Social Epistemology: The Future of an Unfulfilled Promise [1]
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How the World Has Changed Since the Eighties

I recently ran across a South African book that offered a critical survey of the various strands of thought that feed into contemporary 'transdisciplinarity'. The text contained a brief discussion of social epistemology – in particular my version (the analytic version was not mentioned). Much to my bemusement, 'social epistemology' was described as a movement from the 1980s. While it certainly began then, I would hope that it continues to have relevance in a world that has consigned both the Cold War and Duran Duran to the dustbin of history. At the same time, it is clear that many of the field's sustaining themes look different from when I founded the journal and published the book *Social Epistemology* (1988), now more than a quarter-century ago.

If I had to point one consistent source of 'originality' in my thinking, it would lie in imagining a moment in the past when things could have been different, and then tracing the consequences of the path not followed. Such moments would be chosen strategically to satisfy some normative ambition, but the import of this exercise would be to show that 'the real' can operate as a platform for launching 'the ideal'. The policy problem then is determining what – if any – aspects of our current condition might produce a similar effect in the foreseeable future. Applied to Science and Technology Studies (STS), it would mean, say, reading *Leviathan and the Air-Pump's* account of how Robert Boyle triumphed over Thomas Hobbes not as a celebration of the sheer contingency of the outcome, but as a record of failure from which one might learn when a similar circumstance arises in the future, so that the Hobbes-figure might win (assuming, as I do, his way is preferable). When I founded social epistemology, these two positions were not so clearly distinguished because they faced a common foe: the classic 'Whig' view according to which Boyle justifiably beat Hobbes, and the world has been a better place for it. However, that foe is largely gone, and so the differences between its two opponents now acquire salience.

In the last twenty-five years, the celebration of contingency has all too easily fed into a celebration of market volatility in STS, whereby 'distributing agency' (a provocative move at first) turns out to be a euphemism for 'outsourcing responsibility', so that nobody gets held accountable for anything (see Fuller 2000b). In this context, STS's innovation (courtesy of Bruno Latour 1987 and Michel Callon 1986) has been to transfer the legal ontology of *corporations* (i.e. where individuals have limited liability in their role as corporate players) to that of *networks*, where power is spread equally across the network, so that no particular node is more responsible than any other for its overall power-effects. 'Progress', such as it is on this view, amounts to an endless sharing of the burden of network-building by a kind of pyramid scheme metaphysics that aims to make it impossible to blame anyone for anything, as 'autonomy' is reduced to the capacity to

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recruit new nodes in the network. (I wonder what Jacques Derrida, a thinker those normative horizons became more pronounced as he grew older, would have made of this gloss on 'decentring the subject'.)

So what's at stake in talking about 'corporations' vis-à-vis 'networks'? An important legal rationale for the corporation as an 'artificial person' was that clear boundaries could be specified, as with a 'natural person', so that a judge could tell when one entity's agency is ended and another's began. The evil genius of actor-network theory is that it appropriates all the entitlements of corporate agency with none of the liability incurred by a judge's ability to decide who did what to whom and thereby determine whether an injustice had been committed in a particular case.

This is all by way of stage-setting for where I see the future of social epistemology, which is still the field's original aim, namely, the recovery of the normative in the organization of inquiry. *Prima facie* it does not seem that much progress has been made. But as the world changes the definition of the problem needs to change as well. If you examine my first three books [*Social Epistemology* 1988, *Philosophy of Science and Its Discontents* 1989, *Philosophy, Rhetoric, and the End of Knowledge* 1993] written while I was still in the US and before the Cold War world-view had fully dissolved, the main foe appeared to be the disciplinary boundaries that had solidified in state-protected university systems.

Much of my animosity to Thomas Kuhn relates to his clueless justification of this state-of-affairs without ever feeling the need to interrogate the circumstances that made his view so persuasive: Kuhn simply did his own thing and the world be damned! Of course, many academics have been charmed by the 'purity' of Kuhn's clueless elitism. However, perhaps even by the time *Thomas Kuhn: A Philosophical History for Our Times* was published in 2000, and certainly over the past ten years, Kuhn had become a normative irrelevance, and Latour became the new – and somewhat more clued-up – intellectual figurehead for the dominant neo-liberal epistemic Zeitgeist. In EU science policy-speak, the shift from 'Mode 1' to 'Mode 2' knowledge production had become complete.

