



ERASMUS JOURNAL FOR PHILOSOPHY AND ECONOMICS
VOLUME 7, ISSUE 1, SPRING 2014

The Erasmus Journal for Philosophy and Economics (EJPE) is a peer-reviewed bi-annual academic journal supported by the Erasmus Institute for Philosophy and Economics, Faculty of Philosophy, Erasmus University Rotterdam. EJPE publishes research on methodology of economics, history of economic thought, ethics and economics, and the conceptual analysis of inter-disciplinary work relating economics to other fields. EJPE is an open-access journal. For additional information, see our website: <<http://ejpe.org>>. All submissions should be sent via e-mail to: <editors@ejpe.org>

EDITORS

François Claveau
C. Tyler DesRoches
Joost W. Hengstmengel
Luis Mireles-Flores
Thomas Wells

ADVISORY BOARD

Erik Angner, Roger Backhouse, Marcel Boumans, Richard Bradley,
Nancy D. Cartwright, David Colander, Job Daemen, John B. Davis,
Sheila C. Dow, Till Grüne-Yanoff, D. Wade Hands, Conrad Heilmann,
Frank Hindriks, Clemens Hirsch, Geoffrey Hodgson, Elias Khalil, Arjo Klamer,
Alessandro Lanteri, Aki Lehtinen, Uskali Mäki, Caterina Marchionni,
Deirdre N. McCloskey, Mozaffar Qizilbash, Julian Reiss, Ingrid Robeyns,
Malcolm Rutherford, Margaret Schabas, Eric Schliesser,
Esther-Mirjam Sent, Robert Sugden, Jack Vromen.

ERASMUS JOURNAL FOR PHILOSOPHY AND ECONOMICS
VOLUME 7, ISSUE 1, SPRING 2014

TABLE OF CONTENTS

ARTICLES

From desire to subjective value:
what neuroeconomics reveals about naturalism
DANIEL F. HARTNER [pp. 1-26]

A category-mistake in the classical labour theory of value
IAN WRIGHT [pp. 27-55]

Conceptualising the labour-money connection:
a critical re-examination of Benetti and Cartelier's
Marchands, salariat et capitalistes
RICHARD SOBEL AND NICOLAS POSTEL [pp. 56-85]

SPECIAL CONTRIBUTION

In pursuit of the rarest of birds:
an interview with **GILBERT FACCARELLO** [pp. 86-108]

BOOK REVIEWS

Carsten Herrmann-Pillath's *Foundations of economic evolution:
a treatise on the natural philosophy of economics*
DON ROSS [pp. 109-123]

Huei-chun Su's *Economic justice and liberty:
the social philosophy in John Stuart Mill's utilitarianism*
MICHAEL SCHEFCZYK [pp. 124-131]

Robert Leeson's *Hayek: a collaborative biography:
part 1 Influences, from Mises to Bartley*
AGNIESZKA WINCEWICZ-PRICE [pp. 132-137]

Michael Sandel's *What money can't buy:
the moral limits of markets*
THOMAS R. WELLS [pp. 138-149]

Sonya Marie Scott's *Architectures of economic subjectivity:
the philosophical foundations of the subject
in the history of economic thought*

IVAN BOLDYREV

[pp. 150-157]

PHD THESIS SUMMARIES

The Viennese students of civilization: humility,
culture and economics in interwar Vienna and beyond

ERWIN DEKKER

[pp. 158-160]

Phenomenology and economics

PETR ŠPECIÁN

[pp. 161-165]

From desire to subjective value: what neuroeconomics reveals about naturalism

DANIEL F. HARTNER

Rose-Hulman Institute of Technology

Abstract: Philosophers now regularly appeal to data from neuroscience and psychology to settle longstanding disputes between competing philosophical theories, such as theories of moral decision-making and motivation. Such naturalistic projects typically aim to promote continuity between philosophy and the sciences by attending to the empirical constraints that the sciences impose on conceptual disputes in philosophy. This practice of checking philosophical theories of moral agency against the available empirical data is generally encouraging, yet it can leave unexamined crucial empirical assumptions that lie at the foundations of the traditional philosophical disputes. To illustrate this, I compare recent work in the neuroscience of decision to traditional philosophical theories of motivation and argue that the traditional theories are largely incompatible with empirical developments. This shows that genuine continuity between philosophy and science means that in some instances the conceptual foundations required to explain the phenomenon of interest be developed by the sciences themselves.

Keywords: naturalism, neuroeconomics, decision-making, expected utility theory, folk psychology, moral motivation, neurophilosophy

JEL Classification: B40, B41, D87

[I]t is not profitable for us at present to do moral philosophy; that should be laid aside at any rate until we have an adequate philosophy of psychology, in which we are conspicuously lacking (Anscombe 1958, 1).

A great deal of the recent work in cognitive science has, tacitly or explicitly, assumed very much the picture of mental organization that folk psychology proposes. There are other straws in the wind, however. There are findings and theories suggesting that something is seriously wrong with the simple belief-desire structure implicit in common sense wisdom (Stich 1983, 230).

AUTHORS' NOTE: I am grateful to John Bickle, Thomas Wells, and an anonymous referee for many helpful comments and suggestions for revision. I would also like to thank Tim Schroeder, Dimitria Gatzia, and Gonzalo Munevar for their helpful comments on, and criticisms of, earlier versions of this paper.

The last decade or so has seen a growing number of philosophers express concern over the proliferation of dubious empirical claims and assumptions in ethics. Stephen Darwall, Alan Gibbard, and Peter Railton, in their overview of the last century of work in ethics, observe that, “too many moral philosophers [...] have been content to invent their psychology or anthropology from scratch” (Darwall, et al. 1992, 188-189). John Doris and Stephen Stich have echoed that concern, arguing further that philosophy’s empirical complacency has discouraged scientists from “undertaking philosophically informed research on ethical issues” (2007, 115).

For those of us who share these concerns about philosophy’s empirical commitments in an age of rapid scientific progress, it might seem encouraging that there is now at least one problem in metaethics and philosophical moral psychology that is receiving extensive empirical treatment from philosophers. That is the problem of moral motivation (MM), i.e., the problem of explaining, perhaps conceptually, the nature of the relationship between an agent’s moral judgments (or beliefs) and her behavior.

The conceptual difficulty that lies at the heart of the problem of MM is straightforward. Suppose that I come to believe that the morally right thing to do is to tithe my salary in support of famine relief. Does my believing this mean that I will necessarily be motivated to do it? On the one hand, it seems so because if I should insist that giving is the right thing to do without actually being so motivated, the best explanation for my lack of motivation might be that I do not genuinely believe what I claim to. On the other hand, it seems plausible that I might genuinely believe that I should tithe my salary and yet remain unmotivated precisely because I do not actually want to. Which is the better account of the relationship between my moral judgment and my motivation? In very plain terms, this is the problem of MM.

In its more rigorous academic form, the problem of MM encompasses at least two distinct though related philosophical disputes concerned with whether and how moral judgments motivate moral agents. The first dispute is about *whether* moral judgments motivate. Motivational internalists argue that moral beliefs motivate *necessarily* while externalists deny this. The second dispute is about *how* such judgments motivate. Proponents of the so-called Humean theory of motivation (or Humeanism) argue that moral beliefs are *insufficient*

for motivating agents since motivation requires in addition to a belief the presence of a conative state such as a desire. Anti-Humeans reject the Humean theory on the grounds that moral beliefs are themselves sufficient for motivation. Some anti-Humeans endorse internalism, or one of a few related ideas such as that moral beliefs are somehow simultaneously desire-like (“besires”)¹ or that moral beliefs co-occur with or otherwise trigger the relevant desires.

The connection between this philosophical dispute and empirical science is straightforward. Scientists too are interested in the relationship between value judgment, decision-making, and motivation. It might seem promising, then, that a growing number of philosophers—naturalists, though the label is perhaps not always self-applied—are using data from psychology, psychiatry, cognitive science, and neuroscience to help resolve these longstanding philosophical disputes about MM. Naturalism is the philosophical position that the aims and methods of philosophy are continuous with those of the empirical sciences.² Different philosophers define naturalism in different ways but, at least in practice, most naturalists are committed to the idea that the sciences are continuous with philosophy in the sense that the empirical facts ought to constrain and inform the development of or choice between philosophical theories in some way, particularly when those theories purport to explain phenomena that are of interest to the sciences. So, in the case of MM, naturalists try to show that the data vindicates one or another of these traditional theories. The empirical data is a good place to look when purely conceptual considerations fail to settle the matter.

For example, Roskies (2003, 2006) argues that patients suffering from damage to the ventromedial prefrontal cortex (VMPFC) serve as counterexamples to internalism.³ Kennett and Fine (2009) have argued that clinical research with autistic patients and psychopaths supports a Kantian account of motivation, or some form of anti-Humeanism according to which moral judgments are necessarily motivating.

¹ The term, coined by Altham (1986), is now commonplace in the relevant metaethics literature.

² This way of putting it is commonly attributed to Quine (1969), who made a similar point about psychology and epistemology, though few philosophers today endorse Quine’s account of the relationship between philosophy and the sciences.

³ More recently, Schroeder, Roskies, and Nichols, have argued that instrumentalism—a variation on the Humean theory, which holds that an agent is motivated when she forms beliefs about how to satisfy her pre-existing desires—“fits well with the neuroscientific picture” of motivational processes (2010, 106).

Prinz (2006) uses data on psychopathology, though, to argue for a Humean sentimentalist account of moral concepts according to which an agent's believing that an action is morally wrong amounts to her having a sentiment of disapprobation toward it. These are just some of many available examples of empirically sophisticated naturalism in contemporary moral philosophy.

My goal in this paper is to raise the concern that many such naturalistic projects, despite their empirical sophistication, share a problematic core commitment. These philosophers are quite right to recognize the limits of traditional philosophical methods like conceptual analysis, intuition, and armchair reflection for elucidating the nature of MM. They endorse the rather plausible idea that scientific data has much to offer these conceptual inquiries into judgment, decision, and motivation. But there is another idea at work in each of these approaches that is, I think, considerably less plausible. That is the idea that scientific research will ultimately preserve or prove sufficiently compatible with the framework of commonsense psychology in which philosophical disputes about MM are couched.

There is a kind of realism about folk psychological (FP) concepts like belief and desire involved in philosophical disputes about moral motivation. Humeans, anti-Humeans, internalists, and externalists are all, in some sense, in dispute about the role that these states play in bringing about MM. They take for granted that the right or best account of the relationship between moral judgments and motivation will preserve beliefs and desires (or something near enough). After all, this is the very point of using data to vindicate one or another of these traditional theories. To put it another way, eliminativism, instrumentalism, and other forms of serious skepticism about FP states are neither forms of anti-Humeanism nor externalism—such views avoid this FP framework altogether.⁴

The last ten years or so of work on the neuroscience of value judgment, decision-making, and motivation has produced a reasonably unified field called neuroeconomics. Work in neuroeconomics ranges

⁴ Eliminativism is not a form of anti-Humeanism because the latter theory holds not just that beliefs are insufficient for motivation—a claim that might seem compatible with the nonexistence of FP states—but also that motivation requires the presence of a *desire* (or related FP state). Eliminativism is not a form of externalism because it seems there is not much sense in the eliminativist's taking a specific position on the effects of undergoing nonexistent states. Stich has made a similar point in response to Dennett's instrumentalism, arguing, for example, that only real entities and not useful fictions can have causes and effects (1983, 244).

from cellular-level to social-level neuroscience and it has been converging on an account of the causal mechanisms of value judgment and motivation. This account—which is, I think, immediately relevant to the issue of moral and social cognition and hence to philosophical disputes about MM—neither invokes commonsense FP states directly nor appears likely to lend itself to accurate redescription in FP terms.

I will proceed by outlining the development of neuroeconomics and its core concepts, like subjective value, that are important for connecting this scientific field to philosophical disputes about MM. I hope that readers will forgive the empirical review that occupies the first part of this paper. It is crucial to understanding the conceptual connection—one that I think we can no longer afford to ignore—between neuroeconomics and philosophical moral psychology. I then argue that neuroeconomics is poised to raise two serious challenges for traditional philosophical theories of moral agency which rest upon the outmoded framework of FP. Finally, I will argue that what we should conclude from this is not that neuroeconomics has closed the case on explaining how decision-making, value judgment, and MM work, but rather that the relationship between a science like neuroeconomics and philosophical moral psychology can teach us a good deal about what philosophical naturalism properly amounts to, that is, about what it means to develop genuine continuity between philosophy and the sciences.

This last point about naturalism is the real heart of this paper. In their work naturalists tacitly and sometimes even explicitly reveal a commitment to the idea that philosophy is prior to science in at least one important way: carving out and explicating the concepts that scientists require is in large part philosophical, not scientific, work. For example, Jackson and Pettit (1990) are among those naturalists who have been explicit about this idea. They argue that at the very least, a “completed neuroscience” will have to reveal that the folk roles (which is their term for commonsense functional roles) of beliefs and desires are in fact occupied, since with just a bit of conceptual analysis we can see it is sufficient for having beliefs and desires that the folk roles be occupied (1990, 36). It is philosophy, not the sciences, that reveals this.

In philosophical disputes about MM, it is FP concepts that guide discussion. After all, the problem arises from a conceptual difficulty: the question is *whether* motivation is a necessary component of genuine belief, where motivation is an FP concept already widely analyzed and

cemented in the philosophical literature. Then, where the conceptual contributions run dry, naturalists turn to empirical data to tip the scales in favor of one philosophical theory or another. But what the case of neuroeconomics and MM shows is that there may be good reason to think that the sciences themselves carve out and explicate the concepts they require as they develop. Thus, the argument I give here against FP is not intended as an argument for eliminativism but rather as an illustration of how the sciences, in this case economic theory, can lead philosophy in its conceptual development—a twist that many philosophers and even self-described naturalists may find *prima facie* implausible. In fact, though, it is the philosophy-first form of naturalism, which forces empirical data to fit with traditional philosophical theories, that has in many cases become a barrier to recognizing and developing genuine continuity between philosophy and science.

VALUE AND CHOICE: SOME DEVELOPMENTS IN NEUROECONOMICS

Two different academic camps continue to contribute to the conceptual and empirical literature on human and primate decision-making and judgments of economic value. Traditionally, philosophers seek to clarify the relevant psychological concepts and distinctions used in explanations of cognition and behavior while cognitive scientists and neuroscientists collect data to elucidate the physiological mechanisms underlying (or constraining) these explanations. On this way of distinguishing these two camps, the division of labor is straightforward, as is the potential for collaboration between the two camps. We should expect, if this division largely holds true, that philosophers might take an interest in the ways in which their theories and concepts can be mapped onto data from neurophysiology. Conversely, scientists might sometimes invoke or borrow philosophical concepts and distinctions to enrich their more mechanical explanations. Indeed, as I argued in the previous section, the former kind of interaction is precisely what we have seen, with self-described naturalists increasingly looking for ways to map their concepts onto neurological explanations. But developments in decision science have begun to complicate this relationship.

The last decade has seen the development of neuroeconomics, which weds behavioral economics with experimental neuroscience. Its key methodological innovation is to use well-vetted theories in economics, like expected utility theory (EUT), to contextualize neural data generated

by subjects engaged in tasks of judgment and decision. To borrow a helpful summary from one of the field's founders, Paul Glimcher (2009), the idea is that behavioral economists can use neuroscience to reveal the physiological constraints on real agents that sometimes lead them to violate the axioms of normative economic models like EUT, while neuroscientists can use economic theory to help develop algorithmic models of decision-making for which they can identify relevant neural mechanisms (Glimcher, et al. 2009, 7-8).

In what follows I shall assume that neuroeconomics, which seeks to explicate decision-making, is relevant to disputes about *moral* decision-making. In lieu of a lengthy defense of this idea, I offer just two brief remarks here. First, the idea that moral judgment and moral decision-making is a species of value judgment and decision-making more generally is rather plausible on its face. Indeed the idea must also be plausible to philosophers who engage in philosophical moral psychology, since in that field's literature the relevant FP states like belief and desire are the very same as those that appear in (non-moral) philosophy of mind and philosophical psychology. To reject the relevance of neuroeconomics to moral philosophy on the general grounds that economic decision-making should be distinguished from ethics is to reject the idea that moral cognition is a subset of cognition in general. This is not merely a strange idea, but one that seems to be incompatible with current practices in philosophical moral psychology.

Secondly, there are already empirical links in place between decision-making and moral decision-making. The connection comes primarily by way of social neuroscience, a branch of neuroscience concerned with the relationship between patterns of neural activity—most often investigated using functional magnetic resonance imaging (fMRI)—and tasks involving social contexts and norms. Some researchers study the interaction between economic decision-making and moral/social decision-making directly by using or designing tasks that force subjects to make economic decisions in conjunction with decisions about moral and social norms. The idea is to study changes in neural activation patterns as subjects engage in a variety of economic tasks in which social or moral norms are salient. For example, many experiments in social neuroscience use gambling games to force subjects to make decisions about whether and to what extent to cooperate with others in the pursuit of profit (for a discussion of some of these tasks, see Sanfey, et al. 2014). This is one of the

more obvious instances of overlap between economic decision-making and moral/social decision-making. Some economic decisions are simultaneously decisions involving the interests of others.

Moreover, some experiments in social neuroscience have investigated the relationship between social and moral judgments directly. For example, there is some evidence based on patterns of neural activation that judgments about moral norms are a specialized form or subset of judgments about more general (nonmoral) social norms (see Moll, et al. 2002). Insofar as we accept this idea, that moral judgments are *decisions* about what it is right, or best, to do under such-and-such circumstances, then we shall see that neuroeconomics is giving us reason to doubt the empirical adequacy of philosophical disputes about value judgment and motivation couched in FP terms. With this out in the open, I turn to the details.

One primary goal of neuroeconomics—as has been stated explicitly by neuroeconomists—is to establish connections between variables like utility, derived from observable behavior, and “psychophysiological quantities”, like the firing rate of a neuron (Rustichini 2009, 34). In one sense, then, what neuroeconomists are trying to do is to develop a more powerful account of decision than is possible using traditional theories like EUT alone. If we can understand the physiological constraints on real agents that EUT does not take into account, then we will be better able to predict and explain why agents who have to make decisions sometimes violate the axioms of theories like EUT.

EUT uses psychological constructs like utility to make sense of decision-making.⁵ Utility is the calculated psychological value of an option that an agent chooses. In economic theory it is defined in relation to rational choice, that is, choice which realizes the greatest possible subjective value for an agent. Rational choice is facilitated by preference orderings over states of the world which reflect an agent’s relative prioritization of those states. Agents choose rationally when they realize their most valued possible preferences given their option set. In this sense it is a kind of psychological concept, but it is important to note that it can only be calculated from behavior—what real agents choose. The problems with EUT as a realistic model of human behavior are well rehearsed (Kahneman and Tversky 1979). Real agents do not always

⁵ It is worth noting here that the idea that the utility in EUT is a psychological construct is controversial, since some economists understand utility instrumentally, as an index of preferences as patterns of revealed choice. This is a point that I will return to below in discussing conceptual progress in the special sciences.

choose as though they were trying to maximize their utility; they can be induced to violate the axioms of EUT fairly easily. So we might rightly wonder, why bother with EUT at all?

The value to neuroscientists of an economic theory like EUT is that, despite its imperfections, when agents *do* choose in accordance with its axioms—completeness, transitivity and independence—those agents behave *as if* they were trying to maximize their utility. This affords scientists the opportunity to investigate the neurological constraints on agents engaged in value judgments. The insight from neuroeconomics is that it may be possible to find neural mechanisms that fit with EUT when EUT is accurate in predicting choice, and then to narrow the investigation to those mechanisms where EUT goes astray, i.e., when agents violate its axioms, so that the neural data can be used to predict and explain those violations. The result would be something more powerful than EUT because it would capture the physiological constraints that make people, to put it controversially, ‘irrational’. In other words, it becomes possible to accommodate criticisms of EUT, including the famous Allais paradox which shows that people are in fact not ideal choosers since they can be induced to violate at least one axiom of EUT.⁶

The way neuroeconomists have so far gone about doing this is as follows. They begin with a theoretical construct that would allow this neural investigation to unfold. That construct is subjective value (SV). Neuroeconomists have developed a working definition of SV, one that would allow it to harness the power of EUT without the shortcomings. By definition, SVs are the mean firing rates in action potentials per second of specific populations of neurons which predict choices of agents (though stochastically). When expected utilities predict choice, SVs are linearly proportional to the expected utilities. This way the SVs are always consistent with choice (though, again, stochastically) even when choice is not consistent with EUT (Glimcher 2009). SV is thus like utility in that neural activity would track choice in cases in which subjects do choose as though they were maximizing their wellbeing. But SV would deviate from utility and continue to track choice in the cases in which agents violate the axioms of EUT. So it could still be used

⁶ In the case of the Allais paradox, people’s actual choices between lotteries are influenced by the addition of outcomes that are irrelevant to their relative utility. The axiom violated is the independence axiom. The details are somewhat technical, but the axiom is important to the idea that subjects have well-defined preferences, and it is for this reason that the Allais paradox presents a serious problem for EUT.

to predict choice when EUT fails, as it does in the case of the Allais paradox.

One of the interesting features of SV—and an improvement over the concept of utility—is that the construct accords well with a two-stage model of decision making that has been under development in the neural sciences for several years. The two stages in this model are *valuation* and *choice*. In valuation, subjects assign values or utilities to individual goods or actions in their range of options. At the behavioral level, these economic values are calculated by quantifying the subject's choices relative to the alternatives.⁷ At the neural level, these values would need to occupy the role of SV, the theoretical construct that is now central to neuroeconomics for the reasons just given.

The pressing empirical question in neuroeconomics has been whether SV exists—whether there exists a neural firing rate pattern or blood-oxygen-level dependent (BOLD) signal⁸ linearly correlated with utility *when* in fact utility does predict choice, and which regions or cell populations of the mammalian brain are capable of encoding this signal. The rather surprising answer emerging from the empirical literature has been that there are cell populations that encode SV, and that the SVs of items (or, in economic terms, goods) are likely encoded in the ventromedial prefrontal cortex (VMPFC) and the SVs of actions likely encoded in the striatum. It is worth briefly reviewing a bit of that evidence.

Recordings from cells in the VMPFC have contributed to the localization of valuation. In a series of studies, Padoa-Schioppa and Assad (2006) presented monkeys with choices between different types and quantities of juices and foods. They then calculated a behavioral-level subjective value for each of the juices based on the monkeys' choices and the quantities offered. They then checked for neuronal activity that might support the behavioral-level subjective value calculations, the hypothesized common currency for choice.

⁷ For example, if a monkey chooses reward 1A (e.g., one apple slice) when paired with one 1B (e.g., one raisin), 2B (e.g., two raisins), and 3B; it is indifferent at a ratio of 1A:4B; and it chooses B when 6B and 10B are offered, then the value of 1A is roughly equal to the value of 4B [i.e., $V(1A) = V(4B)$] and hence has a subjective value of approximately 4.

⁸ BOLD-contrast imaging is a method used by neuroscientists in functional magnetic resonance imaging (fMRI). The images of brain activity produced by this method are based on changes in the level of oxygen in different areas of the brain associated with changes in levels of activity.

The researchers identified three distinct neuronal patterns corresponding to three types of neuronal function. A portion of the 931 cells in the orbitofrontal cortex (OFC) from which recordings were taken showed a firing rate significantly correlated with the subjective values previously hypothesized from the behavioral data. These neurons were termed *offer value* neurons because they track the subjective value of the juice option offered. In other words, the activity of these particular neurons co-varied with the value of the juice on offer.

A second subset of the neurons showed a firing rate linearly correlated with the subjective value of the juice (i.e., reward) that the monkey *actually* chose (or would eventually choose). In this case the neuronal activity was low when the monkey chose the juice with a chosen value score of about 2, higher when it chose a juice with a value score of about 4, and highest when the monkey chose a juice with a value score of about 6. That these variations in cell activity are significantly correlated seems to indicate that they represent the subjective value of the chosen reward. This subset of neurons was therefore labeled *chosen value* neurons.

The third subset of neurons showed a distinct categorical or binary firing activity response to *particular* juices. The researchers accordingly labeled these *taste* neurons.

Activity in each of these three types of neurons showed a distinct timing pattern. Offer value and chosen value neurons predominantly fired immediately following the presentation of juice options, while taste neurons fired after the juice reward was presented (Padoa-Schioppa and Assad 2006; Kable and Glimcher 2009). Similarly, these three types of neurons have been found in the caudate and putamen of the striatum where research indicates they track the values of actions rather than goods (Samejima, et al. 2005).

Importantly, these studies also showed that the neuronal value representations were menu-invariant. That is, the neural responses are representations of the direct value of individual goods/items rather than representations of their relative value, or the value of a good relative to its paired alternative. Recording activity in 557 individual neurons in the OFC, Padoa-Schioppa and Assad presented monkeys with competing juice pairs (i.e., offers). To determine whether the neuronal responses depended upon the menu (i.e., upon what alternatives were available at that particular time), they recorded the neuronal activity while the monkeys chose between *three* different juices (A, B, and C in

decreasing order of preference) in varying amounts, presented in interleaved pairings of A:B, B:C, and C:A. The results again showed three patterns of neuronal activity corresponding to the three types of neurons (offer value, chosen value, and taste neurons). And these neuronal responses were invariant to changes of menu: the neuronal activity encoding the value of each of the juices was largely independent of availability of other juices.

This is especially important because transitivity of choice at the behavioral level is already well established. Transitivity, which is one of the axioms of EUT, is the basic economic idea that a subject who prefers A to B and B to C must prefer A to C. In behavioral experiments, the monkeys' choices do in fact exhibit transitivity. Monkeys who prefer juice A to juice B and juice B to juice C prefer A to C (Padoa-Schioppa and Assad 2008; Kable and Glimcher 2009). Establishing the menu invariance of neuronal activity is crucial because it shows that the neuronal responses, like the behavioral responses, are stable and consistent, and therefore reflect transitivity (Padoa-Schioppa and Assad 2008). Thus, evidence of transitivity in neuronal activity supports the idea that the values of goods are represented in a common, comparable currency in the OFC neurons. In other words, transitivity is only possible if the neurons encode individual subjective values of goods on a single, common scale and not merely relative (menu-variant) values. Each good on offer, then, has its own *absolute* subjective value represented by particular neurons on a common scale. This, in sum, is the valuation stage in the emerging two-stage model of decision.

In the interest of providing a more complete story of decision with clear relevance to explanations of judgment and motivation, I need to say just a bit about the second stage in the two-stage neural model: choice. It is the valuation stage that is my primary concern here, however the choice stage is important because it provides the overt link to behavior, and hence the relevance of neuroeconomics to disputes about the relationship between judgment or decision and motivation.

The research on choice implicates the lateral prefrontal and parietal cortex. Much of this research is based upon work with the visuo-saccadic control system in the primate brain. Saccades are rapid eye movements executed for the purpose of fixing one's gaze on a scene. Rapid eye movements to points of interest in the visual field help an animal to build a map of a scene. This eye activity is initiated by the visuo-saccadic control system, which includes the frontal eye fields (FEF)

in the cortex and the superior colliculus (SC) in the midbrain. Neuroscientists interested in sensory-motor control have studied this system extensively. It appears to provide the mechanism by which information concerning the chosen option, and not the unchosen options, is implemented in motor systems downstream from the valuation circuitry. It is here that we find the explicit link between decision and motivation, a link crucial to the philosophical account of MM under consideration in this paper.

The details are complex, but the basic idea is that neurons in the lateral intraparietal area (LIP), FEF, and SC form a network for visuo-saccadic decision-making. Studies with monkeys on saccadic decision-making tasks have repeatedly shown that the firing rates of neurons in LIP and FEF increase as evidence accumulates that a visual response will result in reward. Interestingly, once those firing rates cross a preset threshold, a saccade is initiated (Shadlen and Newsome 2001). Further research has since indicated that this firing rate threshold represents a value threshold for movement selection (Roitman and Shadlen 2002). This is the overt link to behavioral output.

It is also worth noting that in the last ten years or so of work in neuroeconomics, much progress has been made on revealing the mechanisms through which SVs—the currency for choice—are learned and represented in the primate brain. Dopaminergic (DA) neurons in the midbrain encode a reward-prediction error (RPE), i.e., the difference between the outcome of an action actually experienced and the predicted outcome of the action (Schultz, et al. 1997). Research indicates that the firing rates of these DA neurons are linearly related to RPE as calculated by behavioral-level economic models (Bayer and Glimcher 2005). Beyond having evidence for the existence of SV as a real neural entity, scientists now have some idea about the neural mechanisms by which these values are learned and encoded in the mammalian brain.

And, as I mentioned briefly above, as these lines of research elucidate the mechanisms behind choice in the primate brain, social and cognitive neuroscientists are revealing that the same regions, most notably the striatum and VMPFC are consistently implicated in tasks in which subjects are asked to make moral and social judgments (e.g., Greene and Haidt 2002; Moll, et al. 2002). While much work remains to be done, there are already some direct links between moral judgment and decision-making and the neurophysiology of decision and motivation.

In sum, both the primary goal and empirical development of neuroeconomics are well established. Neuroeconomics seeks to provide neurocognitive explanations of value judgment and choice behavior, and it has made considerable empirical progress toward that goal by wedding techniques in neuroscience with the theoretical framework of EUT. The overlap with theories in philosophical psychology and moral psychology is also clear: both aim to provide an empirically adequate account of the relationship between value judgment, choice behavior, and motivation. This raises an important challenge for naturalists who want to apply empirical data to longstanding philosophical disputes about judgment and motivation.

THE CASE AGAINST FOLK PSYCHOLOGICAL EXPLANATIONS

Philosophical theories that employ FP concepts to deal with the phenomena of judgment and motivation, especially those that aim to achieve results compatible with the results in the sciences, will need to show that FP is up to the task of capturing these details. It is here that problems arise since FP theories of motivation ultimately run up against a difficult tradeoff. I will try to show that as FP theories become nuanced enough to track the kinds of explanations that neuroscientists have been developing on the back of years of work in behavioral economics, those theories will tend to require concepts and theoretical postulates that lack the commonsense features that are characteristic of FP's mental state postulates. In particular, they will jeopardize the characteristics of postulates like beliefs and desires that make such states commonsensical or folksy. But, perhaps not surprisingly, to the extent that FP-based theories like Humeanism, anti-Humeanism, internalism and externalism preserve their postulates in commonsensical form, and thus remain true to the folksiness of FP, they will be forced toward a level of generality that is far too coarse to say much of substance about the relationship between value judgment and motivation.

In general terms, FP theories need to map the cognitive-level FP story about an agent's subjectively valuing an item or action onto the neurophysiological mechanisms—subjective value—upon which that story must supervene according to developments in neuroscience. The difficulty for the proponents of FP theories is that (1) SVs “exist”—they are genuine *neural* entities, and (2) their contribution to decision and motivational processes—i.e., their explanatorily relevant characteristics

and functions—pertain exclusively to the biophysical level. Importantly, though, those characteristics and functions were uncovered *not* on the back of commonsense psychology but rather on the back of economic theory. This means that the way that we come to understand the psychological-level contributions to accounts of choice behavior will be guided by theoretical and conceptual development in economic theory, not commonsense psychology. Thus, it can hardly be surprising that FP explanations of decision and motivation find themselves forced to choose between empirical inadequacy and trivial generality. And that is precisely what seems to happen.

Consider what a proponent of FP explanations might say about how states like belief and desire fit into the neurological account described above. For example, one possibility for the proponent of FP would be to insist that the power of FP lies in its generality. We vindicate FP when we simply link or identify a state like desire with subjective value. So we might say that choice involves selecting from among objects for which we feel competing levels of desire. A monkey faced with a choice between grapes, bananas, and raisins is essentially faced with the task of selecting from among competing desires for each of the fruits, and perhaps chooses on the basis of beliefs about the quantities available. Two grapes, the monkey *believes*, satisfy its *desires* better than one raisin. Dopamine, synaptic plasticity, learning, and so on, are merely the lower-level neurophysiological mechanisms upon which the cognitive events must supervene given the inevitability of beliefs and desires (see Jackson and Pettit 1990).

The problem is that this approach seems to jeopardize the causal relevance of beliefs and desires as understood in the going philosophical theories of MM. For example, Humeans claim that moral beliefs are insufficient for motivation because beliefs require the presence (or co-occurrence) of a desire to motivate. Anti-Humeans deny this, generally because they are drawn to some kind of motivational internalism. On the account just given, the Humean theory is—on the most charitable reading—just trivially true. It is true in a manner of speaking that desires are required for motivation. But the requirement is trivial, failing to provide a meaningful explanation of the target phenomenon, because desires in this sense are present to varying degrees in *all* of the options, including those that are ultimately bypassed by the chooser. It is this latter point that Humeanism simply overlooks. The addition of desire cannot be an adequate explanation for

motivation if varying degrees of desire are already in place in each of the options. Desire, understood as SV, must be present for motivation precisely because in any real choice SV is always present. Thus, even on a charitable reading, Humeanism as a way explaining the phenomenon is true but nevertheless very far from insightful or explanatory. There is much more going on here than the mere presence or co-occurrence of desire in the FP sense. Proponents of FP theories will need a better way to defend the explanatory relevance of their (disputes about) FP mental state postulates in light of the data.

Another, perhaps more plausible, proposal to suggest on behalf of FP is that desires are somehow linked to utilities rather than SVs. After all, utilities in decision theory are psychological constructs about the value of an item to the agent, which more or less amounts to the commonsensical idea of desirability (I will return to this point again in the final section). Moreover, since desires like utilities sometimes fail to predict choice, this seems an especially appealing possibility.

On this proposal, however, we end up facing precisely the same difficulty that has hampered EUT since the Allais paradox. Utilities are regarded as psychological entities, but as an empirical fact they are revealed behaviorally, by physical choice selection. This means that, in identifying desires with utilities, it will have to be true that utilities, and hence desires, always predict choice. But the Allais paradox shows that they do not. More problematic still, one need not even appeal to technical developments in economics to make this point. As Gauker (2005) points out in addressing the conceptual matter of the relationship between beliefs and desires (i.e., the possibility of a so-called belief-desire law that relates beliefs to desires conceptually), the simple fact is that people do not always do what they most desire to do. Any theory that requires this is already false. Utility simply is not a perfect predictor of choice.

So far the problem encountered is one of explanatory adequacy: because of the simplicity and generality of FP, FP theories of decision and motivation lack explanatory power. One solution is to add a bit of complexity to our FP concepts so as to permit FP explanations to keep pace with the advances in the science of decision. But as we work to find ways to make FP fit with the developments in neuroeconomics, we have to keep in mind that for FP to *be* FP, we need to preserve the basic, commonsense ideas about what these states amount to. The folksiness

of FP is an important constraint on the amount of complexity we can add to FP explanations.

Traditionally, folksiness has meant understanding beliefs and desires in terms of directions of fit. The basic idea behind directions of fit is usually attributed to Anscombe (1957), but it is now widely discussed in the philosophical literature. One formulation, from Schroeder (2009), holds that desires have a world-to-mind direction of fit, which makes them like imperatives that are satisfied when the world changes as they command. Beliefs, by contrast, have a mind-to-world direction of fit, and so are like declarative sentences, satisfied when they are made to match the world. But as we look for ways to map these concepts onto neural explanations, adding nuance to gain explanatory adequacy, we are forced away from these commonsensical characteristics of FP states.

The idea of directions of fit is useful (perhaps as a metaphor) for explaining or rationalizing our neat, intuitive conceptual distinction between commonsense notions of belief and desire, but, as we have just seen, we need something more nuanced than directions of fit to adequately explain why agents choose what they do. As the Allais paradox and Gauker's argument about a belief-desire law show, people do not in fact simply go around shaping the world to their minds. Such an explanation for choice behavior is not just unsatisfying but false. If the commonsense concept of desire can be made relevant to the explanation of choice, it will not be by virtue of a vague (or possibly metaphorical) explanation of commonsense psychological states in terms of directions of fit. For this would require an explanation of choice in terms of desire-as-world-shaping that explains why a state that is *defined* in terms of an agent's world shaping is a state that often flatly fails to predict how an agent will in fact attempt to shape the world. The point is that this shortcoming can be corrected, of course, by supplementing the FP definition with a list of caveats that help us to better predict and explain choice behavior. But there is nothing commonsensical or folksy about mental state concepts loaded with asterisks explaining the various exceptions. More importantly still, the very act of developing that list of exceptions looks much more like the undertaking of an empirical investigation than the application of an indispensable postulate of a folk theory.

But there is perhaps another route for the proponent of FP to try. Suppose, again, that we insist on the connection between FP postulates

like beliefs and desires and the psychological construct of utility. For the reasons we have just seen, equating desires with either SVs or utilities will not work. But we might instead argue that an agent has representations of facts about the value or worth of each of their options. That is, the agent has something more like *beliefs* in the FP sense about the values of the options on offer. This avoids the previously discussed problems with saying that desires are like utilities, while still preserving a crucial role for FP postulates. Now the utilities are linked to beliefs—beliefs about the worth of the items on offer. Yet this seems to get the traditional dispute about Humeanism backwards. In the traditional dispute, the question was not how beliefs about values tip the scales in cases of competing desires but precisely the opposite. Humeans claim that we need desires to tip the scales in motivating us to act in accordance with our beliefs. So such an account might find some room for FP but only by turning the dispute about Humeanism in the wrong direction. Such a result would upend any claim about the indispensability, accuracy, or utility of FP.

These proposals no doubt fail to exhaust the possible FP-friendly interpretations of data from neuroscience. However, that is really not my goal here. Rather, this discussion is illustrative. In considering just a few of the most readily apparent ways to preserve FP explanations a difficult tradeoff already emerges. As neuroscience advances, theories rooted in FP are likely to face a difficult choice between advancing their empirical adequacy and maintaining conceptual coherence. More importantly, though, it seems to me that this result is to be expected given the way in which the concepts most relevant to the explanation of choice and motivation have developed along with the sciences.

CONCEPTUAL DEVELOPMENT IN THE SPECIAL SCIENCES

The trouble with the traditional philosophical accounts of moral judgment and motivation is that they rest on folk psychology, while the neuroscience of decision has scaled down to lower levels of investigation such as brain regions and cells, not from FP but from economic theory, where the relevant psychological concepts emerge from behavioral data not preliminary philosophical hunches formed independently of any systematic empirical investigation into how best to distinguish mental state types. This is precisely the sense in which conceptual progress is guided by the sciences themselves, in this case by economic theory, rather than prior commitments to purportedly

indispensable conceptual frameworks. This in turn grounds my claim that putatively naturalistic attempts to interpret the data to fit traditional philosophical frameworks may in fact run contrary to naturalism in the sense that they implicitly promote the traditional and artificial demarcation between *a priori* philosophy of mind and empirical science.

On the traditional division of labor sketched earlier, conceptual developments and clarifications are expected to set the constraints on scientific theorizing. This is precisely why proponents of FP are inclined to find ways to reconcile the concepts of FP with those of neuroeconomics. These theories must be congruous, the argument goes, because concepts like subjective value in neuroeconomics are products of basic conceptual clarifications: something must occupy the role of desire in economic theory. Jackson and Pettit (1990), as noted above, have articulated this argument explicitly. Yet the results of the preceding section show that something has gone wrong with this argument.

Firstly, it seems that no conceptual role in neuroeconomics is straightforwardly consistent with FP's conceptual apparatus, or with acceptable modifications of it. There seems no clear place for desire in the traditional FP sense in neuroeconomics. At least, there is presently no clear way of defending the idea that FP concepts add anything of importance (let alone that they are indispensable) to the explanatory account of decision-making under development.

Secondly, and more importantly, even if some FP concept could occupy a role in neuroeconomics, the fact is that the conceptual role was nevertheless *not* a product of prior philosophy or commonsense psychology but rather a product of the development of economic theory. The postulates from which neuroeconomists are working are those of such economic theories as EUT, not commonsense psychology. This is because it is EUT rather than FP that furnishes the concepts, like utility, that are based on empirical measurements (or experiments designed to take those measurements) that must be accounted for in the final explanation. Utility in EUT is a way of characterizing raw data, i.e., a set of observations about the empirical world—observable and quantifiable selections or preferences of individual agents—that stands in need of explanation. The goal of developing an explanation of decision-making in neural terms is to explain precisely that set of raw data about choices or preferences. It is no surprise then that the

concepts needed to quantify those preferences will serve as the conceptual foundations of the newly developed theory. It is utility, not desire, which describes those observable choice selections or, in psychological parlance, preferences. If I choose one grape to one apple, I exhibit (behaviorally) a (psychological) preference for grapes. The preference for grapes in this economic sense rather than the desire for grapes in the FP sense is what neuroeconomics seeks to explain. It does not even aim to explain our ordinary concept of desire.

At the outset I said that this paper should not be read as an argument for eliminativism about FP states. The reason should now be clearer. I do not wish to argue here about whether agents undergo beliefs and desires, or whether beliefs and desires are real psychological states in a deep metaphysical sense. The relevant question as I see it is not whether those states exist but whether they figure into scientific explanations of choice behavior.⁹ They do not, as least as far as neuroeconomics is concerned. And this is all the more reason to avoid the practice of forcibly mapping them onto the results of empirical science. Those empirical results are already mapped onto their relevant higher-level concepts, which are the concepts dictated by the raw empirical observations that serve as the target phenomena in need of explanation.

One possible strategy for proponents of FP to pursue in response to this argument is to make their case for the indispensability of FP at higher scientific levels. It seems to me that defenders of the explanatory relevance of FP states have generally tried to show that neuroscientific explanations preserve the conceptual framework of FP (e.g., Schroeder 2004). They might instead turn their attention to the relationship between FP and other higher-level theories such as EUT, rather than neuroscience. Neuroscience might have more to say about desires if desires in the FP sense figured into the higher level empirical theories from which neuroscience sets off.

But that strategy too is problematic. The problem is that the concept of utility in EUT more or less just is the attempt by scientists to capture the essence of our commonsense notion of desire. The economist Daniel Kahneman has recently been very explicit about this point:

⁹ The view I am developing here shares some characteristics with what Bickle (2012) calls “little-e eliminativism”. His argument appeals not to neuroeconomics but rather to affective neuroscience.

