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Whither political economy? Evaluating the CORE Project as a Response to Calls for Change in Economics Teaching

Abstract: This paper offers a critique of a major recent initiative in Economics teaching: the CORE Project. CORE emerged in the wake of the global financial crisis, which was also something of a crisis for economics. The paper deploys four evaluative criteria to pose four questions of CORE which address the demands of the student movement, as expressed in Earle, et al. (2016). CORE claims to be innovative and responding to criticism. However, the paper concludes that its reforms are relatively minor and superficial. CORE, like curricula which preceded the crisis, still exhibits limited pluralism, ignores power and politics, and ignores key educational goals. Despite its opportunity to do so, CORE has not opened up space within economics for political economy.

Keywords: curriculum, political economy, economics, CORE Project, pluralism, educational philosophy.

JEL codes: A14, A20, B50

1. Introduction

When Queen Elizabeth II chastised the economics discipline for failing to predict the financial crisis of 2007/8 (Pierce, 2008), her comments amplified existing criticisms. Employers already bemoaned the skills of economics graduates (O’Doherty, et al., 2007; cf. Thornton, 2014). Wren-Lewis (2016)’s survey evidence reveals a lack of trust in the media of academic economists. This finding reflects a wider mistrust in economists as engaging in unethical practices (DeMartino, 2011; Epstein and Carrick-Hagenbarth, 2012). Economists were accused of arrogance (Fourcade, et al., 2015), imperialism (Fine and Milonakis, 2009) and a slavish mimicry of the physical sciences (Mirowski, 2002, 2013). Commentators asked: What is the use of economics (Coyle, 2012)? Yet others attested that the discipline’s formalism has created a ‘democratic deficit’ (Earle, et al 2016). There were, then, many calls for change.

Political economists – by which we mean those economists who stress the inherently political nature of economics – have long recognised the above problems and, amongst other things, argued for greater pluralism and explicit space for political economy; however, they recognise the considerable institutional resistance to these aspirations. They claim that the mainstream of the economics profession insists on a limited set of mathematical and statistical methods or theoretical tools (Lawson, 1997, *et passim*). These are entrenched, for instance via research assessment (Lee, et al., 2013). More fundamentally, mainstream economics is aligned with real political and economic structures, as merely a reflection of ideology (Fine, 1980). Thus, though the crisis presented a challenge to economics and an opportunity for change, prospects for change seemed limited.

A key battleground in this context is the economics curriculum. Political economists contend that economics teaching must draw from multiple perspectives (Morgan, 2014, 2015; Dow, 2009) and/or with educational goals explicitly different from those apparent in the mainstream (Clarke and Mearman, 2003; Kramer, 2007). Crucially, students have demanded change, via bodies such as the Post-Autistic Economics movement (Fullbrook, 2003); and now the Post-Crash Economics Society (PCES, 2014), Rethinking Economics, the International Student Initiative for Pluralism in Economics (ISIPE) and others. Earle et al. (2016) encapsulate these students' views in an extended critique of economics teaching. They show that current Economics teaching in leading UK universities is narrow and tends to rote learning, with little scope for critical or evaluative thinking. Consequently, they make four connected demands with regard to economics teaching: 1) greater pluralism; 2) inclusion of the wider societal aspects of the economy; and 3) a liberal education; implying 4) fundamental change.

This paper will explore whether economics teaching is actually changing, via a critique of a recent significant curricular development: the Curriculum Open-Access Resources in Economics project, better known by its potent acronym, CORE. The paper deploys the four evaluative criteria outlined above to assess to what extent CORE meets the students' demands. We ask four central questions. *First*: does CORE demonstrate greater pluralism? Does it accommodate more perspectives? Does it therefore offer space for political economy, non-mainstream economics and uncertainty of knowledge? Further, does it demonstrate greater epistemological caution, *contra* accusations of hubris made against the discipline? *Second*, of crucial importance to

political economists, we ask: how does CORE address power, politics, gender and society? *Third*, does CORE make explicit recognition of its underlying, driving educational philosophy, as is typically *not* the case in economics education? Whether or not it does, what are its educational goals and approach? In so doing the paper offers the first evaluation of the published educational principles of CORE (Birdi, 2016). *Fourth*, overall does CORE represent change? Has it grasped the opportunity offered by the financial crisis and its attendant criticisms of economics? The paper therefore offers a critique of CORE which is integrated: previous critiques do not attempt this.

We argue that CORE does not deliver greater pluralism. We find in it only limited evidence of greater epistemological caution. Further, this limited pluralism is manifest in CORE's failure to integrate power, politics and society into economics teaching. These features reflect and reinforce the fact that, further, CORE promotes 'instrumental' rather than 'liberal' or 'critical' education, and pays little explicit heed to educational philosophy – a serious flaw given its centrality to effective teaching. As Russell points out, 'Before considering how to educate, it is well to be clear as to the sort of result which we wish to achieve' (1992, p. 413). It is unlikely that a new architecture will be successful if its aims are unarticulated. Fundamentally, despite considerable investment and activity, and some bold claims, CORE suggests that economics teaching has changed relatively little. This signals that space for political economy and other critical voices within economics remains limited. Given CORE's international reach, this lack of reform has wide-ranging potential implications.

The paper proceeds as follows. The next section outlines our evaluative criteria. The criteria are then applied to CORE (section 3). Section 4 presents conclusions.

