning of 1970s across Western Europe and the United States. Our conclusions are buttressed by the epistemological and political shift caused by Keynesianism as a political paradigm, or a “governmentality”. The Keynesian mode of governance was successful in bringing economic principles and economic technicality into life, thus affecting the ways populations are governed. Consequently, technical economic instruments and welfare systems were actually a technical-scientific justification of intervention via a discourse of power that defended stability, economic growth, and welfare. Once Keynesianism established itself as a mode of



governance we see the rise of a security society where the “social” consolidates itself as a political subject. Policies involving full employment, demand management, economic stability, and social security point out towards new forms of economic control and regulation in the shape of a security pact between the state and the population. In that context, we invite the reader to return to the aforementioned intellectuals and reflect on the effects and forms of resistance to such economic powers. For Keynes, economics actually represented a means towards bigger ethical objectives in the sense of a construction of the self, which is quite similar to Foucault’s assertions on the government of the self. If economics consolidated itself as a theory of production and allocation that seeks the improvement of life, what are prosperity and economic outcomes for? Economic technicality, stability, and security policies should represent the means instead of the ends of economics. By exploring the ethical writings of Keynes and Foucault from a complementary perspective, we stress how economics should be reviewed and reconsidered as a means to achieve an ethical end: the good life. Such trajectory, in Foucault’s rationale, becomes a form of self-government in which the individual transforms himself/herself within the economy and understands economic activity as a means of action—rather than an end.

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**PHD THESIS SUMMARY:**

**The language of Max Weber. A sociological enquiry (in German: Die Sprache Max Webers. Eine soziologische Untersuchung)**

ACHIM SEIFFARTH

*PhD in philosophy, October 2015*

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When Max Weber entered the field of historical and economical research, he might have felt like entering a battlefield. There had been a lot of fighting about the methodology of economics in nineteenth century Germany and Austria, both between historical (Roscher) and abstract approaches (Menger), as well as within these currents themselves.

In the German speaking world, economists had to defend their right to study their own discipline using their own conceptual means. Even philologists like August Boeckh claimed that they should be the ones who had to study economics—at least the one of Ancient times. But more importantly, the historians from the historicist school had founded their own discipline of narrative economic studies following Ranke's teaching of how scholars should consider historical events, and how the single episodes of human history are connected. According to them, in the end, divine providence is governing the whole of history and every single episode. Authors like Wilhelm Roscher were firmly convinced that the economy should be considered with these tools of historiography.

My doctoral thesis about the language of Max Weber analyzes how Weber tried to find his own particular position between economy, history, and psychology (all of these had pertained to the field of philosophy), and how in the end he founded his own discipline, interpretative sociology, and why this branch of human knowledge remains linked to his name and his written works. The examination follows Weber's most important publications from his doctoral thesis to the end. It does so by analyzing his writings pragmatically and with constant reference to the social field in which Weber moves. The surprising fact is that Weber succeeded in founding his sociology without being member of a university. He acts as author, as editor, as advisor to colleagues and as founding member of the German sociological society (DGS) without any institutional backing.

In Seiffarth's analysis we can see how, between 1900 and 1904, Weber, originally a student of Roscher and Mommsen, distanced himself from the historicist school by evidencing the religious foundation of its teachings. By doing so, Weber believed that he had eliminated Hegel and Marx as well. After Weber's first methodological writings the field of social and economic studies seems to be freed from old authorities. But the rejection of the historicist view results in a crisis of narration. How can a scholar present history if he cannot believe that every historical episode could be narrated in a meaningful way, i.e., in one somehow linked to providence? Weber, as I propose, chooses the form of the German essay in his works about the history of religion and especially in the 'Protestant ethics'. This form is similar to some parts of Robert Musil's "Man without qualities", enriched in the footnotes by a series of independent small essays. Later on, Weber will integrate not only literary texts into his texts, but he will also adopt concepts from Plato (e.g., the soul being composed of three parts and the *daimon*) and try to narrate his own myth of modern times: "The old gods...". Not only his constant reference in his writings to himself as a person, but also the style of the works of our classic of sociology links his writings to Weber's name and personal history.

With his new discipline, Weber rejects all concurrent versions of a social science and every attempt of psychologists like Wilhelm Wundt to explain the social sphere. He tries to integrate economic theory as represented by Carl Menger, stating that his 'ideal types' were exactly the concepts needed by Menger. Similarly, he proceeds with Gottl's attempts of a foundation of economic theory in our everyday life.

Weber started with the study of the history of law and of economics. In the end, he attempted to propose sociology as nothing less than a universal approach to human life, including the economy.

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**PHD THESIS SUMMARY:**

**An incrementalist approach to political philosophy. The case of heterogeneous rationality assumptions in theories of distributive justice**

ALEXANDRU VOLACU

*PhD in political science, July 2016*

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The main goal of the thesis is to provide a framework for the pursuit of normative inquiries in the field of political philosophy, which bridges ideal and non-ideal theory by accommodating both types of approaches and by providing a blueprint for the transition between ideal and non-ideal theory. This blueprint is subsequently used to examine the various ways in which principles of distributive justice are dependent upon certain idealised assumptions and the ways in which such principles would be affected by the transition from ideal to non-ideal theory. A secondary goal of the thesis is to explore to what extent we can draw on various developments from social sciences (and particularly for this thesis, from neoclassical and behavioural economics) to engage in meaningful analyses of theories belonging to the field of political philosophy (and particularly for this thesis, theories of distributive justice). Aside from the provision of a theoretical background concerning the topic of distributive justice (chapter 2), the thesis consists of two main parts.

