Professionals' lives as ongoing experiments

Sydney 4S 2018 : Slides content : Mike Hales : 20aug18

The overall plan is on page 2. This following script contains material which was dropped from the Sydney presentation because of length and complexity – in slide #7 and slide #9.

Slide#7 *<Historical frame – Post-Fordism. STS. Radicalism>* is way too much to fit into 15 min, and the entire slide is dropped from the conference presentation. However, there can also be a 'director's cut' made available online post-conference (watch YouTube and FoP RoP) which includes this speculative analytical stuff. It concerns:

- Gary's 'three movements' in science-related (Marxian?) radicalism
- Evolution in the mode of production (the Fordism story) and
- Analytical modes within STS, corresponding (or not) to the three radical movements and post-post-Fordist cultural and economic formations.

Slide #9 *<Cultural-materialist R&D in peer-to-peer (P2P) infrastructure>* has speculative detail which, likewise, was simply too complex to put up on a slide without over-running. If there is a director's cut, this will be added in.

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Vertical right label: HISTORICAL FRAMES

Panel 0:
Title
Professionals' lives as ongoing experiments in a field of classes — and STS failing? As theory of radical practice?

- 1 Intro
  - Three radical science movements
- 2 Two lives in STS
  - Post-fordism & radicalism
- 3 Today — radical science?
  - STS as theory of radical practice

0

Panel 1:
ⓖ INTRO

Two lives
Lucy Gao   Mike Hales

1

Panel 2:
ⓖ THREE RADICAL SCIENCE MOVEMENTS?
- 1930s-40s
- 1970s   ↓ 40 yr
- 2010s ?   ↓ 40 yr

Werskey - the historian /narrator

2

2

Vertical left label: LIVES IN STS

Panel 3:
ⓖ A LIFE IN STS - LUCY GAO

- S&T policy — governance of biotech

- Historical research — 70s radical science movement

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Panel 4:
ⓖ Context — STS @ CHINA
A scholarly frame
- DoN
- STS
- Participatory research
- History of science
- History of culture & radical science

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Panel 5:
ⓖ A LIFE IN (and out of) STS — MIKE HALES
- 70s· hist resch on Left scientists
- 70s· radical science movem't
- 90s· participatory design of IT work — infrastructures
- 90s· innovation services in national systems of innov'n
- 90s· ethnography of designing

5

Panel 6:
ⓖ Context — RADICAL PROF'L @ 70s-80s BRITAIN
A class-activist frame
- Professionals / prof mgr'l class
- Lucas Aerospace plan
- GLC · experiment
- 80s-90s · computers diffusing
  - new terrain for contestation
  - participatory design

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Panel 7:
ⓖ POST-FORDISM· STS· RADICALISM
- Fordism · 1st movement
- Fordism+ · 2nd movement
- Fordism++ · 3rd ?   ↓↓
- Capital's crisis — "resolved"
- P2P production
- P2P tech infrastructures
- Commoning
- 'cultural' and 'materialist'
- The fight between capitals
- Global 'natural commons'

"long waves"

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Panel 8:
ⓖ TODAY'S RISKS OF FAILING
— LUCY· RADICAL SCIENCE — in China?

- Stance of scholars
- Scientism — default mode
- The West can afford 'radical'
- No 'radical history' @ China
- An individual career
- Transformative? sectas?

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Panel 9:
ⓖ TODAY'S RISKS OF FAILING
— MIKE· CULTURAL MATERIALIST R&D in P2P COMMONS CULTURE & INFRASTRUCTURE

- Radical? Science?
- Altered conditions
- Theory - of - practice
- Forces & relations of production
- False scarcity· False abundance

9

Panel 10:
ⓖ WILL STS FAIL? OR SUCCEED?

Continuing "political experiments"

- Mike· STS must furnish theory of practice for 3rd RADICAL INFRASTRUCTURE MOVEMENT

- Lucy· STS @ China must address "what is the main contradiction that may continue?"

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Slide #0 - Professionals' lives as ongoing experiments.
Blue (Intro)

Professionals' lives as ongoing experiments
. . in a field of classes. And STS failing? . . as theory
of 'radical' practice?