2. Evaluative criteria

We apply multiple evaluative criteria to CORE. The criteria reflect four strands of recent literature, all of which anticipate Earle et al.'s (2016) critique and proposals from the economics student movement. It builds on existing evaluations of CORE (Morgan, 2014, 2015; Sheehan, et al, 2015; Earle et al., 2016; Andreoni, et al., 2016). Mearman, et al. (2016) provide a parallel assessment of the revised subject benchmarking statement in economics (QAAHE, 2015), and reach similar conclusions.

2.1. Monist or Pluralist Approach to Economics

Our first analytical category addresses the approach to economics espoused by CORE. It considers pluralism in economics - specifically how curricula reflect degrees of openness to political economy, non-mainstream economics and uncertainty of knowledge (Dow, 2009; Morgan, 2015). We distinguish between monist and pluralist approaches. Monism here means that there is one way (perhaps broadly defined) to gain insight into the economy. We also distinguish between mainstream and heterodox economics. Thus, one might be a mainstream monist (insisting on, for instance, marginalist analysis), or a non-mainstream, 'heterodox' monist (insisting on, say, class analysis). Pluralism would imply that more than one theoretical perspective is needed to illuminate economic phenomena. However, several authors show economics to be unusually dominated by neoclassical economics (see *inter alia* Fourcade, et al, 2015).

However, pluralism can operate at other levels. Lawson (*passim*) argues that mainstream economics imposes a particular method (mathematical modelling), based on an ontology of systems comprising atomistic individuals, closed off from external forces, in which regular successions of events are presupposed to occur. As Chick and Dow (2005) and others have claimed, a different ontology of ‘open systems’ legitimates different methodological approaches. Further, some argue that it is impossible to explain the complex, open nature of the economy from one theoretical perspective (Dow, 1997, 2009; Dobusch and Kapeller, 2012).

Another rationale for pluralism might be *epistemological caution*, or fallibilism, i.e. the possibility of being mistaken. This aspect has been amplified in economics since the crisis, because of the frequent claim that it was driven partly by the hubris of economists. Caballero (2010) has posited the ‘pretence of knowledge syndrome’ and suggested that economists show greater humility. Meanwhile, Fourcade et al. (2015) speak ironically of the ‘superiority of economists’.

Further, pluralism has been advocated as bringing educational benefits. Pluralism can mean that students are better equipped to solve complex problems (Nelson, 2009) and may understand mainstream economics better (Mearman et al., 2011). Pluralism may improve skill formation and, therefore, make graduates more employable (O’Donnell, 2009, 2013); it may engage students more effectively; and may even allow teachers as well as students to learn and gain from teaching different perspectives (Warnecke, 2009). Finally, claims have been made that pluralism allows liberal and critical educational goals to be achieved (see section 2.3). For political economists and other

social scientists, the implication would be that their analysis is necessary and welcome in economics.

2.2. Treatment of Power, Politics, Gender, and Society within Economics

The second analytical category captures the approach taken by economics curricula to the nature of economics and the economy. This strand borrows directly from a heritage of critical political economy (Peterson, 2005; Lee et al., 2013; Morgan, 2014): it scrutinises treatments of power, politics, gender and society within economics curricula. Earle et al. (2016) criticise economics for treating the economy as a separate entity and creating theories in which economic aspects are somehow separable from wider society. This presupposition leads to the exclusion from economics curricula of considerations of the nature of society, of political factors and power, and of ethics. So, we ask whether CORE admits these elements into their treatment of economics.

Ozanne (2016) demonstrates how mainstream economics retains only a highly limited notion of power. Hence we explore how CORE considers power in economics, for instance by considering how power is manifest in production. One form of such power is gendered social relations. Hence we ask whether CORE acknowledges the issue of gender in economics and the underlying elements that derive from a Feminist Economics approach (see, *inter alia*, Peterson, 2005). We also consider whether or not a political aspect is acknowledged. This is a controversial question in economics, which remains dominated by positivism, and its core notion of the discipline's retention of the fact/value distinction makes this controversial. According to this positive economic position, economists *qua* economists and educators ought not integrate their political

views in their practice. This principle is a staple of introductory economics courses. However, it is hard to defend. Similarly Veblen (1919) and Myrdal (1930) show that economics abounds with ethical principles and culturally determined concepts. Political economists are, of course, fully aware of this embedded nature of power in economics.

2.3. Educational Goals and Approaches

Our final analytical category concerns educational philosophy and practice, which are central here, because this paper is concerned with curriculum. This strand builds on Clarke and Mearman's (2001, 2003) work on economics curricula as embodying educational goals and educational philosophy. It asks what the underlying educational purpose of CORE is. The educationalist Peters (1970, p. 28) argues that an examination of educational aims must precede any discussion of curriculum content, as 'a way of getting people to get clear about and focus their attention on what is worthwhile achieving'. Arguably, though, economists have neglected educational goals (Clarke and Mearman, 2001). As Bowmaker (2010, xiii) comments on his interviews with leading teaching economists, few 'interviewees appear to engage in discussions with colleagues about teaching approaches and strategies'. Indeed, the engagement of the interviewees with educational theory was generally weak: few could answer Bowmaker's question about how humans learn. Further, most of his interviewees favoured a transmission model of teaching, which emphasises learning of tools or concepts, rather than critical or emancipatory thinking.