As economists and decision theorists apply the term, it means “wantability”—and I have called it *decision utility*. Expected utility theory, for example, is entirely about the rules of rationality that should govern decision utilities; it has nothing at all to say about hedonic experiences. Of course, the two concepts of utility will coincide if people want what they will enjoy, and enjoy what they chose for themselves—and this assumption of coincidence is implicit in the general idea that economic agents are rational (Kahneman 2011, 377; original emphases).

Since the concept of utility is used to capture the quantifiable element of desire—the relative wantability of something; its likelihood of being chosen from among competing options—and it is this element rather than the concept of desire in the FP sense that serves these empirical purposes, it is hard to make sense of the demand that economists ought to do more with the concept of desire than they have. For that seems to amount to little more than the claim that the special sciences, including psychology and economics, have failed to take seriously our commonsense intuitions about the structure of the mind. If the sciences have failed in this regard, there are really only two possible explanations, neither of which will prove useful to proponents of FP. Either the special sciences have neglected those intuitions because those intuitions were flawed, somehow the products of confusion that require no explanation, or the special sciences have neglected those intuitions because they express facts about the world—raw data or observations—that the sciences simply cannot access.

Proponents of FP will obviously resist the first answer, since their goal is to defend the inevitability of FP. This leaves only the second answer as a real possibility. But what kind of raw data have economists and psychologists neglected due to inaccessibility? It cannot be observational data about preferences, since as we have just seen those are empirically accessible by way of behavior, and the concept of utility is built to organize observations of preferences. So it must then be a kind of introspective data that has been neglected. Psychology and economic theory, the proponents of FP claim, fail to explain our first-person experiences of our own mental states in the way we hoped or expected. Economic explanations of preferences ought to do more to accommodate what we know, through first-person subjective experience, to be true about ourselves, namely that we have desires (and, by extrapolation, so do others).

In this case the objection depends upon the assumption that first-

person introspective experience itself counts as the kind of raw data that simply cannot be ignored, whatever science says. As FP realists like Horgan and Graham put it, “our ordinary epistemic standards for folk psychological attributions are linked so closely to the truth or satisfaction conditions of such attributions that the truth of FP is beyond all serious doubt” (1990, 109). The thing to notice about this response is that, whether or not it works philosophically, it is characteristically anti-naturalistic in its insisting that there are some philosophical conclusions about human psychology that science could not ever overturn. Such a conclusion seems obviously incompatible with the pursuit of projects that involve attempt to show that neuroscience vindicates FP. If our first-person knowledge of desires is incontrovertible evidence of their existence then there is simply no point in looking to the sciences for support or vindication, as many philosophers are recently wont to do.

This brings me back to the broader implications for naturalism. Either the sciences sometimes guide the development of philosophical concepts or they do not. The latter position, which holds that the sciences do not guide conceptual development, privileges the traditional division of labor between philosophy and science. On this view we need not check disputes about philosophical theories against results in the sciences at all since those sciences fail to capture indisputable psychological facts. The former view, which holds that the sciences can in fact guide conceptual development in important ways, emphasizes the continuity between philosophy and science as a necessary feature of naturalism proper.

CONCLUSION

The increasing empirical sophistication of philosophers, who now regularly appeal to scientific data for the purpose of constraining and adjudicating philosophical theorizing, is encouraging, especially to those of us who take philosophical and scientific inquiry to be continuous in their aims and methods. Still, I have argued, any such naturalistic approaches that leave unexamined the conceptual frameworks of traditional philosophical disputes are likely to fall short of genuine continuity. The case of decision-making and motivation is illustrative. The discontinuity between philosophical accounts of judgment and motivation, with their FP frameworks, and the developing empirical sciences of decision, such as neuroeconomics, shows not just

that we may have been too willing as philosophers to invent our psychology from scratch (Darwall, et al. 1992), but more importantly that we have so far paid too little attention to the ways in which the special sciences can themselves guide important conceptual developments.

In closing, I want to call attention directly to what many readers will regard as a loose end. This is the connection between *moral* philosophy and the special sciences. After all, I began by discussing the relationship between naturalism and philosophical *moral* psychology while much of the argument focused on the science of decision and motivation more generally. Earlier I argued that because moral cognition is a subset of cognition, there is no special reason to worry about moving from moral decision-making and motivation to decision-making and motivation more generally. Still, one might wonder why the connection is needed at all. What does moral philosophy really have to do with the preceding argument? I want to conclude with two brief remarks on this issue.

Firstly, the connection has a long and important history. A good deal of philosophical interest in the empirical psychology and neuroscience of motivation has come by way of traditional philosophical interest in morality and moral agency. Philosophical naturalism owes a significant debt to metaethics for developing the idea of continuity between philosophy and the sciences. The study of morality and moral agency was not so long ago squarely in the province of philosophy or theology (Doris and Stich 2007). Today moral philosophers play prominent roles in scientific laboratories and collaboration between philosophers and psychologists is commonplace. Perhaps channeling Hume, moral philosophers now spend a good deal of time drawing connections between human psychology and moral agency. As Hume saw, some of the most interesting questions about human psychology are at the same time questions about moral norms and one's relationship to others and the world around us. The question of whether it is contrary to reason for me to prefer the destruction of the whole world to the scratching of my finger has an unavoidably moral flavor. Because morality exists not in a philosophical vacuum but as a relationship between rational agents, it should not be altogether surprising (though it nevertheless shows remarkable prescience) that in the 1950s philosophers like Anscombe, as quoted in my epigraph, were already calling attention to the impossibility of genuine progress in ethics independently of progress in philosophical psychology.

Secondly, and relatedly, this paper's argument begins with a focus on moral philosophy precisely because it is in moral philosophy—in metaethics and philosophical moral psychology in particular—that we now find a rather useful philosophical framework for assessing philosophical presuppositions about human judgment, decision-making, and motivation against developing empirical claims. Disputes between Humeans and anti-Humeans, and motivational internalists and externalists are well suited to this paper's argument because they are prominent in the philosophical literature, a point of interest for scientifically minded philosophers, and yet open to empirical examination in the sense that their conceptual presuppositions can now be directly investigated by neuroscientists. Whether agents are necessarily motivated to choose in accordance with their beliefs turns out to be the kind of conceptually and empirically complicated question about which the special sciences have much to say. The questions about moral agency need not—as Anscombe, Darwall, and many other philosophers have argued, *should* not—be decided by unaided philosophical intuitions about human psychology. There are more resources from which to draw.

The central argument in this paper draws initially on moral philosophy not because it aims to show that scientific developments such as those in neuroeconomics speak to moral philosophers exclusively, but rather because moral philosophy has been, to its credit, a field rich with interest in the direct application of scientific data to traditional philosophical theorizing. As a result, it has done a great deal to advance our understanding of what philosophical naturalism amounts to in principle and in practice. The implication of my argument, then, is not that philosophical moral psychology is to be singled out for falling short of naturalistic standards but rather that in emphasizing the relationship between moral agency and rational agency it has given us a new vantage point on the old demarcation problem.

REFERENCES

- Altham, James E. J. 1986. The legacy of emotivism. In *Fact, science and morality: essays on A. J. Ayer's Language, truth and logic*, eds. Graham Macdonald, and Crispin Wright. Basil Blackwell, 275-288.
- Anscombe, G. Elizabeth M. 1957. *Intention*. Basil Blackwell.
- Anscombe, G. Elizabeth M. 1958. Modern moral philosophy. *Philosophy*, 33 (124): 1-19.
- Bayer, Hannah M., and Paul W. Glimcher. 2005. Midbrain dopamine neurons encode a quantitative reward prediction error signal. *Neuron*, 47 (1): 129-141.

- Bickle, John. 2012. Finding the mechanisms of affect. In *Categorical versus dimensional models of affect: a seminar on the theories of Panksepp and Russell*, eds. Peter Zachar, and Ralph Ellis. Amsterdam: John Benjamins Publishing Co., 175-187.
- Darwall, Stephen, Alan Gibbard, and Peter Railton. 1992. Toward fin de siècle ethics: some trends. *The Philosophical Review*, 101 (1): 115-189.
- Dennett, Daniel. 1987. *The intentional stance*. Cambridge: MIT Press.
- Doris, John, and Stephen Stich. 2007. As a matter of fact: empirical perspectives on ethics. In *The Oxford handbook of contemporary philosophy*, eds. Frank Jackson, and Michael Smith. New York: Oxford University Press, 114-152.
- Gauker, Christopher. 2005. The belief-desire law. *Facta Philosophica*, 7 (2): 121-144.
- Glimcher, Paul W., Colin F. Camerer, Ernst Fehr, and Russell A. Poldrack. 2009. Introduction: a brief history of neuroeconomics. In *Neuroeconomics: decision making and the brain*, eds. Paul Glimcher, Colin F. Camerer, Ernst Fehr, and Russell A. Poldrack. London: Academic Press, 1-11.
- Glimcher, Paul W. 2009. Choice: towards a standard back-pocket model. In *Neuroeconomics: decision making and the brain*, eds. Paul Glimcher, Colin F. Camerer, Ernst Fehr, and Russell A. Poldrack. London: Academic Press, 503-520.
- Greene, Joshua, and Jonathan Haidt. 2002. How (and where) does moral judgment work? *Trends in Cognitive Sciences*, 6 (12): 517-523.
- Horgan, Terence, and George Graham. 1990. In defense of southern fundamentalism. *Philosophical Studies*, 62: 107-134.
- Jackson, Frank, and Philip Pettit. 1990. In defence of folk psychology. *Philosophical Studies*, 59 (1): 31-54.
- Kable, Joseph W., and Paul W. Glimcher. 2009. The neurobiology of decision: consensus and controversy. *Neuron*, 63 (6): 733-745.
- Kahneman, Daniel, and Amos Tversky. 1979. Prospect theory: an analysis of decision under risk. *Econometrica*, 47 (2): 263-291.
- Kahneman, Daniel. 2011. *Thinking fast and slow*. New York: Farrar, Strauss and Giroux.
- Kennett, Jeanette, and Cordelia Fine. 2009. Will the real moral judgment please stand up? The implications of social intuitionist models of cognition for meta-ethics and moral psychology. *Ethical Theory and Moral Practice*, 12 (1): 77-96.
- Moll, Jorge, Ricardo de Oliveira-Souza, Ivanei E. Bramati, and Jordan Grafman. 2002. Functional networks in emotional and nonmoral social judgments. *NeuroImage*, 16 (3A): 696-703.
- Padoa-Schioppa, Camillo, and John A. Assad. 2006. Neurons in the orbitofrontal cortex encode economic value. *Nature*, 441: 223-226.
- Padoa-Schioppa, Camillo, and John A. Assad. 2008. The representation of economic value in the orbitofrontal cortex is invariant for changes of menu. *Nature Neuroscience*, 11: 95-102.
- Prinz, Jesse. 2006. The emotional basis of moral judgments. *Philosophical Explorations*, 9 (1): 29-43.
- Quine, Willard Van Orman. 1969. *Ontological relativity and other essays*. New York: Columbia University Press.
- Roitman, Jamie D. and Michael N. Shadlen. 2002. Response of neurons in the lateral intraparietal area during a combined visual discrimination reaction time task. *Journal of Neuroscience*, 22 (21): 9475-9489.

- Roskies, Adina. 2003. Are ethical judgments intrinsically motivational? Lessons from 'acquired sociopathy'. *Philosophical Psychology*, 16 (1): 51-66.
- Roskies, Adina. 2006. A case study in neuroethics: the nature of moral judgment. In *Neuroethics: defining the issues in theory, practice, and policy*, ed. Judy Illes. Oxford: Oxford University Press, 17-32.
- Rustichini, Aldo. 2009. Neuroeconomics: formal models of decision making and cognitive neuroscience. In *Neuroeconomics: decision making and the brain*, eds. Paul Glimcher, Colin F. Camerer, Ernst Fehr, and Russell A. Poldrack. London: Academic Press, 33-45.
- Samejima, Kazuyuki, Yasumasa Ueda, Kenji Doya, and Minoru Kimura. 2005. Representation of action-specific reward values in the striatum. *Science*, 310: 1337-1340.
- Sanfey, Alan, Mire Stallen, and Luke J. Chang. 2014. Norms and expectations in social decision making. *Trends in Cognitive Science*, 18 (4): 172-174.
- Schroeder, Timothy. 2004. *Three faces of desire*. Oxford University Press.
- Schroeder, Timothy. 2009. Desire. *The Stanford Encyclopedia of Philosophy*, ed. Edward N. Zalta.
- Schroeder, Timothy, Adina Roskies, and Shaun Nichols. 2010. Moral motivation. In *The moral psychology handbook*, ed. John Doris. Oxford University Press, 72-110.
- Schultz, Wolfram, Peter Dayan, and P. Read Montague. 1997. A neural substrate of prediction and reward. *Science*, 275: 1593-1599.
- Shadlen, Michael N., and William T. Newsome. 2001. Neural basis of a perceptual decision in the parietal cortex (area LIP) of the rhesus monkey. *Journal of Neurophysiology*, 86: 1916-36.
- Stich, Stephen. 1983. *From folk psychology to cognitive science: the case against belief*. Cambridge: MIT Press.

Daniel Hartner is assistant professor of philosophy at the Rose-Hulman Institute of Technology in Terre Haute, Indiana. His research focuses primarily on issues in neuroethics and the relationship between philosophy and neuroscience.

Contact e-mail: <hartner@rose-hulman.edu>

A category-mistake in the classical labour theory of value

IAN WRIGHT

The Open University

Abstract: The classical labour theory of value generates two well-known contradictions: Ricardo's problem of an invariable measure of value and Marx's transformation problem. I show that both contradictions derive from a category-mistake of supposing that technical costs and total costs are of the same logical type. This category-mistake is the underlying cause of the almost two hundred year history of the 'value controversy'. Once identified we can avoid the mistake, which reveals a more general labour theory of value with an invariable measure of value and without a transformation problem.

Keywords: classical political economy, labour theory of value, Ricardo, Marx, problem of an invariable measure, transformation problem

JEL Classification: B51, E11, D46

The natural prices of reproducible commodities vary with the distribution of income whereas their real costs of production, measured in labour time, do not. In consequence, labour costs cannot fully explain the structure of natural prices. This explanatory gap creates two famous problems in the classical labour theory of value: David Ricardo's problem of an invariable measure of value and Karl Marx's transformation problem. The problems imply that a labour theory of value is, at best, incomplete, or worse, logically incoherent (e.g., Seton 1957; Samuelson 1971; Lippi 1979; Steedman 1981).

Nonetheless, dissatisfaction with economic foundations based on the "shallow and superficial framework of supply and demand concepts" (Foley 2000, 2) has ensured a continued interest in the classical problems.

AUTHOR'S NOTE: This work is the result of my current PhD studies supervised by Andrew Trigg at the Open University. Feedback from many people helped me refine the ideas that resulted in this paper. I would particularly like to express gratitude to Andrew Trigg, David Zachariah, Fernando Martins, Angelo Reati, Peter Flaschel, members of the OPE-L discussion group, the editors of this journal and the anonymous referees.

Despite significant intellectual effort, however, the classical problems remain essentially insoluble (see Howard and King 1989, chapter 2; Howard and King 1992, chapter 14).

For “ordinary language philosophers” (Passmore 1978, 424-465), such as Gilbert Ryle (1984 [1949]) and Ludwig Wittgenstein (1953), the underlying cause of a long-lived and insoluble problem is often a hidden conceptual confusion or mistake. The problem is insoluble because the conceptual framework in which the problem is stated is itself faulty. The problem must therefore be deflated or dissolved by applying “conceptual analysis” (Sloman 1978, chapter 4).

For instance, Ryle introduced the term “category-mistake” (Ryle 1984 [1949], chapter 1) to denote the conceptual error of expecting some concept or thing to possess properties it cannot have. For example, John Doe may be a relative, friend, enemy or stranger to Richard Roe; but he cannot be any of these things to the “Average Taxpayer”. So if “John Doe continues to think of the Average Taxpayer as a fellow-citizen, he will tend to think of him as an elusive an insubstantial man, a ghost who is everywhere yet nowhere” (Ryle 1984 [1949], 18).

The argument of this essay is that the contradictions of the classical labour theory of value derive from a “theoretically interesting category-mistake” (Ryle 1984 [1949], 19), specifically the mistake of supposing that classical labour-values, which measure strictly *technical* costs of production, are of the same logical type as natural prices, which measure *social* costs of production, and in consequence labour-values and prices, under appropriate equilibrium conditions, are mutually consistent. Since this supposition is mistaken, Ricardo’s search for an invariable measure of value and Marx’s search for a transformation between labour-values and prices attempt to discover a commensurate relationship between concepts defined by incommensurate cost accounting conventions. They therefore seek an “elusive and insubstantial man” or “ghost”.

The identification of a category-mistake allows a resolution of the classical problems by “giving prominence to distinctions which our ordinary forms of language make us easily overlook” (Wittgenstein 1953, § 132). Such distinctions can then solve, or more accurately, dissolve the problems.

This essay therefore draws a new distinction, lacking in the classical labour theory, between a technical and a total measure of labour cost, where technical labour cost corresponds to the classical concept and total

labour cost includes additional real costs of production incurred in virtue of non-technical, or social, conditions of production, such as production financed by money-capital. The more refined conceptual framework separates theoretical concerns that are conflated in the classical theory. For example, classical labour-values apply to distribution-independent questions about an economy, such as the productivity of labour over time or the quantity of “surplus labour” supplied by workers to capitalists (i.e., technical issues or questions in the theory of labour exploitation), whereas total labour-values apply to distribution-dependent questions, such as the relationship between nominal prices and the actual labour time required to produce commodities (i.e., issues in the theory of economic value). The classical problems dissolve by generalizing the classical labour theory to apply both concepts of labour cost in the appropriate contexts. In consequence, I sketch, in an initial and incomplete manner, a new theoretical object: a more general labour theory of value with an invariable measure of value and without a transformation problem.

The structure of this essay is as follows. The next three sections specify how the classical problems manifest in the simplest possible case—that of a capitalist economy in steady-state equilibrium. A section then introduces the concept of a ‘total labour cost’, in contradistinction to the classical concept, by applying conceptual analysis to the concept ‘labour-value’. The following three sections formally define total labour costs in the case of steady-state equilibrium. The final three sections explain how the new distinction dissolves the classical problems.

THE DEFINITION OF ‘LABOUR-VALUE’

Since the seminal contribution of Ladislaus von Bortkiewicz (1975 [1907]), the transformation problem is normally defined in terms of properties of simultaneous equations.¹ I therefore begin by translating the classical concept of ‘labour-value’ into linear production theory (e.g., see Kurz and Salvadori 1995). The formality imparts precise semantics to our key concepts, which helps identify the conceptual mistake.

Assume $n \in \mathbb{Z}^+$ sectors that specialize in the production of one commodity type. The technique is a non-negative $n \times n$ input-output matrix of inter-sector coefficients, $\mathbf{A} = [a_{i,j}]$. Each $a_{i,j} \geq 0$ is the quantity of commodity i directly required to produce one unit of commodity j . Assume (i) \mathbf{A} is fully connected, (ii) $\mathbf{I} - \mathbf{A}$ is of full rank, and (iii) there exists

¹ For examples of alternative interpretations, see Elson 1979 and Fine and Saad-Filho 2004, 133.

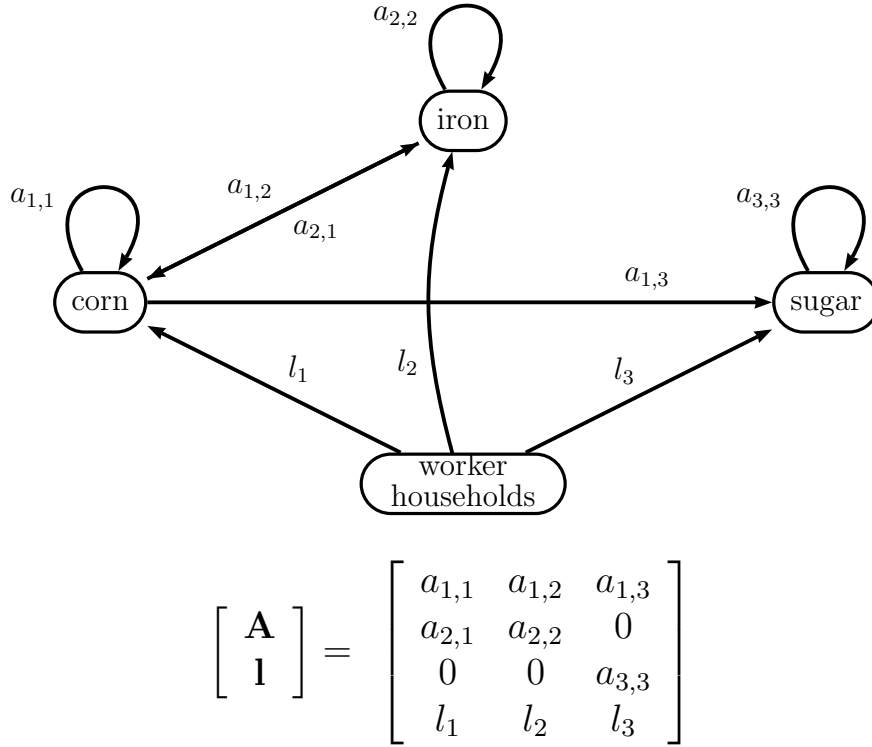


Figure 1: A technique for an example 3-sector economy depicted as a directed graph and a matrix.

a vector $\mathbf{x}^T \in \mathbb{R}_+^n$ such that $\mathbf{x}^T > \mathbf{A}\mathbf{x}^T$, i.e., the technique is productive. The elements of the $1 \times n$ vector, $\mathbf{l} = [l_i]$, are direct labour coefficients, where each $l_i > 0$ is the quantity of labour directly required to output 1 unit of commodity i . Figure 1 depicts an example technique both as a matrix and weighted directed graph.

The total “coexisting labour” (see Hodgskin 1825; Marx 2000, chapter 21, section 3; Perelman 1987, chapter 5) supplied to *reproduce* commodity i is the direct labour operating in sector i *plus* the indirect labour operating in other sectors of the economy that is simultaneously supplied, in parallel, to replace *all* the commodity inputs used-up during the production of 1 unit of commodity i .

Commodities vary in their “difficulty of production” (e.g., Ricardo 2005 [1817], 106) because they require different quantities of coexisting labour for their reproduction. The classical labour theory of value is founded on this objective cost property of commodities, i.e., their labour-value.

To calculate a labour-value we vertically integrate over the technique (e.g., Pasinetti 1980). For example, production of unit i uses-up direct labour l_i plus the bundle of input commodities $\mathbf{A}^{(i)}$ (i.e., column i of ma-

trix \mathbf{A}). This used-up input bundle is replaced by the simultaneous expenditure of indirect labour $\mathbf{IA}^{(i)}$ operating in other sectors. But this production itself uses-up another bundle of input commodities $\mathbf{AA}^{(i)}$, which is also replaced by the simultaneous expenditure of an additional amount of indirect labour $\mathbf{IAA}^{(i)}$. To count all the coexisting labour, v_i , we continue the sum; that is,

$$\begin{aligned} v_i &= l_i + \mathbf{IA}^{(i)} + \mathbf{IAA}^{(i)} + \mathbf{IA}^2\mathbf{A}^{(i)} + \dots \\ &= l_i + \mathbf{I}(\mathbf{I} + \mathbf{A} + \mathbf{A}^2 + \dots)\mathbf{A}^{(i)} \\ &= l_i + \mathbf{I}\left(\sum_{n=0}^{\infty} \mathbf{A}^n\right)\mathbf{A}^{(i)}. \end{aligned} \quad (1)$$

This infinite sum converges since the technique is productive (see Lancaster 1968, chapter 6). The vector of labour-values, from Equation (1), is then

$$\mathbf{v} = \mathbf{l} + \mathbf{I}\left(\sum_{n=0}^{\infty} \mathbf{A}^n\right)\mathbf{A} = \mathbf{l} \sum_{n=0}^{\infty} \mathbf{A}^n.$$

An alternative representation of the infinite series $\sum \mathbf{A}^n$ is the Leontief inverse $(\mathbf{I} - \mathbf{A})^{-1}$. Hence, $\mathbf{v} = \mathbf{l}(\mathbf{I} - \mathbf{A})^{-1}$; that is:

Definition 1. “Classical labour-values”, \mathbf{v} , are given by

$$\mathbf{v} = \mathbf{vA} + \mathbf{l}. \quad (2)$$

Now that we have defined labour-values, let us turn to two famous contradictions in the classical labour theory of value.

RICARDO’S PROBLEM OF AN INVARIABLE MEASURE OF VALUE

Consider a tree A that is twice the height of a tree B. At a later date tree A is three times the height of tree B. Assume we only know the *relative* change in heights. Does this change indicate that tree A has increased in size, tree B has decreased in size, or some combination of these causes? To answer this question we need an *absolute* measure of height that is *invariable* over time.

The metre is such an invariable standard. We measure the absolute height of tree A and B in metres, both before and after the change. Then we can unambiguously determine the cause of the variation in relative heights.

The definition and adoption of the metre by the French state after the revolution in 1793 was accompanied by much theoretical debate and reflection (Roncaglia 2005, 192). Ricardo, a contemporary of these events, recognized that an objective theory of economic value requires an analogous invariable standard of measurement.

Market prices—whether stated in terms of exchange ratios between commodities or in terms of a money-commodity—cannot function as a standard because prices merely indicate relative values:

If for example a piece of cloth is now the value of 2 ounces of gold and was formerly the value of four I cannot positively say that the cloth is only half as valuable as before, because it is possible that the gold may be twice as valuable as before (Ricardo 2005a, 289).

The cause of an altered exchange ratio might be due to an alteration in the absolute value of the standard itself. Picking a market price to measure absolute value is analogous to picking the height of a specific tree to function as an invariable standard of length. Between measurements the chosen tree might grow (or get cut down in size).

Perhaps we should not try to find a standard? This is not an option because, lacking an invariable standard, the theory of value collapses into subjectivity, leaving “every one to chuse his own measure of value” (Ricardo 2005a, 370). In consequence, public statements about objective value, such as ‘commodity A is now less valuable than one year ago’, would, strictly speaking, be nonsense.

Ricardo states that if we had “possession of the knowledge of the law which regulates the exchangeable-value of commodities, we should be only one step from the discovery of the measure of absolute value” (Ricardo 2005b, 315). Ricardo therefore looks beyond exchange ratios in the marketplace to seek a regulating cause that might constitute a “standard in nature” (Ricardo 2005a, 381).

Ricardo defines “natural prices” as stable exchange ratios that are independent of “accidental and temporary deviations” (Ricardo 2005 [1817], 109) between supply and demand. Reproducible commodities are those “that may be multiplied [...] almost without any assignable limit, if we are disposed to bestow the labour necessary to obtain them” (Ricardo 2005 [1817], 59). Ricardo claims that the natural price of a reproducible commodity is regulated by its “difficulty of production” measured in labour time (e.g., Ricardo 2005 [1817], chapter 4). In conditions of constant

“difficulty of production” market prices gravitate toward or around their natural prices due to profit-seeking behavior, which reallocates capital to high-profit sectors and away from low-profit sectors.

Such natural prices, or “prices of production” (Marx 1971 [1894], ch. 9), are equilibrium prices with uniform profit-rates,

$$\mathbf{p} = (\mathbf{pA} + \mathbf{l}w)(1 + r), \quad (3)$$

where \mathbf{p} is a vector of prices (measured, say, in pounds sterling), w is a wage rate (pounds per hour), and r is a uniform rate of profit or percentage interest-rate on the money invested to fund the period of production. Equation (3) states that the production price p_i of commodity-type i has three components: (i) the cost of the input bundle, $\mathbf{pA}^{(i)}$, paid to other sectors of production, (ii) the wage costs, $l_i w$, paid to workers in sector i , and (iii) the profits, $(\mathbf{pA}^{(i)} + l_i w)r$, received by capitalists, as owners of firms in this sector, on the money-capital they advance to pay input and direct labour costs (collectively, the cost-price).

Now if “difficulty of production”, measured in units of labour, in fact regulates natural prices then, in theory, we can measure (absolute) labour-values to unambiguously determine the cause of variations in (relative) prices. We would have identified a “standard in nature” and Ricardo could “speak of the variation of other things, without embarrassing myself on every occasion with the consideration of the possible alteration in the value of the medium in which price and value are estimated” (Ricardo 2005 [1817], 80).

In fact, in some special cases labour-values do vary one-to-one with natural prices. For instance, Adam Smith (1994 [1776], 53) restricts the applicability of a labour theory of value to an “early and rude state of society” that precedes the “accumulation of stock”, where profits are absent and “the whole produce of labour belongs to the labourer”. In these circumstances a natural price is simply the wage bill of the total coexisting labour supplied to produce the commodity; that is,

Proposition 1. $r = 0$ implies $\mathbf{p} = w\mathbf{v}$ (see appendix for proof).

So prices are proportional to labour-values with constant of proportionality w . Hence (relative) prices vary one-to-one with (absolute) labour-values.

But in general natural prices fail to vary one-to-one with labour-values. The reason is simple: production prices, \mathbf{p} , are a function of the profit-rate, r , but labour-values, \mathbf{v} , are not. Hence a variation in the profit-rate alters prices but leaves labour-values entirely unchanged. As Ricardo (2005a) clearly identifies: price depends on the distribution of income (i.e., how the net product is distributed in the form of wage and profit income) but “difficulty of production”, a purely technical measure of direct and indirect labour costs, does not; therefore, production prices have an additional degree-of-freedom unrelated to labour-values. In general, *the relative value of a commodity varies independently of its absolute value*.

This is very perplexing since it is analogous to discovering that the relative size of two trees can change even though their absolute sizes, measured in metres, remain unaltered. Such a discovery would imply the metre is not an invariable standard of size, or one’s theory of size is flawed. Ricardo’s problem of an invariable standard of value arises, therefore, because his labour theory of value cannot fully account for production prices. The profit component of price appears to be unrelated to any objective labour cost. Although “the great cause of the variation of commodities is the greater or less quantity of labour that may be necessary to produce them” there is another “less powerful cause of their variation” (Ricardo 2005a, 404).

Ricardo understands the necessity for an invariable standard in his theoretical framework yet simultaneously understands the conditions that prevent this necessity from being met. Faced with a contradiction he is forced to draw the negative conclusion that there cannot be an invariable standard of value.

Now let us turn to a related problem in Marx’s theory of value.

MARX’S TRANSFORMATION PROBLEM

Marx (1954 [1887]) explicitly assumes prices are proportional to labour-values in Volume I of *Capital*. On this basis profit is the money representation of the unpaid or “surplus labour” of the working class. But Marx must establish the generality of this proposition in the case of (non-proportional) production prices. He tackles the issue in unfinished notes published as Volume III of *Capital* (Marx 1971 [1894]).

Marx proposes that *aggregates* of labour-values and production prices are proportional, even though individual prices and labour-values diverge, and therefore total profit remains the money representation of total surplus labour.

Let us reproduce Marx's reasoning in terms of linear production theory. Define $\mathbf{q} = [q_i]$ as the scale of production or gross product and $\mathbf{w} = [w_i]$ as the real wage. The total labour supplied is therefore \mathbf{lq}^T and bundle $\bar{\mathbf{w}} = (1/\mathbf{lq}^T)\mathbf{w}$ is the real wage consumed per unit of labour supplied.

Marx defines the “surplus-labour” in sector i as the labour supplied in excess of the labour-value of the real wage consumed, i.e., $l_i q_i - l_i q_i \mathbf{v} \bar{\mathbf{w}}^T$. The “rate of surplus-value”, or “degree of exploitation”, for sector i , is then the ratio of surplus-labour to the labour-value of the real wage. Marx assumes, for simplicity, that the degree of exploitation is uniform across sectors,

$$\theta = \frac{l_i q_i - l_i q_i \mathbf{v} \bar{\mathbf{w}}^T}{l_i q_i \mathbf{v} \bar{\mathbf{w}}^T} = \frac{1 - \mathbf{v} \bar{\mathbf{w}}^T}{\mathbf{v} \bar{\mathbf{w}}^T}.$$

A high (resp. low) θ implies capitalists receive a larger (resp. smaller) share of the fruits of the labour they employ.

Now, according to Marx, only “living labour” creates profit from production. Hence the profit produced in *each sector* depends on the labour directly employed in that sector (the “variable capital”) but is independent of the scale and composition of the material inputs to that sector (the “constant capital”). What, then, is the profit-rate in each sector?

Marx considers an initial situation of prices proportional to labour-values. In these circumstances a sector's profit-rate is the ratio of surplus-labour to the sum of the labour-value of constant and variable capitals,

$$r_i = \frac{(1 - \mathbf{v} \bar{\mathbf{w}}^T) l_i q_i}{\mathbf{v} \mathbf{A}^{(i)} q_i + \mathbf{v} \bar{\mathbf{w}}^T l_i q_i} = \theta \frac{1}{(\mathbf{v} \mathbf{A}^{(i)} / \mathbf{v} \bar{\mathbf{w}}^T l_i) + 1}.$$

In consequence, the profit-rates in each sector, r_i , are only equal if the “organic compositions” of capitals, that is the ratios $\mathbf{v} \mathbf{A}^{(i)} / \mathbf{v} \bar{\mathbf{w}}^T l_i$, are also all equal (Marx 1954 [1887], chapter 25, section 1). But they are not equal; hence, “in the different spheres of production with the same degree of exploitation, we find considerably different rates of profit corresponding to the different organic composition of these capitals” (Marx 1971 [1894], 155).

Marx notes that his initial situation is unstable: “The rates of profit prevailing in the various branches of production are originally very different” (Marx 1971 [1894], 158) but, during the formation of production prices, the different rates “are equalized by competition to a single general [uniform] rate of profit” (Marx 1971 [1894], 158).

Marx proposes that production prices *conservatively redistribute* the surplus-labour amongst capitalist owners (in the form of commodities purchased with profit income), at which point,

although in selling their commodities the capitalists of various spheres of production recover the value of the capital consumed in their production, they do not secure the surplus-value [i.e., surplus-labour], and consequently the profit, created in their own sphere by the production of these commodities (Marx 1971 [1894], 158).

The capitalists share the available pool of surplus-labour in proportion to the size of the money-capitals they advance rather than the size of the (value-creating) workforces they employ.

Marx provides numerical examples to demonstrate the redistribution of surplus-value. He computes a uniform (labour-value) profit-rate, r_v , by dividing the aggregate surplus-labour by the aggregate labour-value of constant and variable capital,

$$r_v = \frac{(1 - \mathbf{v}\bar{\mathbf{w}}^T)\mathbf{lq}^T}{\mathbf{vAq}^T + \mathbf{v}\bar{\mathbf{w}}^T\mathbf{lq}^T}. \quad (4)$$

Marx states that the (labour-value) profit-rate, r_v , is identical to the uniform (money) profit-rate, r , which obtains once production prices have formed. He defines ‘prices of production’ as the *initial* cost-price of a commodity, which is proportional to labour-value, marked-up by the uniform profit-rate, r_v (Marx 1971 [1894], 157). Let α be the constant of proportionality. Then we can write Marx’s production prices as

$$\mathbf{p}^* = \alpha (\mathbf{vA} + \mathbf{l}(\mathbf{v}\bar{\mathbf{w}}^T)) (1 + r_v). \quad (5)$$

Marx’s production prices \mathbf{p}^* are not proportional to labour-values:

[O]ne portion of the commodities is sold above its [labour-]value in the same proportion in which the other is sold below it. And it is only the sale of the commodities at such prices that enables the rate of profit for capitals [to be uniform], regardless of their different organic composition (Marx 1971 [1894], 157).

In Marx’s view production prices scramble and obscure the source of profit in surplus-labour. But the labour theory of value continues to hold in the aggregate because the “transformation” from unequal profit-rates

to production prices is conservative. Nominal price changes neither create nor destroy surplus-labour, but merely redistribute it.

Marx therefore claims that three aggregate equalities are invariant over the transformation: (i) the (money) profit-rate, r , is equal to the (labour-value) profit-rate, r_v ; (ii) “the sum of the profits in all spheres of production must equal the sum of the surplus-values”, (Marx 1971 [1894], 173); and (iii) “the sum of the prices of production of the total social product equal the sum of its [labour-]value” (Marx 1971 [1894], 173) (here Marx assumes, for simplicity, that $\alpha = 1$).

And in fact these equalities hold. Marx’s ‘prices of production’ are computed from the assumption that money and labour-value profit-rates are equal and therefore equality (i) is true by definition. Also, Marx’s prices \mathbf{p}^* satisfy equalities (ii) and (iii) (see Proposition 2 in the appendix). Hence, production-prices and labour-values, although non-proportional, are nonetheless one-to-one in the aggregate. Profit, despite appearances, is a money representation of surplus-labour.

But the first critic of the transformation is Marx himself. He immediately observes that “the cost-price of a commodity equalled the *value* of the commodities consumed in its production” (Marx 1971 [1894], 165). Marx’s ‘prices of production’, defined by Equation (5), are calculated on the basis of *untransformed* cost-prices, $\alpha(\mathbf{v}\mathbf{A} + \mathbf{l}(\mathbf{v}\bar{\mathbf{w}}^T))$, which are proportional to labour-value. But since this assumption is false “there is always the possibility of an error if the cost-price of a commodity in any particular sphere is identified with the [labour-]value of the means of production consumed by it” (Marx 1971 [1894], 165). As Marco Lippi (1979, 47) remarks, “the magnitudes on the basis of which surplus-value has been redistributed—that is, capital advanced, measured in [labour-]value—are not identical to the prices at which elements of capital are bought on the market. He therefore admits that the prices previously calculated must be adjusted”. However, Marx does not pursue the adjustment but instead remarks that “our present analysis does not necessitate a closer examination of this point” (Marx 1971 [1894], 165).

Once we make this adjustment then production prices are not defined by Marx’s Equation (5) but by Equation (3). And now Marx’s aggregate equalities do not hold, except in certain special cases. The transformation problem is then the general impossibility of satisfying Marx’s conservation conditions. In fact, we can deduce:

Proposition 3. *All Marx's equalities are true only if the economy satisfies the special condition, $\mathbf{v}(\mathbf{I} - (\mathbf{A} + \bar{\mathbf{w}}^T \mathbf{l})(1 + r))\mathbf{q}^T = 0$ (see appendix for proof).*

Proposition 3 specifies a macroeconomic constraint between labour-values, income distribution and the scale of production. Conditions that satisfy the constraint are zero profit, a uniform organic composition of capital, or a scale of production in certain special proportions (for further details see Abraham-Frois and Berrebi 1997, chapter 6). But, in general, there is no economic reason why this macroeconomic constraint should hold, especially as income distribution and the scale of production vary independently of labour-values. In consequence, a conservative transformation does not exist and “there is no rigorous quantitative connection between the labour time accounts arising from embodied labour coefficients and the phenomenal world of money price accounts” (Foley 2000, 17).

The transformation problem is the primary reason for the modern rejection of the logical possibility of a labour theory of value. The debate has generated a large literature spanning over one hundred years. Ian Steedman (1981) provides the definitive statement of the negative consequences for Marx's value theory. First, the theory is *internally inconsistent* because Marx “assumes that $[r_v]$ is the rate of profit but then derives the result that prices diverge from [labour-]values, which means precisely, in general, that $[r_v]$ is not the rate of profit” (Steedman 1981, 31). Second, the theory is *redundant* because “profits and prices *cannot* be derived from the ordinary [labour-]value schema, that $[r_v]$ is *not* the rate of profit and that total profit is *not* equal to surplus value” (Steedman 1981, 48). Steedman notes, following Paul Samuelson (1971), that given a technique and a real wage (the “physical schema”) one can determine (a) profits and prices and (b) labour-values. But, in general, there is “no way” of relating (a) and (b).

Despite Marx's efforts it appears that a theory of value based exclusively on labour-cost cannot account for price phenomena or the substance of capitalist profit.

TOTAL LABOUR COSTS

Now that we have stated the classical problems we can turn to understanding why they exist. Clearly, prices and labour-values are incommensurate because a price depends on a profit-rate but a labour-value does

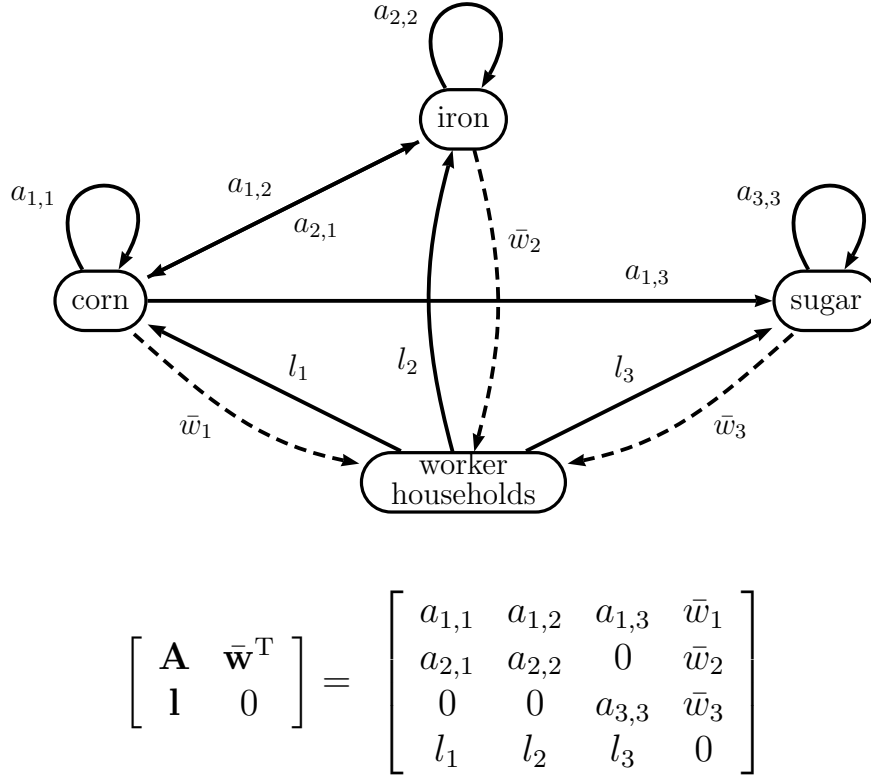


Figure 2: A social accounting matrix for an example 3-sector simple production economy depicted as a directed graph. This graph is identical to Figure 1 apart from the addition of worker consumption $\bar{\mathbf{w}}$.

not. But we need to dig deeper, and apply conceptual analysis to the concept ‘labour-value’, to discover the fundamental reason why money costs and labour costs diverge. First, I will examine two related properties of labour-values, in the context of an economy where capitalist profit is absent, which are subtle and normally overlooked.