Slide #1 - Two lives. Blue (Intro)

Lucy Gao

- **Born** – 80s
- **Country** – China
- **First degree** –
  Agriculture & management
  of technology
- **Master's** – philosophy of
  science & technology
- **Entered STS** – 2000s
  An experimental setting . .
  Tsinghua university – joint
  undergraduate programme in
  agriculture/management of
  technology

Mike Hales

- **Born** – 40s
- **Country** – England
- **First degree** 1967 –
  Chemical engineering
- **Master's** 1970 – history &
  philosophy of science
- **Entered STS** – 1970 'proto-
  STS'. *An experimental*
  setting, Sussex university
  – 'Principles and
  perspectives of
  science' (Brian Easlea)
- **DPhil 1978** – *A Marxist*
  analysis of science &
  ideology

Slide #2 - Three radical science movements? Red (Historical frame)

- Around 1970, **Gary Werskey** publishes research on the Left
  scientists' movement.
- 2007 – Werskey publishes *"The Marxist Critique of*
  Capitalist Science – A history in three movements?"
- **Today – another 40 years . .** Is there a third 'radical
  science' movement? In Britain/China/globally? Marxist?
  Does STS have anything to do with it?

The two 'lives in STS' in this presentation weave in and
around the story of **political experimenting,** in these three
periods, 40 years apart.
It's a story of actions in a class landscape.

Slide #3 - A life in STS. Lucy Gao. Green (Two lives)

2010s – Science and technology policy – governance of biotech.
- 2011 – Institute for the history of natural sciences (Western Division), Chinese Academy of Sciences.
- 2008–present. Collaborating with British policy researchers in biotech governance.

2016 – Historical research – The 70s British radical science movement
- Western STS policy researchers claimed their research trajectory was changed through the 70s radical science movement.
- I realised the British 30s-40s Left was different from the 1960s-70s New Left. I don't think other Chinese STS researchers have access to this kind of awareness.
- In China everything is compressed all together – it all arrived in a package from the West in the 80s. We grow up in **a messed time line!**
- **I think historical study could help me to speak out my words.**

Slide #4 - Context - Practising STS and history of science in China Green (Two lives)

- **Dialectics of Nature** (DoN)– Marxist-Leninist predecessor of STS. Taught as core curriculum across higher education today.
- **S&T policy R&D** (*policy successor* to the First radical science movement) was rolled into the same 'STS' package as **critical/constructivist studies** (*academic successor* to the Second movement).
- **First radical science movement** (Bernal, Needham) – We don't talk about their political position. It would degrade the objectivity of their historical scholarship!
- **History of science is aligned with Old-Left (First movement) scientists** and with the Communist Party, through DoN.
- History of **recent cultural movements** – eg 'radical science' – lacks an institutional location and legitimacy.
- **Participatory research** – An area of contestation . . possible cross-disciplinary inputs to policy **from within the scholarly establishment.** Political/institutional relationship between DoN and STS is negotiated here, on an ongoing basis.

Slide #5/5a - A life in (and out of) STS. Mike Hales.
Green (Two lives)

70s – Historical research on 'The First Movement'
- Quite 'present' for me as a researcher . . I saw their practice was now mainstreamed as science policy R&D and science career – I became ashamed of them . . I felt they had been bought off.

70s – Radical science movement – *Radical Science Journal*
- A founder-member . . the collective had to fight **relativism wars** and thus to practice 'critique' . . my core interest – an ex-engineer – was **the alternative production of the forces of production.** And – ex-corporate employee – organising, in-and-against the **professional-managerial class** that I had innocently fallen into, as a graduate engineer.

90s – Participatory design of IT work infrastructures
- An 'invisible college' of organic intellectuals in **computer supported cooperative work** – some of them, STS folks . . *Work-Practice & Technology* lab at Xerox PARC were **corporate PMC-insiders** like myself.
- Critical of small-canvas ethno 'situatedness' in STS turn-to-practice . . a complementary cultural-materialist stress on **'location' in historical and geographical landscape** . . political economy, uneven development, global value chains, post-Fordist evolution in institutional forms. Relationship – 'designer'/design object/'user' – determined by capital's RoPs.

90s – Innovation services in national systems of innovation
- Contract researcher, failed to get funded in participatory design . . Needed to 'make an honest man' of myself in my business-school research group . . Resorted to policy research on national systems of innovation at firm and state level.