We deploy three broad strands of educational goals found in the literature: instrumental, liberal, and critical. *Instrumental* aims are that students are trained in concrete,

identifiable skills, such as the ability to solve certain types of problems, know formulae or techniques, remember and, perhaps, apply theory, or possess ‘knowledge’ of a topic. All education will involve instrumental outcomes, even if they are not intended or explicitly stated. However, an education mainly geared towards such instrumental goals may be regarded as ‘instrumentalist’. An example of instrumentalist education is one in which a student is indoctrinated into a particular view, behaviour, or socio-political norms. More broadly, though, any educational process can be regarded as indoctrinatory if its content is delivered uncritically: contrary to tenets of ‘liberal’ and ‘critical’ education.

The central feature of *liberal* education is ‘to equip people to make their own free, autonomous choices about the life they will lead’ (Bridges, 1992). That implies the achievement of the intellectual capacities of critical and evaluative thinking, comparative thinking, and intellectual open-mindedness. These aims mean that curriculum content is only relevant in achieving outcomes that are (thought) processual: content should be assessed according to its ability to achieve these outcomes; and ‘facts’ and ‘knowledge’ are de-emphasised. Arguably these desired capacities are achieved better in a pluralist curriculum than in a monist one (Mearman et al., 2011). It should though be noted that liberal educational philosophy is vulnerable to the critiques that it can be individualist; and that under neoliberalism, students are ‘taught the controversy’ (within ‘safe’ limits) or presented with ‘faux disputes’ but not equipped to arrive at a reasonable judgement about them (Mirowski, 2013, p. 81, 245).

Critical pedagogy has been championed by, for example Freire (1970) and hooks (1994). It recognises the role of power in education. Critical pedagogy has Marxist

roots, particularly in critical theory. Radical political economists have advocated it for some time (Bridges and Hartmann, 1975; Rose, 2005). Characterised as a rejection of modernist (Enlightenment) education, therefore including liberal education, critical pedagogy thus aims to liberate those whom the system excludes and oppresses. In practice, it emphasises a student-centred approach stressing the critical evaluation and re-evaluation of common concepts via a process of *conscientisation*, or developing critical self-awareness of one's social and political condition, particularly for disadvantaged or social groups. In addition, the content of the curriculum should change its emphasis to stress the contributions of oppressed groups. This does partly resonate with liberal goals; however, whilst liberal education sees learning as a process that enables the student to think for him/herself, critical pedagogy provides the necessary space for students to engage in critical dialogue with the past, question authority, struggle with ongoing relations of power and prepare themselves for what it means to be critical, active citizens in the public sphere (Visano, 2016).

At this point, some caveats are necessary. First, whilst the three educational philosophies are presented as analytically distinct, this is for convenience. In reality, they overlap. So, though liberal education de-emphasises learning of facts, some learning of *inter alia* key concepts and historical events will assist students in considering them critically. Also, liberal education is somewhat instrumentalist in that it implies a vision of society. Similarly, critical education can be driven by a goal of changing society. And, as already noted, liberal and critical education share a concern with autonomy. Second, the three perspectives may coexist in the same programme, and a good education may contain elements of each (albeit in context-specific combinations).

2.4. Extent and Nature of Change

The criteria laid out in sections 2.1-2.3 capture how we intend to evaluate the extent and nature of change represented by CORE. That follows from the following premise: the *status quo ante* of economics teaching can be characterised as being monist (and neoclassical), in which the dimensions of power, politics, environment, and society are largely excluded, and educational goals are opaque and instrumental. Thus for CORE, our evaluation of change will largely reflect our positions on our other criteria, i.e., whether it has become more pluralist, addresses eco-socio and political dimensions, and makes explicit educational goals inclusive of a liberal approach. Finally, we acknowledge that our analysis is of a curricular framework and not of concrete programmes. At this concrete level, some of our criticisms may be less accurate; some, more accurate. For example, at the University of Bristol, CORE is taught alongside history of thought. At the University of Paris, Sciences-Po, CORE forms part of a suite of general educational courses, many of which reflect other social sciences.

3. The Core (Curriculum Open-Access Resources in Economics) Project

In 2009 a new body with substantial financial backing was established: the Institute for New Economic Thinking (INET). It was founded in direct response to the global financial crisis and consequent amplified calls for economics to change. INET is ‘dedicated to the rigorous pursuit of innovative economic theories and methods that address society’s most pressing concerns’ (INET, 2017). One of its early major projects was to provide \$1m funding to produce what became ‘CORE’. Notionally, CORE

stands for Curriculum Open-access Resources in Economics, although the acronym has been reified. It has been developed across a number of sites¹, and is being used at several more. At present, CORE only operates at the introductory undergraduate level and we are not aware of any concrete plans to develop it further.

There is some debate about what CORE is. At its centre is a large introductory undergraduate e-book called ‘The Economy’, which itself comprises nineteen units on a range of topics. Hence, CORE (2016a) describes itself as an e-book course. Indeed, some uses of CORE treat it as one module or course within a suite of others taught at the introductory level. Additionally, though, CORE is a curricular framework to be elaborated, whose delivery and outcomes are contingent on specific context. Also, CORE is regularly updated and is rather a moving target. With these caveats in mind, some general conclusions can be drawn. We will consider how CORE answers our four central questions.