The independence of labour-values from the real wage

Figure 2 depicts an example economy where all household income takes the form of wages (see Marx’s concept of “simple production”). There is no government or financial sector. The social accounting matrix therefore simply specifies the technique and the real wage consumed per unit of labour supplied, $\bar{\mathbf{w}}$.

Earlier, I described the computation of a labour-value as a procedure of vertical integration. If we perform this procedure in the context of a social accounting matrix we immediately notice that some input paths are ignored. Specifically, the real wage inputs to worker households, drawn as dashed arcs in Figure 2, are not vertically integrated. So the labour

supplied to produce the real wage, which maintains and reproduces the working class, is excluded as a component of the labour cost of commodity *i*. Why is this coexisting labour not counted?

A labour-value is the answer to the question: “What is the total coexisting labour supplied to reproduce 1 unit of a commodity?” But it is not the answer to the question: “What is the total coexisting labour supplied to reproduce 1 unit of a commodity *and* reproduce the labour that reproduced that unit?” Measuring the cost of reproducing the very resource that serves as the measure of cost would be like measuring the height of a tree with a metre rod and including the length of the rod as part of the tree’s height.

We can look at this another way. Any system of measurement defines a standard unit (e.g., the metre). We do not ask: “How many metres are in one metre?” since the measure of the standard unit is by definition a unit of the standard. In a labour theory of value the question “What is the labour-value of one unit of direct labour?” is similarly ill-formed: the real cost of 1 hour of labour, *measured by labour time*, is 1 hour. No further reduction is possible or required. The self-identity of the measuring standard is a conceptual necessity in any system of measurement. So whether workers consume one bushel or a thousand bushels of corn to supply a unit of direct labour makes no difference to the labour-value of that unit of direct labour: an hour of labour-time is an hour of labour-time. In consequence, the procedure of vertical integration, when applied to a social accounting matrix, always terminates at labour inputs and does not further reduce labour inputs to the real wage.

Labour-values as total labour costs

Labour-values, as a conceptual necessity, exclude the reproduction costs of labour (i.e., the coexisting labour supplied to reproduce the real wage). In the context of a simple production economy the procedure of vertical integration therefore reduces *all* real costs (such as corn, iron and sugar) to quantities of direct labour *except* the cost of labour. Hence classical labour-values, in this context, are total labour costs:

Definition 2. *A commodity’s total labour cost is (i) a measure of the coexisting labour supplied to reproduce it that (ii) only excludes the reproduction cost of labour.*

The classical proposition that equilibrium prices of reproducible goods are proportional to labour-values in an “early and rude state” (Smith 1994 [1776]) is not controversial. Indeed, even critics of a labour theory of value accept this (e.g., Samuelson 1971; Steedman 1981; Roemer 1982). Natural prices are proportional to labour-values, that is $\mathbf{p} = w\mathbf{v}$ (see Proposition 1), because both accounting systems, that is money and labour costs, apply the same accounting convention: all commodities are reduced to a scalar measure of total cost—either total money or total labour cost. The accounting systems are dual or mutually consistent and therefore related by the price of labour, w .

Consequently, in a simple production economy the natural price of a commodity is the wage bill of the total coexisting labour supplied to produce it. Commodities that require more of society’s labour-time to produce sell at higher prices in equilibrium.

Now let us introduce capitalist profit income and determine exactly why this simple relationship breaks down.

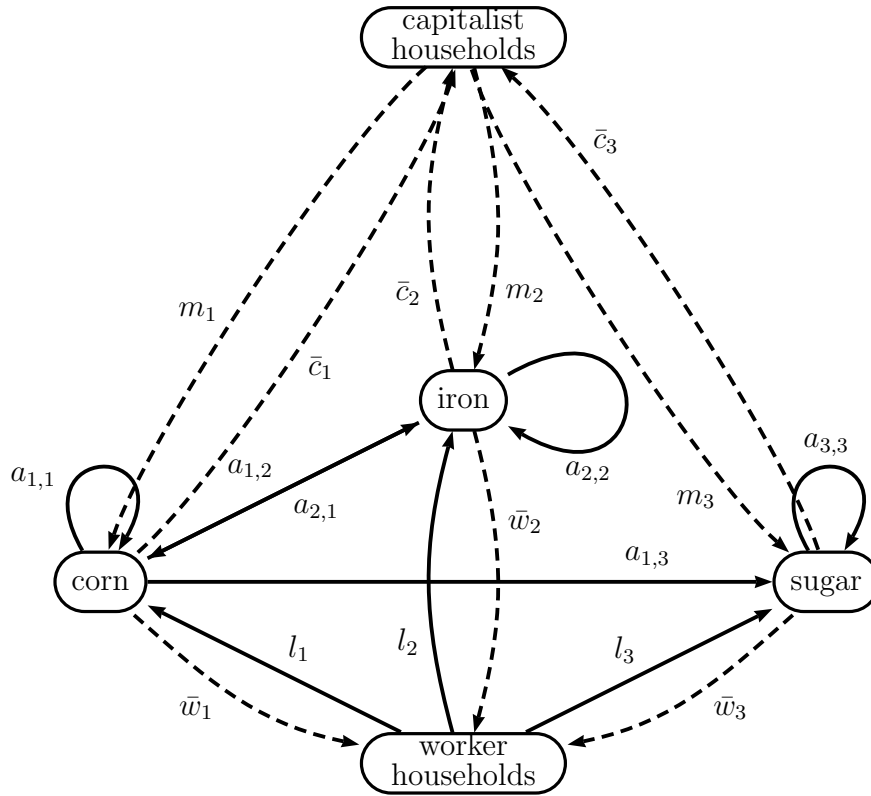
CAPITALIST HOUSEHOLDS

The natural prices of an economy with capitalist profit are production prices given by Equation (3) where the profit-rate is uniform across all sectors. In this situation capitalists supply money-capital to firms to meet production costs and receive profit income proportional to their advance. This profit mark-up, or price of money-capital, r , forms a cost component of the production price.

Assume firms do not self-finance. Then the vector of cost prices, or money-capital requirement coefficients, $\mathbf{m} = [m_i]$, where $m_i = \mathbf{pA}^{(i)} + l_iw$, denotes the quantity of money-capital supplied to produce unit outputs (see also Vickers 1987).

Figure 3 depicts a social accounting matrix for a capitalist economy in a state of “simple reproduction” (Marx 1954 [1887], chapter 23) where capitalists spend all their profit income on personal consumption and therefore no capital accumulation takes place. “Simple reproduction” is identical to “simple production” apart from the addition of a capitalist household sector that funds production by supplying money-capital. The social accounting matrix additionally specifies the distribution of the net product in the form of the real wage and capitalist consumption.

Money-capital is not money but loan capital, i.e., money advanced during the production period, from capitalists to firms, which earns a return. A quantity of money-capital therefore denotes a sum of loaned money



$$\begin{bmatrix} \mathbf{A} & \bar{\mathbf{w}}^T & \bar{\mathbf{c}}^T \\ \mathbf{l} & 0 & 0 \\ \mathbf{m} & 0 & 0 \end{bmatrix} = \begin{bmatrix} a_{1,1} & a_{1,2} & a_{1,3} & \bar{w}_1 & \bar{c}_1 \\ a_{2,1} & a_{2,2} & 0 & \bar{w}_2 & \bar{c}_2 \\ 0 & 0 & a_{3,3} & \bar{w}_3 & \bar{c}_3 \\ l_1 & l_2 & l_3 & 0 & 0 \\ m_1 & m_2 & m_3 & 0 & 0 \end{bmatrix}$$

Figure 3: A social accounting matrix for an example 3-sector capitalist economy depicted as a directed graph. This graph is identical to Figure 2 apart from the addition of a capitalist household sector.

(i.e., an outstanding principal) and the supply of money-capital denotes the supply of loan services, which includes loan management and actual transfers of money. The total supply of money-capital is $\mathbf{m}\mathbf{q}^T$. This quantity of loaned money is not identical to the total stock of money in circulation since “the same mass of actual money can [...] represent very different masses of money-capital” (Marx 1971 [1894], 510). In other words, a given stock of money may service multiple loans.

Capitalist households receive a bundle of consumption goods \mathbf{c} . Figure 3 therefore also specifies capitalist consumption coefficients, $\bar{\mathbf{c}} =$

$(1/\mathbf{mq}^T)\mathbf{c}^T$, which denote consumption per unit of money-capital supplied. For example, $\mathbf{c} = [10, 5]$ indicates that capitalists consume 10 bushels of corn and 5 kilos of sugar per £1 of money-capital supplied to production, where £1 is the unit of account. These coefficients are analogous to worker consumption coefficients, $\bar{\mathbf{w}} = (1/\mathbf{lq}^T)\mathbf{w}$, which denote worker consumption per unit of labour supplied. The economy's net product is then $\mathbf{n} = \mathbf{w} + \mathbf{c}$.

Assume, for simplicity, that the supply of money-capital does not incur direct labour costs, such as the labour of managing and servicing loans. So money-capital is not produced, like a unit of corn, but merely advanced. (Including the direct labour cost of the supply of money-capital would add a new kind of labour activity to our model, and corresponding wage income, but would not remove the fundamental difference between profit and wages: profit is received in virtue of firm ownership, whereas the wage is received in virtue of labour supplied.)

THE DIVERGENCE OF TECHNICAL AND TOTAL LABOUR COSTS

Now that we have specified a social accounting matrix for an economy with capitalist profit we can reconsider the process of vertical integration.

Production now additionally requires the supply of money-capital m_i (as shown by the dashed input edges from capitalist households to the system of production in Figure 3). Although the supply of money-capital, in this model, does not incur direct labour costs it does incur indirect labour costs. Capitalists do not advance money-capital for free, either nominally or in real terms. In parallel with the production of unit i , and the supply of money-capital m_i , capitalists consume commodity bundle $m_i\bar{\mathbf{c}}$. So, a quantity of coexisting labour, $m_i\mathbf{l}\bar{\mathbf{c}}^T$, is indeed used-up during the supply of money-capital, specifically the coexisting labour that produces capitalist consumption goods.

The classical formula for labour-values—Equation (2)—ignores this coexisting labour because the supply of money-capital to production is not part of the technique, and therefore does not feature in the process of vertical integration (i.e., all the dashed input arcs from capitalist households in Figure 3 are not vertically integrated). Money-capital inputs are treated as an irreducible terminus on the same footing as the supply of labour. In consequence, classical labour-values do not count the labour supplied to produce capitalist consumption goods as a real cost of production.

Should this labour be counted as a cost? The classical theory *excludes* this labour without recognizing the existence of a theoretical choice. But

the labour supplied to produce capitalist consumption goods is not a cost of reproducing labour and therefore necessarily excluded, as a conceptual necessity, from any definition of labour-value. The answer depends, quite simply, on what we want to measure. And what we want to measure depends on the theoretical questions we pose and seek to answer.

Classical labour-values, as purely technical measures of labour costs, answer questions about the productivity of labour over time independent of the distribution of income (see especially Flaschel 2010, part 1). The reciprocal of a classical labour-value measures the quantity of the commodity produced by a unit of coexisting labour, independent of the wider institutional context in which this activity occurs.

But if we want to measure *total labour costs*, that is measure the actual labour supplied to reproduce commodities in the complete circumstances in which production takes place, then we cannot use classical labour-values. By definition total labour costs reduce *all* real costs to labour, except the cost of producing the real wage. But classical labour-values exclude the additional labour cost of producing capitalist consumption goods; hence, they do not measure total labour costs. This conclusion is simply a consequence of definitions.

In a monetary production economy, like capitalism, money-capital is not a technical input to production but nonetheless is an actual material prerequisite to production. In capitalist conditions a commodity cannot be produced without workers simultaneously performing tributary or “surplus” labour for a capitalist class. Classical labour-values, as a purely technical measure of labour cost, exclude this tributary labour as a real cost of production. A measure of total labour costs, by definition, must include it. Let us now do that.

TOTAL LABOUR COSTS: NONSTANDARD LABOUR-VALUES

Define the $n \times n$ matrix of capitalist consumption coefficients as

$$\mathbf{C} = \bar{\mathbf{c}}^T \mathbf{m} = [c_{i,j}],$$

where each $c_{i,j} = \bar{c}_i m_j$ is the quantity of commodity i capitalists consume per unit output of commodity j (recall that \bar{c}_i is the quantity of commodity i consumed per unit of money-capital supplied and m_j is the money-capital supplied per unit output of commodity j). Matrix \mathbf{C} , in consequence, is a capitalist consumption matrix that specifies how the production of output is synchronized with the distribution of goods from

firms to capitalist households. It encapsulates the real costs of supplying money-capital to fund production in the different sectors of the economy.

Note that matrix \mathbf{C} is a ‘physical’ input-output matrix that specifies relative material flows of commodities; for example, each element $c_{i,j}$ of \mathbf{C} is measured in units identical to the corresponding element $a_{i,j}$ of the technique \mathbf{A} .

Define the technique augmented by capitalist consumption as

$$\tilde{\mathbf{A}} = \mathbf{A} + \mathbf{C} = [\tilde{a}_{i,j}],$$

where each $\tilde{a}_{i,j} = a_{i,j} + c_{i,j}$ is the quantity of commodity i , including that consumed by capitalists, directly used-up per unit output of j .

We now vertically integrate over the technique augmented by capitalist consumption: Production of commodity i uses-up direct labour l_i and the bundle of input commodities $\mathbf{A}^{(i)} + m_i \tilde{\mathbf{c}}^T = \mathbf{A}^{(i)} + \mathbf{C}^{(i)}$, consisting of means of production and capitalist consumption goods. This bundle is replaced by the simultaneous expenditure of labour $\mathbf{l}(\mathbf{A}^{(i)} + \mathbf{C}^{(i)})$ operating in parallel, which itself uses-up input bundle $\tilde{\mathbf{A}}(\mathbf{A}^{(i)} + \mathbf{C}^{(i)})$. To count all the coexisting labour we continue the sum; that is,

$$\begin{aligned} \tilde{v}_i &= l_i + \mathbf{l}(\mathbf{A}^{(i)} + \mathbf{C}^{(i)}) + \mathbf{l}\tilde{\mathbf{A}}(\mathbf{A}^{(i)} + \mathbf{C}^{(i)}) + \mathbf{l}\tilde{\mathbf{A}}^2(\mathbf{A}^{(i)} + \mathbf{C}^{(i)}) + \dots \\ &= l_i + \mathbf{l}(\mathbf{I} + \tilde{\mathbf{A}} + \tilde{\mathbf{A}}^2 + \dots)(\mathbf{A}^{(i)} + \mathbf{C}^{(i)}) \\ &= l_i + \mathbf{l}\left(\sum_{n=0}^{\infty} \tilde{\mathbf{A}}^n\right)(\mathbf{A}^{(i)} + \mathbf{C}^{(i)}). \end{aligned}$$

The vector $\tilde{\mathbf{v}}$ of total coexisting labour supplied to reproduce a unit bundle $\mathbf{u} = [1]$ of commodities is

$$\tilde{\mathbf{v}} = \mathbf{l} + \mathbf{l}\left(\sum_{n=0}^{\infty} \tilde{\mathbf{A}}^n\right)(\mathbf{A} + \mathbf{C}) = \mathbf{l}\sum_{n=0}^{\infty} \tilde{\mathbf{A}}^n.$$

Rewrite the infinite series, such that $\tilde{\mathbf{v}} = \mathbf{l}(\mathbf{I} - \tilde{\mathbf{A}})^{-1}$; and therefore:

Definition 3. “Nonstandard labour-values”, $\tilde{\mathbf{v}}$, are given by $\tilde{\mathbf{v}} = \tilde{\mathbf{v}}\tilde{\mathbf{A}} + \mathbf{l}$, where $\tilde{\mathbf{A}} = \mathbf{A} + \mathbf{C}$ is the technique augmented by capitalist consumption.

Nonstandard labour-values are a new measure of labour cost that are constructed by vertically integrating the real cost of capitalist consumption. They satisfy the definition of a total labour costs in the context of simple reproduction.

Let us draw some contrasts between classical and nonstandard labour-values. The classical formula, $\mathbf{v} = \mathbf{vA} + \mathbf{l}$, is a property of the technique and measures technical labour costs. In contrast, the nonstandard formula, $\tilde{\mathbf{v}} = \tilde{\mathbf{v}}\tilde{\mathbf{A}} + \mathbf{l}$, is a property of the social accounting matrix, including the distribution of real income, and measures total labour costs.

Classical labour-values are the sum of direct labour, \mathbf{l} , plus indirect labour, \mathbf{vA} . Nonstandard labour-values are the sum of direct labour, \mathbf{l} , and indirect labour, $\tilde{\mathbf{v}}\mathbf{A}$, plus the “super-indirect” labour, $\tilde{\mathbf{v}}\mathbf{C}$, which is tributary labour devoted to the production of capitalist consumption goods. In general, $\tilde{\mathbf{v}} > \mathbf{v}$. But in the absence of ‘profits on stock’ nonstandard labour-values reduce to classical labour-values.

Classical labour-values view all household consumption (of workers and capitalists) as net output and therefore not a cost of production; in contrast, nonstandard labour-values view capitalist consumption as a real cost of production. Both schemes, of course, assign an *ex post* labour-value to capitalist consumption, since this bundle of goods requires labour resources to produce it. However, in the classical scheme, the direct labour supplied to produce capitalist consumption is surplus labour, i.e., supplied ‘gratis’, and therefore, by definition, does not constitute an *ex ante* cost of production (e.g., see Marx 1954 [1887], chapter 18; Marx 1971 [1894], part V, chapter 32).

The definition of nonstandard labour-values does not provide or rely upon any theory of income distribution or profit and is independent of the possible reasons why workers and capitalists consume specific consumption bundles. However, in order to calculate nonstandard labour-values the distribution of real income must be given, in much the same manner that, in order to calculate production prices, the distribution of nominal income must be given.

Both classical and nonstandard labour-values are functions of real or ‘physical’ data alone that may be operationalized without reference to monetary phenomena and constitute entirely self-consistent labour-cost accounting schemes. They measure different aspects of the same economy by applying different cost-accounting conventions to the analysis of the labour process. As we shall see, we need both measures to answer the full range of questions posed by a labour theory of value.

THE CATEGORY-MISTAKE: CONFLATING TECHNICAL AND TOTAL LABOUR COSTS

Now that we have distinguished between technical and total labour costs we can understand the fundamental reason why money and labour costs diverge.

Money-capital has a price, the profit-rate, which is a ‘mark up’ component of the money cost of a commodity. Money-capital also has a real cost, which, in the case of simple reproduction, is capitalist consumption. Production prices, as total money costs, include the profit-rate as a money cost of production, and therefore prices depend on the distribution of nominal income. But classical labour-values, as technical labour costs, exclude the labour cost of money-capital as a real cost of production, and therefore labour-values are independent of the distribution of real income. In summary, the dual accounting systems apply different cost conventions. In consequence, there cannot be a one-to-one relationship between prices and labour-values: the profit-rate component of money costs refers to labour costs that are not counted.

The asymmetrical treatment of the commodity money-capital—present as a money cost in the price system but absent as a real cost in the labour-value system—is the fundamental reason for the divergence of money and labour costs. A quantitative mismatch necessarily arises if *total* money costs are compared to *partial* labour costs.

The classical contradictions of the labour theory of value are the manifestation of the category-mistake of supposing that technical costs are of the same logical type as total costs. Hence Ricardo’s search for an invariable measure and Marx’s transformation are theoretical attempts to find Ryle’s “elusive and insubstantial man” or “ghost”.

The classical category-mistake has been, and continues to be, the major obstacle toward a deeper understanding of the relationship between social labour and monetary phenomena. For example, it has directed theoretical attention toward the contradictions and away from the existence of a simple one-to-one quantitative relation between production prices and labour costs.

Definition 4. A “steady-state economy” produces quantities, $\mathbf{q} = \mathbf{qA}^T + \mathbf{w} + \mathbf{c}$, at prices, $\mathbf{p} = (\mathbf{pA} + \mathbf{l}w)(1 + r)$, where workers and capitalists spend what they earn, $\mathbf{pw}^T = \mathbf{lq}^T w$ and $\mathbf{pc}^T = (\mathbf{pA} + \mathbf{l}w)\mathbf{q}^T r$.

Theorem 1. *The production-prices of a steady-state economy are proportional to nonstandard labour-values, $\mathbf{p} = \tilde{\mathbf{v}}\mathbf{w}$ (see appendix for proof).*

In consequence, in a steady-state economy, the production-price of a commodity is the wage bill of the total coexisting labour supplied to reproduce it. Commodities that require more labour time to produce sell at proportionally higher prices in equilibrium. Natural prices—whether in an “early and rude state” or in our late and civilized times—vary one-to-one with total labour costs.

How general is this proposition? The definition of total labour cost applies to any social accounting matrix. Hence, in more complex models, total labour costs include additional real costs of production, over and above capitalist consumption. For example, total labour-values, in circumstances of expanded reproduction with proportionate or non proportionate growth, are “vertically super-integrated labour coefficients”, which additionally include the labour cost of supplying the net investment goods required to expand the scale of production. The natural prices in growing economies are therefore also proportional to total labour costs (see Wright 2013).

Many possible generalizations remain unexplored, however. For example, the robustness of such equivalence theorems have yet to be tested in the context of (i) more complex social accounting matrices, which include capitalist savings, a public sector, credit money etc., (ii) production with fixed capital, (iii) systems of joint production, and (iv) dynamic models of classical macrodynamics with gravitation of market prices to natural prices.

Now that we have identified the category-mistake, and introduced a distinction between classical and total labour costs, we can finally dissolve the classical problems.

DISSOLUTION OF THE PROBLEM OF AN INVARIABLE MEASURE OF VALUE

Ricardo conflates two concepts of difficulty of production that we can now distinguish. Classical labour-values, \mathbf{v} , measure ‘difficulty of production’ independent of an economy’s institutional structure and distributive rules. A classical labour-value, v_i , is therefore a *counterfactual* measure of the total coexisting labour that would be supplied to reproduce commodity-type i if workers did not perform tributary labour during the production of commodities.

Nonstandard labour-values, \tilde{v} , measure “difficulty of production” dependent on an economy’s institutional structure and distributive rules. A nonstandard labour-value, \tilde{v}_i , is therefore an *actual* measure of the total coexisting labour supplied to reproduce commodity-type i given that workers perform additional tributary labour during the production of commodities.

Ricardo wished to reduce the structure of natural prices (relative value) to “difficulty of production” (absolute value) measured in terms of some real cost basis, such as labour costs. Classical labour-values are an invariable measure of absolute value independent of the distribution of income and therefore we can use them to say, without ‘embarrassment’ or equivocation, that ‘commodity A is now less valuable than one year ago’ in the strictly technical sense that commodity A requires less labour resources to reproduce than it once did. But it is a category-mistake to hope or expect, as Ricardo did, that this standard can also explain the structure of natural prices.

Nonstandard labour-values, in contrast, explain the structure of natural prices in terms of objective quantities of coexisting labour supplied to produce commodities (Theorem 1). Hence they provide that all-important one-to-one relation, required by a labour theory of value, between absolute values, measured in terms of labour time, and relative prices.

The point is the following: classical labour-values answer distribution-independent questions about the technical difficulty of production of commodities, whereas nonstandard labour-values can answer distribution-dependent questions about the actual difficulty of production of commodities. In consequence—and on condition we apply the appropriate concept of ‘difficulty of production’ in each case—we can justifiably make public statements about changes in objective value, independent of the distribution of income *and* simultaneously claim that relative values covary with absolute values, and thereby explain the structure of natural prices in terms of labour costs. Ricardo’s belief in another “less powerful cause” of the variation of relative values, other than labour costs, is caused by the category-mistake. Ricardo’s problem therefore dissolves.

DISSOLUTION OF THE TRANSFORMATION PROBLEM

Marx employs classical labour-values to address issues in the theory of exploitation (e.g., how many hours do workers supply in excess of the time required to produce their real wage?) and, in addition, issues in the theory of economic value (e.g., what does the nominal unit of account,

such as £1, ‘express’ or measure?, what is the ‘substance’ of profit?, etc.) The distinction between classical and total labour-values permits us to separate these concerns and therefore avoid the transformation problem while preserving Marx’s analysis of the capitalist labour process.

Let $\mathbf{n} = \mathbf{w} + \mathbf{c}$ be the net product of the economy, where \mathbf{c} is the consumption bundle of capitalists. The total working day equals the classical labour-value of the net product, $\mathbf{lq}^T = \mathbf{vn}^T$ (see Proposition 4 in the appendix). Marx splits the working day into necessary labour, \mathbf{vw}^T , which is the part ‘technically necessary’ to reproduce workers, and surplus labour, $\mathbf{vn}^T - \mathbf{vw}^T (= \mathbf{vc}^T)$, which is an additional part appropriated by capitalists. Marx’s normative point, among other things, is that production could occur without the performance of this surplus labour, and yet workers could continue to consume the same real wage.

Nonstandard labour-values, by definition, include surplus labour as a cost of production. In consequence, they do not split the working day into necessary and surplus parts. In terms of total labour costs the whole working day, $\mathbf{lq}^T = \tilde{\mathbf{v}}\mathbf{w}^T$ (see Proposition 5 in the appendix), is ‘socially necessary’ to reproduce workers given that the real wage cannot be produced without the simultaneous performance of surplus labour for capitalists.

We can therefore restate Marx’s concept of surplus labour in terms of nonstandard and classical labour-values. Surplus labour is the difference between (i) the labour time socially necessary and (ii) the labour time technically necessary to reproduce workers, i.e., $\tilde{\mathbf{v}}\mathbf{w}^T - \mathbf{vw}^T$ (since $\tilde{\mathbf{v}}\mathbf{w}^T = \mathbf{lq}^T = \mathbf{vn}^T$).

Splitting the working day this way is both logical and illuminating, regardless of any relationship it may have to the price system, since it provides the quantitative basis for a normative critique of capitalist production. But it is a category-mistake to hope or expect, as Marx did, that a technical, and therefore partial, measure of surplus labour has a one-to-one relation with a total measure of money profit. Money profit, in fact, has a one-to-one relation with total surplus labour, $\tilde{\mathbf{v}}\mathbf{n}^T - \tilde{\mathbf{v}}\mathbf{w}^T$, not Marx’s surplus labour, $\mathbf{vn}^T - \mathbf{vw}^T$ (see Proposition 6 in the appendix).

In the context of the transformation problem, the Marxist tradition in general has accepted divergence of production prices from labour-values but defended conservation of labour-value in price, whereas critics have also accepted divergence but denied conservation of labour-value in price. But both sides of the argument are mistaken: once we measure in terms

of total labour costs there is no divergence and there is aggregate conservation. Production prices represent total labour costs, i.e., nonstandard labour-values, and therefore capitalist profit is a money representation of labour time.

Corollary 1. *All Marx's equalities obtain when labour-values measure total labour costs, specifically (i) the profit-rate equals the labour-value profit-rate, (ii) total profit is proportional to surplus labour, and (iii) total production price is proportional to total labour-value (see appendix for proof).*

In consequence, the standard criticisms of the classical labour theory of value do not apply: nonstandard labour-values are not internally inconsistent, since the money profit-rate equals the labour-value profit-rate, nor redundant, since production prices can be derived from labour-values by scaling by the money wage w . Hence a theory of value based exclusively on labour cost can account for price phenomena: total labour costs and prices are “two sides of the same coin”. The transformation problem therefore dissolves.

This conclusion, it should be emphasized, destroys the basis of any claim that a labour theory of value is logically incoherent because prices and labour-values are quantitatively incommensurable in linear production models (e.g., Samuelson 1971; Lippi 1979; Steedman 1981).

CONCLUSION

The classical labour theory of value commits the category-mistake of supposing that classical labour-values, which measure strictly technical or material costs of production, are of the same logical type as natural prices, which measure non-technical or social costs of production, and therefore labour-values and prices, under appropriate equilibrium conditions, are mutually consistent. This category-mistake is the cause of Ricardo's problem of an invariable measure of value and Marx's transformation problem.

This essay has drawn a new distinction, lacking in the classical theory, between a technical and a total measure of labour cost, where a total labour cost includes additional real costs incurred in virtue of non-technical conditions, such as production financed by money-capital. Classical labour-values, in this more refined conceptual framework, apply to distribution-independent questions about an economy, such as the productivity of labour or measuring the surplus-labour supplied by workers; whereas total labour-values apply to distribution-dependent questions,

such as the relationship between nominal prices and the actual labour time required to produce commodities (i.e., issues in the theory of economic value). The classical problems dissolve by generalizing the classical labour theory to apply both concepts in the appropriate contexts.

The category-mistake has misdirected theoretical attention toward the contradictions and away from the fact that a commodity's natural price is the wage bill of the total coexisting labour supplied to produce it (Theorem 1). By ridding ourselves of longstanding conceptual confusions we discover the logical possibility of a new theoretical object: a more general labour theory of value with an invariable measure of value and without a transformation problem.

APPENDIX

Proposition 1. $r = 0$ implies $\mathbf{p} = w\mathbf{v}$.

Proof. Set $r = 0$ into price Equation (3) to get $\mathbf{p} = \mathbf{pA} + \mathbf{l}w$ or $\mathbf{p} = w\mathbf{l}(\mathbf{I} - \mathbf{A})^{-1}$. Since $\mathbf{v} = \mathbf{l}(\mathbf{I} - \mathbf{A})^{-1}$ the conclusion follows. \square

Proposition 2. Marx's 'production prices', \mathbf{p}^* , satisfy (ii) the sum of profits is proportional to surplus labour, $\alpha(\mathbf{vA} + \mathbf{l}(\mathbf{v}\bar{\mathbf{w}}^T))\mathbf{q}^T r \propto \mathbf{lq}^T - \mathbf{vw}^T$, and (iii) the price of the gross product is proportional to its labour-value, $\mathbf{p}^* \mathbf{q}^T \propto \mathbf{vq}^T$.

Proof. Marx defines $r = r_v$. From Equation (4), $(\mathbf{vAq}^T + \mathbf{v}\bar{\mathbf{w}}^T \mathbf{lq}^T)r = (1 - \mathbf{v}\bar{\mathbf{w}}^T)\mathbf{lq}^T = \mathbf{lq}^T - \mathbf{vw}^T$ (since $\bar{\mathbf{w}} = (1/\mathbf{lq}^T)\mathbf{w}$), which establishes (ii). Multiply Equation (5) by \mathbf{q} to yield $\mathbf{p}^* \mathbf{q}^T = \alpha(\mathbf{vAq}^T + \mathbf{vw}^T) + \alpha(\mathbf{vAq}^T + \mathbf{vw}^T)r_v$. Now substitute for r_v , $\mathbf{p}^* \mathbf{q}^T = \alpha(\mathbf{vAq}^T + \mathbf{vw}^T) + \alpha(\mathbf{lq}^T - \mathbf{vw}^T) = \alpha(\mathbf{vAq}^T + \mathbf{lq}^T)$. Multiply Equation (2) by \mathbf{q} and substitute $\mathbf{vAq}^T + \mathbf{lq}^T = \mathbf{vq}^T$. Hence $\mathbf{p}^* \mathbf{q}^T = \alpha\mathbf{vq}^T$, which establishes (iii). \square

Proposition 3. All Marx's equalities are true only if the economy satisfies the special condition, $\mathbf{v}(\mathbf{I} - (\mathbf{A} + \bar{\mathbf{w}}^T \mathbf{l})(1 + r))\mathbf{q}^T = 0$.

Proof. (i) If total profit is proportional to total surplus-labour then

$$(\mathbf{pA} + \mathbf{l}w)\mathbf{q}^T r = \alpha(1 - \mathbf{v}\bar{\mathbf{w}}^T)\mathbf{lq}^T, \quad (6)$$

where α is the constant of proportionality. (ii) If the profit-rate equals the labour-value profit-rate substitute r from (4) to get

$$(\mathbf{pA} + \mathbf{l}w)\mathbf{q}^T = \alpha(\mathbf{vAq}^T + \mathbf{v}\bar{\mathbf{w}}^T \mathbf{lq}^T). \quad (7)$$

(iii) If the total price of the gross product is proportional to its labour-value then $\mathbf{pq}^T = \alpha\mathbf{vq}^T$. Price Equation (3) implies that

$$(\mathbf{pA} + \mathbf{l}w)\mathbf{q}^T(1 + r) = \alpha\mathbf{vq}^T. \quad (8)$$

Substitute (8) into (7) to get $\mathbf{v}\mathbf{q}^T = (\mathbf{v}\mathbf{A}\mathbf{q}^T + \mathbf{v}\tilde{\mathbf{w}}^T\mathbf{l}\mathbf{q}^T)(1 + r)$, which can be rearranged into the form

$$\mathbf{v}(\mathbf{I} - (\mathbf{A} + \tilde{\mathbf{w}}^T\mathbf{l})(1 + r))\mathbf{q}^T = 0. \quad (9)$$

Hence Marx's equalities (i), (ii) and (iii), with a given constant of proportionality α , imply (9). \square

Theorem 1. *The production-prices of a steady-state economy are proportional to nonstandard labour-values, $\mathbf{p} = \tilde{\mathbf{v}}\mathbf{w}$.*

Proof. In a steady-state economy, $\mathbf{p}\mathbf{c}^T = (\mathbf{p}\mathbf{A}\mathbf{q}^T + \mathbf{l}\mathbf{q}^T\mathbf{w})r$. Recall that cost prices $\mathbf{m} = \mathbf{p}\mathbf{A} + \mathbf{l}\mathbf{w}$. Hence $r = \mathbf{p}\mathbf{c}^T/\mathbf{m}\mathbf{q}^T = \mathbf{p}\tilde{\mathbf{c}}^T$. Substitute $r = \mathbf{p}\tilde{\mathbf{c}}^T$ into price Equation (3) to get $\mathbf{p} = (\mathbf{p}\mathbf{A} + \mathbf{l}\mathbf{w}) + (\mathbf{p}\mathbf{A} + \mathbf{l}\mathbf{w})\mathbf{p}\tilde{\mathbf{c}}^T = (\mathbf{p}\mathbf{A} + \mathbf{l}\mathbf{w}) + \mathbf{m}\mathbf{p}\tilde{\mathbf{c}}^T = \mathbf{p}\mathbf{A} + \mathbf{p}\tilde{\mathbf{c}}^T\mathbf{m} + \mathbf{l}\mathbf{w} = \mathbf{p}(\mathbf{A} + \tilde{\mathbf{c}}^T\mathbf{m}) + \mathbf{l}\mathbf{w} = \mathbf{p}\tilde{\mathbf{A}} + \mathbf{l}\mathbf{w}$. Hence $\mathbf{p} = \mathbf{l}(\mathbf{I} - \tilde{\mathbf{A}})^{-1}\mathbf{w} = \tilde{\mathbf{v}}\mathbf{w}$, by Definition 3. \square

Corollary 1. *All Marx's equalities obtain when labour-values measure total labour costs, specifically (i) the profit-rate equals the labour-value profit-rate, (ii) total profit is proportional to surplus labour, and (iii) total production price is proportional to total labour-value.*

Proof. This is a trivial consequence of Theorem 1, i.e., the proportionality of production prices and total labour costs. \square

Proposition 4. *The total labour supplied equals the classical labour-value of the net product, $\mathbf{l}\mathbf{q}^T = \mathbf{v}\mathbf{n}^T$.*

Proof. Since $\mathbf{q} = \mathbf{q}\mathbf{A}^T + \mathbf{n}^T$ it follows that

$$\mathbf{v}(\mathbf{I} - \mathbf{A})\mathbf{q}^T = \mathbf{v}\mathbf{n}^T. \quad (10)$$

But $\mathbf{v} = \mathbf{l}(\mathbf{I} - \mathbf{A})^{-1}$. Replace \mathbf{v} on the LHS of (10) to get $\mathbf{l}\mathbf{q}^T = \mathbf{v}\mathbf{n}^T$. \square

Proposition 5. *The total labour supplied equals the nonstandard labour-value of the real wage, $\mathbf{l}\mathbf{q}^T = \tilde{\mathbf{v}}\mathbf{w}^T$.*

Proof. In a steady-state economy, $\mathbf{l}\mathbf{q}^T\mathbf{w} = \mathbf{p}\mathbf{w}^T$. Use Theorem 1 to substitute for \mathbf{p} and the conclusion follows. \square

Proposition 6. *Money profit, $(\mathbf{p}\mathbf{A} + \mathbf{l}\mathbf{w})\mathbf{q}^T r$, is proportional to total surplus labour, $\tilde{\mathbf{v}}\mathbf{n}^T - \tilde{\mathbf{v}}\mathbf{w}^T$.*

Proof. In a steady-state economy, $\mathbf{p}\mathbf{c}^T = (\mathbf{p}\mathbf{A} + \mathbf{l}\mathbf{w})\mathbf{q}^T r$. Hence we need to demonstrate $\mathbf{p}\mathbf{c}^T \propto \tilde{\mathbf{v}}\mathbf{n}^T - \tilde{\mathbf{v}}\mathbf{w}^T$. Theorem 1 implies $\mathbf{p}\mathbf{c}^T = \tilde{\mathbf{v}}\mathbf{c}^T\mathbf{w}$. And $\tilde{\mathbf{v}}\mathbf{c}^T\mathbf{w} = (\tilde{\mathbf{v}}\mathbf{n}^T - \tilde{\mathbf{v}}\mathbf{w}^T)\mathbf{w}$ by the definition of \mathbf{n} . \square

REFERENCES

- Abraham-Frois, Gilbert, and Edmond Berrebi. 1997. *Prices, profits and rhythms of accumulation*. Cambridge: Cambridge University Press.
- Elson, Diane. 1979. The value theory of labour. In *Value: the representation of labour in capitalism*, ed. Diane Elson, London: CSE Books, 115–180.
- Fine, Ben, and Alfredo Saad-Filho. 2004. *Marx's Capital*. London: Pluto Press, 4 edition.
- Flaschel, Peter. 2010. *Topics in classical micro- and macroeconomics: elements of a critique of Neoricardian theory*. New York: Springer.
- Foley, Duncan K. 2000. Recent developments in the labor theory of value. *Review of Radical Political Economics*, 32 (1): 1–39.
- Hodgskin, Thomas. 1825. *Labour defended against the claims of capital: or, The unproductiveness of capital proved with reference to the present combinations amongst journeymen*. London: B. Steil.
- Howard, Michael C., and John E. King. 1989. *A history of Marxian economics, volume I, 1883–1929*. London: Macmillan.
- Howard, Michael C., and John E. King. 1992. *A history of Marxian economics, volume II, 1929–1990*. London: Macmillan.
- Kurz, Heinz D., and Neri Salvadori. 1995. *Theory of production: a long period analysis*. Cambridge: Cambridge University Press.
- Lancaster, Kelvin. 1968. *Mathematical economics*. New York: Dover Publications.
- Lippi, Marco. 1979. *Value and naturalism*. London: New Left Books.
- Marx, Karl. 1954 [1887]. *Capital*, volume 1. Moscow: Progress Publishers.
- Marx, Karl. 1971 [1894]. *Capital*, volume 3. Moscow: Progress Publishers.
- Marx, Karl. 2000. *Theories of surplus Value*. New York: Prometheus Books.
- Pasinetti, Luigi L. 1980. The notion of vertical integration in economic analysis. In *Essays on the theory of joint production*, ed. Luigi L. Pasinetti, New York: Cambridge University Press, 16–43.
- Passmore, John. 1978. *A hundred years of philosophy*. London: Penguin Books.
- Perelman, Michael. 1987. *Marx's crises theory: scarcity, labor and finance*. Westport (CT): Praeger Publishers.
- Ricardo, David. 2005a. Absolute value and exchangeable value. In *The works and correspondence of David Ricardo, vol. IV*, eds. Piero Sraffa and Maurice H. Dobb, Indianapolis: Liberty Fund.
- Ricardo, David. 2005b. Ricardo to Trower, August 31, 1823. In *The works and correspondence of David Ricardo, Vol. IX*, eds. Piero Sraffa and Maurice H. Dobb, Indianapolis: Liberty Fund.
- Ricardo, David. 2005 [1817]. Principles of political economy and taxation. In *The works and correspondence of David Ricardo, vol. 1*, eds. Piero Sraffa and Maurice H. Dobb, Indianapolis: Liberty Fund.
- Roemer, John E. 1982. *A general theory of exploitation and class*. Cambridge, Massachusetts: Harvard University Press.
- Roncaglia, Alessandro. 2005. *The wealth of ideas: a history of economic thought*. The Edinburgh Building, Cambridge: Cambridge University Press.
- Ryle, Gilbert. 1984 [1949]. *The concept of mind*. Chicago: University of Chicago Press.
- Samuelson, Paul A. 1971. Understanding the Marxian notion of exploitation: a summary of the so-called transformation problem between Marxian values and com-

- petitive prices. *Journal of Economic Literature*, 9 (2): 399–431.
- Seton, Francis. 1957. The ‘transformation problem’. *Review of Economic Studies*, 24: 149–160.
- Sloman, Aaron. 1978. *The computer revolution in philosophy: philosophy, science and models of mind*. Sussex: Harvester Press and Humanities Press.
- Smith, Adam. 1994 [1776]. *The wealth of nations*. New York: The Modern Library.
- Steedman, Ian. 1981. *Marx after Sraffa*. London: Verso.
- Vickers, Douglas. 1987. *Money capital in the theory of the firm: a preliminary analysis*. Cambridge: University of Cambridge.
- von Bortkiewicz, Ladislaus. 1975 [1907]. On the correction of Marx’s fundamental theoretical construction in the third volume of Capital. In *Karl Marx and the close of his system*, ed. Paul M. Sweezy, New York: Augustus M. Kelley, 199–221 (appendix).
- Wittgenstein, Ludwig. 1953. *Philosophical investigations*. Oxford: Blackwell.
- Wright, Ian. 2013. Pasinetti’s hyper-integrated labor coefficients and the ‘pure labor theory of value’. <http://ssrn.com/abstract=2255732> (accessed April 23, 2013).