To his non-negligible credit, Kuhn's social epistemology at least presumed a division of labour in which the ultimate aims of knowledge production were determined by mandarins like his mentor James Bryant Conant, independently of the normative paradigms of the special disciplines. While one might wish for a democratically accountable version of Conant, at least there was a space for a 'knowledge policymaker' in Kuhn's world-view. On the contrary, Latour not only erases the academic conceit that organized inquiry is divided into well-bounded disciplines, but also radically devolves policymaking so that it no longer makes sense to aspire to Conant's panoptical understanding of the knowledge system. In one fell swoop, my original vision of the normative horizons of social epistemology simply vanishes.

As Philip Mirowski (2011) has trenchantly observed, Latour's move retraces Friedrich Hayek's steps in the 1940s to deconstruct the sort of economic expertise claimed by social planners. This was the context in which Hayek advanced a general epistemology of 'distributed intelligence' based on the logic of the market. In terms of the two modern

theories of truth – coherence and correspondence – it follows that coherence is eliminated altogether because there is no pretence to one mind (divine and/or human) grasping the epistemic field as a 'whole', while correspondence is reduced to the aggregation of short-term contracts among traders (aka 'price'). As a result, the normative order simply lurches from one temporary equilibrium to the next, as the accumulation of unintended consequences precipitates a tipping point, which is of course what natural selection would also predict vis-à-vis the constitution of ecological stability.

Why Analytic Social Epistemology Is So Useless

The alert reader will notice that I have not yet said anything about analytic social epistemology (see Fuller 2012), mainly because it continues to exist in a protected academic space where it can proceed as a 'pseudo-paradigm', whereby like-minded people agree to pursue a relatively restricted vision of knowledge by relatively restricted means. To be sure, all of these restrictions are rooted in more general philosophical concerns, and even continue to bear the names of those concerns (e.g. 'truth' and 'validity'), but are pursued in a parallel universe that rarely makes contact with the substantive bases for these concerns, except in the case of legitimation-starved fields – such as education and information science – who are easy marks for the 'validationist' rhetoric that these philosophers spontaneously produce. All told, the continued existence of analytic social epistemology shows that even the most irrelevant academic activities can survive as long as they have a critical mass of passably intelligent, self-regulating people who demand relatively few resources to flourish.

Just to be clear: I have no problem with the abstraction, formality or rigour of analytic social epistemology. In physics, it works fine and produces powerful results, mainly because there are institutionalised means for the knowledge produced in this manner to be materially realized and tested, typically by experiment. The 'naturalistic' turn championed by Larry Laudan (1977) and Ron Giere (1985) in the 1980s (which is when I entered the scene) aimed to address this methodological deficiency in epistemology, which was seen as suffering from a surfeit of 'pre-analytic intuitions' that not only launched philosophical inquiries into the nature of knowledge but also constituted the endpoint to which those inquiries had to return. In other words, what was then called 'normative naturalism' was supposed to stop us from reinforcing our prejudices! (My own early interest in Herbert Simon's (1982) bounded rationality and Tversky and Kahneman's work (e.g. 1984) on cognitive limitations was an expression of this sensibility – as well as helps to explain my abiding fondness for Karl Popper).

But this was easier said than done. In the 80s it was also fashionable for epistemologists to invoke Rawls' (1971) 'reflective equilibrium' – itself based on Nelson Goodman's conservative resolution of the problem of induction (1955) – to justify the entrenching of our deepest held intuitions, even when alternative ('grue') conclusions can be drawn from the same data. Because Rawls' intuitions matched academia's own social democratic default setting, only anti-welfarist libertarians realized that Rawls' method was no more than a high-minded way of playing to the gallery. This point is much clearer now than thirty years ago. To be clear: *Contra* Rawls' libertarian critics, the problem was less his substantive conclusions than the means by which he would have us justify them. Yet

those means survive in the conduct of analytic social epistemology, whose modus operandi is charitably rendered as a collectivist version of reflective equilibrium, whereby your admission to the analytic game is predicated on your already sharing certain intuitions about the sorts of things 'we' would permit as appropriate knowledge practices and products. The intuitions themselves are not up for negotiation. Thus, even the self-described political wing of analytic social epistemology, which is concerned with 'epistemic injustice', poses its central problem so as to take a particular conception of social justice as given; hence: 'Why are various voices not accorded the evidential weight that they deserve?'