3.1. Is CORE Pluralist?

CORE’s main contributor group appears relatively open, offering scope for a pluralist product which creates space for political economy. CORE is led by a leading ‘New Keynesian’ economist Wendy Carlin. Other notable collaborators are Samuel Bowles, an economist with a Marxist background now working in complexity theory; Diane Coyle, who has been prominent in debates about curriculum reform, albeit in a way that fundamentally preserves the mainstream; and Begüm Özkaynak, an ecological

¹ According to the CORE website, as of 22 August 2017 CORE was being used at 36 institutions in 18 countries. <http://www.core-econ.org/> (Accessed 16:00 on 22/08/2017)

economist. Other named contributors include Alvin Birdi (Director, the Economics Network) and Andy Ross (ex-Government Economic Service); ‘Nobel’ Prize winners Joseph Stiglitz and Robert Solow; IMF macroeconomist Olivier Blanchard; critical economists Juliet Schor, Alan Kirman, and Robert Rowthorn; and even critics of CORE such as Maeve Cohen from the PCES. Accordingly, Carlin (2016a) has subsequently made an explicit claim to pluralism: CORE ‘...has already created a plural, practical, global economics course’. Thus, it is legitimate for us to ask how pluralist CORE is.

In fact, many previous assessments of CORE claim it eschews pluralism. Indeed, Carlin (in FT 2014) had earlier accepted the criticism that CORE is *not* pluralist. As PCES (2015, p. 17) puts it: ‘Whilst there is some discussion of whether or not *homo oeconomicus* is plausible and some short and underdeveloped references and insights from other thinkers, CORE still only teaches students one way of doing economics.’ Even though CORE may include some advances in the teaching of economics - including social interactions and altruism (unit 4), irrationality (unit 9) and the role of institutions (unit 15) - it remains rooted in methodological individualism and fails to provide deeper explorations of how these concepts emerge and behave in economics. For instance, CORE’s analyses of social interactions are translated simply as “game theory” (unit 4), leaving aside other relevant aspects of societal hierarchy, such as power or culture. Similarly, altruism is dealt with entirely in terms of the standard utility maximising framework. Essentially, CORE remains ontologically monist by presupposing equilibrium, individuality, self-interest, and rational choice as *a priori* conditions of economic reality. That is despite its aims for contemporary content based on ‘recent developments in economics and other social [and indeed natural] sciences’ (cf. Birdi, 2016), which might include drawing on, say, complexity theory.

CORE makes extensive use of real world data and other evidence, as demanded by many (Joffe, 2014). The CORE approach is to start from evidence – of economies across the world, and the history of their development – and give students tools they can use to analyse and explain what they see (Stevens, 2015). Unit 12 (CORE, 2015e) (Economic Fluctuations and Unemployment), for instance, employs significant historical and experimental data and draws on the history of economics, such as the case of UK GDP growth and unemployment rate in the light of business cycles between 1875-2010.

Thus, CORE can claim to have responded to those who, after the financial crisis (James, 2012), demanded more teaching of economic history. Its first unit is ‘The Capitalist Revolution’, which is significant: typically, economics courses and texts begin with supply and demand analysis, which in CORE is not addressed until unit 8; and it uses the term ‘capitalism’, albeit not discussed thoroughly. By defining capitalism as ‘an economic system in which private property, markets and firms play a major role’ (CORE unit 1, 2015a), it emphasises the trajectory of increasing living standards and technological changes in the last 1,000 years.

However, CORE’s treatment of economic history actually suggests only weak pluralism. CORE seems to impose a single take on history. Earle et al. (2016, p. 113) criticise CORE’s treatment of the ‘hockey stick’ of growth as imposing the narratives of a single, continuous industrial revolution and one which ‘leaves the student believing that at one time “the economy” took off and there has been no going back since’. Furthermore, Carlin (2016b) presents a graph showing growth mapped against speed

of information transmission. This imputes a particular link between economic growth and the speed at which information travels. This is one hypothesis. However, many others are available; yet there is little to demonstrate how students avoid being trapped in one narrative.

On the history of economic thought CORE's approach also suggests weak pluralism. CORE seems to take a Whiggish view, in which past mistakes have been corrected in arriving at the current state of economics. Initially, major past economists were put 'in boxes' (Yang, 2015) and treated as 'intellectual fossils' (Chang, 2015). CORE has responded to criticism by apparently enlivening the dead economists and by re-labelling them as 'great'. However, the way in which this is done is questionable. For example, CORE (unit 6, 2015d) suggests that Ronald Coase and Karl Marx agreed on the politics of the firm. In fact, Coase and Marx had very different notions of why firms even exist. For Coase, the reason is cost minimisation, for Marx it is power and exploitation. This example demonstrates a weak engagement with the history of economic thought. More importantly, it suggests an anti-pluralism, in which the work of past dissenters is not presented accurately. *A fortiori*, the live research programmes emanating from *inter alia* Marx and Veblen are not acknowledged, which includes ignoring key economic concepts such as social class. Critical perspectives, such as feminist economics, which CORE appeared to embrace, are absent. These are serious problems from the perspective of political economy.

CORE also aims to offer greater breadth of topics than is typically provided (Carlin, in FT 2014; Carlin, 2016a) by incorporating *inter alia* norms, power, multiple equilibria and ethics. Of particular note is its consideration of inequality. In unit 1, it is stated that:

‘There is great variation across countries in their success in raising incomes, and in the degree of inequality in living standards within them’, including experiences of developing countries (Carlin, 2016a). There is further acknowledgement that ‘differences in wealth, education, ethnic group and gender *as well as luck* are major sources of inequality’ (emphasis added); and that ‘...inequalities may provide incentives for hard work and risk-taking, they may also incur costs that impair economic performance’. Perhaps most significantly, the material states that, ‘Economic disparities are mostly a matter of where you are born and who your parents are’, a message which is politically controversial. All of this supports the view that CORE represents a shift, in pedagogy and in epistemology: the topics deliberately create doubt and express uncertainty on the part of economists.