Ian Wright is a PhD candidate in the Department of Economics at the Open University, UK. His main research interests are theories of economic value, classical macrodynamics and agent-based macroeconomics. Contact e-mail: <wrighti@acm.org>

Conceptualising the labour-money connection: a critical re-examination of Benetti and Cartelier's *Marchands, salariat et capitalistes*

RICHARD SOBEL

CLERSÉ-UMR 8019-CNRS, Université Lille 1

NICOLAS POSTEL

CLERSÉ-UMR 8019-CNRS, Université Lille 1

Abstract: Carlo Benetti and Jean Cartelier's *Marchands, salariat et capitalistes* (1980) may be seen as a French attempt to develop a radical "monetary" paradigm, designed to counter the dominant neoclassical model. In this article, we argue that while the monetary approach is necessary for an epistemological break from orthodoxy, it is insufficient for the development of a genuinely heterodox paradigm. The problem is its conceptual limitation to a form of "monetary purism". This approach is limited by a form of "monetary purism" and this limitation makes it incapable of attributing any theoretical status either to the labour force or to the wage-labour nexus.

Keywords: monetary approach, heterodoxy, wage-labour nexus, labour force, Marxism, institutionalist political economy

JEL Classification: B24, B25, B31, B51

Marchands, salariat et capitalistes (1980) may be seen as a French attempt to develop an alternative to the dominant neoclassical paradigm. In contrast to the *real* approaches to the economy which characterise the mainstream approach, Carlo Benetti and Jean Cartelier start with the monetary institution of the economy, by recognizing its ontological primacy, and then form the basis of *political economy* by guaranteeing its autonomy within the other social sciences. This piece has had a certain lasting academic impact, though largely limited

AUTHORS' NOTE: The authors are grateful for helpful comments from two anonymous referees and from the editors of EJPE, especially Tyler DesRoches. This article benefited from the assistance of National Agency Research, France (theme: "The CSR: institutional transition or return of paternalism?" Reference: ANR-09-JCJC-132-01).

to France.¹ Unless we are willing to conclude that its approach is no longer relevant—except as a touchstone in the history of French economic thought—it may be worth pausing to enquire what use may still be made of such a monetary analysis some thirty years after its initial publication.

In this paper, we propose the following hypothesis: the monetary approach at the core of Benetti and Cartelier's work is a necessary but insufficient component in the construction of a heterodox paradigm in economics.² Such an approach is necessary insofar as it provides a solid and precise social-historical definition of the political (Castoriadis 1998) and thus avoids the economism to which the formal definition leads (Polanyi 1977). The monetary approach makes possible a conceptual distinction between 'the market economy' and 'capitalism' (a distinction which is all the more important given that the neoclassical mainstream makes no such distinction, and even lacks the theoretical means to consider such a differentiation). In so doing, the monetary approach advances a definition of one of the fundamental institutions of capitalism, the wage-labour nexus, that, as we shall demonstrate, is profoundly reductive and ultimately limits the range of the heterodox paradigm that Benetti and Cartelier intended to construct. Their model invites a twofold critique and this shall be our task in the pages that follow. This is not simply a question of clarifying a problem in the history of contemporary heterodox economic thought, but also a matter of showing how this theoretical approach was never integrated with the more applied methods such as those of the Paris School of Regulation or the School of Conventions (Postel and Sobel 2011)—a failure which weakened heterodox economic thought in France during the late 1980s when the neoclassical trend dominated the academic field.

In the first section, we situate Benetti and Cartelier's monetary approach within the context of theoretical debates regarding French heterodoxy from the late 1970s to the mid 1980s. In the second section, we reveal how this approach redefines the salary relationship as a social relationship of monetary dependence, highlighting the problems it poses for economic analysis. Specifically, it is shown that when the

¹ Demonstrated, perhaps, by the absence of any English translation of the work to date. On the reception, history, and influence of the book, see Schwab, et al. 1985.

² Our contribution is consistent with the recent approach which has given rise to Carlo Benetti and Jean Cartelier's publication of a collective work on the monetary perspective on the economy (Ulgen, et al. 2013), in which these two economists return to *Marchands, salariat et capitalistes* "thirty years later".

salary relationship is used to define labour from an economic perspective, labour itself disappears from the analysis. In the third section, we show that Benetti and Cartelier's interpretation of the postulate that "the monetary form of social relationships is logically independent of the material description of actions that it covers" gives rise to a paradox (Cartelier 1996b, 89).³ This conceptualization reduces labour to an anthropological category, displacing it from political economy, and thus underdetermining the nature of that dependence and reducing it to a mere monetary operation. At the same time it leads to the rejection of an understanding of concrete economic forms from a socio-economic historical approach, which has been academically devalued because it is not sufficiently pure from such a theoretical point of view.

This article contributes to theoretical debates between French heterodox economists that took place thirty years ago. However, this article also endeavours to make a broader contribution. By analysing these debates, especially the place of Marxism in heterodoxy, we are contributing to a current initiative to reformulate the basis of institutionalist political economy,⁴ by trying to determine what lessons from this past experiment could help in constructing a heterodox approach today.

MARCHANDS, SALARIAT ET CAPITALISTES: **A RADICAL INSTITUTIONALIST PERSPECTIVE**

The institutionalist basis of the French critique of political economy

During the 1980s, French historians of economic thought engaged in what might be described as a *critique of political economy*.⁵ This

³ All translations from *Marchands, salariat et capitalistes* that appear in this essay are our own.

⁴ Here we are referring to the *Manifeste vers une économie politique institutionnaliste*,⁴ a process launched in 2007 by the representatives of three branches of French heterodox economics: Alain Caillé (anti-utilitarian theory), Robert Boyer (regulation theory), and Olivier Favereau (convention theory). The authors start with the ideal-typical assessment that there are two approaches to economics, economics as a science and political economics, and announce that they will defend the latter by restructuring it and reinforcing it through an alliance with the most recent trends in institutionalism. This text (available in French and English on the site of *La Revue du MAUSS*, see Caillé 2007) was written by Alain Caillé, with the collaboration of Olivier Favereau and Robert Boyer. (José Luis Corragio, Peter Hall, Geoffrey Hodgson, Marx Humbert, Ahmet Insel, Michael Piore, Ronen Palan, Paul Singer, Bob Jessop, Jean-Louis Laville, Michel Lallement, Philippe Steiner, and François Vatin were also involved.)

⁵ We adopt this expression to refer to the scholars behind this approach who had works published by Maspero and contributed major articles to the *Cahiers d'Économie*

approach examined the possible conditions for a heterodox paradigm—one that might supplant the neoclassical model. The goal was to situate themselves at the same level of conceptual generality and to establish a theory of capitalist market economies, not simply market economies (Cartelier 1983; 1985; and 1991; and De Vroey 1987). *Marchands, salariat et capitalistes* can be viewed as the cornerstone, and perhaps a symbol, of this intellectual period. It represents the ambitions, contributions, and limitations of the underlying theoretical project.⁶

The authors of this school have introduced the foundation of a heterodox paradigm made possible by a return to the basic premises of Marx and Keynes.⁷ On the Marxian side, once all dogmatism arising from dialectical materialism is removed (Faccarello 1981, and 1982; De Vroey 1984b; Gouverneur 1987; Benetti and Cartelier 1998), it is a question of revisiting the analysis of the two social relationships structuring the capitalist economy: the market form of the products of labour and the salaried form of the use of labour. From Keynes's perspective, and complementary to the mobilisation of Marx, it is a matter of emphasizing the basic role of money as a socio-economic institution and the decisive role of the entrepreneur as a key actor in capitalism. These fundamental ideas enable one to grasp the institutional nature of capitalism, while never losing sight of the ahistorical character of theoretical categories such as rationality and 'the market'.

Behind this heterodox perspective is a radical difference in the conception and epistemological status of institutions which stands in marked contrast to the neoclassical approach.⁸ Basic components of

Politique, a journal they helped to create and manage. It is important not to confuse these authors with other heterodox economists who published studies from a *regulationist* perspective in the journal *Critique de l'Économie Politique* (Nouvelle Série [New Series]), also published by Maspero, at around the same time.

⁶ We do not underestimate the diversity of research in this branch of heterodoxy, but in general terms, for our purposes, this shorthand grouping is appropriate. As we will see, Carlo Benetti and Jean Cartelier have radicalised the monetary approach, which is merely one element dividing heterodoxy and orthodoxy.

⁷ Research following this approach has mostly examined very general questions, and, in fact, has not managed to effect a fruitful and sustainable collaboration with more empirical heterodox methodologies, such as Boyer and Saillard's (2002) theory of regulation.

⁸ In this article, the term 'institutionalism' and the adjective 'institutionalist' are not used in the customary academic sense to refer to a trend in economic analysis, whether the old American institutionalism (e.g., Commons) or neoinstitutionalism (e.g., North, and Williamson). In the French intellectual arena, they signal a common characteristic of heterodox economics, the taking into account of institutions in an

the modern construction of the economy as capitalist—institutions such as money, merchandise and the wage system—must not be reduced to merely the results of individual interactions, as if one were dealing only with a transaction between autonomous agents. Clarifying this point jettisons the constructivist illusion of methodological individualism, an idea that drives the debatable fiction according to which society can be produced by individuals out of nothing, a fiction that obscures both the actual nature of these institutions and the social relationships that they initiate and cause to function. Although such terminology is never employed by the authors, it is precisely this ‘institutionalist’ dimension that we believe to be at the heart of Benetti and Cartelier’s analysis. It constitutes a compelling break from what is today considered the best approach to economic theorization: micro-foundations research on the basis of the universal axiom of the instrumental (and ultimately strategic) rationality of *homo economicus* (Lazear 2000).

Neoclassical theory—particularly in its most recent contractualist version—never confers an autonomous role on institutions.⁹ Institutions are the *explanandum* and never the *explanans*. Contrary to this, institutionalist heterodoxy emphasizes the structures of the economy which very strongly condition the actions of economic agents. Marx was certainly the one who insisted the most on this institutional conditioning. Let us first recall the Marxian issue. To grasp the mode of capitalist production, Marx starts by constructing the theoretical fiction of a merchant society (C-M-C’). The economy is comprised of independent merchant producers, who specialize in a type of production (C, C’), whose social division of labour will provide all that the community requires. Each producer sells the product of their labour in the form of merchandise, to have access to money, its general equivalent, allowing access to other necessary merchandise. All merchandise (whether goods or services) appears as a social object with two dimensions: a *use* value (which represents its useful character for an economic agent with needs to satisfy) and an *exchange* value (based on the average quantity of abstract work socially necessary for its production at a particular point in time given the functioning of the economy, which we label work-value). The use value is the concrete support for the exchange value, but does not determine it, either in

approach which stems neither from methodological individualism, nor from holism or structuralism, see Postel and Sobel 2009.

⁹ For the purpose of this paper, we will not revisit the institutional presuppositions from the perspective of neoclassical thought.

terms of its substance (the general work) or in terms of its scale (time of work). It is impossible to compare the merchandise from the point of its use value, but equivalent values in terms of exchange value may be determined since they all participate in a common substance, work value (Marx 1995 [1867], henceforth *Capital*).

In the fiction Merchandise 1-Money-Merchandise 2, use value is more important than exchange value and its representative, money. The latter is merely the means at the service of a social process which puts human need in the forefront. For Marx there is now, at the heart of modern societies, an inversion of this process: economic agents ("capitalists"), through the intermediary of generalized commercial exchange, aim at another end result than the satisfaction of a particular need: Money 1-Commodity-Money 2. This other outcome is the growth in the quantity of money (' Δ Money' being the surplus value), unlimited growth, sought for its own sake, the general equivalent of 'capital accumulation'.

For Marx, the origin of the growth in value was located in a specific exchange (the salary trade) and in leaving the area of the circulation of merchandise to descend into the realm of the production of merchandise. The economy is not a socially homogenous domain but instead finds itself split into two classes of economic agents. Indeed, from a sociological and historical perspective, there are certainly other social classes; but here the reasoning is structural and only considers the basic cleavage, the capital-labour relationship or the wage-labour nexus, established through violence ('the primitive accumulation of capital', described in *Capital*, volume 1, chapter 23) and reproduced especially by the government, the political instrument at the service of this class domination.

The *capitalists*, on the one hand, possess a quantity of capital-money, a pure form of capital, which they seek to increase through the exploitation of the workforce which they pay. Thus, they themselves have the potential to initiate a process of production of merchandise for their own enrichment.

The *proletariat*, on the other hand, possesses only their labour power, and all they can do is seek to rent it out to live. This relationship of subordination is not at all a commercial exchange: the salary is obtained in exchange for availability to perform certain tasks, within a particular context and over a specific period of time, for the usage

of the labour power, the latter, unlike real merchandise—being indistinguishable from its holder.

For Marx, labour power is a particular form of merchandise. Its use value is none other than the creative power of human labour. To have access to the use of this power, the capitalist has only to pay an employee a flat rate: the exchange value of labour power, which corresponds to the value of the merchandise necessary to maintain and reproduce the labour power. This value is less than that the employee can create over the period during which the capitalist rents the use of the labour power. This difference is the surplus value which follows the use/exploitation of labour power after the undefined/indefinite productivity of the use value and at the simple cost of the exchange value.

Marx's theory has a common point of departure with many other heterodox schools—e.g., Keynesian, institutionalist, regulationist, and conventionalist schools (Lawson 2006). In all such cases, institutions are not treated as the systematic and contemporary creations of agents. Heterodox approaches have a theory of the origin of institutions; but, unlike the orthodox approach, this theory is not, properly speaking, 'economic'.¹⁰ Instead, it depends on other social sciences—history, political science, anthropology, and so on—and thus calls for a multidisciplinary approach to economic institutions.

This attempt to construct a heterodox paradigm never went very far and did not give rise to a collective research dynamic. Indeed, the fact that the French heterodox model saw its development slow down at the end of the 1980s is relevant in terms of academic strategies operating within French economics itself, and can perhaps be best understood from the perspective of the sociology of this field. The political and intellectual context of these years experienced a general loss of credibility for Marxist thought (Pouch 2001), and structuralist thinking in the social sciences more generally. For reasons of space, our contribution here cannot address this critical context in any detail;

¹⁰ One must depend on the permanent wordplay which neoclassical theory requires in its usage of the term 'economic'. This term designates either an area of social life—the economic realm as a collection of concurrent acts and institutions anywhere and anytime, but in the social-historical forms specific to the production-distribution-consumption of resources necessary to individual and collective life, i.e., a "substantive" definition according to Karl Polanyi (1977)—or behaviour—'economic' behaviour being that which seeks the most for the least, i.e., an ahistorical anthropological form of *homo economicus* according to Polanyi's formal definition. What the mainstream calls 'economic analysis' falls completely outside of the formal definition.

rather our focus is on constructing an alternative paradigm within the framework of the current academic situation.¹¹ While we are not certain that Benetti and Cartelier would formulate the issues in this way, and however far it may be from exhausting the full original heterodox contribution of their monograph, we nonetheless find at the centre of their work a theoretical conviction consistent with our own that heterodoxy must find its unity on the basis of an institutionalist perspective of what can be defined as economic.

The prevalence of the monetary institution of the economy

The essential core of Benetti and Cartelier's theoretical contribution lies in its definition of the monetary institution of the economy and, in association with that, in its radical critique of the current real approach. In a short essay to clarify this point, written prior to the publication of *Marchands, salariat et capitalistes*, Carlo Benetti and Jean Cartelier (1995) remark that since the birth of economics, economic theorists have been careful to focus only on social relations that are quantifiable:

for the most part, economists have traditionally focused on relations that can be quantified (through money and accounting) and have left the others (family, political relations, religious and symbolic practices, etc.) to other specialised fields. In other words, it is because certain social relations are expressed in monetary terms and in things (goods), that they are associated with a particular area of reflection. Beyond these various interpretations, economists were taken with the same subset of social relations, formed by relations appearing to be the major ones. The central point is that the key relations at play here are not those constructed by theoreticians. They are the result and substance of the individuals' own practices (Benetti and Cartelier 1995, 218).

Benetti and Cartelier clearly favour the substantive definition of what is economic, but they believe that it must be further developed to discern the social-historical nature of the real goal of political economy. Economic *reality*, the subject of orthodox economic theory, is primarily comprised of specific major factors that appear in all societies in the daily life of human beings. Economic science, in the form of political economy, has received its impetus western society in which—while serving the spread of capitalism—these particular quantitative

¹¹ For more precision about this academic situation, we can refer to the website of the French Association for Political Economy: www.assoeconomiepolitique.org

relationships developed and formed a system in an objectifiable manner. The “immediately” quantitative nature of economic reality could always appear as a strong indicator of its objectivity and therefore as a guarantee of a “natural” economic science. Thus rendering economics distinct from other, equivalent, if sometimes obscure, forms of social knowledge such as sociology, political science or history. Yet the form of conceptuality from which economic theory principally developed was not content with this first level of objectivity, and always looked beyond this monetary “appearance” for the so-called “essence” of the economic subject matter which, up to that point, had only revealed itself phenomenally in economic practices.

Throughout the history of economic thought, this search for the essence of what is economic has characterised the paradigmatically dominant “realistic approach”, as opposed to the paradigmatically dominated monetary approach, that, while repeatedly rejected, has just as consistently re-emerged in such models as Keynes’s monetary production economy (Schumpeter 2000 [1954]). Consequently, it has led to a divided opposition. On one hand, analysis in real terms is based on the principle that all economic phenomena may be fundamentally described in terms of goods and services or, more precisely, in terms of decisions concerning them and the relations between them, money itself being merely a veil. On the other hand, the monetary approach views money as a principle fundamental to understanding economic relations, themselves considered as the entire set of monetary operations that, to be understood correctly, must be subsumed under goods and services.

With the realistic approach, economic relations function in terms of the rate of exchange in such a way that objects that are deemed genuinely economic are ultimately reduced to physical objects. Consequently, relations between the economic agents and, more fundamentally, the social relations that characterise them, are reduced to simple relations between these physical goods. Hence trade relations are measured through the intermediary of the exchange rate between goods,¹² regardless of what good serves as a measurement standard; and all prices may be expressed in terms of this good. Meanwhile, from this

¹² x quantity of good A is exchanged for y quantity of good B, which in value means that $xA = yB$ or that $A = y/x B$. If we consider a series of partial exchange rates between goods A, B, C, and so on, we may make B the general equivalent constituting a qualitative leap by which C. Benetti (1985), in explaining Marx’s analysis of forms of value in the famous section 1 of book 1 of *Capital*, effectively demonstrates its “metaphysical” character.

“physical” perspective, goods themselves are heterogeneous. Their commensurability is established by means of a theory of value: an “objective” theory of labour-value (which exists in diverse forms in classical political economy)¹³ or a “subjective” theory of utility-value. In both cases, a theory of real prices then eliminates the monetary dimension of economic relations, the latter having to be derived from real exchanges (Benetti 1981).

The realistic approach basically objects to money being presented immediately as a quantitative reality, its objectivity being social in character and stemming from the prince or the law, that is to say, the political power (Aglietta and Orléan 1999). Now, the fact that money has been thus associated with political relationships—regardless of the socio-institutional forms they may take—has without a doubt disqualified it in the eyes of the founders of the theory of value. Staying with money would have tarnished economic theory from the outset through a false objectivity, one too closely linked to arbitrary policy. Therefore genuine objectivity is to be sought elsewhere than in random social data. Only something like “nature” constitutes an acceptable presupposition. To produce or to find this “nature” once again, one has to build a theory on the basis of a clean social slate, considering goods defined only by their physical-chemical characteristics.

In technical terms, one might track this naturalisation of the economic object to the central postulate that makes the realistic or the value approach operational: the postulate of nomenclature.¹⁴ This postulate supposes an a priori description of a collection of things, characterised as goods (the theory of utility-value), or as merchandise (the theory of labour-value), prior to and independent of any proposition relative to society. The latter is deemed to be a mere historical variable in which economic acts take place and, as such, is economically nonessential. In other words, specific social forms (exchanges, production, and so on) are built on a neutral substratum: the physical world (Benetti and Cartelier 1981, 94). Thus, this postulate not only signifies that the economic agents know the quality of the goods and the “states of nature” but, more fundamentally, that the particular

¹³ Here, in a general fashion, we bring together the singular reflections of great thinkers such as Smith and Ricardo who, at a much finer level of analysis, would largely escape the naturalism under which this article’s critical perspective claims summarily to categorise them.

¹⁴ We find this again in the formulation of any theory of value, in particular in the dominant neoclassical version.

social-historical forms of production can be neglected. Whether in its dominant neoclassical version or in its Marxist version,¹⁵ the theory of value is, consequently, based on the postulate of a given list of goods before any other indication relative to individuals or society. From this naturalist perspective, the connection between individuals and society is subsequently constructed as follows:

Individuals define themselves in the collection of goods, the image of nature. They are first natural, before being social, at least according to the naturalist interpretation that has generally been proposed for this postulate of nomenclature. Once this space is admitted, it becomes possible to represent individuals as autonomous entities driven by their own interests, whether expressed on a real scale (real profit) or through a function defined in the space of goods to which selfish interest, supposed to define individual references, may be related [...]. The possible or effective relations between individuals are not only represented in the space of goods. [...] The particular (individual) is linked to the general (society defined in the space of goods), a scientific process giving rise to an explanation of the situation of the former as the effect of a law characterising the latter (Benetti and Cartelier 1995, 221).

Thus, economic theory closely links the quantification of social relations to a particular organisation, the market, the essence of which, once again, should not be confused with its historical form of expression. Individuals present themselves in the market as capable of acting freely according to their own interests and, from this perspective, are not subject to any constraint or dependency external to the market (such as, for example, any form of political, domestic, familial or personal subordination).

The automatization of political economy is inseparable from the abstraction of economic relations and their main form of representation by means of the mechanical paradigm of the market. Consequently, this automatization diminishes our general knowledge of society: economic subjects are no longer identifiable as political or religious members of society or as part of a family or community. Meanwhile, the construction of an adequate rational representation is further at issue. This is a case of providing a scientific explanation of the nature of economic society (De Vroey 1984a). Since it goes beyond the question of a trade

¹⁵ Here, once more, we employ a shorthand, Marx's theory of value not being at all univocal and also possibly giving rise to an anti-naturalist interpretation, see Cartelier 1991; and Williams 1992.

agreement and the specific form of socialisation that such an agreement would involve, the issue is then to establish whether it is possible to understand everything that is 'economic' as stemming from this type of socialisation, notably resulting from salary relations.

THE REDEFINITION OF THE WAGE-LABOUR NEXUS

The wage system and monetary dependence

In the dominant approach, or the value approach, labour falls into the category of goods. It is identified according to the same principle as any other merchandise, and the labourer is thus raised to the level of a trader who sells a piece of merchandise, labour, the trade of which is not special in any way since it is governed by the rule of voluntary exchange and the principle of equivalence. Since it is limited by the presupposition of the existence of agents providing merchandise, the value approach cannot, therefore, envisage the salary relationship as anything other than a market relationship no different from any other.

Of course, the mode of integration of labour differs depending on whether one adopts the classical viewpoint or the neoclassical viewpoint. From the perspective of the former (excluding Marx), labour is considered as simply physical input and its price, the salary, is predetermined on the basis of a standard of reproduction. The inability to take account of the specificity of wage system relationships may be seen from at least two angles. First, labour, as such, can never be considered as the object of an economic activity to create a good that will be a candidate for exchange. The definition of *salary* based on a nomenclature of salary-goods does not express a property of the wage system relationship as such, to the extent that, thus defined, the salary refers back to the market relations in which the wage earner is an acquirer of goods.

For Benetti and Cartelier, from the perspective of basic neoclassical models, the special nature of the salary relationship is hardly any better understood. On this model labour is an ordinary good; wage earners are identified as being like any other provider of the factors of production. Now, the least one could say of such a classification is that it is flawed: in his/her status as wage earner, and in his/her necessary lack of access to goods other than labour, the employee cannot participate in any relationship that follows the rules of voluntary exchange. For Benetti and Cartelier, the wage-earning relationship is difficult to "formalize" in neoclassical models. Nevertheless, they put forward a model in which

salary asymmetry is problematic in terms of budgetary constraints (Cartelier 1995; and 1996a). This does not fully take account of the wage-earning relationship as an institution, but at least it permits the opening up of a discussion in the context of neoclassical theory. For Benetti and Cartelier, it is crucial to underline the fact that, within this context, employees' budgetary constraints are not and cannot in any case be similar to those of the economic agents (the entrepreneurs) for whom they work, that is, under whose orders the work is carried out.

The monetary approach of the wage-labour nexus offers the means of reversing this series of difficulties and rethinking not only the problem of economic socialisation on non-naturalist foundations, but also the specific problem of wage socialisation—which the realistic approaches cannot envisage without theoretical recognition of a true salary difference based on the ambiguity of labour as economic property in capitalistic systems. In *Marchands, salariat et capitalistes*, the particular nature of capitalism is developed in conceptual terms: monetary dependency describes the inequality likely to exist in an economy where money is the form of social connection that is “separation” (Benetti and Cartelier 1980, 64). A focus on the status of dependency is supposed to be specifically “economic”, and therefore, uninhibited by any reference to external considerations related to sociological or political domination.

By economic dependency in a market economy, we mean to designate the status of a certain category of economic agent: those who have nothing to sell, not even their skin to be tanned,¹⁶ since no merchandise is exchanged in the salary relationship. Labour power is merely the metonymic designation of labourers-without-power, incapable of initiating, by themselves and for their own benefit, a process of labour for the market (De Gaudemar 1981). Of course, this inability does not reflect any natural physical or psychological defect. From a heterodox theoretical viewpoint, it is based on a social cleavage: the possession of capital-money, in Marxist terminology; access to investment credit, in Keynesian terms; and *monnayage*, (access to money) in the terminology of Benetti and Cartelier. The main idea remains the same throughout: only agents initially able to spend money—and thus finance themselves and initiate a labour process the end product of which can be put on sale in the market—are able to play an active role in market production.

¹⁶ One could say in reversing Marx's famous expression about the wage earner.

On the other hand, the social integration of labourers/wage-earners is dependent on the initial activity of economic decision makers who have the power of initiative over social production. In the terminology of Benetti and Cartelier, wage-earners are the “declared elements”: in their initial advances, decision makers, the “declaring elements”, declare them for a certain amount of money with which the wage earners are economically identified and which will allow them to participate in the monetary operations of market consumption.¹⁷ Without salary relationships the market economy, described on the basis of compartmentalisation into many decision-making trading units, forms an economically homogeneous society, which we identify as the market society. There, all individuals have the same economic status. For if there are differences between decision makers due to differentiated results from market validation—related, in fact, to the unequal availabilities of *monnayage*—such differences are, by their nature, purely quantitative and all individuals are subject to the same rules.

Can such a hypothesis of homogeneity be helpful in understanding modern economies? The response to this question is at once complex and multifaceted. Certainly Benetti and Cartelier admit that one must incorporate the realistic question of heterogeneity in any discussion worthy of the name; however the way in which they proceed to theorise this incorporation ends by depleting the salary relationship of any substance. Indeed, within the perspective they offer, while we can effectively distinguish the salary relationship as such, we cannot say much about it. We find ourselves forced to place it in a different theoretical category, if not exclude it altogether. Jean Cartelier seems to adopt precisely such a position in his 1996 text, *La monnaie*:

Admitting that heterogeneous groups exist amounts to recognition that relations of equivalence cannot exist between individuals belonging to distinct groups and that not all economic relations are market relationships. Those that link individuals of different classes must then be the focus of a specific theory (Cartelier 1996b, 86).

Therefore, we must still examine the consequences of such a compartmentalisation in analysing the wage-labour nexus, although Benetti and Cartelier themselves claim to establish the concept in specific economic terms.

¹⁷ Let us remember that this can only be a case of final non-productive consumption.

The limits of such a positioning for the development of heterodox economic analysis

Remaining strictly in the field of economic relations for which they construct this model of social specificity, Benetti and Cartelier analyse the salary relationship as a social one characterised by a purely economic asymmetry: the belonging of the “declared elements” (the wage-earners-employees) to economic society is determined by their submission to “declaring elements” (the entrepreneurs-employers), the only economic subjects fully integrated into the market-capitalist order. In this way, wage earners only see themselves as they are through their collective dependency on the declaring elements.

As a monetary relationship, the salary relationship is the only means, in a society founded on separation, to socialise those who are excluded by virtue of the rules of access to money [...]. For (collective) wage earners, socialisation takes place on both sides of the fence. In empirical and approximate terms, it is because the goods that they consume must be produced at the initiative of entrepreneurs that the wage earners are what they are, that is, doubly submitted monetarily (Cartelier 1983, 13-14).

However, in our view, one component worth monitoring is the wage-labour nexus as monetary submission. In this, one deals with the salary connection to labour surreptitiously, by indicating that the true nature of salary, within monetary relations between declaring elements, “describes [integrally] labour that one defines as the mode of submission by which dependency experiences the monetary belonging of the declared element to society” (Benetti and Cartelier 1980, 65). Therefore, the consequence is that from a purely economic perspective, “labour is only thus defined by the wage-labour nexus, and not the opposite” (Benetti and Cartelier 1980, 65). The least one can say of this proposition is that it is paradoxical. Since it confuses the social forms that labour may assume, the salaried form and the independent form (or capitalist society and market society). By making labour always property and the employee always a merchant, the monetary approach can finally no longer explain salaried labour as such.

Indeed, saying of the salary-labour link that it is only monetary submission (or dependency) confuses several aspects of the problem. For Benetti and Cartelier, submission appears through monetary membership in society. Yet from there, we cannot directly deduce that this dependency is exclusively a principle of that submission. While the

declared elements are economically dominated, this is only due to their expenditures. No other dimension of the issue is raised by Benetti and Cartelier either in *Marchands, salariat et capitalistes* or in subsequent writings (see Cartelier 1995; 1996a; and 2007). Monetary dependency can only signify one thing, however: the obligation of the declared elements, such as workers, to spend their money on goods and services offered by the separate elements, such as capitalists. Such an obligation is not characteristic of labour, but rather of consumption. Yet within the theoretical framework of Benetti and Cartelier, consumption plays no role whatsoever; at best, it can be dimly perceived through necessity—the necessity to exist, to have access to money—in a social-historical context marked by the growing monetisation of social relations. Thus, we are faced with a form of circular reasoning: the result of the salary relationship, the salaried collectivity in monetary dependency, is the precursor to its description (Lautier and Tortajada 1984). It is not and cannot be something like a theory of the wage-labour nexus in *Marchands, salariat et capitalistes* or in the research that derives from it; there is only, and at best, a refraction of the salary relationship in a particular form of relationship between economic subjects.

LABOUR, THE LABOUR FORCE, AND THE WAGE-LABOUR NEXUS

For us, one of the basic limitations of this analysis is that the economic identification of the salary solely from the angle of its spending power eliminates any relationship to work, so that the latter fails to be redefined as a form of submission governed by the salary relationship. This point of view may be clarified and developed by referencing the comments on Marx in the second part of *Marchands, salariat et capitalistes*, especially note 2: on “the notion of labour”.¹⁸ This note advances two hypotheses about Marx’s theory of labour value. The first is a critical hypothesis, and the second is an alternative thesis stemming from the former. These theses are: (1) The concept of labour does not belong to the theory of merchandise as an economically significant notion; and (2) Labour is determined within the theory of the salary relationship.

¹⁸ Please see Benetti and Cartelier 1980, 164-167. Obviously, it is not surprising that this type of problem would be discussed on the occasion of a confrontation with Marx, since this is the author who first theorised the salary relationship and made it one of the institutions specific to the capitalist mode of production.

These two theses are then developed by Benetti and Cartelier, starting from the Marxist distinction between abstract and concrete labour. The problem that they raise is how one can know what constitutes, for Marx, the specific social form of existence in economic society such as they envision it within their discussion of the process of its constitution. For them, “Marx answers this on the basis of two notions: value and labour (abstract)” (Benetti and Cartelier 1980, 165). Benetti and Cartelier’s judgment of Marx is at best hasty and surely reductive. Therefore, it is worth deconstructing this judgment since it shores up their first critical thesis and reinforces the alternative thesis that the concept of labour is completely determined by their theory of the salary relationship.

This process of reasoning is initially made possible by a primary reduction. We must remember that the two concepts that, for Marx, explain the construction of social reality within the economic order are concrete labour and abstract labour. For Benetti and Cartelier, however, these two dimensions are reduced to abstract labour alone. Why is concrete labour abandoned and considered an irrelevant concept from their economic point of view? To answer this question, let us return to their argument in *Marchands, salariat et capitalistes*: “[concrete labour] is, for Marx, associated with things. Thus, everything that could be said about it has the same status as what could be said about things” (Benetti and Cartelier 1980, 164); that comes from a discourse prior to political economy, and which, as such, has nothing to do with economics. Clearly, Benetti and Cartelier are confusing two distinct conceptual levels: the general notion of labour which belongs to Marx’s philosophy and the concept of concrete labour which belongs to Marx’s political economy. Since these two terms tend to be conflated, let us pause to explain them.

The critique of the general concept of labour

For Marx, the general concept of labour stems from philosophical anthropology in as much as it concerns a generic or universal definition of the human condition. Let us recall that for Marx the general notion of labour has two key aspects, the technical and the artistic. Certainly the technical aspect is the best known. We find it discussed in a famous section from *Capital*, volume 1, chapter 6. “Labour” designates a process or the application of a form of labour to the object of labour through explicit labour activity under the continuous control of the mental representation of the desired product. In this sense, labour is, first and

foremost, a technical activity by which human beings, from a trans-historical perspective, measure themselves against nature, draw upon their mastery, and rationally govern their organic exchanges with it. It is at this level that some forms of labour exploitation (of one class by another) can develop in history, the capitalist mode of production being seen by Marx as a particular historical form of labour exploitation.

However, this aspect of the problem merely touches one element in Marx's thinking. *The economic and philosophical manuscripts of 1844* (Marx 1932 [1844]) indicate what aspect of labour most profoundly affects human beings. There labour is depicted as the act by which human beings relate to themselves as universal beings or, more precisely, as the activity in which they each become aware within themselves of all their own humanity and thus of all humanity. At this level, forms of alienation may develop in certain historical modes of production, the organisation of society leading some of its members to be deprived of this creative and fulfilling dimension of labour activity. While it is not our purpose to develop a detailed explanation of these two aspects of labour here, we would nonetheless stress that it remains a question of *two* aspects that workers have fully attributed to themselves at the end of history (from a Marxist point of view), in the communist society where they will be liberated from exploitation and alienation. Indeed, it is from this utopian point of view that anthropology may connect with history in the form of a social critique (Sobel 2011).

We fully agree with Benetti and Cartelier that the Marxist notion of labour in general is economically undetermined, in the sense that, for Marx, the determination of an economic category is linked to a particular mode of production. For Marx, this concept represents a fundamental philosophical precondition without which nothing intelligible may be advanced with respect to human societies by any social science. Yet, while it may be necessary, such an anthropological foundation is still insufficient for an understanding of the social form of existence under capitalist modes of production. On this point too we agree with Benetti and Cartelier's contention that philosophical-anthropological considerations are not, as such, directly relevant in the academic discourse of political economy or in its critique.¹⁹ There is an

¹⁹ In this, they are returning to the thesis of Louis Althusser (1965) on the epistemological break between Marx's early writings (where general anthropological categories dominate) and his mature works (where Marx constructs a genuine historical science of modes of production).

inevitable epistemological gap at the heart of economic discourse: philosophical notions cannot be placed on the same level as scientific concepts.

Concrete labour and abstract labour

Nonetheless, this is not the same as saying that “concrete labour is therefore economically undetermined” (Benetti and Cartelier 1980, 165). Here we find an unjustified slide between the concepts of “labour in general” and “concrete labour”. For our part, we believe that it allows Benetti and Cartelier to ignore all issues of labour (in the sense of production) in their analysis of economic socialisation. Thus, if their argument is convincing for labour in general, it is inapplicable to concrete labour. For Marx, the conceptual opposition of concrete labour and abstract labour is specific and not synonymous with a senseless opposition of heterogeneous terms, the opposition between “labour in general” and “abstract labour”.

Such assimilation aims to pass over another opposition as well: that between nature and social reality. With labour in general—a philosophical anthropological concept—human beings are dealing with the things in nature that they transform. Yet “labour in general” cannot exist *except* in particular historical forms, which Marx calls “concrete labour”—a form of labour where humans are no longer concerned with things in general, but henceforth with social objects defined in and by socially and historically determined practices. Here we leave the level of philosophical anthropological analysis to enter that of Marxist science, the economic analysis of modes of production and different forms of the division of labour. In our view, this change of perspective from labour in general to concrete labour is the effect of an unjustified rejection of the hypothesis of nomenclature characteristic of the monetary approach. Let us remember that, so long as it remains legitimate to consider social factors as the priority,

the presupposition that the point of departure of economic reflection is the existence of a physical world existing independently prior to all social activities emphatically rules out any attempt to describe objects or subjects of economic activity as products of specific social relations (Benetti and Cartelier 1980, 115).

Rejecting the hypothesis of nomenclature as an analytical foundation does not mean abandoning attempts to take it into account

in social scientific analysis. Otherwise, we would merely be shifting problems. The enigma of this nomenclature, given a priori to use values (nature) would then be replaced by the enigma of the structure and history of its component relations (social factors). May we then avoid the explanation of different forms of divisions of labour, of modalities of concrete work producing multiple use-values? Here we find the habitual false interpretation of Marx that effectively reduces him to an unconscious neo-Ricardian: we attribute to him a point of departure, an a priori social-technical matrix which would, at most, be considered as a natural substratum, to cover social determinations a posteriori, without any true necessary correlation. Now, we must remember that Marx's *Capital* begins with an account of a mode of social emergence that is historically determined and speaks, not of (natural) things, but of commodities: objects that are already the products of labour. Objects perceived as socially and historically determined, and are the result of commercial exchanges dominated by capitalist logic.

In these conditions, it is simply false to say that in Marx's theory of value the concept of abstract labour has the role of ensuring "the social representation of things" (Benetti and Cartelier 1980, 165). Rather it is through the dual concept of concrete labour and abstract labour, and thus through the very movement away from abstraction, that this representation is considered. To support their thesis, Benetti and Cartelier quote the following passage from *Capital*:

This is no longer, for example, a table or a house or a wire or some useful article; neither is it the product of the work of a lathe operator, a mason, or of any determined productive labour. Along with the disappearance of the particular useful nature of products of labour, the useful nature of work contained within them disappears at the same time, as do the diverse concrete forms that distinguish one type of labour from another. Therefore, there only remains the common character of this work (Benetti and Cartelier 1980, 165).

Now, in Marxist commodity theory, abstract labour—regardless of its content—does not in itself support all the weight of social factors. Indeed, when Marx studies commodities, he does not naively envisage the use value as the useful aspect in itself but quite the contrary; he sees the use value as the already existing social support (that is, socially determined) of a relation of production. At the risk of regressing to a pre-Marxian theoretical exertion, what we must thoroughly grasp is that the use-value of the commodity is not, for example, the useful

nature of the object-table, but the useful nature of the commodity-table. The distinction between the use value and utility of the object is a distinction belonging to Marxist economic analysis, although in the current representation, we confuse these two notions: the buyer of the table does not buy the economic concept “use value of the table” but the table itself which will prove useful to him or her later on.²⁰

In hypothesising about Marx’s depiction of abstract labour, Benetti and Cartelier state that it is not a representation of social factors but rather is purely nominal. In so doing, their argument is reinforced by their critique of real approaches for denying the essentially monetary expression of social substance. Labour is the universal factor arising from pure analytical convention: “given the universality already attributed to labour, there is no more room for the other universal which is money. Therefore, it is only in pushing this away that we may introduce that” (Benetti and Cartelier 1980, 166).²¹

Now, Carlo Benetti and Jean Cartelier claim that if this analytical space is empty. Empty because it was emptied of its legitimate content by Marx. Emptied, that is, of “the monetary (social) expression of value” (Benetti and Cartelier 1980, 166). In a very enlightening critical comment, Bernard Guibert remarks ironically that:

once this illegitimate suppression has taken place, the place may be occupied by anything at the discretion of the theoretician: for Marx, for example, by abstract labour; for Wiksteed by abstract utility; and for our two authors by access to money, each according to their whims! (Guibert 1980, 125).

Nevertheless, without wholly adopting Marx’s perspective, we would also argue that it is useful to pursue his line of thinking as far as possible if one wishes to criticise him at the level of his own theoretical ambition, starting with the particular elements of his analysis. Now, we can only disagree with Marx’s observation that if a place “seems” empty, it is because it “is” empty (first slip); and that if it is empty, this is because it “has been emptied” (second slip); and that it has been emptied “by someone” (third slip). This tripartite series of slips leads to the theoretician Marx, the author of the gesture that rejects money;

²⁰ Of course these buyers are individuals socialised in a historically determined society, and unless they are themselves (heterodox) economists or, more broadly, social science researchers, they lack a theoretical understanding of the ins and outs of the economic system in which their needs are met.

²¹ And more recently, see Benetti and Cartelier 1999.

but it evidently disregards the Marxist theory of fetishism, the blind and social process of displaying the products of labour. Now, Marxist analysis shows us precisely how relationships between things substitute for relationships between human beings, so that the latter become invisible, and the façade of commodities (reification) obscures their social content, which consists precisely of socially determined labour.

Marx also tells us that the laboratories of production are secret because walls prevent us from penetrating the enigmas. There is thus work for the economist and, for Marx, this is clearly work that is appropriate for economists. Benetti and Cartelier think differently: these laboratories are empty for the economist, or—and it amounts to the same thing—if there is something in these laboratories, it does not concern the economist as such. Following Bernard Guibert, however, we may legitimately wonder:

Are they [really] empty? Yes, says the language of commodities, and it fills them in, giving them their monetary names. No, says Marx, the place is already occupied by exploited labour. The chattering of commodities allows for the exploitation of the labour that produces them (Guibert 1980, 125).²²

From this point, fully reintegrating labour into the economic analysis of capitalism requires giving consistency to a dependence which signals the monetary approach while preventing, as we have demonstrated, a thorough examination of that issue. Marx had indicated that the path to introducing the concept of labour power allowed him to add theoretical depth to the capital-labour relationship, which was for him a relationship of social domination. Is a simple return to Marx on this point sufficient? Nothing is less certain. The concept of labour power is problematic and we can readily understand any hesitation in using it,

²² For a similar critique, see what Michel De Vroey (1985) writes:

The path of Benetti and Cartelier could be identified as Wittgensteinian minimalism. Not only do they reject the substance and grandeur of value, equilibrium and gravitation with which we would personally agree; they also discard another central tenet of Marx, the connection between the physical-technical axis and the social axis. Only the latter is retained, the other being relegated to the impenetrable secret laboratory. Personally, we regret this last break, the impact of which is fundamental. We admit that the proper subject of economic discourse is the social relationship, and not the underlying physical-technical dimension. But it is not because the discourse can say nothing in itself on the latter that it is right to abandon it (De Vroey 1985, 406).

in the same way we can understand its rejection by the field of economic analysis.