2010s – Ethnography/ethnomethodology of design work in corporations
- Fly-on-the-wall . . conceptual-design of hugely expensive capital goods . . 'dance of knowing' conducted through **storytelling** around visual representations, locating the design in a global corporate/market landscape. Hard to persuade folks in **innovation economics** to see things in ethno **work-practice** terms.

Slide #6/6a - Context - 70s-80s movements of radical professionals. Green (Two lives)

- **'Radical professionals' in every academic disciplinary field** – philosophy, economics, education, statistics. Quasi-Maoist ethos – 'head and hand' unified.
- **Ivan Illich 'de-schooling society', 'tools for conviviality'** – As important as Marx – destruction of vernacular capability . . State-enforced compulsory participation in professionalised domains of service (medicine, schooling, urban planning).
- **'The professional-managerial class'** – Widely debated and theorised – and other disputed notions of changed class composition in the baby-boomer generation.
- **Cultivating rank-&-file 'research and development' literacy** – Baby-boomer graduates going into community organising, local economic research and development, and cultivation of rank-&-file 'development literacy' . . trade-union and community resource and information centres.
- **70s – Lucas Aerospace shop stewards' corporate plan**

- **'Turn to practice' (pre-STS)** – Neo-Marxism . . hybridised with new-Left historical-sociological analysis of *cultural production and literacy* . . and a turn to *the materiality of work, production and culture* of all kinds . . the mundane production of *use-values*. 'Turn to practice' was a broad Left awareness, not an academic thing.
  - 1980 – *Living Thinkwork – Where do labour processes come from?* . . autobiography of a worker 'paid to think'
  - 1982 – *Science or Society – The politics of the work of scientists* . . 'radical science movement' perspectives
- **80s – Greater London Council – an experiment in 'the partner state'** – 'In-and-against the State'
- **80s – 90s – Computers became a new terrain for contesting capital and reconstituting skill** . . in newly evolving forces of production – in homes, workplaces, domestic goods, capital goods, infrastructures. Participatory design for renewed skill. Scandinavian *'tool oriented design'* perspective adopted as a transatlantic movement of design professionals.
- **Post-Fordism** – In a business school innovation research group, post-Fordist inventions were everyday stock-in-trade – as conditions of *capitalist success*.

Slide #7 - Post-Fordism. STS. Radicalism. Red (historical frame)

- **First radical science movement** – Post-war military-industrial-corporate-Statist complex . . Fordism . . **centralist organisation of mass production** . . Statism and collectivism (Fabianism, research-based professionalisation, institutionalised R&D, scientism). *Scitech professionals enter the salariat.*
- **Second radical science movement** – Proto-STS . . post-Fordism . . **distributed knowing and cognition . . distribution of powers across networks of mixed actors** . . associationism? 'situatedness', local knowledges vs claimed universality. *Academically trained scitech professionals enter the precariat.*
- **Third radical(?) science(?) movement?** Post-STS? Post-post-Fordism (nano/chromosomal/algorithmic capitalism). Distribution of knowing (not narrow 'science') and diverse powers (literacies) across a *pluriverse . .* mycelial/memetic rhizomes within ecosystems . . continuous meshes in **continuous space-without-spaces.** *Mundanely-skilled organic intellectuals in everyday life outnumber salaried professionals . .* a global 'bodhisattva class' emerges.

- **Peer-to-peer (P2P) production** – is hyper-efficient. It is/will be a necessary form in forces of (continuing capitalist) production
- **P2P tech infrastructures** – *re-decentralised web*, open-apps ecosystems, wireless networking, hash-chain/holochain, open-ledger value chains, thermodynamic accounting etc – will increasingly compete with the *extractive, corporate-enclosed internet* in economic and cultural spheres.
- **P2P global-local 'commoning' in knowledge-producing** – the global-local *mobilising of knowledges* and the platform-sharing of *economic tool-infrastructures* – will become a domain of commonplace, memetically evolving literacy.

- **The class struggle of capitals** – The fight with and between capitals will be bloody . . *net-oligarchic capitals* of the global North . . *regional capitals* in the global South . . old centralist *global-sectoral* capitals (land, finance, energy, mining, construction, etc). Development of economies, value-production and economic wellbeing will be *hugely uneven*. Local and global commons may or may not be able to hold, against enclosure, sell-outs and corruption.