In the first part (chapter 3), I propose and defend a novel methodological approach for pursuing normative inquiries, which aims to bridge ideal and non-ideal theory and provide a framework for the systematization of knowledge in political philosophy. The core ideas of the approach are that: (1) political philosophy should be concerned with both short term goals, such as addressing severe injustices in the present world and long term goals, such as moving towards gradually more just states of the world in the long-run and (2) an appropriate way to satisfy these aims in a systematic manner is to build a landscape of normative models through incremental derivation (i.e., making the assumptions of a model more or less fact-sensitive one at a time) and selecting to pursue the best path that we might take from mitigating problems of severe

injustice in the current state of the world to the achievement of perfect justice. The subsequent chapters, which together compose the second part of the thesis, are then designed to expose various ways in which normative principles are dependent on certain assumptions, thereby illustrating the problems which may arise in the transition from ideal to non-ideal theory. All cases studied refer to the connection between principles of distributive justice and assumptions concerning rationality.

In chapter 4 I challenge the Rawlsian assertion that each party will have a first-ranked preference for an identical set of principles of justice behind the veil of ignorance, claiming that the original position allows parties to choose on the basis of a plurality of conceptions of rationality and allows choices based on the assignment of different weights to social positions, which in turn may lead to a reasonable disagreement concerning the conception of justice selected. I then argue that this reasonable disagreement does not entail an abandonment of the contractualist project, but its reconstruction in the form of a two-stage process, where parties first construct an individual preference hierarchy for alternative conceptions of justice and then work towards the reconciliation of the divergent conceptions that are chosen in the first stage. Finally, I claim that the threshold prioritarian view is the most plausible candidate for selection in this reconciliatory stage, since it manages to address both the legitimate complaints of parties that would prefer a conception of justice focused on the most disadvantaged positions in society as well as the legitimate complaints of parties that would prefer a conception of justice in which less or no special weight is assigned to the worst-off positions. This result illustrates the more general claim that, in some cases, incrementally modifying the inputs of a normative model may lead to a change in the principles generated by that model.

In chapter 5 I seek to assess the responses provided by several theories of sufficientarian justice in cases where heterogeneous assumptions concerning individual rationality are introduced. In the first part of the chapter I draw a number of distinctions between sufficiency views and I distinguish between a maximizing conception of rationality and a satisficing one, using the latter concept in the sense developed by Michael Slote. In the second part I build two test cases and study the normative prescriptions which various sufficiency views offer in each of them. I conclude that resource sufficientarianism does not provide the correct response to the first case, since its distributive prescriptions

would violate the principle of personal good and that subjective-threshold welfare sufficientarianism as well as objective-threshold welfare sufficientarianism committed to the headcount claim do not provide correct responses to the second case, since their distributive prescriptions would violate the principle of equal importance. I then claim that an objective-threshold welfare sufficientarian view committed to prioritarianism under the threshold offers the correct response to both cases and therefore resists the challenge raised by scenarios that involve differential conceptions of rationality. This result illustrates the more general claim that, in some cases, incrementally modifying the inputs of a normative model may lead to a decrease (or, alternatively, increase) in the desirability of that model.

In chapter 6 I aim to explore the effects of relaxing rationality assumptions in respect to computational capacities on Ronald Dworkin's theory of egalitarian justice. In the first part I outline the content of resource egalitarianism, by appealing to Dworkin's distinction between option luck and brute luck and his hypothetical insurance device. In the second part I attempt to clarify an ambiguity concerning the proper site of responsibility in Dworkin's theory, arguing that it is represented by preferences—not choices—as Dworkin and other authors (such as Carl Knight), sometimes suggest. Since preferences are the proper site of responsibility for Dworkin, I go on to maintain that the process of converting preferences into choices may be affected by systematic reasoning errors, which distort individual computational capacities in a morally relevant way. I use a hypothetical case to argue that the principle of equal opportunity to insure against bad luck is undermined by the empirically plausible assumption that individuals can make reasoning errors and, therefore, that Dworkin's theory is stricken by a different and deeper strand of unfeasibility than the one which leads him to suggest that counterfactual compensation should ultimately be enacted as a matter of policy. This result illustrates the more general claim that, in some cases, incrementally modifying the inputs of a normative model may lead to a decrease (or, alternatively, increase) in the feasibility of that model.

Finally, in chapter 7 I attempt to refute a recent challenge raised by Michael Otsuka against prioritarianism, according to which the priority view is objectionable since it rejects the moral permissibility of choosing in accordance with rational self-interest, understood as maximization of expected utility, in one-person cases involving other-regarding decision-

making under risk. I claim that Otsuka's argument is bound to make an illegitimate move which is either to implausibly assume that individuals are risk-neutral or to implausibly assume that the decision-maker in his cases can have accurate information on the attitudes towards risk held by the individual on behalf of whom the decision is taken. I argue, *pace* Otsuka, that acting in accordance with rational self-interest in such cases requires that we adopt a view which takes into account general empirical facts about human nature and that prioritarianism does not conflict with this latter view. This result illustrates the more general claim that, in some cases critiques of normative models are themselves reliant on a specific combination of inputs and that they may be refuted under different, and more empirically plausible, assumptions.

**Alexandru Volacu** is an adjunct professor at the National University of Political Science and Public Administration (SNSPA), in Bucharest, Romania. Recent publications include the volumes *Modern dilemmas: understanding collective action in the 21st century* (co-editor, Ibidem-Verlag) and *Rational choice and electoral behaviour* (co-author, Tritonic), as well as journal articles published in *Contemporary Political Theory* and the *Journal of International Relations and Development*. He is currently co-authoring a chapter on the ethics of voting (together with Annabelle Lever) as part of the *Routledge handbook of ethics and public policy* (forthcoming). His research interests include theories of justice, the ideal/non-ideal theory debate, the ethics of voting, electoral behaviour, rational choice theory, and game theory.

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