The particular nature of the labour force and the issues involved in a shift in theoretical perspective

The entire problem stems from the fact that labour power is not an object that is easy to grasp within the field of economic analysis. Nevertheless, for it to be relevant at all, an economic theory must recognise the particular or “ontological” nature of labour power within the capitalist mode of production. This is clearly an entirely different task from the essentially critical task of this article. Without claiming to settle the debate, however, we will content ourselves with clarifying a few theoretical issues to support the critical interpretation we are presenting.

Contrary to the classical economists, who are at best ambiguous on this point, Marx argued that labour was not a commodity. Yet the perspective he substituted for theirs (labour power as a commodity) is itself insufficient to explain the specificity of the wage-labour nexus. In the French heterodox domain, some work (Aumeeruddy, et al. 1979; Lautier and Tortajada 1982; M. De Vroey 1985) published around the same time as *Marchands, salariat, et capitalistes* did, in fact, demonstrate that, contrary to the prevalent interpretation of Marx,²³ labour power itself cannot strictly be considered as a commodity.²⁴ Yet to the extent that labour power is indistinguishable from its holder and, at the same time, does not represent all of a person, one is obliged to ask what theoretical status one should accord the object “labour power” within political-economic discourse. To what degree does this rupture with current economic analytical forms give us positive

²³ Marx’s thought is not homogeneous and, upon closer examination, itself includes a heterodox perspective that lifts him from a homogeneous and finally ahistorical approach to the economic value approach. On this point, see Maunoury 1984; and De Vroey 1985.

²⁴ In the strict sense of the term, labour power cannot be a commodity since its production is fundamentally not the result of any professional private labour, as all commodities produced under the conditions of a decentralised market economy must be. In fact, there is no productive consumption integrated in the process of labour whose immediate result would be labour power. Furthermore, a commodity only truly becomes such when it is sold, that is, recognised socially in the market. There again, the sale of labour power does not validate any private professional work. Indeed, the cost of the reproduction of the worker is comprised of domestic work, that is, of private professional labour incorporated in the salary commodities consumed that were already validated as such since they were purchased by the worker in the market of goods.

theoretical content to the labour force, that is, to give content to the very economic dependence which characterises the wage-labour nexus?

We can perhaps appreciate the degree of rupture by briefly referencing two attempts in this regard, those of Michel De Vroey and of Bruno Théret. De Vroey suggests considering labour power as a natural resource, that is, “a use-value at the disposition of men by nature and whose available quantity is not the effect of work” (De Vroey 1985, 460). The salary transaction could then be interpreted as “a transfer of rights of usage of a natural resource of an owner who lacks the means to put it to work to a purchaser who has the means” (De Vroey 1985, 461). However, De Vroey’s solution remains partial. What is at stake here is, at the very least, a special type of natural resource since it is not, like other natural resources, a pure external and appropriable object but one which simultaneously refers to the legal subject who is its owner.

A definitive solution might consist of making a radical break with any “naturalist” conception of labour power. The latter can only be reduced to a pure expenditure of energy when one accords its holder the status of a legal-political subject.²⁵ Certainly, with the theory of regulation, Bruno Théret (1994) was able to proceed furthest with the implications stemming from the specific status that one must accord labour power in a society whose economic order is dominated by market capitalism and whose political order is structured by a state of law, and, in formal terms, by a democratic state. From the perspective of salaried workers, meanwhile, representing nothing more than merely a labour force in the economic order causes identity problems. Such self-distancing, in principle prior to the salary transaction, is never a given. This distancing is always a symbolic construction orchestrated by an entire network of rules,²⁶ essentially destined to focus on wage labourers/salaried workers over the course of the labour contract by giving them a role as holders of a “fictional commodity”²⁷ that is their own labour power (Castel 2002). Now, this symbolic construction is nothing more than the product of history. Without further developing Bruno Théret’s perspective, let us insist on the intrinsically historical

²⁵ That is to say, as soon as we distinguish the wage system from the different historical forms of forced labour (serfdom, slavery, and so on) and we place ourselves in the context of a rule of law where salaried workers are also subjects. This is historically the case for those nations in which capitalism developed (notably the states of Western Europe and the United States).

²⁶ This aspect is especially clarified by the economic analysis of conventions. See Eymard-Duvernay 2007.

²⁷ Bruno Théret uses the apt expression of Karl Polanyi (1983).

character of the change in theoretical perspective to which we are led. From pure theory, claiming to be heterodox—like the capitalist-monetary approach where salary dependence and socialisation are underdetermined—we must move on to an institutionalist approach, a mode of theorization adapted to objects which are by nature floating outside of history but are in large part “social-historical”²⁸ constructions, irreducible to earlier forms.

It is, thus, a matter of studying different histories of the social-political integration of economic non-owners, the salaried workers. To examine how they are constructed, how they function, and how they transform themselves into different collective institutions (via labour law, collective conventions, and social protection) that, without radically changing the nature of the relations of production, give effective content to salary socialisation at each stage of capitalism and other socio-cultural contexts. This is the path, for example, still followed by the theory of regulation (Boyer 1993; and 1995), of which Bruno Théret’s research on the salary relationship is still the most theoretically advanced work.

CONCLUSIONS

The main contribution of the heterodox approach of Benetti and Cartelier is that it questions the relevance of a view of the economy exclusively based on a market perspective. Can the universalist perspective according to which there is no need to raise the fundamental differences between the markets and the agents who participate in them be described as tenable? For Benetti and Cartelier, the answer is clearly no; and the analytical insights of their monetary approach are worth retaining. This conclusion is central to economic research.²⁹ To examine the problem of the social connection in capitalist-monetary economies, we have to bear in mind the ambiguous status of workers and of the “labour power” of which they are the enigmatic holders, as we have seen with De Vroey and Théret. Although the monetary perspective leads to a very strict formulation of this problem, this approach has definite limitations. This can be seen especially clearly when one analyses Benetti and Cartelier’s interpretation of Marx’s concept of labour. In radicalising economic dependence, they deprived

²⁸ We borrow this term from Cornelius Castoriadis.

²⁹ Obviously, we are aware of the daunting scale of this task.

it of all substance. In so doing, they place economic science before a problematic alternative which is far from being resolved.

Either we think “purely” of capitalism, theorising that economic agents are the only subjects (“the declarative elements”), but at the cost of neglecting an analysis of wage labour; or we integrate salaried work into our theoretical model. The former, as we have seen, leads to the perspective suggested by Benetti and Cartelier, who are at least consistent in saying that political economy, as such, ultimately has nothing specific to say about salary socialisation and that we must leave this task to other fields of academic discourse (the socio-economy of labour and employment, for example). Insofar as the dominant option today with respect to the theorization of capitalism is the integration of wage labourers as merchants, we have, with this model, considerably regressed with respect to the theoretical position of the heterogeneity of statuses.

To integrate salaried work, meanwhile, one has to accept the difficult task of describing, once it is correctly understood, the precise nature of labour power. This is a task which involves the social-historical theorization of modes of integration of salaried workers, for example in the Marxist wake of the most applied research of the ‘school of regulation’. Despite being challenging, this clearly marks the opening of a genuine economic heterodoxy to other social sciences. Thus, the question is the following: are the adherents of the alternative paradigm ready to accept the consequences of the theoretical recognition of heterogeneity? To this point, the academic field of economics has been structured around the need for an economic theory that would remain both homogeneous and extremely abstract. Any actors or institutions that might seek to adopt an alternative, heterodox, social-historical position would inevitably be breaking away from the dominant academic. At best, such a break would lead to the creation of institutionalism; at worst, to socio-economy. Either way, such is the foothold of “abstraction” in orthodox economics that neither outcome would result in what academia comprehends as *economic theory*.

This is the entire issue of the initiative launched by Alain Caillé, Robert Boyer and Olivier Favereau starting with the *Manifeste pour une économie politique institutionnaliste* (2007). This initiative attempts to start again with the business of constructing an alternative paradigm. It seeks to do so, not by refocusing on a rigid theoretical foundation at the risk of falling into purism (one of the imitations of the Benetti-

Cartelier approach), but in drawing from a collection of heterodox approaches. One of the possible criticisms that could be raised is that this eclecticism risks resulting in a certain heterogeneity, at least in terms of its general theoretical nature. A lesson that could emerge from our critical perspective on the approach of Benetti and Cartelier is that a heterodox theoretical process must ensure a balance between historical relevance (going beyond simple description) and conceptual precision (moving beyond abstraction for its own sake, or esotericism).

Consequently, thirty years after the publication of *Marchands, salariat et capitalistes*, we are presented with this alternative in principle, even if the question has in fact already been resolved, the former term having carried the day in the academic domain in France, as in other countries. Yet one point remains incontrovertible: the theoretical recognition of the heterogeneity of capitalism, however necessary, cannot be accomplished in a homogenous paradigm and most certainly not from within neoclassical theory. This only leaves the question: what is an economic theory that has nothing pertinent to say about capitalism and its forms of social integration?

REFERENCES

- Aglietta, Michel, and Anton Brender. 1984. *Les métamorphoses de la société salariale*. Paris: Calmann-Lévy.
- Aglietta, Michel, and André Orléan (eds.). 1999. *La monnaie souveraine*. Paris: Odile Jacob.
- Althusser, Louis. 1965. *Lire le Capital*. Paris: François Maspero.
- Aumeeruddy, Aboo T., Bruno Lautier, and Ramon G. Tortajada. 1978. Labour power and the state. *Capital & Class*, 2 (3): 42-66.
- Benetti, Carlo (ed.). 1981. La formation des prix: A. Smith, D. Ricardo, and K. Marx. *Cahiers d'Économie Politique*, n. 6.
- Benetti, Carlo. 1985. Economie monétaire et économie de troc: la question de l'unité de compte commune. *Economie Appliquée*, 1985 (1): 85-109.
- Benetti, Carlo, and Jean Cartelier. 1980. *Marchands, salariat et capitalistes*. Paris: François Maspero.
- Benetti, Carlo, and Jean Cartelier. 1987. Monnaie, valeur et propriété privée. *Revue économique*, 38 (6): 1157-1170.
- Benetti, Carlo, and Jean Cartelier. 1995. L'économie comme science: la permanence d'une conviction mal partagée. In *L'économie devient-elle une science dure?*, eds. A. d'Autume, and J. Cartelier. Paris: Economica, 216-232.
- Benetti, Carlo, and Jean Cartelier. 1998. Money form and determination of value. In *Marxian economics: a reappraisal (Essays on volume III of Capital: method, value and money)*, ed. Riccardo Bellofiore. London: MacMillan, 157-171.
- Benetti, Carlo, and Jean Cartelier. 1999. Market and division of labour: a critical reformulation of Marx's view. *Rivista di Politica Economica*, 89 (4-5): 117-140.

- Boyer, Robert. 1993. Labour institutions and economic growth: a survey and a "regulationist" approach. *Labour*, 7 (1): 25-72.
- Boyer, Robert, and Yves Saillard (eds.). 2002. *Regulation theory: the state of the art*. London: Routledge.
- Caillé, Alain (with Olivier Favereau, Robert Boyer, José Luis Corragio, Peter Hall, Geoffrey Hodgson, Marx Humbert, Ahmet Insel, Michael Piore, Ronen Palan, Paul Singer, Bob Jessop, Jean-Louis Laville, Michel Lallement, Philippe Steiner, and François Vatin). 2007. Toward an institutionalist political economy. *Revue du MAUSS*, 9 September 2008. www.journaldumauss.net/spip.php?article232 (accessed February 2014).
- Cartelier, Jean. 1983. Une introduction à l'économie hétérodoxe. *Working Paper n. 8302*, Université Catholique de Louvain, Louvain, BE.
- Cartelier, Jean. 1985. Théorie de la valeur ou hétérodoxie monétaire: les termes d'un choix. *Economie Appliquée*, 1985 (1): 63-82.
- Cartelier, Jean. 1991. Marx's value, exchange and surplus value theory: a suggested reformulation. *Cambridge Journal of Economics*, 15 (3): 257-269.
- Cartelier, Jean. 1995. *L'économie de Keynes*. Bruxelles: De Boeck.
- Cartelier, Jean. 1996a. Chômage involontaire d'équilibre et asymétrie entre salariés et non-salariés. *Revue économique*, 47 (3): 655-666.
- Cartelier, Jean. 1996b. *La monnaie*. Paris: Flammarion.
- Cartelier, Jean. 2007. The hypostasis of money: an economic point of view. *Cambridge Journal of Economics*, 31 (2): 217-233.
- Castel, Robert. 2002. *From manual workers to wage laborers: transformation of the social question*. New Brunswick (NJ): Transactions Publishers.
- Castoriadis, Cornelius. 1998 [1975]. *The imaginary institution of society*. Cambridge (MA): MIT Press.
- De Gaudemar, Jean-Paul. 1981. Des mystères du logarithme jaune. In *Réexamen de la théorie du salariat, de la force de travail individuelle à la reproduction sociale* (collective). Lyon: PUL, 7-17.
- De Vroey, Michel. 1984a. La procédure de socialisation et le statut des échangistes dans trois représentations théoriques du marché. *Economies et sociétés*, PE series (Oeconomia), 10: 129-150.
- De Vroey, Michel. 1984b. Marchandise, société marchande, société capitaliste: un réexamen de quelques définitions fondamentales. *Cahiers d'Économie Politique*, n. 9: 109-135.
- De Vroey, Michel. 1985. La théorie du salaire chez Marx: une critique hétérodoxe. *Revue économique*, 36 (3): 451-480.
- De Vroey, Michel. 1987. La possibilité d'une économie décentralisée. Esquisse d'une alternative à la théorie de l'équilibre général. *Revue économique*, 38 (4): 773-806.
- Eymard-Duvernay, François. 2007. De la valeur-travail aux institutions de valorisation par le travail. In *Le salariat: théorie, histoire et formes*, ed. F. Vatin. Paris: La Dispute, 107-123.
- Faccarello, Gilbert. 1981. Karl Marx et la problématique des prix naturels. *Revue d'Économie Politique*, n. 4: 373-397.
- Faccarello, Gilbert. 1982. L'échec de Marx: pour rouvrir un débat. *Cahiers d'Économie Politique*, n. 8: 65-85.

- Gouverneur, Jacques. 1987. *Manuel de théorie économique marxiste*. Bruxelles: De Böeck.
- Guibert, Bernard. 1980. Les ravages de la logique. *Critique de l'Economie Politique, nouvelle série*, n. 13: 107-129.
- Lautier, Bruno, and Ramon Tortajada. 1982. *Ecole, force de travail et salariat*. Paris: François Maspero.
- Lautier, Bruno, and Ramon Tortajada. 1984. A propos de 'Marchands, salariat et capitalistes'. Monnaie, financement et rapport salarial. *Cahiers d'Economie Politique*, n. 9: 159-194.
- Lawson, Tony. 2006. The nature of heterodox economics. *Cambridge Journal of Economics*, 30 (4): 483-505.
- Lazear, Edward P. 2000. Economic imperialism. *Quarterly Journal of Economics*, 115 (1): 99-146.
- Maunoury, Jean-Louis. 1984. Théorie marxiste de la valeur et normes sociales de valorisation. *Cahiers d'Économie Politique*, n. 9: 85-107.
- Marx, Karl. 1932 [1844]. *The economic and philosophical manuscripts of 1844*. Marx/Engels Internet Archive: <http://www.marxists.org/archive/marx/works/1844/manuscripts/preface.htm> (accessed February 2014).
- Marx, Karl. 1995 [1867]. *Capital: a critique of political economy, Volume 1, Book 1: The process of production of capital*. Marx/Engels Internet Archive: <http://www.marxists.org/archive/marx/works/1867-c1/> (accessed February 2014).
- Polanyi, Karl. 1944. *The great transformation*. Boston: Beacon Hill.
- Polanyi, Karl. 1977. *The livelihood of man*, ed. H. W. Pearson. New York: Academic Press.
- Postel, Nicolas, and Richard Sobel. 2009. Institutionalism as the way of unification of the heterodox theories. *The Journal of Philosophical Economics*, 3 (1): 47-77.
- Postel, Nicolas, and Richard Sobel. 2011. Toward a heterodox theory of the economic actor: the contribution of two French institutionalist schools. *History of Economic Ideas*, 19 (2): 43-68.
- Pouch, Thierry. 2001. *Les économistes français et le Marxisme apogée et déclin d'un discours critique (1950-2000)*. Rennes: Presses Universitaires de Rennes.
- Schumpeter, Joseph. 2000 [1954]. *History of economic analysis*. London: Taylor and Francis.
- Schwab, Laurent, Alain Le Diberder, and Philippe Steiner. 1985. Une introduction à l'économie politique hétérodoxe: Marchands, salariat et capitalistes. *Revue économique*, 36 (2): 411-424.
- Sobel, Richard. 2011. Necessity and liberty in the communist utopia: André Gorz's rereading of Marx. *Rethinking Marxism*, 23 (2): 265-281.
- Théret, B. 1994. Le salariat comme forme de l'interdépendance entre l'Etat et le marché. In *L'Etat et le marché*, eds. B. Bellon, et al. Paris: *Economica*, 68-79.
- Ulgen, Faruk, Ramon Tortajada, Mathieu Méaulle, and Rémi Stellian (eds.). 2013. *New contributions to monetary analysis: the foundations of an alternative economic paradigm*. London: Routledge.
- Williams, Michaël. 1992. Marxists on money, value and labour-power: a response to Cartelier. *Cambridge Journal of Economics*, 16 (4): 439-445.

Richard Sobel and **Nicolas Postel** are assistant professors of economics at the University of Lille 1 (France), and researchers at the laboratory CLERSE-CNRS (<http://clerse.univ-lille1.fr/>). They have founded and are members of the editorial council of the *Revue Française de Socio-Economie* (La Découverte/ CAIRN). They are specialists in institutional economics and have co-published the *Dictionnaire critique de la RSE* (Presse Universitaires du Septentrion, 2013).

Contact e-mail: <richard.sobel@univ-lille1.fr>

Contact e-mail: <nicolas.postel@univ-lille1.fr>

In pursuit of the rarest of birds: an interview with Gilbert Faccarello

GILBERT JEAN FACCARELLO (Paris, 1950) is professor of economics at Université Panthéon-Assas, Paris, and a member of the Triangle research centre (École Normale Supérieure de Lyon and CNRS). He is presently chair of the ESHET Council (European Society for the History of Economic Thought).

He completed his doctoral research in economics at Université de Paris X Nanterre. He has previously taught at the Université de Paris-Dauphine, Université du Maine and École Normale Supérieure de Fontenay/Saint-Cloud (now École Normale Supérieure de Lyon). He is a co-founder of *The European Journal of the History of Economic Thought*, which he co-edited for 20 years with J. L. Cardoso, Heinz D. Kurz, and A. Murphy. With Alain Béraud, he edited the *Nouvelle histoire de la pensée économique* (La Découverte, 3 volumes, 1992-2000) and, together with Heinz D. Kurz, he is presently editing a *Handbook of the History of Economic Analysis* (3 volumes, forthcoming with Edward Elgar).

EJPE interviewed Gilbert Faccarello about his research career in the history of economic thought, where he has focused especially on old and new classical and Marxian political economy, and French political economy during the 18th and 19th centuries. G. Faccarello discusses his interest not only in the logical structure and context of the economic ideas of past thinkers but also the links between economic thought, philosophy, and religion.

EJPE: *Professor Faccarello, you did your PhD in economics but you have specialized in the history of economic thought. How is it that you first became interested in historical questions? Were there any scholars who particularly influenced your intellectual development?*

GILBERT FACCARELLO: I did my PhD in economics but this heading in France includes the many sub-disciplines of economics, including the history of economic thought. It is true that my master's degree was in international economics, but my doctoral thesis, defended in 1979 and published in a revised form in 1983, was on 'Labour, value and prices: a critique of the theory of value'.

You must realize that, when I was studying economics it was still the time of the capital controversy between the two Cambridges, i.e., the time of a fierce critique of the neoclassical aggregate production function and the related theory of distribution. This critique was principally associated with a strong neo-Ricardian revival after the publication of Sraffa's *Production of commodities by means of commodities* in 1960. As a consequence questions were also raised about the status of Keynes's writings and Keynesian theory, not only *vis-à-vis* the marginalist approach but also in relation to Sraffa's work and neo-Ricardian developments. Finally, all this rekindled the debates around Marx's theory, especially about the theory of labour value and the problem of the transformation of labour values into prices of production—and of course, in this case also, about the Marxian theory of distribution and the alleged law of the falling rate of profit.

Thus, at that time, economic theory, history of economic thought, and methodology were intimately intertwined. Consider that this was also the period when Paul Samuelson started to publish papers in HET. My doctoral thesis reflected this general mood. It dealt with the different attempts which had been made by many authors—from Smith to Sraffa and the neo-Ricardians, *via* Ricardo, Marx, Dmitriev, Bortkiewicz, etc.—to establish links between the concepts of labour, value and prices, attempts which were almost always coupled with the defence of specific theories of income distribution. I tried to understand why none of the links which were proposed could withstand critique. In my opinion this meant that this question of the links was not correctly posed, probably because the basic concepts had not been defined properly. These concepts, in particular the concept of labour—e.g., 'abstract labour' and 'socially necessary labour' in Marx—had thus to be reconsidered and redefined. All these points naturally entailed methodological and philosophical issues. For example, in the case of Marx this led me to reconsider his supposed links with Hegel, to examine precisely what Marx had borrowed from the *Wissenschaft der Logik* and *Grundlinien der Philosophie des Rechts* and why it was necessary for him to do so. I thus tried to disentangle three different strands in Marx's discourse, what may be termed the technological, sociological, and dialectical. Marx no doubt thought that these lines of thought were complementary and necessary for his intellectual project. But I reached the conclusion that they were actually in conflict with each

other because, among other things, they entailed different and conflicting concepts of 'abstract labour'.

During all these formative years, I benefited of course from extensive reading, especially in English, Italian, and also German—the literature in the French language was very poor, to say the least, and not only in HET but throughout economics in general. Reading Sraffa and some papers from the Cambridge controversy in the seminar run by my supervisor Gilbert Abraham-Frois—who subsequently published a book with Edmond Berrebi, *Theory of value, prices and accumulation*—was exciting. Geoffrey Harcourt's book, *Some Cambridge controversies in the theory of capital*, which had just been published, was also important for us, together with those of Maurice Dobb, Ronald Meek, and John Hicks.

On the Marxian side, I was very dissatisfied with the traditional Marxist literature. I found the way in which Marx was read and commented upon totally uncritical and uninteresting. I was looking for new approaches. A short paper by Hans-Georg Backhaus on the 'Dialektik der Wertform' (1967), and a book by Helmut Reichelt, *Zur logischen Struktur des Kapitalbegriffs bei Karl Marx* (1970) were of great interest together with some works by Isaak Illych Rubin, especially his *Essays on Marx's theory of value*, an incomplete German translation of which I bought in Berlin in 1974; I subsequently bought the German 1975 translation of a debate between Rubin and S. A. Bessonow, *Dialektik der Kategorien*. Once back in Paris, I suggested a complete French translation of the *Essays* to colleagues in charge of the journal *Critiques de l'économie politique*, published by the left wing publishing house of François Maspero. It came out in 1978, translated by Jean-Jacques Bonhomme, after the English translation by Milos Amardzija and Fredy Perlman published by Black and Red, Detroit, 1972. Subsequently Rubin's *History of economic thought* was published in English with Ink Links in 1979. I am glad that there is now a kind of Rubin revival, in Russia, Germany, and Japan where publications of some of Rubin's manuscripts came out recently. As usual, France is unfortunately lagging behind.

On the Italian side the debates were lively and generated an impressive number of papers and books. I benefited a lot from the writings by Claudio Napoleoni, for example, and I also remember the publication of an Italian translation of a series of essays by Ladislaus von Bortkiewicz, edited by Luca Meldolesi (Einaudi 1971). But the greatest influence probably came from Lucio Colletti, an Italian

philosopher whose book *Il marxismo e Hegel* (1969) impressed me a lot; his long introduction to Marx's *Early Writings* (1975) was also of great interest. In particular, he showed clearly why Engels's line of thought was not only irrelevant but also a highly misleading guide to the interpretation of Marx's writings; and how Marx's own position was much deeper and more complex than was usually claimed. But Colletti, like Rubin, did not go so far as to radically criticize Marx's discourse—and that is precisely what I tried to do, re-evaluating Ludwig Feuerbach's approach at the same time. Feuerbach was not only essential to Marx's youthful critique of Hegel's philosophy; Marx also accepted Feuerbach's definition of abstraction and made decisive use of it in his characterization of the concept of money and in one of his most interesting definitions of abstract labour.

You teach a seminar class on 'Methods in the history of economic thought'. What is your perspective on the methodology of HET?

On this point I am a kind of anarchist. I do not think that there is only one way to do good research in HET. It is true that I have always rejected the retrospective 'Whig' approach as sterile and irrelevant. I have always been in favour of historical methods, with the condition of course that the links between economic theories and their historical 'contexts', their intellectual environments—philosophical, religious, political—be taken seriously and not treated as merely a kind of decorative but inessential wallpaper. But this delimits a very broad field. Specific historical methods and approaches are numerous—including the good old history of theories—and you are free to choose which one suits you best. It all depends on what you would like to study. Just show me your results: only the novelty and the quality of the results are important, not the road you take to reach them.

In this respect I think that simple oppositions between internalist/absolutist and externalist/relativist approaches, or between rational and historical reconstructions—do you know of any 'irrational reconstructions'?—are rather superficial. If we would like to reflect on our own practices as historians of economic thought—and I do not deny that this is useful and even necessary—we must face up to much more complicated and complex problems. We are unavoidably embedded in a particular historical horizon, as are the authors and works we are analyzing. One of the first things to do then is to try to determine what are the precise meanings of concepts like 'explain', 'understand', and

‘interpret’—and also what is a ‘text’ or a ‘work’. To put it briefly, economists and especially historians of economic thought should take into account the history and developments of hermeneutics since at least Friedrich Schleiermacher and Wilhelm Dilthey, and particularly the writings of Hans-Georg Gadamer and Paul Ricœur—not to speak of the numerous debates they raised, for example with Jürgen Habermas. In my opinion this is a fundamental task.

On the other hand, insisting too much on ‘method’ presents two dangers. The first is to think that adopting a particular ‘correct’ method is an infallible path to wonderful results. This is doubly misleading because, first of all, committing to one method does not *ipso facto* provide any guarantee of success. Good research also depends on chance, coincidence, accidents, and above all on one essential element which cannot be taught: scientific imagination. Second, sticking to a single method can be paralyzing, especially for young scholars. In this respect we should bear in mind Montesquieu’s warning: “vous ne pouvez plus être occupé à bien dire, quand vous êtes sans cesse effrayé par la crainte de dire mal”.¹ Nietzsche said the same thing in substance: don’t ask yourself what is the best way to climb the mountain, just climb!²

The second danger is dogmatism and intolerance. Those who are imprisoned by strict rules are sometimes led to despise any other approach and to become involved in sterile polemics on the subject. Unfortunately we are sometimes confronted in HET with the same sectarian attitudes we find in other fields of economics, where colleagues almost religiously follow one line of thought and excommunicate all who do not. This reminds me of Armande’s speech in Molière’s *Femmes savantes*: “Nul n’aura de l’esprit, hors nous et nos amis”!³

When I studied the theories of Boisguilbert and Marx I felt the necessity to combine an analytical approach with historical and philosophical point of views. This was the only way, in my opinion, to reconstruct the coherence of these authors, to make the full complexity

¹ “You can no longer be engaged in speaking or writing well, when you are constantly afraid of impropriety”—*Defence of the spirit of the laws, part III* (free translation).

² “Wie komm’ ich am besten den Berg hinan? Steig nur hinauf und denk nicht dran!”—*Die fröhliche Wissenschaft*.

³ Molière, *Les femmes savantes* (*The learned ladies*)—Act 3, scene 2. Armande: “We, by our laws, shall judge of all new works; / We’ll rule both prose and verse, whatever’s writ; / Except our friends and us, none shall have wit; / We’ll spy out faults in everything and find / None but ourselves to write in style refined”.

of their theories and beliefs intelligible. When I studied the historical reception and dissemination in France of the writings and ideas of Adam Smith (with Philippe Steiner) or David Ricardo (with Alain Béraud), we adopted a more historical approach but without giving up the analytical point of view. The analytical approach is in turn predominant in my work on the history of public economics in France, and in my study of Ricardo's theory of international trade.

What about your seminar on 'Methods in the history of economic thought'?

My 'séminaire de méthode' does not really deal with 'methods' in the history of economic thought. Maybe the name is ambiguous. It is more modest in its aims: a seminar where students can learn how to read texts in a critical way.

To learn how to critically read a text is in no way superfluous, at least in France. During their prior studies, most students are accustomed to just working to pass exams, and to pass exams you are supposed to know what you have learned. In this seminar I try to make them realize that the attitude of a researcher is precisely the opposite: research starts when you recognize 'I do not understand'. They do not have to be afraid of speaking in this way, even when they read texts by prestigious authors.

We read and comment on works from different periods, for example the controversy between Bodin and Malestroict on the links between money of account, species, and prices—in the original version; Bernoulli's 1738 paper on his new theory of the measurement of risk, sometimes confronting different translations; or Keynes's 1911 review of Fisher's *Purchasing power of money* together with the first section, on the quantity theory of money, of chapter 3 of his *Tract on monetary reform*, etc. The analysis of these texts is driven by very simple questions: Against whom is the author writing? Which thesis is put forth? What is the structure of the argumentation? Is it convincing, and why? We pay attention to the vocabulary employed and its special meaning in a specific theoretical, historical or philosophical context—even if the meaning of words seems obvious at first sight. All this shows the students how careful a reading ought to be. On specific subjects—Boisguilbert or Smith for example—I or an invited speaker go deeper into the links between philosophy and the development of economic thought. We also spend some time examining the material

aspects of the documents—hence our use of the original 16th century version of the Malestroict/Bodin texts.

In order to widen their horizons, I also recently began inviting young scholars who are writing a PhD thesis to attend some specialized conferences in HET, even if the topic is far from their own research. For example, at the conference on ‘New developments on Ricardo and the Ricardian traditions’ that we organized last September in Lyon together with the Ricardo Society Japan, the day before the conference opening was devoted to a series of lectures on various aspects of Ricardo’s thinking to prepare the invited students for the conference sessions. The results were very positive and I plan to repeat the exercise. I think this kind of thing is an excellent complement to the annual European Summer School in the History of Economic Thought.

There is one point however over which I still quarrel with students. Although I distribute the texts in the form of PDFs, I urge students not to read them on the screen of their computer or tablet but to print them out and use a simple pencil to annotate them assiduously with their remarks, questions, and the like, as they read and re-read them. But I am afraid my arguments in this regard do not seem to be totally convincing! I know that annotation functions in electronic readers are improving, but they still lack the necessary flexibility to be really useful.

What do you think is the aim of the history of economic thought as an academic discipline? Does it contribute to the understanding of contemporary economics by researchers and students?

The history of economic thought is first of all a sub-discipline of its own, *à part entière*, like labour or monetary economics. We do not have to apologize for being researchers in HET, nor feel guilty for the aesthetic pleasure we feel when reading ‘ancient’ texts. It is true that this does not contribute directly to solving contemporary problems, though it can suggest ideas for further theoretical elaboration. But it certainly helps us to understand those problems in a deeper way, and contemporary economic theory and concepts in general.

Moreover a solid training in HET provides an antidote to the narrow purely technical and mathematical training that most students now receive in schools and universities. I am not at all against formalization and the use of technical tools. But training in economics cannot be confined to this kind of technical approach without generating a loss of contact with reality and the pressing problems of today. When I look

at the content of many of the professional journals in the faculty library, I feel that we are back in the heyday of Scholasticism when Schoolmen were bitterly debating how many angels could dance on the head of a pin... Of course, those Schoolmen were convinced that this was an essential activity for the advancement of knowledge and the common good; just as some economic ‘theoreticians’ today!

A training in HET is all the more necessary because students (and teachers) are also usually highly specialized by topic and thus unable to reason on subjects outside of their precisely defined field of competence. HET can open new horizons, and that can help one to think in a more comprehensive and critical way. In this perspective—paraphrasing Keynes—the study of HET is a necessary preliminary to the emancipation of the economist’s mind. It allows one to see the analogies but also the differences with past events and controversies. And this is not superfluous. It is astonishing to see old ideas being put forth again and again in various guises, in public debates as well as in research papers. To take just two academic examples, economists would have had a better idea of the supposed novelty of the ideas Milton Friedman developed in his celebrated 1968 paper on ‘The role of monetary policy’ had they read Dennis Robertson; and the phenomena of adverse selection ‘discovered’ a few decades ago would have seemed rather less radical if some striking passages on banking activity and the fixation of interest rate limits in the *Wealth of nations* had been seriously studied.

It is significant that after every crisis the public, the press and even economists suddenly show some interest in economic history and HET. This was the case recently following the subprime crisis, when the social and professional status of economists and financiers was seriously shaken. They were accused of having developed useless—or even dangerous—models and practices, and of being quite wrong in their forecasts. Even Queen Elisabeth II noticed this, and she asked the right question on the occasion of her 2008 visit to the London School of Economics: why did no one see it coming?

But unfortunately this interest in HET did not last, except perhaps for a renewed attention to the writings of Keynes without any practical consequence, at least for the time being. Most people tend to be forgetful again once a crisis seems over and they are happy to go back to their old daily routines. When I was a student, we discussed the respective merits of Kuhn, Lakatos, and Feyerabend regarding the

sociology and methodology of science and the structure of scientific revolutions. I confess that I preferred the way Lakatos dealt with these questions. I realize now that Kuhn was also right, and that I underestimated the strength of the practice of ‘normal science’. “In the long run, the economic scholar works for the only coin worth having—our own [the profession’s] applause”, Samuelson once wrote (1962, 18). Alas, this is very true. It is the dark side of the ‘scientific community’.

It is of course possible to come up with many other excellent reasons to study and to teach HET—see for example Mark Blaug’s 2001 repentance, or Heinz D. Kurz’s 2006 ESHET presidential address. But its role in a better understanding of economic concepts and the development of a more comprehensive and critical way of thinking seems to me essential.

One hundred and fifty years ago John Stuart Mill stressed the necessity of overcoming narrowness in thinking. “If a political economist is deficient in general knowledge”, he stated in *Auguste Comte and positivism*, “he will exaggerate the importance and universality of the limited class of truths which he knows”. A “liberal mental cultivation” is a necessary if not a sufficient remedy “against this narrowness [for] a person is not likely to be a good political economist who is nothing else” (Mill 1865, 306).

A few decades later, in his 1924 essay commemorating Marshall, Keynes wrote a few sentences along the same lines that are worth meditating. Max Planck once told Keynes that he had been interested in economics but he had felt that it was too difficult for him. “Professor Planck could easily master the whole corpus of mathematical economics in a few days”, Keynes commented. “He did not mean that! But the amalgam of logic and intuition and the wide knowledge of facts [...] which is required for economic interpretation in its highest form is, quite truly, overwhelmingly difficult” (Keynes 1924, 186n). The way in which Keynes detailed the difficulties is worth quoting. Economics, he stressed, is not *a priori* a difficult subject—“compared with the higher branches of philosophy and pure science”. This notwithstanding, “good, or even competent economists are the rarest of birds. An easy subject, at which very few excel!” Why is it so?

The paradox finds its explanation, perhaps, in that the master-economist must possess a rare *combination* of gifts. He must reach a high standard in several different directions and must combine talents not often found together. He must be mathematician,

historian, statesman, philosopher—in some degree. He must understand symbols and speak in words. He must contemplate the particular in terms of the general, and touch abstract and concrete in the same flight of thought. He must study the present in the light of the past for the purposes of the future (Keynes 1924, 173).

No doubt some will say this is an old-fashioned view, or too unattainable a model—or even that Keynes is only describing himself. But I presume all will agree that this kind of economist is still today the rarest of birds and that the present ways of teaching economics will not, to say the least, make them any more common.

Turning to your own research, you often write about early-modern, pre-Smithian economic thought. What is it that particularly interests you about this period?

Please allow me a remark on your terminology, which is extensively used in our discipline. I think that categories like ‘pre-Smithian economic thought’ are misleading. Why not ‘pre-Turgotian’, ‘pre-Ricardian’ or ‘pre-Keynesian’ economic thought? In the case of ‘pre-Smithian economics’, it is taken for granted that Smith was the founder of political economy and that contemporary economists are “the sons and daughters of Adam Smith” (Samuelson 1962, 1). There would be a before (non-scientific) and an after (scientific) Smith; a point of view that is totally biased and which moreover gives a false image of Smith, as the wealth of research published on his work in the last three decades demonstrates. I know that the label ‘pre-Smithian economics’ is still widely used by historians of economic thought, but this is unfortunate and suggests an intellectual inertia, or at least that the results of research take a long time to be accepted and integrated into our professional language.

I was (and I am still) particularly interested in the works of 17th and 18th century authors because, first of all, there is much to study in this field. The case was probably a bit different for English or Scottish authors, but, when I started to study HET, I realized that as regards Continental Europe the publications of that period were either neglected or dealt with in terms of the retrospective approach. At best their authors were considered as ‘precursors’, i.e., unimportant, just curiosities, the only elements of interest in what they wrote being precisely those which vaguely foreshadow some theory stated much later. This is an incredibly sterile approach which in the end cannot

uncover anything new. HET is not the history of a cumulative scientific truth which has been reached by discarding errors. It is certainly not the study of 'the wrong opinions of dead men'.

My aim was instead to take these authors seriously and to reconstruct their thinking as completely as it is possible to do in our own historical horizon, paying much attention to their historical and philosophical environment. What was needed was to reconstruct the logic and coherence of their arguments. A typical example is the work of Pierre Le Pesant de Boisguilbert who was only considered as a precursor of Quesnay; or even Turgot—an extraordinary theoretical mind, who is himself still all too frequently mentioned only as a 'dissenting Physiocrat', which does not mean anything. Not to speak of Jean-Joseph-Louis Graslin, Alexandre Vandermonde or even Ferdinando Galiani. This did not exclude research on more specific points. I tried for example to show how the debates between Turgot, Galiani, and Necker were politically and theoretically significant because they discussed, with valuable arguments on both sides, the difficult problem of how to design a successful economic policy in the context of the transition from a regulated to a free market economy. That was a very rich debate. Ironically enough, approximately the same questions were topical again quite recently, after the collapse in Eastern Europe of the political and economic regimes of the USSR and the so-called 'People's democracies'. I tried also to show how Vandermonde, while not a first rank theoretician, had nevertheless been important during the French Revolution, paving the way to Say's and Destutt de Tracy's concept of productivity.

Another powerful reason to study seriously these 17th and 18th century (but also more ancient) authors lies in the complex relationships they maintained with, broadly speaking, philosophical ideas. Most of the time these ideas are of no minor interest for these authors and powerfully motivate the questions they raised and the solutions they tried to find. The case of Boisguilbert is striking. His attitude towards the Jansenist currents of thought, together with the friendly attitude Jansenists had towards Cartesian physics, allow us to reconstruct in a better way his approach and results. Another striking example is Graslin. His *Essai analytique sur la richesse et sur l'impôt* (1767)—and his *Dissertation* of Saint-Petersburg (1768), for the few commentators who were aware of it—always raised a serious problem of interpretation. His writings have generally been considered to be important, but

commentators have never agreed on the reasons for that—and this is what happened in the case of Boisguilbert’s writings, too. Whence a very vague image of Graslin as a ‘forerunner’ of just about everybody—again, like Boisguilbert. In order to find out what he was really about, I tried to combine intellectual history and an analytical approach. This allowed me to see how Graslin based his approach on ideas borrowed from Jean-Jacques Rousseau—especially from his *Discours sur l’origine et les fondements de l’inégalité parmi les hommes* (1755)—and sensationist philosophers like Maupertuis or Charles Bonnet. It was then fascinating for me to uncover how Graslin tried to develop a kind of Rousseauist political economy and how his construction can also be considered as the foundation of classical political economy—in the sense that it entails a theory of the natural prices of commodities based on the ‘conditions of production’ and a theory of market prices as ‘gravitating’ around these natural prices, a special case being a labour theory of value. It was also interesting to see how and why, like some of his contemporaries—Condorcet for instance—Graslin paid great attention to certain questions of public economics like market failures and the free rider problem, or how he distinguished complementary from substitutive goods.

For those who are interested in the multiple links between economic theory and philosophy, this period is central. This is not to say, of course, that these links disappeared afterwards and that economics finally became an autonomous science mimicking the model of physics. The old thesis of a progressive independence of economic theory *vis-à-vis* philosophy, politics and religion—which Louis Dumont tried to revive in the 1970s in his *Homo æqualis*—cannot be accepted. To believe that economic theory became a science through cutting away at any kind of link with philosophy, politics and religion—‘freeing’ itself from them and the intellectual environment out of which it progressively emerged—remains a kind of fundamental illusion. While more discreet, those links are still there, and of material importance. With Philippe Steiner I have tried to show how political economy presented itself as a new political philosophy. Succeeding centuries of domination by religion on behaviours and thoughts, it imposed a new ethos, a new ‘conduct of life’ to use Max Weber’s phrase. This is what we called ‘philosophie économique’.

Could you explain what this phrase ‘philosophie économique’ means and why it is so interesting to you?