From this standpoint, the recent drive toward 'experimental philosophy', which aims to put all such hallowed philosophical intuitions to the test of ordinary people's judgements, is an overdue antidote, notwithstanding its apparent ignorance of the precedent set a century ago by the Würzburg School of psychology. (I was already pushing for this twenty-five years ago in *Philosophy of Science and Its Discontents*) But just to be clear: Even if it turns out that the philosophical intuitions are empirically invalidated, it does not follow that they are not worth pursuing. Rather, it means that the intuitions need to be openly defended, invariably an exercise in political argumentation in which the 'intuitions' start to look like the empirical-normative mongrels that they are, the status of which may change according to the time and place in which their justification is sought. For example, no one can deny that women are under-represented in the discipline of philosophy relative to the entire population. The question is whether this fact is innocuous or problematic. The intuition that it is problematic requires a normative judgement of this fact, the case for which should be argued explicitly and hence made contestable.

Let me put this observation in the larger frame of my thinking (which goes back to the chapter of *Social Epistemology* on the 'demarcation problem'). Ernst Cassirer perhaps made the most profound observation about the nature of modern intellectual progress in his 1910 book, *Substance and Function*, which is a reflection on the modern revolutions in logic and physics starting with Boole and ending with Einstein. Cassirer argued that progress was made once concrete objects ('substances') started to be understood as instances of a cluster of defining properties that could be realized elsewhere, by other means and perhaps even better (i.e. the space defined by algebraic functions). Quine (1948) captured this insight elegantly as 'To be is to be the value of a variable'.

Those able to get to the heart of Randall Collins' monumental *The Sociology of Philosophies* (2000) will see that he turns this insight – the 'semantic ascent' to second-order thought – into the general motor of intellectual change (albeit without acknowledging Cassirer). Understood historically, the shift from substance to function completed the move away from Aristotle and back to Plato. Understood logically, it amounts to a conversion rule: Turn 'X' into 'whatever passes as X where something with the relevant properties of X is required'. In other words, any substantive belief or commitment should be seen as filling a placeholder or playing a role that might be better filled or played by some other belief or commitment in a different context. In terms of the previous paragraph, a relevant 'X' might be 'valid knowledge' or 'social justice'. The problem with analytic social epistemologists, then, is that they treat the referents of X as

concrete yet indubitable intuitions, as opposed to abstract variables whose exact content may shift over time and, in any case, are open to contestation.

Re-Inventing Social Epistemology in the Emerging Brave New World

So, I have never denied an interest in truth as the ultimate end of inquiry, and I have certainly endorsed the idea that social justice is a worthy feature of any normative order. However, both truth and social justice are abstract ideals that may be instantiated in different ways at different times and places. The job of the social epistemologist – very much in the spirit of Hegel – is to discern the vehicles of these concepts at particular moments that have the capacity to expand the horizons of the human condition. An active distrust of consensus thinking proves to be a good heuristic in this context. Thus, I have been drawn to Hilary Putnam's (1978) 'pessimistic meta-induction' about the history of science; namely, that we have little reason to think that the agreed general theories of today are the ones most likely to be leading inquiry a century from now, just based on past predictions of this sort. For me this is the true take-home message of Kuhn's theory of scientific change, if we consider history 'philosophically' – which is to say, *not* inductively: in other words, to learn from the past in its totality, not simply from a finite range of previous moments. The background intuition to this line of thought (which I see in Popper) is that any sort of consensus should be diagnosed rather than built upon – that is, regarded as a symptom of something missing, given that humans are fallible beings who seek safety in numbers.