That example supports claims that CORE exhibits greater pluralism via increased epistemological caution. Indeed (privately) some of CORE’s enthusiastic proponents cast this caution as central to the project. Key to this is CORE’s much vaunted use of evidence. However, if evidence is so important, it begs the question why so many concepts unsupported (or refuted) by evidence remain so prominent in CORE. Utility maximisation (PCES, 2015) and the U-shaped average cost curve (Joffe, 2014) both lack empirical support and yet remain key elements in CORE. In these cases, their retention is predictable, given their prominence in the mainstream canon. Yet an approach genuinely driven by evidence would at least suggest that all of them are at least questioned. A mainstream economist may argue that more data could be sought; however a critical approach would entail a serious discussion of whether both are merely convenient fictions that should be ditched.

Overall, is CORE pluralist? In our view it is not. CORE reflects and inculcates modes of thought that are largely monistic and cement the mainstream of economics. CORE *appears* more pluralist, via nods to ‘past great economists’. However, acknowledging pluralism in some circumstances and in minimal ways is not the same as encouraging or facilitating pluralism, or stating it as fundamental to free and open enquiry. While economics as a discipline is changing and exhibits some diversity, established schools of thought considered ‘heterodox’, such as Post Keynesianism, Marxism and Institutionalism are excluded in its teaching. CORE does not treat these schools as having live research programmes. Instead they are either treated as defunct bodies of theory confined to the history of economic thought or their critiques are superficially co-opted, with no injunction to engage meaningfully with them. Not only does CORE not provide grounds for pluralism, it presents an exemplar of absence of pluralism in spite of being presented as a progressive development in economics curriculum. Hence, it fails to create space for political economy and for social sciences more broadly. Further evidence of these problems can be seen in CORE’s treatment of society (section 3.2) and its educational approach (section 3.3).

3.2. How does CORE treat Power, Politics, Gender and Society within Economics?

We want to know if CORE treats the economy as separate; and whether it addresses the social, political (including the concept of power) and ethical dimensions of economics. If it did, it would be reversing the shift, which has occurred over roughly the last century, away from political and moral economy and towards an apparently technical subject.

The title of the CORE e-book – *The Economy* – initially suggests that the economic sphere is treated as a separate entity. Inside, however, the material suggests a different approach. For instance, CORE unit 1 presents the economy as embedded in a biosphere. Similarly, in Carlin (2016b) the economy is a system with open boundaries, lying inside society, which itself lies inside the biosphere. Open boundaries allow impact into and from the economy to the biosphere: ‘In the process [of economic activity], households and firms transform nature by using its resources [matter and energy], but also by producing inputs [waste] to nature’. This type of language appears consistent with that used by ecological economists and might reflect their influence in the project.

However, this initial favourable impression is countered by other treatments of the economy-environment relation, more conventional to economics. Crucially, CORE (2015g) unit 18 retains the language of ‘externalities’, i.e. costs and benefits arising from production and consumption which have effects external to the initial internal transaction. This approach is problematic generally, as it presupposes an atomistic conception of society in which relations are external. It retains the pretence that the internal and external effects are separable, a claim which is, at best, sustainable formally. At least as far back as Kapp (1950; 2015) and Robinson (1972), political economists have recognised that, in the context of environment, the ‘external’ effects are much greater than the ‘internal’. This has significant impacts on economic treatments of the environment. For instance, they render neoclassical valuation methods fundamentally flawed because they conflate use value and exchange value: they attempt to place values on species or environmental features according to their monetary worth (as a proxy for utility) to individuals (see Mearman, 2005). These considerations seem absent from CORE.

We also ask whether (and if so, how) the social, political and ethical dimensions of economics are admitted. Is it acknowledged that economics is a political discipline with implicit ethical positions? Despite claims that CORE addresses multiple political and social perspectives on the nature and mechanics of the economy, CORE still reflects one particular socio-political position. For instance, using the term ‘capitalism’ in unit 1 may be better than eschewing it, but how this is done is crucial. There appears little attempt within CORE to *examine* capitalism, which might lead students into a critical discussion of it. Whilst acknowledging the existence of institutions, power and conflicts in society (cf. CORE, unit 5, 2015c) CORE maintains Pareto efficiency and market solutions as the standard, which implies the adoption of the normative biases of the role of scarcity (Watson, 2011) and liberal economics (Myrdal, 1930). Social interactions and dilemmas are seen as a closed, binary system of self-interests in which game theory embodies all the necessary information (CORE units 4 and 5, 2015b and 2015c).

CORE’s limited socio-political engagement is also demonstrated by its treatment of issues in the political economy of developing countries. Despite Carlin’s (2016a) suggestion that CORE pursued a different approach to economic development by including local evidence and comparisons between advanced and emerging economies, CORE’s units do not explain or discuss *what* makes developing countries different and *why*. CORE presents quite effectively contrasting evidence, such as why low-wage economies attract firms seeking lower production costs (CORE unit 6, 2015d) and how lower-income countries have higher trade tariffs than rich countries (CORE unit 16, 2015f); however, critical engagement is absent. No reference to underdevelopment theories is made, and comparative advantages still play a dominant role in international

economics. Causes of underdevelopment are justified simply as historical asides: ‘*For reasons of history* (emphasis added), some countries may specialise in sectors where there is a lot of potential for innovation, whereas others specialise in sectors with little such potential.’ (CORE unit 16, 2015f).