As you know, in the specific intellectual context of 18th century France, almost every intellectual was said to be a ‘philosophe’, i.e., a person who thought freely and against prejudices and worked for the advancement of science and truth. Quesnay and the Physiocrats were known as the ‘économistes’ or ‘philosophes économistes’. They were seen by many as philosophers who had not only developed a new science but also subverted the traditional wisdom for the counselling of the government of a state because they put the ‘science de l’économie politique’ or ‘science économique’ at the centre of the legislator’s concerns. In fact they proposed a new political philosophy based on a new ethics.

This attitude was labelled ‘philosophie économique’ by some contemporary authors. The phrase was first coined in 1767 by Nicolas Baudeau, the founder of the *Éphémérides du citoyen*—which became the organ of Physiocracy—and who is also noted for having called Quesnay the ‘European Confucius’. It appeared first in the *Éphémérides* and then in a book probably written at the same period but only published in 1771, *Première introduction à la philosophie économique ou analyse des États policés*. It was also picked up by Gabriel Bonnot de Mably, who was critical of this kind of discourse. The attitude of Quesnay and the Physiocrats was not new. It started with Boisguilbert some decades before, was also Turgot’s, and was continued by Paul Thiry d’Holbach, Claude-Adrien Helvetius, and Jean-Baptiste Say. This new approach to politics, ethics, and society—this new political philosophy—was both positive and normative and tried to impose a new ‘conduct of life’ favouring the development of a market economy and the accumulation of capital. To express this we tried to build an ideal-type along Weberian lines. It is this ideal-type we chose to call ‘philosophie économique’ because we thought this was the best contemporary expression. In constructing it we focused on three elements: a self-interested conception of human behaviour; a theory of knowledge essentially based on sensationism; and a peculiar attitude to the Legislator which evolved through time. We have developed our idea in two co-authored papers.

Weber himself wrote that the relevance of the ideal-type he developed in his studies on *Die protestantische Ethik und der Geist des Kapitalismus* stopped at around the end of the 17th century. It seemed to us that, in France, from that date to the period of the

Restoration—i.e., the beginning of the 19th century—our new ideal-type was useful in understanding the fundamental changes in the political, ethical and philosophical ideas that characterised the period.

Your best-known and most-cited book deals with the economic writings of Pierre de Boisguilbert, whom you have already mentioned several times. Marx called him one of the founders of classical political economy, together with William Petty. How important was Boisguilbert's work to the development of modern economics?

Marx was certainly a poor historian of economic thought, simply because he was not interested in HET *per se*. His approach is totally retrospective. He almost always judged the authors who wrote before him by a sole criterion: did they foreshadow or anticipate his own theory? Were they his 'predecessors' or not, and on which points? Classical political economy, according to him, included the works of all those who tried to understand the real production relationships in a capitalist society, i.e., to describe what happens behind the curtain of the market, unveiling what is hidden. And 'vulgar economists'—those who were satisfied dealing with mere appearances—were in his view the apologists of the system. Stated as such, this is a rather vague criterion. Something had to be added. The touchstone was in fact the labour theory of value. As he put it in *Zur Kritik der Politischen Ökonomie* (1859), Petty in England and Boisguilbert in France initiated the scientific movement on this point which led to Ricardo and himself. This is of course an inaccurate statement: I cannot see any reference to or 'anticipation' of a labour theory of value in Boisguilbert. On the contrary he developed an account based on the interaction of demand and supply in markets and, on this basis, determined a system of relative equilibrium prices he called 'prix de proportion'.

In *Theorien über der Mehrwert* (1862-1863)—where, if I am not mistaken, Boisguilbert is referred to only once—Marx maintained that Boisguilbert was a forerunner of the Physiocrats who, in his view, showed that the "surplus value" was created in the sphere of production—even if this sphere was limited to agriculture—and not in the sphere of circulation. But there is nothing similar in Boisguilbert.

In fact what Marx found of greatest interest in Boisguilbert were his thoughts on money. The greatest number of references to Boisguilbert is to be found in *Grundrisse* (1857-1858), *Zur Kritik* (1859) and the 1858 primitive version of it, and they concern precisely this theme. Marx is

attracted by the many passages where Boisguilbert violently stressed the damaging effects of the passion for money, gold, and hoards, and insisted that money, which should only have been the servant of trade in its functions of measure of value and medium of exchange, became its tyrant in its role of a store of value and as a consequence contributed to generating crises. It is on this aspect that Marx contrasted English and French (classical) political economy—Petty and Boisguilbert—an opposition that, he wrote, was a lasting one because it was still to be found between Ricardo and Sismondi. Contrary to Boisguilbert who was supposed to fight money, stressing repeatedly that genuine wealth consisted in the amount of commodities produced and not species, Petty was said to praise gold and the love of money because of their beneficial consequences for economic growth and the extension of markets.

Notwithstanding Marx's flawed interpretation, Boisguilbert *was* important in the development of political economy. On the basis of his religious belief and his stress on the Fall and Original Sin, he put the depraved, selfish, maximizing behaviour of agents at the centre of his analysis of the functioning of interdependent markets. From this conception of agents, together with their information and expectations, he determined the conditions of an optimal equilibrium of the economy, the 'état d'opulence', and proposed a laissez-faire policy—'liberté du commerce'—and a limited role for the State (justice, police and defence). This equilibrium—he used the term—is characterized by a system of relative prices, the 'prix de proportion' already alluded to. Absolute prices and the quantity of money in circulation do not play any decisive role in his analysis. Money as a circulating medium is for the most part endogenous: Boisguilbert thought his contemporaries were wrong to believe that the quantity of specie was too low and a cause of crisis. The fact that money does not circulate is not the cause of but a consequence of a crisis, the real causes of which are to be found elsewhere—essentially in bad economic and fiscal policy and the regulation of markets. Boisguilbert also analyzed possible destabilizing shocks and how a crisis could develop in one sector of the economy, especially agriculture, and then spread to the other sectors and become general. He also developed a circular flow approach in order to take into account the economic role of rentiers and the State.

These themes formed the legacy that Quesnay and the Physiocrats on the one hand, and Turgot and sensationist political economy

on the other, took up in two rather complementary ways. In my opinion, however, Turgot, by substituting sensationist philosophy for Boisguilbert's theological point of departure in explaining the behaviour of agents, was the one who developed this intellectual legacy the most rigorously and farthest.

Coming back to Marx: he did not properly understand some French 17th century vocabulary—for example 'finance' and 'financiers'—and this explains some of his judgments. Moreover he worked on a faulty edition of Boisguilbert (the Daire edition, published in the celebrated *Collection des principaux économistes* in 1842). We had to wait for the beautiful 1966 INED edition of the works and correspondence of Boisguilbert by Jacqueline Hecht, including a substantial number of previously unpublished manuscripts, to get a better understanding of this architectonic author.

Except for your work on the 19th century, most of your publications deal with French economists or economists who wrote in France/French. Do you think that, in describing the rise and development of modern economics, there exists a bias towards the British contribution? If so, why is the French contribution underestimated?

There is certainly—or rather there was, because it seems that things are now changing again—a bias in favour of English-writing authors. This bias came strongly to the fore after World War II. If you look back to the 19th century or the beginning of the 20th, scholars paid more attention than today to what happened in different countries. As Samuelson remembered (1962, 3): "When I began graduate study at Harvard in 1935, Schumpeter rather shocked me by saying in a lecture that of the four greatest economists in the world, three were French". Well, it is true that Schumpeter came from Austria, but his case is not isolated. Things changed in a decisive way with the acceleration of the professionalization of economists after 1945—which gave the USA a political and intellectual dominance over economics, as in other fields. It was moreover easier for native English-speaking economists—rather reluctant to learn other languages or to consider research not written in English—to concentrate on their own heritage. This set the tone and in other countries many other scholars tended to imitate them and publish on the same themes. The great controversies, like the debates on capital theory already alluded to, on Keynes, on Ricardo, and so forth, also

played an important part in this focusing on Anglophone authors and writings. Historians of economic thought are not locked up in ivory towers—we also follow fashions and topicality.

Fortunately there were some exceptions. ‘Big names’ like Quesnay, Turgot, Say, Cournot, Dupuit, Walras, Marx, or Pareto always attracted some attention. But they remained exceptions. Note that what I just said of economists is certainly not true of English-speaking historians who never lost a wider perspective.

To this must be added the fact that, during the last two centuries, a great number of first-rank theoreticians, from Ricardo to Keynes, were British or American. And as historians of economic thought used to understand their discipline as the history of theories, this could explain the concentration of research on works published in English and the relative neglect of writings and debates in other languages. This is not to say that the latter were not studied. But the problem of language was a serious impediment to the reception and spread of research findings.

Two complementary problems which today do not exist any more also formed no mean obstacle to wider research. The first were the scant possibilities to publish a paper in HET in an Anglo-Saxon journal without dealing with subjects which were supposed to be of interest to this journal and its narrow range of referees. Now of course the spaces for publication are rather numerous, the profession is well organized and, thanks to the internet, communication with authors and referees from all over the world is incredibly easy. All these transformations over the last two or three decades are of material importance and no doubt favour the multiplication of subjects, themes and methods in HET.

The second reason was the simple (un)availability of the texts—the more ancient they were, the more difficult they were to find—and, more generally, of meta-information about the texts such as would allow tracing related works published during a given period. Today, with the internet and especially thanks to sites like Gallica (the electronic library of the Bibliothèque Nationale de France), Google Books, or Archive.org, and many other institutions, researchers can immediately have at their disposal a huge number of texts in various languages and all the meta-information that scholars of my generation could only get after months of detective work in libraries. By simply typing some words on your keyboard you can find very interesting references that you did not at all expect and which widen your horizon. The real challenge now is not to get documents and information, but how to manage and make good use

of them—and the problem is serious for students starting a research project. Of course, this aspect of things depends on the subject: if you are studying Keynes's *Treatise on money* or the monetary theory of Walras, the problem is different. What I would just like to stress here is that one can now easily have a better view of the wealth of literature and debates in various countries. This is how, a few years ago, I discovered the richness of the debates about public economics among 19th century French economists, or the huge and highly varied French literature on population, poverty, and wealth.

When it comes to 19th and 20th-century economics, you seem to be particularly interested in Ricardo, Marx, and Sraffa. Is there a philosophical connection between these economists?

No, I do not think there is any philosophical connection between them, at least not any deep connection. Ricardo and Marx had different approaches. Sraffa owes something to both of them but he was working in a totally different intellectual context, well described in some recent contributions by Heinz Kurz based on the still unpublished Sraffa papers deposited in Trinity College, Cambridge. The only link I can imagine between the three of them would be a kind of positivist 'scientific' attitude. But this is rather superficial a link.

In fact, after my book and some papers on the topics you mention, I did not do any more original research on the 19th century for a long time. I was interested in other subjects, and I felt it was not good for me to spend too long digging in the same place. Better to come back later, with a fresher mind. As we already discussed, I turned to the French 17th and 18th centuries, but also to the 20th. For the past 15 years, I have been teaching a seminar on Keynes—not the Keynes of the *General theory* and after, but the Keynes before 1936, starting with his first writings—'Keynes before Keynes' is the title.

However, I have returned to the 19th century in the last few years. First to the French 19th century, with papers on the history of public economics during this period, on the debates around poverty, population and wealth, on the various associationist trends of thought and finally on the role of the different religious faiths, old and new, in the controversies of the time. Of course Say, Cournot, Dupuit, and Walras are well known, but unfortunately research into the French 19th century usually only focus on 'big names'. This is a pity because the period is infinitely richer, both analytically and from the point of view

of intellectual history. Be they liberals or anti-liberals, conservatives or socialists, the variety of opinions is incredible, as is the number of subjects they engaged with.

I am also returning to Ricardo and English classical political economy. It is really interesting to read these texts again after so many years and to re-discover them from another perspective. Sometimes my two 19th centuries connect with each other. For example I just published, with Alain Béraud, a study on the reception of Ricardo's writings in France. It was fascinating for us to see how the two worlds communicated, and how, why, on which points and by whom Ricardo's ideas were accepted, modified, criticized, or rejected over the following six or seven decades, and also how he influenced, directly or indirectly, various developments in economic theory on this side of the Channel.

In your research you often pay attention to theological issues. Recently you launched a research programme entitled 'The conflict-ridden development of modernity: theology and political economy'. What does theology have to do with economics?

Religion has been very important at decisive moments in the development of political economy. On this topic we usually think spontaneously of classical Greece and Scholasticism. But religion was still significant, though in a more discreet or even hidden way, from the seventeenth century onwards. And this should not be surprising. After centuries of religious domination, you cannot expect people to suddenly change their mentalities and totally erase the ideas which so powerfully shaped their intellectual cultures. Let us take an example. Historians of economic thought often quote Petty's assertion that he wanted to reason in terms of 'number, weight, and measure', and it is taken for granted that it represented the new scientific ethos of the time and a break with Scholasticism. It is true that this phrase is often quoted by 17th century scientists. But, interestingly enough, it comes from the Bible (*Wisdom of Solomon*, XI, 20-21).

I was first confronted with religious schemes of thought when studying Marx and trying to find the inner logic of his argument. I do not allude to the well-known 'opium of the people' but to something more fundamental. When discussing and trying to logically analyze the concepts of commodity, value, money and capital, Marx often used religious metaphors which, following Colletti, I proposed to take

seriously because they are in my view a key to the correct interpretation of many difficult or enigmatic passages in Marx's writings.

I was further confronted with theological disputes when I studied Boisguilbert. I started to read Boisguilbert by chance—I had to teach a course in the history of economic thought and I did not understand what I had read about him in the standard histories of economic thought. Fortunately I had bought the Hecht edition. I started reading and with every page more and more questions came to my mind. One thing led to another. I examined the Jansenist controversies of the time and found that I could interpret Boisguilbert's theories as an answer to some important questions being raised at that time in religious, moral, and political debates. In this case, and quite unexpectedly to me, religious ideas and beliefs were of material significance in shaping the political economy of free trade.

And this is not an isolated case. Philippe Steiner (2011) recently showed how Hermann Heinrich Gossen was inspired in his theoretical research by his religious faith. A decade or two ago, the writings of Maurice Potron—a French mathematician and Jesuit who wrote at the beginning of the last century—were rediscovered and republished. It is amazing to see how his faith and his search for a 'just price' could push him to elaborate a theory of prices of production and to find a mathematical solution for the existence of a system of equilibrium-relative prices—he used the Perron-Frobenius theorem as early as 1911 (Bidard, et al. 2009). It is striking too to see how Potron used, without knowing his writings, almost the same words as Boisguilbert. To define equilibrium prices, Boisguilbert used the condition that "*il faut que chaque métier nourrisse son maître*": for Potron, it was the translation of the prayer "give us this day our daily bread".

Religious thinking was also the source of important 19th century critiques levelled at liberal political economy by many authors from very different points of view—protestant, conservative catholic, liberal catholic, and socialist. As a matter of fact many socialist or associationist doctrines in France during the first half of the 19th century were inspired by religious ideas, old or new; doctrines that Marx and Marxists tried to dismiss but which not only played a major role in French culture and history, but were also much more important than avowed for the development of Marx's thought itself. It is also remarkable to note that the religious critique of liberal political economy motivated the foundation of sociology—and later 'economic

sociology’—by Auguste Comte, Émile Durkheim and the Durkeimians, and so on, as Steiner (2005) clearly showed in a recent book. And coming back to economics, it is fascinating to see that the Protestant and Catholic critiques were rather similar at the beginning of the 19th century but diverged afterwards and by the end of the century were associated with two radically different models of economic and social organization—one founded on liberty and association, the other on authority and new corporations.

All this of course runs counter to, or challenges, the famous ‘secularization thesis’, which has been around for at least 150 years though its intellectual foundations are continuously shifting. I am not the first, of course, to be interested in this kind of research. But there is a need for more systematic study of the role of religious thought in HET. This is the reason why I proposed the research programme you mention. I also think that an international comparative study is essential in this field because the histories of the links between religion and political economy are not the same in every country. What happened in France, for example, is different from what happened in Great Britain or in the United States, Italy, or Germany. I am quite confident that the new research this programme will foster will bring interesting results and could well change or at least greatly enrich our perception of the history of economic thought.

REFERENCES

- Béraud, Alain, and Gilbert Faccarello. 2014. ‘Nous marchons sur un autre terrain’. The reception of Ricardo in the French language: episodes from a complex history. In *The reception of David Ricardo in continental Europe and Japan*, eds. Gilbert Faccarello, and Masashi Izumo. London: Routledge, 10-75.
- Bidard, Christian, Guido Erreygers, and Wilfried Parys. 2009. ‘Our daily bread’: Maurice Potron, from Catholicism to mathematical economics. *The European Journal of the History of Economic Thought*, 16 (1): 123-154.
- Blaug, Mark. 2001. No history of ideas, please, we’re economists. *Journal of Economic Perspectives*, 15 (1): 145-164.
- Colletti, Lucio. 1969. *Il Marxismo e Hegel*. Bari: Laterza.
- Colletti, Lucio. 1975. Introduction. In *Karl Marx’s early writings*. Harmondsworth: Penguin, 7-56.
- Faccarello, Gilbert. 1982. Sraffa versus Ricardo. the historical irrelevance of the corn-profit Model. *Economy and Society*, 11 (2): 122-137. Republished in *The value dimension: Marx versus Ricardo and Sraffa*, 1986, ed. Ben Fine. London: Routledge and Kegan Paul, 188-208.
- Faccarello, Gilbert. 1983a. *Travail, valeur et prix: une critique de la théorie de la valeur*. Paris: Anthropos.

- Faccarello, Gilbert. 1983b. La loi de la valeur et le problème de la coordination des activités économiques [On Isaak Illych Rubin]. *L'Homme et la Société*, 67 (67-68): 153-177.
- Faccarello, Gilbert. 1986. *Aux origines de l'économie politique libérale: Pierre de Boisguilbert*. Paris: Anthropos. Revised edition: *The Foundations of Laissez-faire: the Economics of Pierre de Boisguilbert*. London: Routledge, 1999.
- Faccarello, Gilbert. 1989. L'évolution de la pensée économique pendant la Révolution: Alexandre Vandermonde ou la croisée des chemins. In *Politische Ökonomie und Französische Revolution*. Trier: Schriften aus dem Karl-Marx-Haus, 75-121.
- Faccarello, Gilbert. 1992. Turgot et l'économie politique sensualiste. In *Nouvelle histoire de la pensée économique, vol. 1: Des scolastiques aux classiques*, eds. Alain Béraud, and Gilbert Faccarello. Paris: La Découverte, 254-288.
- Faccarello, Gilbert. 1997. Some reflexions on Marx's theory of value. In *Marxian economics: a centenary appraisal*, volume I, ed. Riccardo Bellofiore. London: Macmillan, 29-47.
- Faccarello, Gilbert. 1997. Galiani, Necker, and Turgot: a debate on economic reforms and policies in eighteenth century France. In *Studies in the history of French political economy*, ed. Gilbert Faccarello. London: Routledge, 120-195.
- Faccarello, Gilbert. 2000. Karl Marx et la critique de l'économie politique: le 'purgatoire du temps présent'. In *Nouvelle histoire de la pensée économique, vol. 2: Des premiers mouvements socialistes aux néoclassiques*, eds. Alain Béraud, and Gilbert Faccarello. Paris: La Découverte, 62-170.
- Faccarello, Gilbert. 2006. An 'exception culturelle'? French Sensationist political economy and the shaping of public economics. *The European Journal of the History of Economic Thought*, 13 (1): 1-38.
- Faccarello, Gilbert. 2009. The enigmatic Mr. Graslin: a Rousseauist bedrock for classical economics? *The European Journal of the History of Economic Thought*, 16 (1): 1-40.
- Faccarello, Gilbert. 2010. Bold ideas: French liberal economists and public economics in 19th century France. *The European Journal of the History of Economic Thought*, 17 (4): 719-758.
- Faccarello, Gilbert. 2010. 'She tells him to be gone'. Population, poverty, and welfare in France during the first 19th century: the heyday of a controversy. Tokyo, Waseda University: Seminar on 'Population, poverty, and welfare in the history of economic thought'.
- Faccarello, Gilbert. 2011. A dance teacher for paralytic people? Pauperism and the two births of Christian political economy in 19th century France. Tokyo, Waseda University: Seminar on 'Population, poverty, and welfare in the history of economic thought'.
- Faccarello, Gilbert. 2014. From the foundation of liberal political economy to its critique: theology and economics in France in the 18th and 19th centuries. In *The Oxford Handbook of Christianity and Economics*, ed. Paul Oslington. Oxford: Oxford University Press, 73-93.
- Faccarello, Gilbert. 2015. Autopsy of a text: being an enquiry concerning Mr. Ricardo's principles of international trade. *The European Journal of the History of Economic Thought*. Forthcoming.

- Faccarello, Gilbert, and Philippe Steiner. 2002. The diffusion of the work of Adam Smith in the French language: an outline history. In *A critical bibliography of Adam Smith*, ed. Keith Tribe. London: Pickering and Chatto, 61-119.
- Faccarello, Gilbert, and Philippe Steiner. 2008a. Interests, sensationism, and the science of the legislator: French 'philosophie économique', 1695-1830. *The European Journal of the History of Economic Thought*, 15 (1): 1-23.
- Faccarello, Gilbert, and Philippe Steiner. 2008b. Political economy and religion in early 19th century France. *History of Political Economy*, 40 (Annual Supplement): 26-61.
- Faccarello, Gilbert, and Philippe Steiner. 2012. 'Philosophie économique' and money in France, 1750-1776: the stakes of a transformation. *The European Journal of the History of Economic Thought*, 19 (3): 325-353.
- Keynes, John Maynard. 1924. Alfred Marshall. In *The collected writings of John Maynard Keynes*, volume X, 1972. London: Macmillan and Cambridge University Press, 161-231.
- Kurz, Heinz D. 2006. Wither the history of economic thought? Going nowhere rather slowly. *The European Journal of the History of Economic Thought*, 13 (4): 463-488.
- Mill, John Stuart. 1865. Auguste Comte and Positivism. In *Essays on ethics, religion, and society*, 1969. Toronto: The University of Toronto Press, and London: Routledge and Kegan Paul, 261-368.
- Samuelson, Paul Anthony. 1962. Economists and the history of ideas. *The American Economic Review*, 51 (1): 1-18.
- Steiner, Philippe. 2005. *L'École durkheimienne et l'économie*. Geneva: Droz. Revised edition: *Durkheim and the birth of economic sociology*. Princeton: Princeton University Press, 2010.
- Steiner, Philippe. 2011. The creator, human conduct, and the maximisation of utility in Gossen's economic theory. *The European Journal of the History of Economic Thought*, 18 (3): 353-379.

Gilbert Faccarello's Webpage: <http://ggjfff.free.fr/>

Review of Carsten Herrmann-Pillath's *Foundations of economic evolution: a treatise on the natural philosophy of economics*. Edward Elgar, 2013, 704 pp.

DON ROSS

University of Cape Town
Georgia State University

There is no settled view among economists about the place of their discipline in the general architecture of the sciences, but in their methodological remarks one finds two common ways of side-stepping the issue. Some, for example Edward Leamer (2012), maintain that economics is not a science, but is rather a craft aimed at policy engineering. Leamer directs his criticisms against a more traditional alternative, which defends the scientific credentials of economics, and at the same time distinguishes economics from other sciences, by reference to applications and extensions¹ of a set of axioms descended from Paul Samuelson (1947). The discipline's most influential textbooks (such as Mas-Colell, et al. 1995), present economics according to the latter approach, which finds its logical apotheosis in the work of Bernt Stigum (1990). In this context it is straightforward to identify relationships between economics and similarly axiomatized domains of inquiry, such as the psychology of decision making, by comparing axiom sets. I refer to this philosophy as a way of avoiding substantive questions about interdisciplinary relationships because it displaces them by purely technical ones and, more importantly, because it renders by fiat all questions about the place of economics among those sciences that are not axiomatically structured implicitly ill-formed and therefore unanswerable. This point applies to the majority of behavioral and social sciences.

Since the demise of logical empiricism, few philosophers of science have supported the idea that the boundaries of empirical sciences can be literally identified with formal structures. This does not force us over to Leamer's view, because the dichotomy he assumes is too restrictive. It is possible to agree with him that economists are and should be

¹ The most important extensions to which I allude are game theory, expected utility theory, and general equilibrium theory.

practical in their focus and opportunistic in their use of sources of evidence, while nevertheless believing that economists have managed to collectively discover some theoretical generalizations about the structure of the social world. That is enough to motivate interest in how these generalizations can be true of the same world as claims in apparent tension with them that emerge from related disciplines such as sociology (Coleman 1990), demography (Clark 2009), cognitive science (Simon 1957; Clark 1997; Ross 2005; Kahneman 2011), neuroscience (Glimcher 2012), evolutionary psychology (Ofek 2001), the psychology of motivation and personality development (Schelling 1978, 1980; Ainslie 1992, 2001), ethology (Noë, et al. 2001), and the histories of technology (Ziman 2000; Brynjolfsson and McAfee 2012), business (Schumpeter [1911] 1982; Porter 1980, 1985; Ghemawat 1998) and political institutions (North 1990, 2005; Bates 2001; Grief 2006; Aligica and Boettke 2009). As noted, the formalist approach does not allow one to even begin to get purchase on most questions of this kind, though sometimes—as in Coleman (1990) and Glimcher (2012)—explicit implications for formal relationships are drawn from informal inductive reflection.

Once we get as far as asking whether it is worthwhile to explore pairwise relationships between economics and specific other disciplines, we can generalize this style of questioning to ask what, if anything, might be said about the place of economics in the overall architecture of systematic inquiry. There have been very few sustained investigations of this type. The investment required is considerable, as it demands broad and synaptic mastery of the history and philosophy of multiple fields of study; and the expected return is relatively meager, as even the minority of economists who find value in cross-disciplinary comparisons are often skeptical about the practical point of studies that necessarily cast their focus far from the empirical ground. Yet, for all that, the general question once raised is irresistible, even if only for late-night reflections with a glass of wine, to any economist who is self-conscious about her discipline's roots, limits, and future. And then such an economist might wish that some altruistic scholar would take on the burden of mounting a rigorous interrogation. In the person of Carsten Herrmann-Pillath, this selfless scholar has appeared.

I begin by outlining the structure and principal claims of Herrmann-Pillath's magnum opus. First, he identifies the general foundations of economics, along with the other behavioral and social sciences, in

formal physical information theory. It is by reference to the principles and equations of this body of theory, he argues, that we should most fundamentally distinguish the sciences which traffic in *evolutionary* dynamics from others. Then he specifies the most general distinctive features of *human* evolutionary processes as being mediation by *semiosis*—that is, the gathering together of functionally related aspects of reality under signs, which in turn feed back to constrain and influence extra-symbolic behavior—and *performativity*—that is, the disposition to create causally effective structure by theorizing it. Semiosis and performativity enable uniquely human forms of *niche construction*, the term for organisms' modification of the environments that set the selection pressures for their development, thereby introducing feedback into their own evolution. Semiosis and performativity are first-order human forms of niche construction that make possible a powerful second-order form, *technology*, which is partly driven by semiotic and performative *science*, but which also, to at least as great an extent, follows an autonomous evolutionary pathway resulting from its dynamical impact on energetic stocks and flows. This contingent historical trajectory ultimately led the human species to experience an industrial revolution, which reached different communities at varying rates but now determines relevant adaptive niches for almost all humans. *Industrialization* in turn gave rise to accelerating specialization of labor, and to the wider special patterns of agency—norms of consumption, production, contracting, investment, incorporation, and so on—that characterize the making of and responses to *markets*. Markets then have their own general characteristics that distinguish them from other niches or other types of institutions, and naturally their semiotically empowered participants track those general characteristics by building a performative body of evolving theory—the activity they call 'economics'.

This summary sketches a carefully constructed and intellectually attractive edifice. Although the building turns out to have a few flawed features when examined in close detail, considered at wide resolution I believe it to be by far the most thorough and systematic account of the scientific context of the discipline of economics that anyone has yet produced.

Philosophers reading this far may wonder about the extent to which Hermann-Pillath, an economist specializing in Chinese business institutions, has taken the time and trouble to integrate his general

intellectual structure with those developed by their tribe. I am pleased to report that philosophers not only have nothing to feel superior about in this instance, but have much to learn. The single greatest influence on Herrmann-Pillath appears to be C. S. Peirce, and the text indicates close knowledge of and careful reflection on the best contemporary Peirce scholarship. As Peirce is my own personally preferred candidate for greatest philosopher of all time, I admit to bias here. But I am confident that no one will be able to reasonably claim that the book is philosophically shallow. And it provides entry to a remarkable surprise, a resurrection of Hegel, of all people, as a farsighted anticipator of currently widespread views in the philosophy of social agency, whose work was open to misappropriation by mystics and romantics, and to widespread abuse for being so appropriated, because he lacked access to the pending conceptual innovations of Darwin, Peirce, and the early sociologists. With a co-author, Ivan Boldyrev, Herrmann-Pillath has given this striking idea its own book-length treatment (Herrmann-Pillath and Boldyrev 2014), so the proposal is far from casual. If the suggestion bears critical weight, then, given Hegel's never-disputed influence on Marx, important new lines of inquiry in the historical philosophy of economics may open up.

All this notwithstanding, few economists will be attracted to a long and difficult book about ontology and epistemology by an assurance that its author has paid his philosophical dues. As someone who has been thinking and writing for many years about relationships of the kind Herrmann-Pillath explores, I can conjecture how the typical economist may respond to my summary above of material that Herrmann-Pillath spends 600 pages setting out. I expect that the following thoughts would cross her mind. First, she will struggle to imagine how Herrmann-Pillath's structuring of the disciplines and their core theories could speak meaningfully to her activities of problem selection, model specification and estimation, parameter and causal channel identification, and policy recommendation. She is likely to wonder what possible empirical tests might favor the structure I sketched over possible alternatives—particularly as she is not likely to be able to conceive, herself, of any specific such alternatives. The last reflection would itself be a barrier to her engagement with the account. The value of any theoretical perspective relies on critical dialectics, but the typical economist might find that she can respond to Herrmann-Pillath's book only as she might to a daring jazz performance that

breaks rules she never knew existed and explores structures she cannot pick out of the din.

On the other hand, increasing numbers of economists, perhaps by now a majority of the profession, are sensitive to the importance of institutions and social structures in modeling and causally explaining economic outcomes (Coyle 2007). A philosopher of science can point out that this automatically implicates economists in the domains of neighboring social and behavioral sciences where questions of disciplinary relationships cannot be evaded by appeal to formalism because there is no generally acknowledged mapping from systems of axioms to institutional and social processes; there are at most a few partial frameworks (e.g., Schotter 1981). Standard modeling approaches in social and institutional economics begin with the usual individual agents, specified by attributed preferences and then additionally assigned beliefs about distributions of variables, including variables related to risk. These preferences and beliefs are then modified by contingent values of social and institutional state variables using parameterizations that are seldom derived from any deeper theory. The introduction of group identity considerations into microeconomic models by Akerlof and Kranton (2000) is one of many examples of the kind of approach I have in mind here. In my experience, few economists yet have much inkling (though see Wilcox 2008) that, from the perspective of near-consensus opinion in the philosophy of psychology, the ontological assumptions implicit in such models are bankrupt. Preferences and beliefs, according to numerous persuasive arguments mustered over the past two decades by such philosophers, are *not* latent internal states of individual people which are then subject to modification by outside influences. Preferences and beliefs are, rather, culturally evolved symbolic structures used by communities of people to relate one another's behavioral histories and dispositions to choice situations that are typically, though not always, interactive, but are always normatively characterized as *problems*. Put simply, preferences and beliefs are social constructs, certainly descriptive but also partly and essentially normative, that individuals use to predictively model both themselves and others. They are not, and do not admit of reduction to, internal psychological (let alone neurofunctional) states (Burge 1986; Dennett 1991; McClamrock 1995; Bogdan 1997, 2000, 2009, 2010; Hutto 2008; Zawidzki 2013).

Ironically, this kind of *externalism* about the content of (particularly) preferences is in no tension with the most hallowed core of mainstream microeconomic theory, the revealed preference account that informed Samuelson's (1947) original axiomatic model of the consumer. But Samuelson did not try to combine his model of the individual consumer with his (many) models of market processes, even though the most famous early forms of those models appeared in the same book. The individual economic agent plays no role in any of the models presented in Samuelson's *Foundations*, and the classic theory of that agent that Samuelson develops to rationalize downward sloping demand was declared by him, in the concluding words of the chapter devoted to it, to be of little probable importance to economics (Ross 2014). However, as soon as economists who assumed individualistic ontologies of intentional states *did* try to put the Samuelsonian consumer to work—for example, in Milton Friedman's (1956) model of lifetime consumption smoothing, which Stigum (1990) pulls into his generalized formal economics—they faced a choice between combining revealed preference theory with an 'as if' story about the relationship between the model and real consumers, or projecting preferences and beliefs into people's heads as latent representations or dispositions. I do not think it overstates matters to say that what has resulted is an inconsistent muddle of mathematicized folk psychology and cognitivist pseudo-science that has become an ever more serious methodological problem as economists have ventured deeper into domains they (confusingly) call 'behavioral'. This applies even to many macroeconomists, who lately find themselves contending with claims that business cycles result from social epidemics of pessimism and optimism (Akerlof and Shiller 2009). Such theory merely redescribes the phenomena it purports to explain because sound cognitive science will not vindicate the folk psychology on which it relies.

I thus think that a case can be made that a new philosophy of social agency in economic problem settings which can furnish a full-scale replacement for the atomistic cognitivism that economists collectively stumbled into between the 1950s and the 1980s should feature in the typical economist's demand schedule.

If I have persuaded any such economists, they should be warned that the book is hard sledding, and not merely because the themes it explores are difficult, deep and not yet embedded in familiar metaphors. The construction of many of its sentences is based on the syntactic logic

of German rather than English. To pick one example: “[...] the most widespread definition of economics is actually misleading which relates scarce means to ends, because the essential question is how means and ends co-evolve” (p. 511). If you know how to render this into idiomatically identical German then you will not feel the Anglophone reader’s instinctive need for a change in word order, a second comma, and a subordinate clause. Reading Herrmann-Pillath thus has much in common with reading translations of Hegel himself: the reader cannot expect to go through such sentences at normal reading speed, so the number of pages in the book understates its effective length.

However, most consumers of this book will be reading it as work and will, in principle, be getting paid for their time. So let them not whinge. I will use my remaining space here to emphasize the potential compensations for an economist who currently experiences moments of puzzlement about how her discipline folds into wider human knowledge. If such a reader thinks she would be a better economist—not to mention a better teacher of economics—to the extent that she was less puzzled about this, then the returns Herrmann-Pillath has to offer are very great. In fact, no one has yet provided an account that better scratches the itch of the economist who feels adrift in the scientific firmament.

Here, then, are some of the notable product features from which you, the ‘typical economist’ I am idealizing, will get to benefit if you swallow the medicine.

First, the book’s rigorous philosophical foundations in Peirce will expose the inadequacy of most existing stories about the supposedly philosophical ‘foundations’ of economics. Sciences do not, in general, need such foundations, regardless of how many philosophers say they do. But any account of the place of a science in the wider enterprise of human knowledge production is automatically a philosophy of the science in question. If you think that a bit of Popperian falsificationism will suffice where economics is concerned, then you really should read something more sophisticated or, for your own sake, forswear ever discussing methodology in public. Herrmann-Pillath channeling Pierce will bring you all the way up to head table fitness in one volume.

Second, you will see why rejecting a formalist account of economics does *not* imply any reduction of its technical content. The economic domain is fundamentally statistical, and there is no such thing as formal statistics—but at the same time, there is no risk of running out of

difficult novelties in econometric theory, so technophiles will remain as important as ever. A trend already well evident in the journals is that emphasis on mathematical elegance is steadily giving way to valorization of econometric know-how. Herrmann-Pillath's account will allow you to understand why this is not a mere change of fashion facilitated by faster computers and specialized econometrics software. It is, instead, what *should* be happening if the discipline is moving along the right track, because economics, like biology, is about information flow, and the science of information is part of the kingdom of statistics.

Third, you will learn how to stop relying on the silly 'as if' defense of attributing cognitive omniscience to economic agents in markets. You will be able to throw away this non-explanation of what you assume when you build models thanks to learning the doctrine of philosophical externalism about the mental. This is one of the very few ideas developed by philosophers more recent than Hume that you really should set out to grasp, because it explains how and why human behavior in market contexts conforms to a distinctive kind of orderliness that it largely lacks in other settings—one important economist who has emphasized this is Vernon Smith (2008). According to Herrmann-Pillath, Hegel deserves some of the credit for this idea. While struggling through Herrmann-Pillath, you can thus make yourself feel better by saying "this way I don't have to read Hegel". Perhaps, however, Herrmann-Pillath will inspire you to read some other first-order philosophy on this subject more accessible than Hegel; I recommend Zawidzki (2013). The 'as if' doctrine about agents' apparently miraculous information processing in market contexts is typically referred to as 'instrumentalism'. By reading Herrmann-Pillath's book you will come to understand its insightful conclusion that "[...] economic instrumentalism is a disguised form of sociological reasoning, because it factually adopts an externalist approach to rationality inappropriately cast into internalist language" (p. 211). When the disguise is removed, the motivation for instrumentalism vanishes. Economics as a discipline is much closer in both its assumptions and its explananda to sociology than to psychology (Ross 2014). It is mainly confused philosophy of mind that has obscured this fact, and that has simultaneously distorted economists' sense of where they should look for borrowings from the neighbors.

Fourth, you will see how to address the current conceptual chaos in social economics, where more or less complete anarchy governs usage

of the notions of convention, norm and institution. Economists perhaps suspect that they are importing this anarchy from sociology and so are not responsible for it. Even if that were correct, which it is not, it would not mean that nothing should be done to create some order. Herrmann-Pillath provides a rigorous systematization of these three concepts and their relationships to one another. The systematization itself is derived from general philosophy of social science, and is then applied carefully to the domain of markets. For example, according to Herrmann-Pillath's typology, although all prices coordinate expectations, wages and interest rates in a modern economy are institutionalized, properly speaking, whereas the price of a slice of pizza in New York (in January 2014, \$1 around West 40th Street and 8th Avenue, \$2.50 four blocks south on 7th Avenue) is not. The difference is not that interest rates do not vary as much as pizza prices (they do); it is rather that the processes that control variation in the former are more transparent and less responsive. This should matter to you if you design structural models of price-generation. Herrmann-Pillath's systematization should be the basis for improved cross-comparability in such models, and can provide guidance to experimenters when they are deciding which laboratory variables to fix exogenously and which they should allow to arise endogenously.

Fifth, you will gain a new appreciation of how subtle, not to say slippery, is the distinction between production and consumption. Mainstream economists should not be so impressed with the logical and empirical gaffes in Marx's labor theory of value that they ignore his correct observation that consumption produces human capital. Most economists now recognize status as a form of social capital and the basis of network assets, so even luxury consumption has this productive aspect. Herrmann-Pillath elevates this tension between classical and neoclassical thought from the domain of ambiguous conceptual conventions to firm adjudication in the technical science of bio-energetic systems. That is, rigorous technical distinctions from a domain more general than economics are developed to do rigorous work that the intuitive distinction between production and consumption cannot. As Herrmann-Pillath explains, increasing labor productivity is the basic bootstrap for growth and technological progress. This is illustrated in terms economists will recognize by his account of what they call 'the Salter cycle' as a special case of more general hypercyclic dynamics (p. 470). Marx tried to ride this generic insight about

production-consumption cycles too hard and too far, partly because in his hands it was little more than an intuition. Following a century and a half of developments in systems theory, applied in both biochemistry and thermodynamics, Herrmann-Pillath can correct Marx without introducing any extraneous ideological considerations, and in a way that, once again, builds bridges to mathematical developments in other sciences that can guide modeling in economics. Production and consumption are tightly related aspects of a single underlying dynamic of technological niche construction that gives rise to evolving market structures.

Sixth, and closely related to the fifth feature, you will learn how to think in a subtle and creative way about relationships between classical and neoclassical analyses. Comparative advantage, as Adam Smith taught, depends on specialization, but specialization as a real process is dynamic and depends on observations of relative price differences. These in turn can only be reliably identified when there are monetary institutions. Thus, according to Herrmann-Pillath, even though neoclassical utility concepts are crucial for representing preferences that range over risk and time, money remains a fundamental concept for microeconomists. Relatedly, the distinction between microeconomics and macroeconomics arises because global-scale markets can clear in the accounting sense (credit and debit columns, counted in money, balance) leading to global equilibrium (the aggregate credit balance plus wealth in hand = financed production) even though many individual markets are not clearing. Thus we arrive at a philosophical complement to the practical point, increasingly recognized by economists following the events of 2008 and beyond, that the strange activity of building macroeconomic models that do not specify and incorporate a financial sector cannot be soundly motivated by appealing to 'microfoundations'.

Seventh, as with consumption and production, you will learn how to view a range of economic concepts as empirically anchored in evolutionary dynamics. For example, 'scarcity' if it is to be a useful scientific concept, must designate more than the mere fact that a factor is not infinitely supplied at a marginal cost of zero. An economist who notices this obvious point might be inclined to seek an alternative operationalization. But, Hermann-Pillath explains, this would be a mistake based on confusion about the ontological nexus of the concept.

Scarcity is not an economic category but an evolutionary category [...] Scarcity is a short-hand notion for all selective pressures that

operate on human behavior, also in the context of markets, but scarcity is also endogenous to evolutionary niche construction. Hence, scarcity is essentially related with novelty (p. 511).

The main point here, that scarcity is both relative and dynamic, is empirically persuasive. However, this also serves as an example of a style of reasoning that will likely strike most economists as peculiar, based on the highly questionable idea that disciplines are distinguished in part by being assigned custodianship of concepts.

Of course disciplines are historically and practically *associated* with specific concepts. However, Herrmann-Pillath is not as careful as I think he should be to avoid laying down *a priori* legislation about disciplinary limits, with all of the conservative implications of that philosophical attitude. For example, early in the book he mentions work, such as that collected in Noë, et al. (2001), which applies economics to the analysis of intraspecific and interspecific behavioral relationships among non-human animals and then announces that “I am not in favour of these extensions because they do not lead to a sustainable arrangement between the various scientific disciplines” (Herrmann-Pillath 2013, 53). Presumably Herrmann-Pillath does not mean that he wishes this empirical and modeling work were not done at all, but only that he prefers that it not be *called* ‘economics’. His reason for this seems to be that non-human animals cannot signify themselves to themselves as such, nor (therefore) engage performatively to produce economics ‘properly speaking’.