- **Natural commons** — The global 'natural commons' are *ticking time bombs* — air, water, wild ecosystems, energy, icecaps, climatic/oceanic/geothermal systems, bandwidth. New governance!

Slide #8 - Today's risks of failing (1) - Radical science, in China?
Grey (Risks of failing)

- **After 'the Great Enlightenment', academics have their heads down**
- **'Scientism is our default mode'**
- **'China is not yet wealthy enough for the luxury of critique'** — The West is wealthy and can afford critique, debate, quality of life, radicalism, reduction of consumption.'
- **Lacking a social enlightenment** — such as happened in the West in the 60s and 70s.
- **Will Chinese scholars develop a radical commitment?** Chinese scholars driven to maximise publications — whatever their quality or value.

Slide #9 - Today's risks of failing (2) - Cultural-materialist R&D in peer-to-peer (P2P) infrastructure. Grey (Risks of failing)

- **Globally evolving peer-to-peer (P2P) skills and genres, far beyond professionalised 'science'** — there is globalised organic intellectual practice, in P2P production and mobilisation of *multiple rigorous modes of knowing* . . far richer and more diverse than 'science'. Irreversibly beyond scientism and social engineering. *Does STS address these?*
- **Historically altered conditions of radical practice, compared with 'the Second movement'** — Conditions for today's precarious/nomadic/gigging professionals . . dimensions of 'radical' — especially, environment . . dramatically evolving tech infrastructures. *Does STS address these?*
- **Theory-of-practice in 'commoning' being developed** — for example . . P2PF observatory, Commons Strategy Group, P2P Value research, Berkman-Klein centre, P2P Models @ Madrid . . Solidarity Economy consortia in cities, cross-national R&D communities (eg RIPESS). *Does STS contribute and integrate here?*
- **Producing forces & relations of production (FoP RoP)** — Material commons practices . . 'dance of knowing' . . ecology of the heart-mind. **I**n each sphere, evolved FoP, altered RoP. *Does STS contribute and integrate here?*

- **In a pluriverse?** – Engaging radical, evolving Others, without falling into Othering. Extremely radical liberation practice! *Does STS materially contribute to pluriversal capability?*

Slide #10 - Will STS fail or succeed? Red (Historical frame)

Will STS fail or succeed?
What 'political experiments' must post-2018 STS (post-STS?) become capable of addressing, to be a success - as theory-of-practice?

Mike : STS must furnish theory-of-practice for the (current, global) radical infrastructure movement
Going outside its self-accepted 'science' boundaries, STS must address . . .
  • **Class. RoPS and FoPs. Geography. Commons –** The production of knowledges, uneven development . . the relations of production for cultivating the individual skill and courage, and collective genres and stories, for fully pluriversal living. Not Othering. Opening to all the diversity and suchness that there in fact is, in every place; that appears as difference between any two places.
  • **Peer-to-peer production and culture. Infrastructuring –** Mycelial/epigenetic-evolutionary/memetic processes and architectures . . Inter-operability of a massive multiplicity of federated tools and local knowledges of necessarily differing rigour.

Lucy : What must STS in China concentrate on . . What is the main contradiction that may continue into the future?
 • **Government places governability and limitation of diversity above all else**
 • **In biotech STS, balancing . . my own view, the Western mainstream view, the cultural-institutional politics** – Awkward stand-offs . . between *DoN/STS*, *Party/civil society*, *globalised science-success/ actual wellbeing* of actual communities of Chinese working people
 • **A messed timeline – made clearer?** – Fordism, post-Fordism, post-post-Fordism, all piling in together - just like the First and Second radical science movements are invisibly telescoped together in the STS package that was delivered to China from the West.
 • **A radical history movement? An organic intellectual generation?** *Self-making* of a Chinese radical-professional (*organic intellectual*) community?

- **Natural commons, genome commons, P2P commons – in China?**
  – Uneven development . . regions and metropoles . . in China, across the world . . The collapse of global natural commons affects China along with all other nations and economic competitors. The genome commons of biotech crosses all states' boundaries. What will the shape of *P2P-commons* be, in the Chinese biotech sphere?

Slide #11 - End

Slide has Sydney Circular Quay image, full-screen . .
ie 'outside, here'
End
Ongoing!
. . I will try to tell the story of STS in China