Similarly, gender issues are treated marginally within CORE. Unit 19 discusses inequality by addressing, *inter alia*, endowments and classes, income inequality and wage differentials within the labour market (CORE unit 19, 2015), making a brief reference to the gender pay gap and educational levels between men and women. No reference is made, however, to the social construction of gender and its effects on the labour distribution and the economy. Or, more importantly, how women tend to perform certain economic jobs in the economy whose wage bargains are affected by culturally and historically specific notions of fairness (Power et al., 2003). The definition of inequality provided by CORE suggests that gender wage differentials, for instance, are the result of ‘*accidents of birth*’ (CORE unit 19, p. 49, emphasis added) rather than social and cultural constructions, evidencing CORE’s limited engagement with the political economy of gender (Waylen, 2007).

Last, we explore how CORE treats power. Power is an essential element of economic reality, and a key concept within political economy. However, in CORE, it is defined weakly: as a conflict, or ‘the ability to do and get the things we want in opposition to others’ (CORE unit 5, 2015c). *How* one achieves power, *how* one convinces others, and *how* this relates to the economy and society is ignored. Power is rather treated as an exogenous shock, or a special case in economics rather than inherent. For instance, no reference to social class or economic dominance is made in CORE’s units. On the

contrary, economic dominance is treated broadly as “bargaining power”, which is easily neutered in a Nash game-theoretic framework, and it presumes that economic actors are in similar socio-economic conditions of bargaining (CORE unit 5, 2015c). Hence we conclude that CORE’s treatment of power is limited.

Overall, how does CORE treat power, politics, gender and society within economics? Again, reflecting prevailing approaches within the discipline, CORE largely treats the economy as a separate entity and, therefore, economics as a rather separate and (not very) social science. Further, CORE, reflecting other recent similar moves in economics, appears more interdisciplinary; however, the nature of the interaction between economics and other disciplines remains rather superficial, selective and, in some ways, still imperialistic. Particularly, there is little evidence to suggest that social, environmental, political, and ethical dimensions are considered inherent to economics: rather these are treated as external shocks, whose internal effects are to be explored. Hence, economics is viewed not as a moral, ethical, political or social discipline *per se*. Despite apparently de-emphasising technical expertise, we would aver that CORE’s treatment of the economy still reflects the discipline’s dominant monism and instrumentalism, which has led it to exclude the wider and more complex nature of economic interactions and of economics itself (see Ozanne, 2016). Thus, CORE’s treatment of society is both a manifestation of lack of pluralism and suggestive of the key elements of its approach to education.

3.3. What are CORE’S Educational Goals and Approach?

As outlined in section 2.3, clear educational goals are essential for good teaching. These ought to come before considerations of either content or process. However, in economics education, explicit considerations of goals are typically ignored. Content is both prioritised and neglected. That is to say, the content is decided first, but without being discussed much. The majority of the debate in existing literature is on how it is then to be delivered (see Clarke and Mearman, 2003). This pattern is repeated in CORE. The Project has been running since 2012, yet teacher guides for more than half of its units had, at the time of our writing, not been completed. Moreover, a guide to the pedagogical method of CORE (Birdi, 2016) was not published until September 2016. Perhaps CORE decided that its resources were best employed to develop good content and persuade instructors to adopt it; however the delay invites the conclusion that in CORE pedagogy is rather an afterthought. .

Further, CORE does exhibit educational innovation. As Birdi (2016) puts it, ‘CORE lends itself well to a quiet revolutionising of this established pedagogy’. Specifically, Birdi refers to CORE’s ‘backwards mode of exposition’, in which students encounter both evidence and complex theories, rather than being schooled in simple, abstract theories elucidated from first principles but unsuited to engagement with the real world. This approach ought to enliven teaching and engage students more. Further, CORE explores stimulating topics - such as the environment, inequality, innovation, and globalisation - and deploys many additional resources, such as lecture slides and quizzes, which allow teachers to adapt to their own styles. Podcasts and classroom flipping aim at higher degrees of interactivity (Birdi, 2016). At University College London, for example, first year students are asked to create a three-minute media piece on the theme of capitalism, growth and inequality (CORE, 2016b). CORE even

contends it has halted the ‘sophomore slump’ (THES, 2017), although evidence for this claim is unclear.

An additional educational innovation claimed by CORE is that it moves towards co-creation and student-centredness. Carlin (2016a) proclaims that, ‘Students are among the creative voices telling us how we can do better: some are helping create the material we provide.’ Birdi (2016) elaborates further that, via the provision of *inter alia* technical supplements and quizzes, ‘...instructors and students can decide [for] themselves how far they wish to delve.’ Further, ‘...the modular and backwards-oriented approach to learning allows a student to study as much detail as he or she would like or is equipped to pursue...’ This does accord with student-centred learning and co-creation. In that sense, the liberal goals of creating autonomous learners and critical pedagogy of empowering learners may be reflected. However, no detail is offered on a suggested balance between teacher guidance and student selection. Further, given our discussion in sections 3.1 and 3.2, it is not clear that students are equipped to make the choices open to them. As such, the options open to students seem prescribed. In any case, reflecting CORE’s weak pluralism, the options only allow greater deepening of technical knowledge rather than a broadening of the curriculum. That suggests that learning the material is the goal. Autonomy may occur, but accidentally, indicating strongly an instrumental education.