While appreciating the substantive point being made, I am not sympathetic to Herrmann-Pillath’s following the lead of Kant in anointing disciplines with ‘essential’ missions that define rigid borders around them. It is fine to say that economists have been, historically, mainly interested in markets that are institutionally stabilized, and that this explains the nature of the boundaries that have actually been observed between economics and psychology on the one side, and between economics and sociology on the other side. I am also happy to add a normative dimension to this descriptive claim, and say, for example, that many behavioral economists have inappropriately ignored the first historical boundary and have consequently launched criticisms of other economists that amount to taking them to task for not being psychologists. However, both of these points of sympathy with Herrmann-Pillath are compatible with the view that boundaries between disciplines are fuzzy and often overlapping, and thereby generate

productively disputable territory, and that they furthermore shift over time. To return to the example at hand, it does not trouble me at all to say that at coral reefs where fish queue up to have parasites removed by other fish who extract some ‘payment’ by also nipping off a few scales, we find non-human markets that are appropriately analyzed by economists even though the economics in question plays no performative role in the behavior of the participants.

Essentialism about performativity may also be related to what I regard as Herrmann-Pillath’s excessively sweeping negative remarks about equilibrium analysis in economics. I agree with him (and Hayek, and many entirely mainstream contemporary economists) that it is never a true, or indeed sensible, thing to claim that a large economy is ‘at’ or ‘approaching’ general equilibrium (GE), which would be equivalent to saying that both excess demand and excess supply are zero and no one has any incentive to plan to do anything they are not already planning or to learn anything until there is an ‘exogenous shock’. Herrmann-Pillath is of course aware that there are important equilibrium concepts other than GE, including Nash equilibrium (NE) and special-market-clearing equilibrium (Marshallian partial equilibrium or PE) that are important in economics. He explicitly agrees that PE often applies to specific markets—indeed, this is essential to his account of the micro/macro distinction, as we saw above. And he nowhere attacks, for example, the idea that oligopolistic suppliers (e.g., Coke and Pepsi) might settle into long-running NE. But even GE, understood as the solution concept for certain sets of closed-form equations defining convergent functions, can be a highly useful analytic *tool* for economists. If I am studying a national economy, I know that it is a heterogeneous bundle of stochastic data generating systems. Agreeing with Herrmann-Pillath’s case against atomistic individualism about agents, I recognize that these bundles do not decompose into particular people, but I do not let this trouble me. I write down a few simple closed-form models of the responses of the economy to changes in a variable that interests me (presumably because someone has policy control over it). Then I estimate a maximum likelihood function that tells me which of my models best describes the responses of various types of data-generating bundles, which I idealize as ‘sectors’. The result is a structural model of a lot of statistics about sector inputs and outputs. Now, the models I use in my mixture had each better have an equilibrium solution; otherwise I cannot decide what econometric model

to use for estimation. And when, at the end, I predict the outcome for the economy of wiggling my variable of interest, the result is a representation of an equilibrium. Knowing that equilibrium never literally describes a real economy, I warn the policy-maker that all this means is that I predict that if she pushes the variable to such-and-such a value, the evolving economy will then pass through, or close to (with error quantified in my analysis) one of the states that *in my model* is represented as an equilibrium. The importance of this for policy recommendation and choice is that we know how to use equilibrium analysis to explore aggregate welfare comparisons. For an example of GE analysis in policy-focused economics of the kind I am imagining, and to which I can find no basis for objection in Herrmann-Pillath's book, consider Harrison et al (2002).

However, reflection on Herrmann-Pillath's general picture of economics as, fundamentally, the science of markets as a species of complex systems, and of the special form of agency to which markets give rise, can deepen the economist's value as a policy advisor beyond what technical analysis by itself achieves. Suppose that my advice to a policy-making client as imagined above leads her to decide to manipulate the variable I have focused on within the range I have suggested, but that she also asks me, "And then what happens?". If I have taken Herrmann-Pillath's account seriously I should *not* reply by saying that the economy will remain in its new equilibrium until, after a period I cannot specify, some or other exogenous shock, which by methodological definition I cannot describe, occurs. I will have to admit to the client that, after her intervention plays out, I will need to gather new measurements and model everything again. But if she is unhappy with this, because she wanted policy advice good for all time, I can explain to her that the error terms in both my base models and the output structural model assume various things to be uncorrelated, some of which are bound to *become* correlated, possibly quite rapidly. That is how things are with living dynamic systems, of which the inter-linked cluster of markets we call an 'economy' is a special kind.

The reader will notice—perhaps with satisfaction—that in the imagined story my client must pay me indefinitely to make new models and estimations regardless of whether I justify this by empty rhetoric about exogenous shocks or by offering a tutorial on the statistics of dynamical systems. But in the second instance she spends her resources on the basis of sound scientific explanation, whereas in the first

instance she is put off with bluster. Philosophy can only ever matter to people who care about this distinction, and not every practical person does. But economists who so care should carve out time for Herrmann-Pillath's major contribution to the discipline's self-understanding.

REFERENCES

- Ainslie, George. 1992. *Picoeconomics*. Cambridge: Cambridge University Press.
- Ainslie, George. 2001. *Breakdown of will*. Cambridge: Cambridge University Press.
- Akerlof, George, and Rachel Kranton. 2000. Economics and identity. *Quarterly Journal of Economics*, 115 (3): 715-753.
- Akerlof, George, and Robert Shiller. 2009. *Animal spirits*. Princeton: Princeton University Press.
- Aligica, Paul, and Peter Boettke. 2009. *Challenging institutional analysis and development: the Bloomington school*. London: Routledge.
- Bates, Robert. 2001. *Prosperity and violence*. New York: Norton.
- Bogdan, Radu. 1997. *Interpreting minds*. Cambridge (MA): MIT Press.
- Bogdan, Radu. 2000. *Minding minds*. Cambridge (MA): MIT Press.
- Bogdan, Radu. 2009. *Predicative minds*. Cambridge (MA): MIT Press.
- Bogdan, Radu. 2010. *Our own minds*. Cambridge (MA): MIT Press.
- Brynjolfsson, Erik, and Andrew McAfee. 2012. *Race against the machine*. Seattle: Digital Frontier Press.
- Burge, Tyler. 1986. Individualism and psychology. *Philosophical Review*, 95 (1): 3-45.
- Clark, Andy. 1997. *Being there*. Cambridge (MA): MIT Press.
- Clark, Gregory. 2009. *A farewell to alms*. Princeton: Princeton University Press.
- Coleman, James. 1990. *Foundations of social theory*. Cambridge (MA): Harvard University Press.
- Coyle, Diane. 2007. *The soulful science*. Princeton: Princeton University Press.
- Dennett, Daniel. 1991. *Consciousness explained*. Boston: Little Brown.
- Friedman, Milton. 1956. *A theory of the consumption function*. Princeton: Princeton University Press.
- Ghemawat, Pankaj. 1998. *Games businesses play*. Cambridge (MA): MIT Press.
- Glimcher, Paul. 2012. *Foundations of neuroeconomic analysis*. Oxford: Oxford University Press.
- Greif, Avner. 2006. *Institutions and the path to the modern economy: lessons from medieval trade*. Cambridge: Cambridge University Press.
- Harrison, Glenn, Jesper Jensen, Morten Lau, and Thomas Rutherford. 2002. Policy reform without tears. In *Policy evaluation with computable general equilibrium models*, eds. Amedeo Fossati, and Wolfgang Wiegard. London: Routledge, 20-36.
- Herrmann-Pillath, Carsten. 2013. *Foundations of economic evolution*. London: E. Elgar.
- Herrmann-Pillath, Carsten, and Ivan Boldyrev. 2014. *Hegel, institutions and economics: performing the social*. London: Routledge.
- Hutto, Dan. 2008. *Folk psychological narratives*. Cambridge (MA): MIT Press.
- Kahneman, Daniel. 2011. *Thinking fast and slow*. New York: Farrar, Straus and Giroux.
- Leamer, Edward. 2012. *The craft of economics*. Cambridge (MA): MIT Press.
- Mas-Colell, Andreu, Michael Whinston, and Jerry Green. 1995. *Microeconomic theory*. Oxford: Oxford University Press.

- McClamrock, Ron. 1995. *Existential cognition*. Chicago: University of Chicago Press.
- Noë, Ronald, Jan van Hoof, and Peter Hammerstein (eds.). 2001. *Economics in nature*. Cambridge: Cambridge University Press.
- North, Douglass. 1990. *Institutions, institutional change and economic performance*. Cambridge: Cambridge University Press.
- North, Douglass. 2005. *Understanding the process of economic change*. Princeton: Princeton University Press.
- Ofek, Haim. 2001. *Second nature*. Cambridge: Cambridge University Press.
- Porter, Michael. 1980. *Competitive strategy*. New York: Free Press.
- Porter, Michael. 1985. *Competitive advantage*. New York: Free Press.
- Ross, Don. 2005. *Economic theory and cognitive science: microexplanation*. Cambridge (MA): MIT Press.
- Ross, Don. 2014. *Philosophy of economics*. Houndmills Basingstoke: Palgrave Macmillan.
- Samuelson, Paul. 1947. *Foundations of economic analysis*. Cambridge (MA): Harvard University Press.
- Schelling, Thomas. 1978. Economics, or the art of self-management. *American Economic Review*, 68 (2): 290-294.
- Schelling, Thomas. 1980. The intimate contest for self-command. *Public Interest*, 60: 94-118.
- Schotter, Andrew. 1981. *The economic theory of social institutions*. Cambridge (UK): Cambridge University Press.
- Schumpeter, Joseph. [1911] 1982. *The theory of economic development*. Piscataway: Transaction.
- Simon, Herbert. 1957. *Models of man: social and rational*. New York: Wiley.
- Smith, Vernon. 2008. *Rationality in economics*. Cambridge: Cambridge University Press.
- Stigum, Bernt. 1990. *Toward a formal science of economics*. Cambridge (MA): MIT Press.
- Wilcox, Nathaniel. 2008. Against simplicity and cognitive individualism. *Economics and Philosophy*, 24 (3): 523-532.
- Zawidzki, Tad. 2013. *Mindshaping*. Cambridge (MA): MIT Press.
- Ziman, John (ed.). 2000. *Technological innovation as an evolutionary process*. Cambridge: Cambridge University Press.

Don Ross is professor of economics and dean of commerce at the University of Cape Town, and program director for methodology at the Centre for the Economic Analysis of Risk at Georgia State University. His areas of recent research include economic methodology; experimental economics of risk and time preferences in vulnerable populations; strategic foundations of human sociality; and scientific metaphysics. His many publications include *Economic theory and cognitive science: microexplanation* (2005), *Every thing must go: metaphysics naturalized* (with James Ladyman, 2007), *Midbrain mutiny: the picoeconomics and neuroeconomics of disordered gambling* (with Carla Sharp, Rudolph Vuchinich, and David Spurrett, 2008) and *Philosophy of economics* (2014). Contact e-mail: <don.ross931@gmail.com>

Review of Huei-chun Su's *Economic justice and liberty: the social philosophy in John Stuart Mill's utilitarianism*. Routledge, 2013, 214 pp.

MICHAEL SCHEFCZYK

Leuphana University Lüneburg

For those who are inclined to discount John Stuart Mill as an erratic and eclectic thinker, *Economic justice and liberty* should be required reading. The book belongs to a steadily growing class of scholarly works which interpret Mill with sympathy and a solid cognizance of his writings, and which confirm J. O. Urmson's judgement that if one studies his work diligently, "an essentially consistent thesis can be discovered which is very superior to that usually attributed to Mill and immune to the common run of criticisms" (Urmson 1953, 33). The author of this highly readable book, Huei-chun Su, goes even further than Urmson. Mill's position is not only superior to what sloppy, lazy or nit-picking readers ascribe to him. His social philosophy offers modern readers a serious alternative to that of contemporary luminaries such as Rawls, Sen, and Hayek. By ending the book with the remark that "Mill deserves to be recognized as one of the greatest thinkers in human intellectual history", the author's praise may go a bit over the top. But it is an understandable reaction to the ill-informed dismissiveness towards Mill which is still *de rigueur* in some academic quarters. Many philosophers take liberties with Mill they would never dare to take with G. E. Moore.

Economic justice and liberty was developed from a PhD thesis supervised by John Maloney at the University of Exeter. The later stages of the book, however, took shape at the Bentham Project at University College London, and one gets the impression that this academic environment helped the author to hammer out what utilitarianism was in the 19th century and how it differed from its modern successor, as canonised by J. J. C. Smart. In order to mark the difference between the two as clearly as possible, Frederick Rosen once coined the useful term 'post-utilitarian paradigm' to describe the latter (Rosen 1997). The post-utilitarian paradigm of Smart and others requires the maximisation of total utility and is indifferent to how utility is distributed. Since it conceives utility to be a uniform and summable entity, the post-

utilitarian paradigm seems to open the floodgates for the justification of all kinds of injustices, ranging from imprisoning innocent people for fun to extreme inequalities in the distribution of income and wealth. One of the great merits of *Economic justice and liberty* consists in pointing out that a principle of justice is at the very centre of Mill's utilitarianism and that his conception of justice is surprisingly close to that of Rawls, who did so much to discredit utilitarianism as a theory of political morality.

The book has three parts. The concise first part elucidates important aspects of Mill's moral psychology. Everyone has heard that Mill was both a utilitarian and a radical empiricist. Far less established, though, is how closely Mill linked moral theory with empirical science. The bogus authority of moral intuitions must be replaced by a proper inductive basis for normative and axiological claims. Pursuing an essentially Humean programme, Mill was convinced that moral philosophy had to be based on a science of human nature containing in particular what he called "the laws of mind". As Mill frequently lamented, there was no scientific psychology in his day. This has important implications for the status of Mill's moral philosophy and how modern sympathisers should deal with it. Measured against its own standard his moral theory is based on merely conjectural knowledge. It is thus in the spirit of Mill's approach that Huei-chun Su sketches in the book's concluding remarks what a scientific foundation for utilitarianism might look like if we used the resources of modern psychology.

Mill is certainly not to blame for the lack of a scientific psychology in his day, but he could have presented his ideas about moral psychology in a more systematic fashion. The author gathers "views scattered in different places of his work" and accurately pieces them together. It goes without saying that Mill's moral psychology cannot be dealt with comprehensively in a few pages. But the author ably explains the crucial points, such as Mill's backing away from his father's (and Bentham's) view that people are motivated solely by expectations of pleasure or pain. Mill agrees with his mentors that pleasure and pain play a crucial role in explaining actions. But unlike them Mill argues that the pursuit of pleasure or the avoidance of pain may trigger actions without necessarily being their object. For example, a virtuous person finds the thought of being malicious painful and the thought of being benevolent pleasant, but this does not mean that such a person

performs a virtuous action in order to obtain pleasure or avoid pain. In other words, mental states like pleasure and pain are necessary parts of the total cause of an action, but obtaining pleasure and avoiding pain is not necessarily the aim of what one does. This deviation from his mentors' views enabled Mill to give his theory of human motivation in general, and of moral motivation in particular, a much richer texture.

The second part, on utilitarianism and the theory of justice, is the linchpin of the book. The reader is in safe hands when the author explains the architecture of Mill's moral and social philosophy. Among other things, she gives a crisp survey of the contentious discussion of whether Mill was an act or rule utilitarian.

After the author has climbed this ladder, she kicks it away in order to show "what we can achieve in understanding Mill's utilitarianism with this liberation". One achievement, and no small one, consists in spotlighting Mill's claim in *Utilitarianism* that the "highest standard of social justice" is a "direct emanation from the first principle of morals" (Mill 1967 [1861], 257). In other words, in Mill's understanding, the utility principle contains a principle of justice which requires society to treat "all equally well who have deserved equally well of it". This makes a surprisingly simple defence available against the notorious criticism that utilitarianism, under certain empirical conditions, would justify imprisoning, or even torturing, innocents for the amusement of the masses. Mill's retort would simply be that innocents do not deserve to be imprisoned or tortured.

Many a critic will object that this is just another example of how readily Mill took eclectic and inconsistent positions. When Mill says that the utility principle demands that "one person's happiness, supposed equal in degree [...], is counted for exactly as much as another's" (Mill 1967 [1861], 257), this instructs us how we have to calculate the sum total of individual pleasures and pains. The innocent person's pain does count for one unit, as do the pleasures of every individual spectator. Like Bentham, Mill makes a point of forgoing an appeal to abstract rights. Hence, a critic may argue, if Mill only stringently applied the logic of utilitarian thinking the innocent's 'right to equality of treatment' would simply mean 'the right to be counted for one, like anybody else'. From this perspective, despite Mill's asseverations to the contrary his highest standard of justice is by no means a "direct emanation from the first principle of morals" but an independent deontological side-constraint.

What does Huei-chun Su have to say in Mill's defence? The crux of her reasoning is that Mill distinguishes and ranks different kinds of pleasures and pains. Following in Bentham's footsteps, he calls security "the most vital of all interests" and an "extraordinarily important and impressive kind of utility" (Mill 1967 [1861], 250-251). One purpose of legal rights consists in protecting this most vital interest in security. Thus, transgressing the legal rights of an innocent person by imprisoning her for fun would amount to a violation of an extraordinarily important kind of utility. How does this affect the utilitarian calculation? Since the interest of an individual in her security is infinitely more important than the interest of a mass of people in being mightily amused by the despair of an innocent prisoner, the balance of pleasures and pains speaks against imprisoning innocent people. Generally speaking, in order to count everybody for one and nobody for more than one, adequate utility assessments have to account for the different, and differently important, types of utility involved. This sets classical utilitarianism apart from the post-utilitarian paradigm.

As Huei-chun Su points out, the right to equal treatment is just a formal condition of justice. It requires *inter alia* a system of secondary principles which specifies the extraordinarily important and impressive kinds of utility that must be protected by legal rights. The liberty principle is the best known of these secondary principles. Moreover, Mill declared that "the highest abstract standard of social and distributive justice" is a "direct emanation from the first principle of morals". Since this standard employs the idea of desert, Mill's admittedly sketchy theory of justice argued that the way in which economic and social institutions distribute material advantages must respond to individual merit or exertion. He thus pioneers the idea that a just society will not tolerate undeserved inequalities due to social disadvantages or natural differences in talent. Spelling out in more detail how one could judge whether an institutional setting is sufficiently responsive to desert is one of the great challenges for Mill scholarship. Interestingly, Mill was opposed to a progressive income tax since he believed that the assumption of a diminishing marginal utility of money was "not true to a sufficient extent". Below a certain amount, though, incomes should be exempted from taxation altogether.

It is a bit surprising for a book with the title *Economic justice and liberty* that the author pays relatively little attention to Mill's

Principles of political economy. This is particularly striking in the chapter examining Mill's account of the relation between justice and liberty. As the author repeatedly emphasises, Mill was committed to the idea that normative claims must be underpinned by empirical science. Large chunks of the *Principles* are devoted to the 'art' of economic policy, meaning an outline of the institutional structure which best promotes the end of national wealth. In this context Mill advocates, among other things, a particular version of the laissez-faire principle, and it is, of course, a vital question how this core principle of the art of economic policy aligns with his views on justice. The lack of a sufficiently detailed discussion of Mill's laissez-faire principle is not the only peculiarity of this chapter. Given that earlier in the book the author emphasised the significance of desert for Mill's theory of justice, one wonders why she now claims that his principle of economic liberty is restricted only by others' rights to subsistence. Does Mill's highest standard of social justice, being a "direct emanation from the first principle of morals", not have more bite than that? Does it not demand wages which are appropriately responsive to merit or exertion, for instance? In the *Principles*, does Mill not call land "the original inheritance of the whole species" (Mill 1965 [1848], 230)? And does he not write that "the state is at liberty to deal with landed property as the general interests of the community may require" (Mill 1965 [1848], 231)? Simply put, Mill seems to argue that the laissez-faire principle must operate within a framework of just property institutions, supplemented by the right of workers to strike. Sufficient power for collective bargaining should ensure that wages grow in line with productivity so that the labouring classes get what they deserve.

Let me underline that the book's interpretative thrust goes in just this direction; however, a closer inspection of the *Principles* would have made it even more evident how central and far-reaching considerations of social justice were for Mill's moral theory. Another topic that might have deserved more attention in a book on *Economic justice and liberty* is Mill's speculation about the future of the labouring classes. Mill believed that wage labour involves a form of dependence that is incompatible with the desire to determine the conditions of one's work on equal terms with one's co-workers. The author is absolutely right to emphasise the compatibility of justice and liberty, but Mill's account of 'real freedom for all' requires, it can be argued, decidedly more than a right to subsistence.

In the third part, the author confronts Mill's attempt to reconcile social justice and individual liberty with supposedly superior modern approaches. The comparison of Mill and Rawls is of particular interest for two interrelated reasons. On the one hand, Rawls is probably responsible more than anyone else for the wide-spread view that utilitarianism provides a deficient conception of justice; on the other hand, in his *Lectures on the history of political philosophy* Rawls went so far as to claim that "the content of Mill's principles of political and social justice is very close to the content of the two principles of justice as fairness" (Rawls 2007, 267). According to Rawls, Mill arrived at the right principles of justice by using an incurably flawed theoretical framework; *A theory of justice* delivers what is right and valuable in Mill without the flaws. Consequently, we have little reason to care about Mill's theory of justice apart from an interest in the history of moral and political philosophy.

How does Huei-chun Su counter this challenge? Firstly, she argues that the target of Rawls's criticism is the post-utilitarian paradigm, which differs from Mill's position in crucial respects. Secondly, she argues that Rawls, in contrast to Mill, offers no first principle which would allow conflicts between basic liberties or other high-order normative requirements to be resolved.

The first response might work for Rawls's critique in his *Theory*, but it does not cover his critical appreciation of Mill's account in the *Lectures*, a book which the author does not list in the bibliography. In the *Lectures*, Rawls's main criticism is that Mill's principles are overly dependent on a disputable "psychological account of human nature" (Rawls 2007, 269). Just institutions of society should be based on a more robust theory, a theory which is not exposed to reasonable disagreements. Personally, I am convinced that reasonable disagreements about the empirical underpinnings of normative theories are difficult to avoid and that the kind of robustness Rawls wants to obtain is an illusionary ideal for political philosophy. Huei-chun Su is right, I think, to support Mill's idea that we should base our normative conceptions on the best available scientific theories instead of trying to avoid contact with controversial empirical claims as much as possible. Alas, *Economic justice and liberty* does not confront Rawls's political liberalism on this ground, probably because the author did not consult his *Lectures* and is thus unaware of Rawls's most developed discussion of Mill's utilitarianism.

The last chapters offer two more comparisons with contemporary philosophers. Amartya Sen's writings seem to be far less influenced by or close to Mill's positions than Rawls's, but his work has certainly had strong repercussions on the way Mill's theory is now perceived. In particular, his theorem about the impossibility of a Paretian liberal comes to mind (Sen 1970). The author defends Mill against Sen's critique of utilitarianism in two steps. In the first step, she follows the lead of Robert Sugden (2006) and uses a *tu quoque* argument to the effect that Sen's capability approach does not "do better than utilitarianism in terms of protecting individual liberty". In the second step, she argues that Mill's utility principle enables us to draw a line between the moral and the non-moral sphere and thus to avoid the transgression of individual liberty.

Finally, turning to Hayek, the man who accused Mill of being the intellectual vanguard of totalitarian socialism, the author argues that Mill's position on liberty was uncompromising. More than once, she points out, Mill declared freedom to be "the first and strongest want of human nature". Real freedom, however, requires a minimum level of material means, hence Mill's right to subsistence. Moreover, Mill's advocacy of a highly progressive *inheritance* tax followed from his views about the "spirit of private property", namely granting individuals the "fruits of their own labour and abstinence". A related point can be made with regard to Mill's defence of equality of opportunity. Once again the author arrives at the conclusion that Mill's utilitarianism withstands modern scepticism, successfully reconciles the ideals of social justice and liberty and offers us a principle with the help of which we can balance conflicting normative requirements.

In sum, this is a fine book that not only guides the reader through the complexities of Mill's works but also makes a convincing case for considering Mill as a viable option for contemporary political philosophising. It is not entirely without flaws, but then what is?

REFERENCES

- Mill, John Stuart. 1965 [1848]. *Principles of political economy with some of their applications to social philosophy*, Vols. 2-3 of *The Collected Works of John Stuart Mill*, ed. John Robson. Toronto: Toronto University Press.
- Mill, John Stuart. 1967 [1861]. *Utilitarianism*, Vol. 10 of *The Collected Works of John Stuart Mill*, ed. John Robson. Toronto: Toronto University Press.
- Rawls, John. 2007. *Lectures on the history of political philosophy*, ed. Samuel Freeman. Cambridge (MA): Belknap Press.

- Rosen, Frederick. 1997. Utilitarianism and the punishment of the innocent: the origins of a false doctrine. *Utilitas*, 9 (1): 23-37.
- Sen, Amartya. 1970. The impossibility of a Paretian liberal. *Journal of Political Economy*, 78 (1): 152-57.
- Sugden, Robert. 2006. What we desire, what we have reason to desire, whatever we might desire: Mill and Sen on the value of opportunity. *Utilitas*, 18 (1): 31-55.
- Urmson, J. O. 1953. The interpretation of the moral philosophy of J. S. Mill. *Philosophical Quarterly*, 3 (10): 33-39.

Michael Schefczyk is professor of philosophy and dean of the philosophy faculty at Leuphana University Lüneburg, Germany. He is also honorary senior research associate at the Bentham Project at University College London (UCL); visiting professor at the Department of Philosophy, University of Zurich; liaison officer of the Friedrich Ebert Foundation; and member of Amnesty International.

Contact email <michael.schefczyk@leuphana.de>

Review of Robert Leeson's *Hayek: a collaborative biography: part 1 Influences, from Mises to Bartley*. New York: Palgrave Macmillan, 2013, 241 pp.

AGNIESZKA WINCEWICZ-PRICE
Newcastle University
Erasmus University Rotterdam

Given the vast literature both on Hayek and his work, one may wonder what contribution can be made by yet another study of the “greatest economic philosopher of his age”.¹ And yet this book endeavours something new, namely, “to connect Hayek’s life to the sentiments he expressed”. More specifically, the authors aim “to describe, interpret and integrate Hayek’s life, beliefs and philosophy”.

The book differs in many ways from a conventional biography, not least because it was co-authored by a group of fifteen scholars, among them historians, economists and political scientists. With such a large and diverse collection of authors, the book certainly manages to meet its aim of offering a variety of perspectives on Hayek and his life, work and influences, as well as his impact on intellectual and political history. However, it is debatable whether these multiple perspectives succeed in presenting an integrated picture of Hayek, which was the second major aim of this ambitious project. It is hard to resist the impression that this biography has no unifying theme, but remains merely a collection of vignettes—albeit sometimes very interesting ones.

Given that Hayek’s intellectual contributions range from economics to political philosophy to epistemology, it may seem more than appropriate to attempt an intellectual biography as a collaborative effort, so that specialists can be brought to bear on his various intellectual accomplishments and their connections to his personal life. Rather than offering a complete and comprehensive analysis of the man and his work, this book offers an interesting supplement to the existing Hayek literature by detailing what other biographies and accounts of Hayek’s ideas mention merely in footnotes or bibliographies. The authors took pains to consult a wealth of archival material and have used it to present Hayek as a person rather than merely as the label

¹ A photograph caption in the May 18, 1978 issue of the *London Times*.

for a certain nexus of ideas. For this accomplishment they deserve high praise.

In at least one way, the book's diversity in form and content can be seen as an asset. The authors touch on a vast array of subjects—the selection of which has been handled deftly—and place them in their historical context, thus widening the scope of their analyses. Yet this method also makes the authors' individual contributions rather idiosyncratic. Among the more interesting discussions here are the back-story to, and the reception of, *The road to serfdom*; a brief critical review of Nicholas Wapshott's *Keynes Hayek*; the not unproblematic relations between Hayek and Mises; and Hayek's own reflections on his time in Freiburg.

The editor of the volume contributes the two longest chapters. Leeson's introduction gives a very good and engaging overview of Austrian economic thought and its clashes with the libertarian camp. It presents the themes covered by the other authors, in the context not only of Hayek's life but also of the origins and development of the Austrian School of Economics, itself analysed as part of a still bigger picture of classical economics. The editor then proceeds to distinguish four phases of Hayek's influence: his bringing the focus of the London School of Economics to Austrian economics; the unexpectedly broad reception of *The road to serfdom* (scorned by the left and mostly praised by the right); the impact of Hayek's Nobel Prize on the transformation of social sciences and public policy; and, finally, the 21st century promotion of Hayek by Fox News.

Leeson later examines the complicated and controversial personality of the biographer that Hayek himself appointed, William Warren Bartley III. Bartley also initiated an unfinished project, *The collected works of F. A. Hayek*. Leeson's chapter is not a standard biographical essay but rather a lengthy exposition of some turbulent episodes in Bartley's intellectual and professional life, as well as his personal ailments and struggles. Bartley himself was an accomplished philosopher, whose PhD supervisor—none other than Karl Popper—is said to have described him as “the most gifted young philosopher he had ever met”. The subject that interested Bartley most was rationality, which he studied both as a psychological faculty and as a foundation of scientific reasoning. But he was also well suited to writing biographies, and devoted a lot of his energies to that. He managed to complete two provocative and controversial biographies: one of Ludwig Wittgenstein

and the other of Werner Erhard. His premature death did not allow him to finish biographies of Popper and Hayek.

Despite the initially adverse impression Hayek formed of Bartley, with time it turned out that these thinkers' interests and views, both professional and personal, overlapped. Both had broken off with the religious traditions of their families, and each in his own way was sceptical of religion's presence in the public sphere. But Hayek, unlike Bartley, had at least some appreciation for the role of Christian tradition, of its "symbolic truths" which "has created morals in modern civilization". Hayek was attracted to Bartley's theory of 'justificationism', which criticised the authoritarian structure of Western thought and epistemology wherein beliefs must be justified by appeal to an authority of some kind. Hayek's views on morality, however, seem to be marked by an important paradox. He was an advocate of strong moral conventionalism, resisting others' attempts to reform modern morality. Yet, as a rationalist he sought reasons for adhering to traditional morality. Rafe Champion's chapter investigates this apparent inconsistency in Hayek's liberal thought in more detail.

Three other chapters in this volume that deserve special mention examine the divisions between the Austrian and libertarian traditions. Douglas French's "Hayek and Mises" gives a fairly detailed account of the "curious" (as Hayek put it) relationship between the two great representatives of the Austrian school of economics. French outlines Hayek's appreciation and gratitude for Mises's help in his professional life, as well as the intellectual inspiration he gained from his first great mentor. Those less conversant with the various strands within the Austrian tradition will learn that Mises's influence on Hayek was not as great as might have been expected. Hayek thought the source of their intellectual differences lay in the fact that whereas he belonged to the liberal camp of English descent, Mises was more an heir of the European rationalist tradition of liberalism. The main areas of disagreement between the architect of praxeology and his most famous protégé appeared in the socialist-calculation debate and over Mises's "apriorist" methodology.

Victor Vanberg's noteworthy chapter is about Hayek's time in Freiburg and the conflicts within the classical liberal tradition. There is generally a lack of information about the ordoliberal Freiburg School in economic textbooks, and even courses in history of economic thought do not give it much attention. Its principal founder, Walter Eucken, was

Hayek's close friend and, during Eucken's last four years of life, also a close collaborator. Eucken played an important role in the discussions which led Hayek to organize what was to become the founding meeting of the Mont Pelerin Society; he was also its only German participant. Ordoliberals were of the opinion that '*laissez faire*' is not an adequate response to the needs of a free and humane society, and that the state must influence or directly establish the legal-institutional framework within which the economy works. Vanberg points out the important role of this theme in Hayek's work from the late 1930s until 1950, and the clash it caused between Hayek and some libertarian authors. He also touches upon the apparent tension between Hayek's views on the need for institutional framing and his later shift towards an evolutionary perspective. The chapter shows that Hayek felt very much at home in Freiburg, both intellectually and personally, by highlighting important details about Hayek's academic appointments there, along with some of his contemporaneous personal reflections.

The chapter by Nils Goldschmidt and Jan-Otmar Hesse further explores some aspects of the relationship between Hayek and Eucken, and consequently the differences between the German and the Austrian Schools of liberal thought—a subject largely neglected in the academic literature. The analysis is based on a letter from Eucken to Hayek in which he comments on *The road to serfdom*. While Vanberg's chapter presents the differences in Hayek's and Eucken's views as complementary, this chapter suggests that they were often contradictory. Examples include their different understandings of the relation between freedom and order; the conditions for and meaning of competition; and democracy. Some further research may be necessary in order to better judge the differences of interpretation between these two chapters. Still, it would seem that this discrepancy likely derives from a difference of emphasis rather than of substance. After all, both chapters address nuanced distinctions between two closely-related variants of liberalism, minor differences which pale in comparison with what unites Eucken and Hayek.

There is also a noteworthy chapter dealing primarily with the genesis and the reception of Hayek's most popular work, *The road to serfdom*. It provides an interesting analysis of a key set of texts which Hayek wrote between 1933 and the completion of the book in 1943. Melissa Lane argues against the commonly held idea that Hayek uncritically praised market liberalism by showing socialism to be

inefficient. In fact—and this is not always remembered in many contemporary debates—Hayek was far from idealizing markets and, on the contrary, argued that the theoretical assumptions of idealized markets always needed to be confronted with the temporal dynamics experienced in actual markets. Lane also notes that, contrary to the common view, although the left found many of its ideas difficult to accept, *The road to serfdom* also contained much that was rather inconvenient to the right (e.g., the rejection of nationalism as a relevant principle in economic affairs).

It also deserves to be noted that *Hayek* refutes—or at least qualifies—some myths about the supposedly great animosity between Hayek and Keynes. This is a theme of the chapter by Selwyn Cornish, but is also touched upon elsewhere. As much as the two great economists differed significantly on many fundamental issues, there was also much that they agreed upon. It may be surprising to learn that Keynes was very complimentary of *The road to serfdom*. Among other things, he shared the view that, even with all its problems, market domination over individuals is nevertheless preferable to the exclusive state control of the economy. In political matters both men had a lot in common. And despite their grand differences of perspective on economic theory and policy, they very much held one another in high personal regard and intellectual respect.

Three yet unmentioned short chapters uncover some uncommon knowledge about Hayek. The chapter by Gabriel Söderberg, Avner Offer, and Samuel Bjork presents a technical but interesting analysis of patterns of academic citation of Hayek before and after receiving the Nobel Prize. Most winners of the prize see their citations peak shortly following its reception. But Hayek's award arrived at the tail end of the curve of citations to his academic work. The Prize, however, reinforced his authority and reputation, providing him with a citation boost that shifted him onto a much higher trajectory, as illustrated in one of the graphs included in the chapter. David Laidler's chapter attempts to solve the puzzle of the curious juxtaposition of the 1974 Nobel Prize recipients: Hayek and Myrdal. Another chapter, by Steven Dimmick and Robert Leeson, offers an interview with Stephen Kresge, Bartley's partner, who took over the *Collected works of F. A. Hayek* project. The interview adds first-hand clarification of some important matters mentioned in elsewhere in *Hayek*.

At first it may seem surprising that a book about the work and influences of one great thinker gives so much attention to the biographical details of so many other famous intellectuals. It is apt then to recall what the great Goethe scholar, Nicholas Boyle, taught, namely, that a good biography focuses on secondary subjects and does not rely only on sources that originate from the subject. This collaborative biography certainly meets Boyle's standard in that it does not isolate Hayek's life and work from the rest of his world, but describes and interprets it through his connections and experiences with other scholars, events and institutions. Such an approach makes this biography all the more valuable and worthwhile.

Still, this collaborative biography is not to be recommended to a reader who has no prior knowledge of Hayek's work and ideas. Moreover, it is certainly not advisable as an introductory text for beginners; nor would it be a good choice for someone in search of a good summary of Hayek's life and work. For that, Bruce Caldwell's *Hayek's challenge: an intellectual biography* (2008) would be a much more suitable pick. It will, however, serve graduate students and researchers well. Anyone well acquainted with Hayek, but perhaps curious to learn more about his life and work, will not be displeased.

REFERENCES

Caldwell, Bruce. 2008. *Hayek's challenge: an intellectual biography of F. A. Hayek*. Chicago: University of Chicago Press.

Agnieszka Wincewicz-Price is a PhD candidate at Newcastle University and a research master student at Erasmus University. Her research interests lie in history of economic thought and theories of international political economy, with a special focus on the changing accounts of the human person in the history of economic ideas. Her doctoral dissertation investigates different understandings of moral human nature in micro- and macroeconomics.

Contact email: <agnieszka.wincewicz@gmail.com>

Review of Michael Sandel's *What money can't buy: the moral limits of markets*. New York: Farrar, Straus and Giroux, 2012, 256 pp.

THOMAS R. WELLS

Erasmus Institute for Philosophy and Economics

Michael Sandel's latest book is not a scholarly work but is clearly intended as a work of public philosophy—a contribution to public rather than academic discourse. The book makes two moves. The first, which takes up most of it, is to demonstrate by means of a great many examples, mostly culled from newspaper stories, that markets and money corrupt—degrade—the goods they are used to allocate. The second follows from the first as Sandel's proposed solution: we as a society should deliberate together about the proper meaning and purpose of various goods, relationships, and activities (such as baseball and education) and how they should be valued.

Public philosophy is a different genre from academic philosophy, but that does not mean that it cannot be held to high standards. In my view, while this book does provide food for thought and food for conversation, it nevertheless has significant failings as a work of public *philosophy* rather than journalistic social activism on the model of Naomi Klein's *No logo* (1999).

THE CORRUPTION THESIS

Before moving to discuss Sandel's corruption thesis, let me sketch the context of the debate. A market is an institutionalised space in which goods and services can be exchanged for reasons of direct self-interest, usually though not necessarily via the medium of money (Herzog 2013). Market exchange may be contrasted with other arrangements for allocating goods, such as those identified by Karl Polanyi (1944, chapter 4): *reciprocity* between individuals (such as gift exchange systems), *redistribution* by government, and *autarky* in which people produce what they need for themselves (such as subsistence farming). Economists like markets because, under certain conditions (such as rivalrous competition between multiple producers) they tend to promote the efficient allocation of resources, as well as innovations that make

those resources go further. The story of the world's increasing material prosperity over the last few hundred years is the story (Adam Smith's story) of the rise of markets, which have allowed individuals to meet more of their wants and needs than ever before, and, *through taxation*, have also permitted an enormous expansion in the provision of public services by governments (education, health, security, law, transport infrastructure, and so on). The practical success of the market economy is sometimes taken to imply that, other things being equal, markets are the best way of organising the production and distribution of everything. But are other things equal? The critique of the market comes from three directions.

Economists themselves are the first to point out the limits of markets. They recognise that the conditions for a successful market are actually quite demanding, and that where they are not met, such as in the case of 'natural monopolies' or public goods, alternative institutional arrangements may well perform better. For example, while it is possible to have drinking water supplied by competing fleets of tankers, and this is something one actually finds in cities in poor countries, it is far cheaper to have a single—regulated or publicly owned—water utility company running a pipe network. (This is why drinking water costs less in London than in the slums of Manila, Jakarta, or Nairobi.) Another example is the economic justification for firms themselves (Coase 1937). Although firms obviously buy their inputs and sell their products in markets, their internal organisation is a bureaucratic command economy whose operations are carefully shielded from the market. That is largely because contractual relationships between self-interested strangers often impose high transaction costs that make them uneconomical. Economists thus use the instrumental criterion of *efficiency* to draw the limits of the market. Markets should only be used where they are more efficient than other arrangements.

In contrast to economists, moral philosophers have tended to focus on the *fairness* of market arrangements, especially with whether they produce (outcome) inequality or are characterised by (procedural) exploitation. Take inequality first. On the one hand markets generate inequality in wealth as a by-product of the competition that drives them. On the other hand, markets work by discriminating between different people's wants on the basis of their willingness-to-pay, which has an obvious relation to their ability-to-pay. Thus, while markets may

increase the aggregate productivity of an economy, unless the purchasing power of market losers is somehow restored, such as by government intervention, they may not benefit much if at all from that prosperity.

Exploitation concerns the abuse of power within transactional relationships that undermines their moral legitimacy. Many contemporary economists argue that so long as transactions are voluntary, exploitation is impossible by definition. But that extrapolates too easily from institutional and social context. Individuals (or corporations) can take advantage of inequalities such as of wealth, legal rights, information, or their possession of some extraordinarily valuable good (like a scarce medicine) to 'offer' vulnerable people a choice they cannot refuse. Exploitation is endemic in real world (as opposed to ideal theoretical) capitalism, from sweatshops underpaying illegal immigrants to work in dangerous conditions, to payday loan companies preying on the poor, to pharmaceutical companies' extraordinary pricing of patented medicines to maximise the profits of monopoly rather than lives saved.

Note that exploitation can often be addressed by governments reforming and even deepening market institutions to make their performance better resemble the economist's ideal. For example, by empowering illegal immigrants to assert their equal labour rights; by supporting the development of alternative lending institutions for the poor (such as credit unions); and by introducing alternative incentives for innovation than intellectual property. But simply providing the exploited with more market *choices* without addressing their powerlessness may not be helpful. For example, allowing vulnerable people to send their children to work, to sell their kidneys, to work longer hours, and so forth, may merely open up new domains of immiseration (Satz 2010).

Sandel's critique is not about efficiency or fairness. Rather, he follows a third tradition in worrying about how the value or meaning of goods themselves is *corrupted* by going through markets. What is this corruption? Sandel argues that "[t]o corrupt a good or a social practice is to degrade it, to treat it according to a lower mode of valuation than is appropriate to it" (pp. 29-30). According to this hierarchy, scalping free tickets to a papal mass, accepting the children of 'donors' to prestigious universities, selling baseball memorabilia, and so on,

degrades the nature of what is being sold. Selling such things profanes them.

