mh : Appendix to note on Theory of practice : 28 July 2018

Way back in the 70s, when I was a card-carrying member of 'the radical science movement' (Sussex BSSRS group, Radical Science Journal collective member and author) I started a PhD as a historical study of a branch of management science that emerged from the wartime activities of the pre-war Left-scientists' movement: operational research. The majority of those individuals left this field post-war, returning to 'proper' science in natural sciences in university labs, to Nobel Priz.es. scientific eminence, the Royal Society, and so on. The postwar field of OR was mostly colonised, in their absence, by American-influenced mathematical approaches: linear programming for example. But there was a really interesting countercurrent represented by two American philosophers, Russ Ackoff and C West Churchman, which was known as 'the systems approach'. Rather than cranking out objective results from crunching formally codified 'problems', through algorithms, this practice was concerned with the practical issue of producing actionable knowledges in communities of practice, concerned with dispositions of 'men, machines, materials and money'. This variant of the systems approach was informed by philosophical traditions, especially, American pragmatism with a touch of Hegel and Kant on the side.

It was through this, as much as through Marxism's historical materialist critique of philosophical idealism, that I learned to treat knowledges (plural) as outcomes of specific historical practices, organised in specific ways, adopting specific modes of rigour and 'belonging' to specific communities of actors. What your community/constellation of communities may 'know', and be competent to act upon, is a consequence of how it has been organised and mobilised. And 'knowing', in that context, is an active, transitive verb: practices of knowing produce capability in the collective, which constitute capability to handle objects of specific kinds, as formulated. They actively 'know' the world into shape, a shape that they are thereby equipped to act in response to. Today I would theorise this in terms of the central Marxian, labour-process concept of production and mobilisation of labour-power; in individuals, in collectives.

I combined this insight with the Gramscian notion of the organic intellectual, and with a broad sense of 'sciences' as just one kind of 'cultural' production (each 'department' of which had its own characteristic modes of rigour - in theatrical production, in poetry, in journalism, in drama, in group facilitation, in psychoanalysis, etc), to arrive at a

¹Gary Werskey was influential in this. His initial hunch was mistaken - that cybernetics had something to do with this community. But it was a good steer, and met my need for a field of research that was related to industrial corporate practice; I had earlier worked in a chemical multinational, in 'middle management', as a chemical engineer.

notion of many modes of knowing which may be cultivated, cross-bred and mobilised in communities of radical practice: seeking to know the current world into a shape which they were thereby equipped to act on/in, and to transform. Before I left the university in 1974, I'd ceased to be involved in 'radical science' in any narrow sense (I had never been a scientist, but an engineer) and become committed to a 'cultural materialist' practice² of radical knowing (verb, transitive) and mobilising of knowledges, as a socialist organic intellectual activist. There was a broad movement in the 70s, of 'radical professionals' of all kinds, and I took up this politics as one of very diverse, cross-community, radical professionalism: for me, in Marxian labour-process political economy, teaching, 'workers' R&D' and management science; and for others , in statistics, midwifery, philosophy and so on. In specific sciences and in other branches of technologies too (agriculture, occupational health and epidemiology, etc). There also was radical 'R&D' in working-class communities (called 'community development'), aimed at alternative strategy and self-managing political capability, in transforming the economic life-chances of local communities and countering forces of the State and corporations; the form of rigour here was called 'facilitation'. I saw this as all of-a-piece.

Perhaps on this basis it's clear why I never really regarded my practice as being within STS? STS, as a labelled constellation of academic activity, emerged during a time when I had no academic connections (I was working in a trade union setting in industry, and then in regional government economic strategy) and I saw it - a bit jaundiced, I admit - as a careerist response by 70s 'radicals' to the tightened circumstances of academic life and wage-earning in the 80s. A political failure; or at least, a turn from 'being political' to 'being academic' and building courses, departments, professional hierarchies and systems of qualifications. It wasn't until the 90s - after ICT had begun to diffuse through all kinds of organisations - that I joined an academic department, in an innovation-management research group, in a business school. I saw myself as working - in the spaces that funding commitments allowed - on selfmanagement, and as doing radical action research with workers in corporations, to create alternative forms of corporate IT infrastructure which enabled and enhanced rather than subverted and deleted skill and jobcontrol. In this context I found a newly emerged, rather politicised field, Computer Supported Cooperative Work, and came into an alliance with an 'invisible college' of radicals - mostly 'work practice' anthropologists, but also 'interaction designers' and experimental system developers - in corporate labs and in university departments of computing and sociology. In this community there were prominent people in STS, notably Susan Leigh Star and Lucy Suchman; but the context was one of

²The term originates with Raymond Williams, but was applied by him more narrowly, in the sphere of arts, literacy and communication.

radical-professional activism associated with computer systems design and implementation, rather than an academic one. The closest thing I did to STS was probably a piece on 'monstrous' intervention³, as an organisational development consultant, in a global telecommunications corporation which was at that time going through the dramatic transition from landlines to mobile telephony, and revamping its global supply-chain management IT systems.

For 40 years then, my politics hasn't been radical science (or engaged with 'sciences' at all), but the radical production and reproduction of well-founded working knowledges in communities of worker-producers, and capacities for producing these knowledges (work-practice design), in corporate and community settings of counter-hegemonic practice..

It seems to me that at the present time, this broadening of the focus - from 'science' and 'technology' and medicine, to skilful knowing and mobilising of R&D-based capabilities of worker-producers, across all modes - is extremely important. While technoscience and scitech innovation continue to be profoundly influential forces, the biggest 'radical' movements today are (I believe) more broadly concerned with how people come to 'know' things (for example, in 'populism') and how they are able to construct well-functioning, transformative cultural and economic formations that are founded in well-founded knowledges and self-know-ledges (for example, in the global movement for the commons, in forms of technical and governmental hacktivism and in 'radical' platform cooperatives).

The questions are open, regarding ways in which STS as an academic (trans)disciplinary institutional framework will form part of this present political experimentation which, rather than being centred on 'science' in any simple, institutionally based sense, is fundamentally grounded in a radical and diversified methodology of knowing, and in radical formations of distributed labour power, allied with distributed digital technologies?

³Information systems strategy, a cultural borderland, some monstrous behaviour. in S. L. Star (1994) (ed)., The cultures of computing. Oxford, Basil Blackwell/Sociological Review Monograph series A, 103-117.