Another way to engage students more is via asking students to do a range of things, many of which are quite different from methods relied upon by traditional passive models of learning in which transmission of content is the dominant approach. Asking students to produce short videos is one example. Learning theories would suggest that

this type of activity will increase engagement *and* learning. However, this still begs the question: engagement for what purpose? CORE allows momentary critical space for participation through “discussion boxes” where students are asked to engage through comparison and opinion on a pre-determined set of concepts. This hints at liberal educational goals.

Intellectual openness is also hinted at in CORE’s ‘backwards mode of exposition’. CORE claims to abandon canonical teaching and prioritises data to promote an empirical approach to economics. According to Carlin (2016a), CORE’s stated intended outcome is to make students able to learn conceptual tools and empirical skills for enquiry into major economic problems - not algorithms for solving toy models that illustrate ‘thinking like an economist’. Further, as Birdi (2016) clarifies: ‘the empirical examples are presented in considerable historical detail without the constraining effect of being simplified to demonstrate a particular theoretical concept. CORE’s method of teaching is then to introduce *whatever theoretical apparatus* will help in the analysis and understanding of the empirical example’ [emphasis added] This all sounds promising educationally; moreover it suggests a significant pedagogical shift, perhaps greater pluralism.

However, we would argue that such a judgement would be unfounded. First, it assumes that observation is theory-free, when it is theory-laden (Kuhn, 1962). When one looks at (and indeed constructs) data, one imposes a theoretical (and political) framework on the object. That then requires that we consider the range of perspectives to which students are exposed. For, if students are exposed to only one perspective on how to view the world, they will most likely view it through that lens. There seems to be a

small set of valid ways of observing events. Thus, although, superficially, the idea of allowing the data to drive matters seems reasonable, in fact, by teaching only one perspective on economics, the door to openness may have already been closed. Moreover, by purporting to have an open approach when in fact only presenting one view, students may be misled into thinking they have reached their own conclusion when, in fact, they were led to it.

Let us explore one example, as given by Birdi (2016). He writes that: ‘An example [of CORE’s empirical approach] is the long-period historical wage data that students see in unit 2 in which the sharp rise in real wages at the end of the nineteenth century is noted. This inspires a discussion of relative input cost changes which [sic] *necessitates* the introduction and use of isocost lines’ [emphasis added]. Here, the non-pluralist cat emerges from the bag. Discussion of isocost lines is only necessary if one views the world in a particular way; or if one’s objective is that students learn about isocost lines. Many other lines of enquiry open up when considering early capitalism, especially when drawing on political economy. For example, one might consider working conditions, the rise of monopoly capitalism, or the rise of a leisure class. By narrowing the focus to isocost lines, the motivation appears not to be towards open-ended enquiry and more towards pre-conditioned explorations designed to derive or illustrate pre-determined concepts.

Overall, these criticisms suggest significant limitations of CORE educationally. The emphasis on learning a single perspective, and a limited engagement with open, critical enquiry are hallmarks of instrumental education: one which stresses facts, knowledge and skills. CORE may represent an improvement in some respects, but also seems a

missed opportunity. These concerns may have motivated the criticism from Rethinking Economics and the Young Scholars Initiative, student groups set up and funded by INET, which have supported efforts to implement more fundamental changes.

3.4: Does CORE Represent Change?

CORE presents itself as significant change. Carlin (2016a) portrays CORE as promising a *new paradigm* for teaching economics by comparing it to earlier paradigm-setting texts, such as Mill's *Principles of Political Economy* (1848) and Marshall's *Principles of Economics* (1890). Further, it suggests potential for gradual, significant change in economics.

CORE's main objectives appear to have been twofold: to enliven teaching and update the curriculum. Crucially, CORE aimed to address the concern that teaching materials were lagging considerably behind the mainstream research frontier. As Carlin (2016a) puts it: 'Our motto is: "Teaching economics as if the last three decades had happened."' Thus, Carlin (2016b, slide 10) refers to an old benchmark model and a new one. The latter is associated with 'contemporary economics and CORE', suggesting that CORE captures the new thought. CORE includes, for example, game theory (unit 4) and imperfect competition (unit 7), which have become important strands in economic theory. Notably, CORE also associates microfoundations to macroeconomic analyses to offer an integrated approach beyond the typical micro-macro division. For instance, investment decisions of the firm are first explored from the game theoretic perspective, and later students can assess their impacts on aggregate demand and GDP (CORE unit 12, 2015e).

In many ways, CORE appears to answer the call for a reinvigorated economics curriculum: its materials embody recent research activity and are designed and presented in ways which *prima facie* encourage engagement. However, our arguments suggest that, in fact, CORE may not constitute change. Its treatment of economics is limitedly pluralist, despite some evidence of greater epistemological caution. Its treatment of the social, political and ethical dimensions of economics essentially replicate pre-existing curricula. Thus, it creates little space for political economy. Though it pays explicit attention to teaching practice and some learning theory, its educational approach does not clearly show genuine openness. Again, in that respect, it reproduces existing economics.