The central failure of the book is Sandel's disinterest in developing his corruption critique systematically—philosophically. The references are telling. While dozens of economists are mentioned and often discussed in some depth, the philosophers like Michael Walzer (1983), Elizabeth Anderson (1993), and Margaret Radin (1996) most associated with developing this corruption thesis are almost entirely absent (a footnote acknowledges Anderson in general terms). Even Aristotle only receives a couple of lines. Indeed, the domination of economics is really quite astonishing—much of the theoretical level of the book consists of pitting the hack psychology of contemporary behavioural economics against a parody of neoclassical economics (which Sandel confuses with markets which he confuses with money). In contrast, sociology, the academic discipline actually tasked with investigating social meaning, is absent, with the exception of a famous but empirically outdated work by Richard Titmuss (1970). Even a casual glance into the sociological literature shows that the interesting issue is not *whether* 'the market' is bad for social relationships and morality but the complex dynamics of their interaction, such as how wages confer dignity as well as income, how couples negotiate the economic dimensions of intimate relationships (Zelizer 2009), and so on.

Sandel's economicist theoretical framework is complemented with dozens of (mostly American) newspaper stories of unconventional things being for sale. Sandel's principal rhetorical strategy appears to be to evoke disgust in his readers, at the idea of people being allowed to pay money to avoid queuing; companies buying and trading life insurance on their employees; rich people paying to hunt endangered species; poor people having themselves tattooed with a casino website address; etc. This strategy is distinctly limited.

First, the moral significance of what Sandel calls corruption is poorly explained. His case more or less begins and ends by evoking readers' disgust at the *ugliness* of the practices he identifies. Yet this seems a primarily aesthetic response—ugliness being a perception of impropriety between form and substance—that has no *prima facie* connection to moral value. "Yuk!" is not an argument, moral philosophers teach undergraduates in introductory classes. Basing moral appraisals on one's aesthetic response to appearances—the presence of dollar signs—leads to polemical excesses, such as claims

that education, baseball, kidney transplants, friendship, parenthood, religion, and the like, are spoiled for everyone by the commercial innovations Sandel discusses.

Sandel has a point—transactional arrangements can *change* meanings and relationships, sometimes for the worse—but his method can only detect transgressions of convention, not their moral valence or significance. What might be called the zoning approach to moral philosophy focuses on whether things are in their rightful place, not whether it matters that they are. This interferes with—perhaps in this context I should say ‘crowds out’—the more nuanced and persuasive case that Sandel sometimes tries to make. For example when he turns from explaining how paying children \$2 to read a book corrupts reading to the worrying domination of the cash incentives paradigm in American education policy circles (pp. 40-43).¹

Second, it is *recent* transgressions that catch the eye, and thus the moral opprobrium. This makes Sandel's journalistic critique peculiarly specific to his time and place. He seems to benchmark the acceptable limits of the logic of buying and selling to what he grew up with. Thus he does not see life insurance itself as morally controversial, as it was in the 19th century, only such recent innovations as its use and trade by third parties such as employers. Advertising around baseball stadiums is fine since that was how things were when he was a child, but not on the bases! And so on.

The problem here is that Sandel's moral analysis seems hostage to whatever social norms happened to prevail in his formative years. It turns out that commercial innovations are quickly digested and normalised by society. For example it is now normal and hence morally invisible for politicians to pay professionals to write their speeches. Sandel spends several pages criticising the idea of paying someone to write your wedding toast. But if buying political speeches is fine, can we

¹ Indeed, I wish Sandel had developed the point further. Extrinsic motivations—i.e., incentives—have always been used to inculcate self-sustaining habits, as children are taught to eat their vegetables with the promise of desert. But it seems increasingly common for managers exercising bureaucratic power, and politicians responsible for public services, to rely entirely on extrinsic motivations (see Grant 2012). This attitude not only demeans the people under their power. Despite its apparent hard-nosed pragmatism it is also practically foolish, as a moment's consideration of the idea of paying someone to be honest or loyal will show. Sandel is surely mistaken to assert that paying children to read books is morally wrong or corrupting in itself. But if incentives—for teachers as well as students—have become the only or main resort of politicians and civil servants, that reflects a failure of imagination that impoverishes us all.

really justify the general intuition Sandel appeals to, that a bought wedding toast has less value than an 'authentic' one? And can we have any confidence that that intuition will continue to be widely shared in 10 or 20 years?

Money is ubiquitous in a commercial society as the universal currency of remuneration. Activities which are not sufficiently remunerated will generally not be supplied, because it is not sustainable to produce them except as a kind of hobby (the difference between professional baseball and Saturday afternoon amateurs). It is therefore hardly surprising that all sorts of valuable things are supplied in exchange for money. Bibles are published and sold commercially (as is Sandel's book); elected politicians receive salaries; pharmaceutical companies put prices on their life-saving medicines; and so on. Sandel seems to accept all this. But then his criticism of *changes* to what he grew up thinking of as normal seems arbitrary. Why is it only in these 'new' cases that the appearance of money engenders corruption? Why does advertising inside novels pose a threat of corruption but not advertising inside news media?

Sandel's corruption thesis appears to lack the resources to critically analyse what is socially accepted as normal. If he had been born 30 years later, one can only suppose that he would think the vulgarities of baseball skyboxes and memorabilia markets were normal and right. Sandel's approach thus has a strong conservative orientation—an attachment to and desire to preserve things in their familiar form.

SANDEL'S ILLIBERAL POLITICAL SOLUTION

Some left-leaning liberals (in the political philosophy sense of liberal) will endorse Sandel's book simply because it criticises markets. They should be careful. Sandel's is really a reactionary social conservative approach, and one that conflicts with many principles that liberals should hold dear.²

First, while Sandel dates the commercialisation of society to the 1980s market triumphalism of Ronald Reagan and Margaret Thatcher, he never mentions neo-liberalism, the dominant critical account of this developed on the left. His book attempts a cultural critique of market transgressions that quite deliberately sidesteps that ongoing political

² I do not mean to assert Sandel's political affiliation with any particular political party. Indeed, variations on his communitarian conception of political society animate, or at least appeal to, many on both the left and right of mainstream politics.

debate about how conflicts between fairness, liberty, and prosperity should be resolved. But merely because Sandel is also a critic of the ideology of markets does not make him an ally of egalitarians, for he implicitly prioritises cultural integrity above concerns about fairness.

Sandel argues that the expansion of transactional arrangements comes at the expense of alternative 'moral' relationships and implies that this is always a bad thing. Yet liberal political philosophers have long noted that traditional social institutions are as capable of gross injustice and inhumanity as market ones, despite having the *form* of being animated by reciprocal benevolence and respect. In particular, they tend to generate cloying moral obligations that suffocate the individuality, rights and freedoms of lower status members of the community. Meaning is often preserved through oppression and facilitates exploitation.

It follows that the undermining of social ties and traditional values associated with the extension of the transactional economy can actually be worth fighting for, to free people from imprisonment in unchosen and degrading social norms and relationships. For example, the idea that the family should be a domain of love and solidarity protected from the heartless business of the world does not so much negate the scope for despotism within intimate relationships as help render such despotism beyond criticism or resistance (e.g., Sen 1990). Hence the long campaign by feminists for the civil right of women to paid work—the freedom to sell their labour in the market—and Susan B. Anthony's famous slogan "Woman must have a purse of her own".

Second, is the general dangerousness of the amorphous but visceral concept of corruption, which has a long association with intolerant strains of political conservatism, for example, in support of racist politics. The problem is that 'corruption' refers to the category of those transgressions of social norms that trigger a moral disgust reflex and, despite Sandel's claims to the contrary, this is a mode of moralising rather than of critical reflection. For instance, the claim that gay marriage corrupts the traditional institution of marriage works in just the same way as Sandel asks us to think about his examples. The rhetoric of purity and pollution presents a danger not a wonderful opportunity for the liberal conception of democracy, for it is a licence for imposing the private moral beliefs of the powerful or the many over the rights of minorities.

Sandel's implicit illiberalism should not be surprising—after all, he made his name as a communitarian critic of Rawls's political philosophy. Like 'defenders' of straight marriage, Sandel is anxious to politicise value questions. Contemporary US politics is "empty of moral and spiritual content", because it involves endless argument over things like taxes and spending but "fails to engage with big questions that people care about" (pp. 14-15). In particular, Sandel argues that a community should ask itself the Aristotelian question—what are such activities as education and baseball *for*?—and thus determine how they should be valued and how they should be treated (pp. 153-154). Sandel never really elaborates on this political dimension of his argument. Perhaps because he recognises that few readers would be willing to go all the way along with this illiberal view of politics as a space for determining what thick set of values should animate an entire society, for example whether America is a Christian nation.

The liberal conception of politics is committed to separating the private and public spheres, to secluding a substantial domain of individual life from public scrutiny and collective decision-making. Liberal institutions like markets and secularism help realise this dichotomy by privatising contentious moral issues rather than politicising them. (In an ironic twist on his zoning approach to moral philosophy, here it is exactly the market's role in separating private and public domains that Sandel objects to (pp. 15-16)). From the liberal perspective it simply isn't the business of democratic politics to make decisions about how everyone in society should value baseball, and to ban whatever might corrupt that purpose, such as the trade in memorabilia, moneyball methods of selecting players, or seat-pricing differentiation criticised by Sandel. To the contrary, liberal politics deliberately make space for the endogenous and spontaneous creation of new practises and values from the free interaction of individuals. Liberal democracy is also comfortable with and committed to respecting value pluralism, not least because the burdens of judgement identified by John Rawls lead to persistent disagreements even between reasonable people (Rawls 2005, 54-58). Sandel notes that the 'true purpose' of many of the goods, relationships, and activities he discusses is contested. But he asserts that a community can determine the single right answer to such value questions and that this is what democratic politics is for.

AGAINST RAPACIOUS CAPITALISM

Clearly I am not a big fan of Sandel's corruption thesis. Yet his book can also be read in a more general way as a critique of the *scale* of incursions of commercial practises into our civic and private life. Many of Sandel's examples relate not to the theme of market corruption but to what I call 'rapacious capitalism', which is characterised by the treatment of human beings (and everything else) only as a means, as an object of cold calculation, as a site of potential profit. The cumulative effect of Sandel's myriad examples is to expose the prevalence of this rapaciousness, and to arouse a healthy attitude of critical resistance to it.

Rapacious capitalism is the translation of the all too human drive to dominate and exploit others into the structures and relationships of capitalist society. It has many dimensions, from the political to the environmental. At the political level, for example, we see multinational companies and rich individuals exploiting loopholes in the international tax system to evade regulatory oversight and avoid paying their fair share. Industries like finance and oil & gas co-opt our democratic institutions to transfer the risks and costs of their business models onto society as a whole. And so on.

Rapacious capitalism inflicts its greatest harms on the vulnerable (such as hourly workers, or livestock animals). Yet even the middle-class readers of Sandel's book know what it is to be relentlessly targeted for commercial exploitation. The internet for example, once idealised as a worldwide democratic commons, has been commercialised so thoroughly that every time we go online our identities are being tracked and hacked to be sold off to third parties, who will use the resulting profiles to target us ever more assiduously. Advertising itself, a dominant motif in Sandel's book, is built on the exploitation of property rights loopholes. It consists of the sale of our attention between third parties without our consent. The intrusion of advertising into more and more spaces in modern life—our clothes, our fruit, eggs, stamps, police cells, toilets, inside novels, poor people's foreheads, and so forth—makes one long for spaces of tranquillity free from its incessant intrusive manipulations (much as Sandel longs for the baseball of his childhood memory). A recent *New Yorker* short story about a family visit to a theme park portrays the ordinary individual's experience of rapacious capitalism rather well:

He felt squeezed into grooves of expertly predicted responses and behavior, of expenditures of sweat and hilarity and currency from his wallet and also his soul. He was as helpless as a pinball coursing in a table-top machine... It struck him now that the park's design was somehow alimentary. You were being engulfed, digested, shit out (Lethem 2014, 59-60).

This rapacious capitalism is what unites the moral philosopher's critique of the exploitative dimensions of capitalism with Sandel's concerns about the degrading effects of commercial incursions into our private and civic life. It is why such apparent trivialities as adverts appearing on grocery store fruit and eggs should be classed together with the systemic targeting of children by merchandisers and advertisers, in and out of school. (Sandel notes that advertising to children in America has increased more than 150 fold since the early 1980s.)

Rapacious capitalism is not a new problem. The corollary of the tendency to gentle manners produced by mutually beneficial trade (the providential *doux commerce* thesis promoted by Hume, Smith, and Montesquieu) is the tendency to hyper-aggressiveness produced by competitive rivalry between economic players for that trade. As in warfare, such hyper-aggression corrupts our sense of morality and wreaks devastation upon societies and individual lives. Yet it is not inevitable. As Adam Smith put it in the *Wealth of nations*,

The violence and injustice of the rulers of mankind is an ancient evil, for which, I am afraid, the nature of human affairs can scarce admit of a remedy. But the mean rapacity, the monopolizing spirit of merchants and manufacturers, who neither are, nor ought to be, the rulers of mankind, though it cannot perhaps be corrected may very easily be prevented from disturbing the tranquillity of anybody but themselves (IV.3.38).

Indeed, controlling this dangerous aspect of capitalism has always been a core political project, and a central theoretical topic in ethics and theology. Most recently, a long political struggle to domesticate capitalism without smothering its positive potential culminated in the postwar 'golden age' when anti-trust legislation, regulatory agencies, civil rights, social insurance, unions, and the rest seemed to have contained its worst excesses. So Sandel gets something right when he identifies a change in the character of capitalism from the Reagan era onwards as those constraints were dismantled or allowed to decay.

But I think Sandel is wrong about the source of this kind of corruption. Our institutions have not been corrupted by subtle changes in meaning brought about by dollar signs, but by an out of control beast that feeds off money.

I agree with Sandel that we need to tame capitalism again, so that it works for us rather than tries to eat us, and that this is a political rather than an academic project—about democratic deliberation over the public interest and the functioning of our social institutions, and the marshalling of popular opinion into electoral outcomes and political change. But I disagree with Sandel that this political project should be concerned with determining the ‘true meaning’ of things like baseball. Rather, it seems to me that what is required is a new social compact for the 21st century that will channel the benefits of commercial society to all in a fair way and protect all of us, but especially the most vulnerable, from its excesses and depredations.

REFERENCES

- Anderson, Elizabeth. 1993. *Value in ethics and economics*. Cambridge (MA): Harvard University Press.
- Coase, Ronald H. 1937. The nature of the firm. *Economica*, 4 (16): 386-405.
- Grant, Ruth W. 2012. *Strings attached: untangling the ethics of incentives*. Princeton: Princeton University Press.
- Herzog, Lisa. 2013. Markets. In *The Stanford Encyclopedia of Philosophy*, edited by Edward N. Zalta. <http://plato.stanford.edu/archives/fall2013/entries/markets/>
- Klein, Naomi. 1999. *No logo: taking aim at the brand bullies*. New York: St. Martins Press.
- Lethem, Jonathan. 2014. Pending vegan. *The New Yorker*, April 7, 2014.
- Polanyi, Karl. 1944. *The great transformation: the political and economic origins of our time*. Beacon Press.
- Radin, Margaret Jane. 1996. *Contested commodities*. Cambridge (MA): Harvard University Press.
- Rawls, John. 2005. *Political liberalism* [expanded edition]. New York: Columbia University Press.
- Satz, Debra. 2010. *Why some things should not be for sale: the moral limits of markets*. Oxford: Oxford University Press.
- Sen, Amartya. 1990. Gender and cooperative conflicts. In *Persistent inequalities: women and world development*, ed. Irene Tinker. Oxford: Oxford University Press, 123-149.
- Titmuss, Richard M. 1970. *The gift relationship: from human blood to social policy*. New York: Pantheon Books.
- Walzer, Michael. 1983. *Spheres of justice: a defense of pluralism and equality*. New York: Basic Books.
- Zelizer, Viviana A. 2009. *The purchase of intimacy*. Princeton: Princeton University Press.

Thomas R. Wells is an independent post-doctoral researcher affiliated with the Erasmus Institute for Philosophy and Economics (EIPE) at Erasmus University Rotterdam; and an editor of the *Erasmus Journal for Philosophy and Economics*. His research interests include human development, economics, ethics, and political philosophy.

Website: <www.twells.org>

Contact e-mail: <t.r.wells@dunelm.org.uk>

Review of Sonya Marie Scott's *Architectures of economic subjectivity: the philosophical foundations of the subject in the history of economic thought*. London and New York: Routledge, 2013, 302 pp.

IVAN BOLDYREV

National Research University Higher School of Economics
Humboldt University of Berlin

This book is an historical study of economic science that provides a close reading of Ricardo, Marx, Marshall, Walras, and Mises in order to unearth not the “philosophical and economic premises” of a given model or theory, “but rather an interaction between explicit philosophical or [...] methodological assumptions and implicit, often contradictory philosophical practices” (p. 9). More precisely, the book deals with the “*epistemological* constitution of subjectivity in the history of economic thought” (p. 2), with a special emphasis on its “architectonic”. Subjectivity is defined as “the logical and epistemological prescription to which the purported ‘people’ that economics describes are *subjected*” (p. 2), whereas architectonic, a term borrowed from Kant, refers to “the attempt to create a coherent theoretical unity [...] an enclosure [...] around the concepts, subjects and logic that comprise the unity” (p. 3). The architectonic, for Scott, is never complete, but all the theories she describes are somehow moving towards such enclosure.

In the first chapter (influenced by Marx’s account of Ricardo in his *Theories of surplus value*) the work of Ricardo is located “within the history of the modern liberal subject [...] [that is] *homo oeconomicus*” (p. 11). Scott argues that Ricardo imposes a rational structure on the subversive realm of the natural, a realm linked with the labouring, subsisting subject, and that this move underlies the whole edifice of Ricardian thought. The body of the labourer is conceived as a factor of contingency and instability that is at the same time the basis of the labour theory of value since the labouring body of the worker is the source of economic value. Scott deconstructs Ricardo’s attempt to tame the beast of labour by suppressing and subsuming it within a rationalised doctrine. But labour cannot be fully known, and the quest

for an invariable standard of value, Scott argues, is bound to fail. The concreteness of labour and the qualitative nature of the labourer are dispensed with; workers are deprived of any independent agency, while the rational agency of those who control capital and their self-ascribed superior understanding (“epistemological domination” in Scott’s terminology) become the determining features of this process. As Scott puts it, “The labourer is robbed of his materiality, made abstract and bound into reified relations, i.e., relationships characterized by price, by units of labour-time, etc.” (p. 51). The domination of a particular class—the rational owners of capital—is textually demonstrated from Ricardo’s treatment of taxes.

Ricardo’s immaterial but invariable standard of value is a failure: “unable to be rooted in the material, but continuously requiring the material in order to substantiate its existence, it becomes the impossibility of Ricardo’s system itself” (p. 35). Thus, along with the labouring body and the rational capitalist the third implicit subjectivity emerges—that of the political economist, or scientific observer who wants to embrace the whole of the economic system within his model, but is unable to do that since the abstraction used is both directed at reality and separated from it by the quixotic quest for an invariable standard of value.

The second chapter goes back to Smith. Scott describes *The wealth of nations* as enacting “scattered, tangential and tentative economic subjectivities” (p. 53); Smith’s architectonic is merely partial and tentative. The text is read primarily not as a theory of value but as a collection of historical digressions. In particular, reading the digression on colonies, Scott suggests that “the profound conflict that lies at the heart of *The Wealth of Nations*” (p. 87) is the difference between concrete economic subjects (who belong to different classes and nations) and abstract individuals populating the ideal system of freedom. But generally Scott seems to find less in the way of ‘subjectivity’ to work with in Smith than in Ricardo, and ends with the claim that “no architectonic and no clear economic subject” are discernible here (p. 97).

The discussion of Walras in the third chapter is focused on the constitution of subjectivity “insofar as it operates in and through temporality” (p. 98). Scott tests the Walrasian architectonic against the experiences of ‘real’ economic subjects and, quite interestingly, observes that the Walrasian model has an emotional foundation—*desire*—which is

subsequently abstracted and impoverished by its mathematical reformulation within a theory of marginal utility. Much of the discussion is based on the Walrasian premise that desires do not alter upon entering the market and negotiating prices. As Scott puts it, “the theoretical limitation of time to a fixed period in which desire is assumed to remain absolute and constant creates a temporal absolute, where materiality is nullified as much as dynamic time” (p. 110).

Walras is claimed to have tamed temporally defined desires (those characterised by persistence and urgency) through prices assumed to be the only variable factor. The temporal nature of equilibrium is further considered within the structure of an “eternal promise” of becoming (p. 116), since, according to one of Walras’s formulations, the equilibrium is never conclusively reached, and what we observe is the incessant dynamic groping towards it. Time is conceived as a disturbing factor for the Walrasian system, not to be assumed away and embodied either in the “temporally frozen desire” (p. 140) or in the structure of deferral constitutive of general equilibrium analysis.¹

The fourth chapter’s analysis of Marshall and Keynes takes up the theme of temporality again and puts the issues of subjectivity in a more intimate relationship with the role of economist. The relatively short examination of Marshall (which, unlike the other parts of the book, does not refer much to the secondary literature) focuses upon the theoretical compromise embodied in Marshall’s work between the inherent contingency of economic life and the “theoretical violence” (p. 157) needed to keep his theory manageable. Scott’s interesting twist of this (otherwise well-known) argument is to claim that this tension between the unstable nature of temporally organised real experience, on the one hand, and the need to rationalise and simplify in order to say something coherent and theorise at all, on the other, is to be found throughout the architectures of economic subjectivity and that it determines an inescapable logic of judgment and action.

Keynes is also seen as a Marshallian in this respect. Scott expounds Keynes’s theory of uncertainty and expectations, his ethical concerns with what she labels the “anti-social fetish of liquidity” (p. 159), and the idea of the wasteful utilisation of resources to secure full employment. She examines in detail the notion of animal spirits along with various

¹ What Scott proposes here is a familiar critique of economic abstractions: “The real problem is quite simple. People cannot and do not act in temporally frozen periods of exchange [...] The very foundation of this [purely mathematized economic] theory remains immanently flawed” (p. 140).

other irrational traits in Keynes's account of economic subjects, and the influence their sentiments exert on the valuation of capital. In particular, Scott sees conventionality as an underlying structure of both the Walrasian premise of frozen time and of Keynes's description of the typical investor. Scott analyses short-termism as a specific temporally organised attitude (in the spirit of Shackle): a neurotic need to constantly reallocate and revalue investment, with money serving "as a mode of deferral, a replacement for the knowledge of future conditions" (p. 169) and buying time "to forestall the immediacy of a decision" (p. 178).

Scott claims that in relating individual behaviour to the social whole, Keynes still believes in a sort of an invisible-hand argument: that despite all the irrationalities of human action the whole process is directed towards eventual rationality and progress. She accuses Keynes of being insufficiently critical with regard to capitalism, of neglecting class relationships and focusing almost exclusively on (individual) consumption at the expense of production. For example, the liberal optimism of *Economic possibilities for our grandchildren* (1930) is associated with the belief that capitalism would endogenously create its own transformation, while the focus of Keynes's analysis, Scott contends, remained a narrow logic of individual consumption.

The final chapter is devoted to the radical subjectivism of Mises and Hayek. Mises, on Scott's account, did not create a genuine architectonic, but rather provided an aprioristic philosophical rendering of human action. Scott traces a certain bias towards epistemology and away from ontology in the work of Mises, along with the conflation of action, rationality, and the economic proper, leading to the glorification of market capitalism as the only social system based on the free choices of concrete agents. Scott criticizes Mises for creating a formal framework that disregards substantial issues in favour of ranking existing alternatives.² But her major criticism is directed at the implicit authority of the economist as the guardian of rationality and master of superior knowledge. The discussion of Hayek's architectonic legacy is limited to *The pure theory of capital* and his epistemological texts on the

² Since, in Mises, "all action [...] is economic, because [...] the economic is always constituted by choice, by the consideration of the benefits of actions with the end in mind" (p. 204), "action, and with it the essence of humanity, must take considerations of content and relate them in terms of rank—making all action inherently instrumental and all thought in the realm of the economic inherently formal" (p. 209).

dispersed knowledge underlying his account of spontaneous order. Much attention is paid here to the idealisations employed by Hayek.

After sketching the contents of the book let us consider the main argumentative pattern Scott seems to follow. It consists in finding the element(s) marginalized by the ‘architectonic’ and then demonstrating that that architectonic itself somehow depends on those suppressed phenomena—be they contingencies of nature and human labour in Ricardo or emotionality and temporality of desire in Walras. Economists are pictured as desperately trying to impose order onto the messy realm of the economy. Scott hardly distinguishes their theoretical strategies, political considerations and the real effects of their work. Economic subjects are presented as fictional heroes who “inhabit” capitalism (p. 4) and can be, for example, “stripped of real influence and intelligence within the abstracted laws of distribution” (p. 34) or, as bodies, “lost, absorbed, overwhelmed and even destroyed by the abstractions of economic time and the laws of distribution” (p. 35).

However, the economists Scott writes about were *worldly philosophers* (a term coined by Robert Heilbroner) and this worldly dimension is insufficiently accounted for in Scott’s narrative. For example, instead of blaming Ricardo for being not dialectical enough (p. 16) and privileging capitalists over labourers one could consider his system as an abstract scheme explaining the *given* social order, advocating free trade policy and attacking the Corn Laws. The absence of this aspect of Ricardo’s political economy from Scott’s account of the imposition of an architectonic is significant since it opens up a different perspective on the relations between theory and reality. Ricardo’s project would then look much more like a structural and macro-oriented *description* of the given rather than an “epistemological prescription to which the purported ‘people’ that economics describes are *subjected*.”

My general problem with Scott’s project is not its deconstructivist flavour—indeed, I would be among the first to endorse that—but rather the tendency to conflate the realms of knowledge, power, and real social history, without first carefully distinguishing them. When considering the writings of economists one has to admit that it is, after all, a *theoretical construction* (whatever meanings we attribute to ‘science’ or ‘theory’—one should, of course, be explicit on that as well). Some drawbacks of the book stem from the neglect of this important qualification.

Recall that Scott sets out to examine the implicit “philosophical practices” (p. 9) of economists and how they interact with their declared philosophical premises. But, again, the point is that the economists she studies are actually trying to come to terms with economic reality, to theorise it, simplify, produce a coherent account, and were one to look for their ‘philosophical practices’ what else could there be available apart from this theoretical discourse? Scott’s project involves reading political economy as a construction enacting itself in the world—hence the recurrent theme of the “epistemological domination” of the political economist (p. 10). This can be plausible, provided that a careful and detailed analysis of this performative construction is given, beyond the internal critique of the texts. Otherwise one loses the ability to tell reality from theory, and to distinguish *ideal types* employed by theorists and some posited forms of agency claimed to be (or instigated to become) *real*. Scott’s account would then converge with the naïve critiques of *homo oeconomicus* for not being ‘altruistic’ or ‘social’ enough, and of the excessive formalism of the economics discipline, where Walras’s abstraction of economic subjects just “requires a philosophical leap of faith out of the social realm and into the physico-mathematical universe” while “the path by which people become entrenched, as thinking subjects, within its parameters, is shrouded in a mystical veil” (p. 105).

The assumptions economists make—like that of the entrepreneur, who is both necessary for and impossible in the never-to-be-attained Walrasian equilibrium (p. 134), or, in the case of Hayek, employing the fictions of equilibrium and an omniscient communist dictator—fill Scott with astonished indignation and generate a lot of unnecessary speculation. But anyone who has ever looked at the immense body of work devoted to the critical analysis of economic theory is aware that such idealizations are constitutive of economics discourse—be it orthodox or heterodox. These idealisations, the limitations of modelling, and so on *constitute a real epistemological problem* and neither a historical contingency (a problem created by the way economists like Ricardo chose to work) nor something that should preclude theorists from making any statements at all. Their theories may play other roles than the mere imposition of the overarching order, like guiding empirical research or providing useful heuristics. At the same time, the alternatives we are left with if we abandon their theoretical discourses are at best vague and imprecise.

Scott's version of the history of economics is also puzzling at times. In the opening chapter, for example, what would strike many historians of economic thought is the contention that Ricardo created "the first veritable architectonic" (p. 3). The author is certainly acquainted with the theoretical systems of the Physiocrats (they are discussed at various points in the book), but she evidently does not believe that *Cantillon and Quesnay* should be considered the first authors of a true architectonic in political economy. The only fleeting and indirect discussion of this issue is in the chapter on Smith, where Scott states that "the architectonic must put *capital*, and not land, at its centre. Only in this way can we start to create subjects that are coherently unified in their knowledge of the economy, because the economy becomes [...] the movement of capital" (p. 94, emphasis in the original). But this statement, accompanied by an erroneous description of Physiocrats as interventionists (p. 93), is both precarious and tautological. The idea that "the qualitative nature of land, the [...] frequently unpredictable rhythms of its productivity [...] shape its resistance to the architectonic form" (p. 94) is plainly false if we are talking of "the concepts, subjects and logic" that constitute "a coherent theoretical unity". Cantillon and Quesnay were able to create a *coherent system of ideas* based on the natural foundation, with minimal behavioural premises—and they did possess the notion of capital.

The upshot of the book is disappointing. Economists as "*architects of modern economic subjectivity*" (p. 239) are accused of being preoccupied with architectonics and, hence, of being utterly unrealistic. Small wonder that the author, after her lengthy account of architectonic economics feels "a sense of desperation" (p. 242). What she proposes in the end amounts to abandoning the architectonic form altogether, embracing more concrete/socially-oriented accounts of economic action in the spirit of Smith and Marx and, finally, engaging with the social ontology practiced by contemporary critical realists. I do not think that this alternative is promising or realistic given the complexity of contemporary economic analysis and the variety of its epistemological stances. For example, I do not see how Marxian theory can escape the charge of doing "violence" to individuals' 'real' subjectivity by dissolving it in the 'forces' and 'relations of production'. But I do believe that if we pay more attention to the constitution of economic subjectivities enacted by economists (both past and present) and take into account social and epistemological contexts of this performativity, we will get

a richer and more differentiated picture of economics as a fundamental, albeit not unproblematic, part of our general culture.

Ivan Boldyrev is an associate professor at the National Research University Higher School of Economics, Moscow and visiting scholar at the Humboldt University of Berlin. His research interests include the history, philosophy, methodology, and sociology of economics; aesthetics; and the philosophy of history. His recent publications include papers in *Mind & Society*, *German Quarterly*, *American Journal of Economics and Sociology*, *Review of Social Economy*, and *International Studies in the Philosophy of Science*, and *Hegel, institutions and economics: performing the social* (with Carsten Herrmann-Pillath, Routledge, 2014)

Contact e-mail: <iboldyrev@hse.ru>

PHD THESIS SUMMARY:

The Viennese students of civilization: humility, culture and economics in interwar Vienna and beyond

ERWIN DEKKER

PhD in (Cultural) Economics, January 2014

Erasmus University Rotterdam

This dissertation argues that the group of interwar scholars who are usually known under the banner Austrian Economists—including Carl Menger, Friedrich von Wieser, Joseph Schumpeter, Ludwig von Mises, and Friedrich Hayek—are better understood as the ‘Viennese students of civilization’. Contrary to many economists—both then and now—the Viennese students of civilization understood the economy neither as a self-regulating natural order nor as a system which could be planned, but rather as a cultural process: just like language and law, markets emerge and develop from human interaction. As a cultural process the market economy has both important cultural effects and is sustained by what we could call a market culture.

In this dissertation the cultural effects of the market are explored especially as they relate to restraint. For the Viennese scholars restraint was the central element of civilization, but I also show its centrality for a wider group of Central European scholars, including Sigmund Freud, Bronislaw Malinowski, and Norbert Elias. The Viennese students of civilization, especially Wieser, Mises, and Hayek, believed that they lived in a particularly unrestrained age. This had fuelled opposition to market and other cultural institutions which were not rationally constructed. The acceptance and cultivation of the market economy came at a cost they called the ‘strain of civilization’. That cost is primarily the restraint of our innate instincts. Civilization requires the acceptance of certain norms—of individual responsibility, the acceptance of differences and inequality. This price however was no longer accepted by the social scientists of their time, who preached unrestrained rationalism. And it was no longer accepted by the mass political movements, such as socialism and fascism, which promised to relieve the people of this strain.

During the interwar period the Viennese students felt that their civilization was in acute danger. They analyzed this revolt, and their own role in the process. Initially their response was largely passive and accepting, an attitude characteristic of a Viennese cultural trait known as 'therapeutic nihilism'. The social scientist, or rather student, could study the cultural tectonics of their society, but they are outside his or her control. Yet the Viennese students also criticized many of their contemporaries for being under the illusion that they could predict the course of society, and ultimately of history. This outsider-perspective, however, was seriously challenged during the course of the interwar period, especially during the rise of fascism.

The Viennese intellectuals increasingly realized that they bore a responsibility toward their culture, and that they might even possibly have some influence over its fate. This put them in an awkward position. Their work became more political and idealistic, features which they had criticized in the work of others. Hayek's *The road to serfdom* (1944) and Karl Popper's *The open society and its enemies* (1945) are outcomes of this tension between the recognition of the limited power of the scholar and the desire to defend a civilization under pressure. In their work Hayek and Popper apologized to their colleagues for the political nature of their books, but they felt obliged to write them nonetheless as their 'war effort'. Ultimately, although reluctantly, they attempted to draw up ideals and plans for the future. They regained some hope, in part because they were now no longer writing for a Continental but for an Anglo-Saxon audience. It is also in this sense that Hayek and Popper were engaged in a new kind of liberalism, one that intended to be resistant to mass political movements and the desire to throw off cultural restraints.

This dissertation draws heavily on the cultural histories of fin-de-siècle and interwar Vienna. It shows similarities in the problems faced by artists, novelists, scientists and politicians in Vienna. Such similarities were sometimes incidental, but they also arose out of the interactions within and between the various Viennese circles (Kreise). In these partly overlapping circles, broad intellectual conversations were stimulated and this greatly contributed to the creativity of the contributions emerging out of Vienna, especially during the interwar period. The prominence of these circles partly accounts for the fact that the Viennese students of civilization crossed many interdisciplinary

boundaries, and that their intellectual concerns were driven as much by social and political issues as by scientific ones.

Erwin Dekker did his doctoral research at the Erasmus School of History, Culture and Communication (ESHCC) at Erasmus University Rotterdam (Netherlands) under the supervision of Prof. Arjo Klammer. He is currently assistant professor in cultural economics at the ESHCC where he is working on a research project about the valuation of cultural goods. Previously, he lectured at the European Studies department at the University of Amsterdam, where he specialized in political economy.

Contact e-mail: <e.dekker@eshcc.eur.nl>

PHD THESIS SUMMARY: Phenomenology and economics

PETR ŠPECIÁN

PhD in economic theory, September 2013

University of Economics, Prague

The question of relevance of phenomenological method for economics has been revived in recent decades especially in the context of the Austrian school and also in more general considerations of economics (see Düppe 2011). My thesis concentrates mainly on the important contributions of formerly Viennese social thinker Alfred Schutz. I attempted to find an interpretation of the original Schutzian legacy that would fit present methodological discussions and show the virtues of the Schutzian framework in comparison with Misesian aprioristic praxeology on one extreme and the empirical ventures of behavioral economists on the other.

Chapter 1 (*World and science by Ludwig von Mises*) shows that Misesian theoretical approach can, on one hand, provide a good tool to defend a specific character of social sciences that rely on folk psychological (or 'mentalist') concepts (finality, means-ends relationship) from purely pragmatic (i.e., not metaphysical) grounds. The mentalist concepts are indispensable in providing the only presently viable way of describing human action and this allows us to use instrumental rationality as a tool to explain economic phenomena. The effort to get the scientific description of the world rid of 'ontologically unreliable' teleology using, e.g., the behaviorist notion of revealed preference cannot get too far because they implicitly rely on particular psychological assumptions that smuggle it back in. On the other hand, unsustainability and inconsistencies of Mises's uncompromising defense of rigidly aprioristic character of praxeology have to be stressed. There is no finite set of eternal and never-changing truths underlying any successful attempt to grasp human action that would be tautological and, at the same time, describe features of the world.

In Chapter 2 (*Alfred Schutz between phenomenology, historicism, and the Austrian school*) I argue in the context of Alfred Schutz's work that it is much more suitable to understand economic principles (under the

label of praxeology or otherwise) as typifications with an empirical origin, although ‘empirical’ in a broader sense than a positivist would acknowledge. Schutz’s methodology is based on concepts of typification and anonymity that allow us to grasp the continuity between immediately perceived everyday reality and abstract theoretical concepts used in scientific description that underlie economic models.

Schutz’s methodological instrument, the telescopic ideal type—term coined by Prendergast (1986)—dissolves the dichotomy between theory and history that was one of Mises’s central themes and allows us to better understand the specific standing of economics that tries to emulate the rigor and precision of physics but is, at the same time, fundamentally connected with interpretation of the actions of naïve agents in their lifeworld. Abstract formal models can be created after ‘zooming-out’ and anonymizing the agents to an extent that allows us to replace the real people living in particular historical, cultural and biographical conditions by anonymous transparent puppets whose utility function has been implanted by the economist acting as a ‘small god’ of his model world. Such formal models can be, of course, sometimes applied to particular empirical circumstances only using additional ad hoc assumptions, constraints, and the like. This fact, nevertheless, does not undermine the scientific value and legitimacy of economic approach as many critics suggest—it is a process necessarily connected with descending on a lower level of abstraction where various circumstances become relevant which we did not need to pay attention to before.

In addition to its philosophical virtues, the Schutzian approach also sheds light on methodological problems connected with Hayekian idea of spontaneous order (Foss 1996). Spontaneous coordination and rise of a social order that has not been designed by any individual mind represent a problem that needs to be solved considering institutional context of the coordination because it is not possible to decide *a priori* which of the multiple equilibria a rational agent going to choose. Hayek attempts to solve this issue through a theory of evolution of institutions. This theory which is potentially problematic because of vaguely Lamarckian character of social evolution can be supplemented using Schutz’s concept of shared ideal types—e.g., Thomas Schelling’s focal points that allow us to solve coordination games with many equilibria make good sense in the context of shared typifications and structures of relevance that are grounded in an invariant structure of a

shared lifeworld. This approach is consistent with the method of telescopic ideal type and Schutzian requirement of continuity between scientific and naïve idealizations of the world that originates in Husserl's phenomenology. Everyday experience with social coordination makes each agent in a socio-economic system into a theoretician of spontaneous order to some extent—successful action often requires understanding of social mechanisms that transcend individual experience towards the anonymous social forces represented as ideal types. These notions provide necessary building blocks for scientific analysis that can more or less smoothly use and refine them. Moreover, the method of telescopic ideal type allows us to bind even the most abstract economic models with the mid-range theories inspired by different social sciences.

Chapter 3 (*Question of apriorism in economics*) of the thesis shows that the telescopic ideal type is a very suitable tool also when we discuss the status of behavioral economics and its standing in the context of general economic discourse, especially with regard to rational choice theory (RCT). The proponents of behavioral economics (e.g., Camerer and Loewenstein 2004) argue that RCT is only a particular branch of the broader behavioral approach and that the assumption of rationality limits the scope of its application. It can be shown, nevertheless, that behavioral economics, which is largely a-theoretical by itself, is only viable to the extent that it assumes a rational benchmark that frames its efforts as find-systematic-anomalies approach. I argue for the crucial importance of the RCT as a universal and fully anonymous model of an agent that demarcates the area for behavioral research in concrete 'historical' (institutional, psychological) circumstances.

The basic axioms of completeness, transitivity, dominance, and invariance are a priori assumptions of a model world with the highest degree of anonymity. These assumptions underlie the ahistorical ideal type of a rational agent that can be consistently and rigorously analyzed—such analysis then provides ground for more detailed particular 'pragmatic' problem solutions. *Homo economicus* is not supposed to be a psychologically correct mirror-image of *homo sapiens* but a theoretical construct with an immense heuristic value due to its simplicity and transparency. If we 'zoom in' and move below the highest level of abstraction to put our idealized scientific constructs face to face with a particular historical setting in the real world, the institutional context, cultural and psychological biases and limited (bounded)

rationality of real people become relevant, of course, and it is necessary to accept additional assumptions and ad hoc interpretations which is the fate of all empirical social sciences including the behavioral economics approach.

Behavioral economists thus collect examples of anomalous actions and violations of axiomatic rationality (for instance, of invariance and transitivity) but offers no alternative paradigm. The anomalies are, from the Schutzian point of view, something that is to be expected when 'zooming in'. It is even thinkable, however remote, that empirical findings will, in the end, force us to pragmatically re-evaluate and reconstruct the basic aprioristic (axiomatic) analytical framework (similar argument has been made by Barry Smith (1996) from a different perspective). Nevertheless, this changes nothing on the present situation where behavioral economics serves only as a specific branch of empirical research that finds and tries to classify the particular conditions under which a modification in the standard model is needed. I conclude that because this effort makes little sense without the presence of such a standard model, it seems unfortunate to speak about a duality of descriptive and normative (prescriptive) approach (e.g., Tversky and Kahneman 1986), where only one approach captured on different levels of abstraction exists.

REFERENCES

- Camerer, Colin, and George Loewenstein. 2004. Behavioral economics: past, present, future. In *Advances in behavioral economics*, eds. Colin Camerer, George Loewenstein, and Matthew Rabin. Princeton and Oxford: Princeton University Press, 3-51.
- Düppe, Till. 2011. *The making of the economy: a phenomenology of economic science*. New York: Lexington Books.
- Foss, Nicolai Juul. 1996. Spontaneous social order: economics and Schutzian sociology. *American Journal of Economics and Sociology*, 55 (1): 73-86.
- Prendergast, Christopher. 1986. Alfred Schutz and the Austrian school of economics. *American Journal of Sociology*, 92 (1): 1-26.
- Smith, Barry. 1996. In defense of extreme (fallibilistic) apriorism. *Journal of Libertarian Studies*, 12 (1): 179-192.
- Tversky, Amos, and Daniel Kahneman. 1986. Rational choice and the framing of decisions. *The Journal of Business*, 59 (4): S251-S278.

Petr Špecián obtained his PhD in September 2013 at the Faculty of Economics of the University of Economics, Prague under the supervision of Professor Ján Pavlík. Petr Špecián currently works as an assistant

professor at the University of Economics and the Charles University in Prague. His main research interest is the philosophical background of the Austrian school of economics.

Contact e-mail: <specian.p@gmail.com>