The social epistemologist, somewhat like a financial analyst, strategically bets against the current pieties, not because she opposes the very idea of dominant positions but because she recognises that the current occupants of those positions will last only until the discovery a larger field of play de-stabilises the dominant position's power base. On this point Schumpeter's theory (1942) of technological innovation (by creative destruction of existing markets) and Kuhn's theory (1962) of scientific revolutions (by paradigm switch) coincide. Their difference lies in Schumpeter regarding innovations as the *intended* consequences of entrepreneurship, while Kuhn regards revolutions as the *unintended* consequence of generational shift. But the effect in both cases is to shore up the distinction, expressed in epistemic terms, between 'the truth' and 'what passes for the truth', where the latter is expected to change over time, as new competitors alter the terms in which the potential for approximating the truth is judged.

While the historical philosophy of science – peaking with Lakatos and Laudan in the 1970s and 1980s – understood the above point very well, it has yet to take hold in political philosophy of science, where 'social justice' remains anchored in issues relating to disadvantaged groups as defined in the second half of the twentieth century, regardless of their relevance to the problem of social justice today or its likely future shape. Thus, an increasing number of women and Blacks assert their autonomy while distancing themselves from the corresponding social justice movements. Seen in this light, 'epistemic injustice' as invoked by analytic social epistemologists looks like a high-minded way of entrenching academic norms of political correctness. Indeed, in their hands, the ideal of 'democratic' knowledge production, to which all of us 'leftists' claim allegiance, becomes incredibly patronising. It amounts to taking false consciousness as

the default position of agents who *prima facie* have the wherewithal to decide for themselves what to believe yet decide to refuse the frame of 'affirmative action'. To be clear: I mean this not as a criticism of affirmative action *per se* but of the ability of its proponents to see how the identity of those worthy of affirmative action might change over time, a point I had already raised in *The Governance of Science* (1999).

Nevertheless, I cannot deny that 'democracy' has become increasingly problematized in the twenty years since I proposed a 'democratic presumption' for knowledge production in *Philosophy, Rhetoric and the End of Knowledge* (1993). On the one hand, the scientific establishment has become more authoritarian in the face of largely internet-based (what used to be called 'grassroots') challenges to its knowledge claims; on the other, the default alternative on offer to the scientific establishment has been a pluralisation – and hence relativisation – of 'sciences' to particular groups, depending on world-view. This has generally come with the blessing of the more postmodern and politically correct quarters of the academy. I have also provided a qualified endorsement for this trend, dubbing it 'Protscience', named after the Protestant Reformation, which took hold as Christians began to read the Bible for themselves as a means of taking back control of a religion that professed the equality of all people as children of the same deity. However, it did not take long for Protestantism itself to consolidate into multiple denominations, each often just as – if not more – dogmatic than the Roman Catholicism from which they split.

But not all Protestants went down this route. Many saw the path to faith as a project of indefinite duration – perhaps extending beyond one's lifetime – rather than as one make-or-break moment, as the sacrament of baptism suggested. In other words, 'faith' was the name of a process, not a state. (Indeed, this was what Pascal had in mind with his 'wager' on God's existence.) These non-conformist Christians promoted a dynamism associated with the questing mind, ever desirous of self-transcendence. This orientation was responsible for opposing sorts of extreme human behaviour: on the one hand, the revolutionary mentality that aims to re-boot the human condition with a new programme (aka 'social contract theory'); on the other, the intergenerational patience that is required to fully resolve the scientific enterprise (aka 'the ultimate theory of everything'). Deism, Unitarianism, Transcendentalism and Idealism are only some of the names under which this movement has travelled. In recent times, the sentiment has been domesticated – if not outright de-politicised – as 'positive psychology'. Nevertheless, what distinguishes this entire line of thought from the relativism informing the democratic sensibility of these postmodern times is its privileging of *the capacity for change* over *the recognition of difference*.

My version of social epistemology follows this line of thought. Democracy should not provide an excuse for people to remain entrenched in their default identities, which is what 'the recognition of difference' all too often disguises. On the contrary, democracy should challenge people to embrace an ever expanding existential horizon, which implies openness to change – but not mere adaptation: Once one discovers the curve, one should try to get ahead of it. That's one operational definition of autonomy. The ontological basis of democracy is that a self-governing polity requires self-governing individuals,

each of whom can be legitimately counted as equal to the rest, and not as a mere part or reflection of some presumptive whole.