One defence of CORE is that it is relatively new, which means it may well address later the shortcomings identified by our critique. Another defence might be that unless more funding is found, it will remain confined to the introductory level, which limits the effects of its shortcomings. A further justification for its approach is the standard argument that, at the introductory level, students need to be familiarised with the subject before being exposed to fundamental debates. The argument has some support from educational psychology. Perry (1970) warns that moving students from a 'dualist' (right/wrong) mode to a 'pluralist' one can encounter resistance from the student if s/he is rushed. The danger with such a contention, though, is that by being taught only one perspective, students get locked into one way of thinking which precludes opening-up later. As Sutton (2000, p. xv) notes, the curiosity of students can be quashed as they are focused simply on mastering technical material. CORE might respond that it de-emphasises technical material, which is placed in supplements called 'Einsteins' and

‘Leibnizes’. However, under typical disciplinary norms, students will be encouraged to engage with that technical material, thereby becoming trapped; or disillusioned. CORE’s very name reflects an attempt to redefine a core of economics, albeit one which is somewhat broader than before. Moreover, CORE constructs a set of materials which are designed to be adopted easily and relatively costlessly. This, in itself, creates disincentives to innovate.

Regarding curriculum design, the above monism about economics is not *necessarily* a barrier to pluralist teaching. It is perfectly possible to be strongly committed to a particular approach to doing economics but teach in an open, pluralist way. However, this shift requires a particular mindset, which could be inspired by greater engagement with educational philosophy and the recognition of its importance to teaching. For example, a commitment to liberal or critical educational philosophy could save economics from being taught in a monist way.

Unfortunately, overall, in CORE educational philosophy is largely implicit. Clearly some attention has been paid to how to achieve whatever goals are held in mind: it is recognised that for learning to occur, students need to be engaged and that engagement is often inspired by relevance. However, the wider educational objectives of CORE are opaque. Some of the examples given by CORE suggest, though, that it remains driven by instrumental concerns of learning specific content, training, and preparation for employment. While liberal or critical outcomes such as greater critical thinking or autonomy may result, these appear incidental.

CORE suggests that new issues are being addressed by adding teaching topics from the mainstream research frontier and extensive use of empirical data. Nonetheless, evidence that this represents an actual change on the way economics is taught is scant. Recognising something is not equivalent to engaging with it. Arguably, as Morgan (2014) notes, CORE's approach to learning is that of 'point, click, confirm'. CORE reveals snapshots or anecdotes, without engaging with underlying disagreements and insights. Students can note that Marx existed, or that Keynes had an impact, without knowing what they wrote or what research inspired by them says. In CORE in particular, there appears little possibility that students will complete their first year being thoroughly sceptical about economics or rejecting core mainstream concepts. Both of these outcomes ought to be possible in a liberal or critical education.

4. Conclusions

The 2007/8 economic crisis was also a crisis for the economics profession. It presented a moment of opportunity for the discipline to institute significant changes to its practice, including its approach to teaching. This paper has considered CORE, a recent significant new curricular initiative being developed and used in several continents. The paper evaluated CORE according to four criteria, which address demands from students as crystallised in Earle, et al. (2016).

We find that 1) CORE continues to exhibit limited pluralism, either in terms of openness to fundamentally different alternatives or to the possibility of legitimate argument that an alternative was preferable to the mainstream. 2) This lack of pluralism is manifest in its treatment of economics generally, but specifically manifest in CORE's

treatment of the social and political aspects of economics. Together, these findings suggest limited scope for political economy to play a role in modern economics teaching. Further: in teaching these are significant deficiencies as they limit the development of core cognitive faculties and achievement of key educational goals associated with liberal pedagogy. Nonetheless, the deficiency could be mitigated if CORE paid explicit attention to educational philosophy in general and liberal pedagogy in particular. Unfortunately, (3) our analysis suggests that CORE pays insufficient *explicit* attention to the educational purpose. This is a fundamental problem: ‘Instructors simply function in a fog of their own making unless they know what they want their students to accomplish as a result of their instruction’ (Mager quoted by Curzon, 1990, p. 131). Collectively, these are serious failures that suggest that CORE fails to rise to the demands for change to economics following the great financial crisis of 2008. In addition, the implicit educational approach of CORE fits more accurately under an ‘instrumentalist’ label. These conclusions corroborate previous analyses of CORE that judges it (4) as presenting change merely to stay the same (Morgan, et al. 2014; Stockhammer and Yilmaz, 2015). As such, CORE falls short of public, professional, and student expectations. Given the international profile of CORE, these flaws have wide-reaching potential implications for economics teaching.

These concerns are partly addressed in recent attempts to reform CORE. Indeed, the original funder of CORE, the INET, is now supporting an alternative set of Massive Open Online Courses (MOOCs) being developed by a team led by Robert Skidelsky and Ha-Joon Chang. These MOOCs are initially to be on the history and philosophy of economics, and on so-called ‘unsettled questions’. These aim explicitly at establishing that economics is a contested space and is inherently political, social, environmental,

and ethical. They are also based firmly on the principles that education should be directed towards critical, autonomous thinking and not merely towards training the next generation of economists. In these ways the new MOOCs serve liberal and critical educational goals but subvert the traditional training process evident in much economics teaching. That process serves the objectives of economics educators are mainly to produce the next generation of neoclassical researchers. As prominent economists, such as Kenneth Arrow, have argued, currently too much resource is devoted to teaching technical material from one perspective, deemed necessary to prepare students for postgraduate study (McCloskey, quoted in Colander et al., 2004). The undergraduate curriculum should be valued in and of itself and free from the narrow technical demands of postgraduate study. Political economy may play an important role here, facilitating critical and comparative thinking more easily than monism. Further, by exposing students to different schools of economic thought, they may develop multiple bases of knowledge when solving complex problems. Given the content of many of these schools, students may also develop an understanding of economic affairs in a fuller way, which incorporates the social, environmental, political and ethical dimensions of economics.

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