So What Should Tomorrow's Social Epistemologist Be Doing?

My support of a self-empowering, dynamic democracy needs to be understood in light of the fact that we live in a world where classical notions of privacy are routinely violated by relatively unobtrusive forms of market research and state surveillance. Nevertheless, this emerging state of technologically enforced openness offers humanity the opportunity to grow collectively – as individuals, on the one hand, get clearer on what they believe (in preparation of some public justification) and on the other, learn to tolerate those who believe differently (in recognition that such people exist and can justify their existence). It may be that we end up looking more kindly on John Stuart Mill's original arguments for a public ballot in elections, perhaps initially with an opt-out clause for people who believe that their interests are better served by not openly expressing a preference. But this would only be a temporary measure, until an appropriate legal regime is in place that rationalises the interests of all those involved in what is effectively the co-production of publicity. Indeed, we may come see 'privacy violation' a bit like 'labour exploitation' – that is, the name for the limiting case in which fair remuneration and compensation have not been observed. In the future, we may fight not to keep things about ourselves hidden but to benefit from things about ourselves that are revealed.

This suggests a new role for the university in this 'brave new world' currently being forged in Silicon Valley through the offices of Google and *Wired* magazine. It lies in the promotion of the *transhumanities*. Before justifying this new *raison d'être* for the university, it is worth recalling that more than two centuries ago Kant proposed – and Humboldt installed – philosophy as the academic site for students to resolve individually the various bodies of knowledge and modes of inquiry jostling for authority in the university. Such was the crucible in which the modern autonomous self was forged. Its original role model was that idiosyncratic polymath (aka 'genius'), Johann Wolfgang von Goethe, a pre-Humboldtian who nevertheless embodied throughout his long life – outliving Hegel – the voracious and independent intellect that the Humboldtian university aimed to promote. Humboldt envisaged (perhaps too hopefully) the university serving as a production line for an endless supply of Goethes, each the product of a uniquely forged synthesis of all that s/he has learned, a vital whole much greater than the sum of its academic parts, who would then go out and do great things in the world.

Those who follow the fortunes of contemporary transhumanism will realize that the main challenge facing any 'University 2.0' wanting to generate 'Techno-Goethes' is that transhumanism lacks a clear conception of personhood, the legal category corresponding to the autonomous self. Put crudely, transhumanists – very much in the spirit of Steve Jobs – regard the human being as a processing unit that provides a platform for launching any number of 'apps', depending on functionality and demand. To be sure, transhumanism is a discourse of 'self-transcendence', but this is normally understood as a matter of indefinite extension along one or more desirable dimensions of being, regardless of its prospects for producing a coherent sense of self. Thus, Ray Kurzweil's 'singularity' is literally about an acceleration in computational performance (Moore's

Law), which he and others then correlate with various humanly relevant traits that supposedly flow from the process (e.g. rationality, comprehensiveness, perspicuity, perhaps even consciousness itself). What the 'singularitarians' take for granted as an emergent effect of a technological revolution is precisely what requires a University 2.0 for it to be forged properly.

Sometimes it seems that we've been thrown back to the mid-18th century, when Enlightenment thinkers argued that the simple emancipation of the peasants would allow their latent talents to be properly recognised and remunerated in the 'free market', resulting in a world of untold prosperity for all. Nowadays instead of religious strictures and feudal law holding people back from realizing their full potential, transhumanists claim that academic accreditation and an over-regulated innovation environment perform the same function. However, if history is our guide, then we are forced to admit that the legacy of the Industrial Revolution fuelled by this Enlightenment sentiment has been chequered. The overall result has been a manufacture of extremes (aka 'inequality') in the human condition – both in relative and absolute terms – which the world had previously not seen. The Humboldtian university emerged in the wake of the Industrial Revolution as a way to enable such newly freed people to construct their own sense of self, something that in earlier times the law would have done for them, typically on the basis of birth, but which in the early 19th century could no longer be taken for granted. It is just this ideal of *Bildung* – the process by which one becomes a self-legislating person in a world where all the default norms are disintegrating – to which social epistemology should devote its attention as it shores up the prospects for a University 2.0.

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