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Public health: exploring complex inter-connected problems, and creating complex inter-connected solutions

WELL-HEALTH 3.0:
An exploration of synergistic thinking in public health, integrated healthcare, healthy cities

Overview

In this lecture, Dr Ravetz introduced us to his work on online prototype tools designed to facilitate synergy among the various stakeholders with an interest in the quality of urban life. This note follows closely the hand-out produced by Dr Ravetz and distributed at the lecture. The hand-out is also among the resources gathered together here in association with the lecture.

3.0 Synergistic thinking

Dr Ravetz began by asking us to imagine a community where young and old live in harmony: where positive health and wellbeing is widespread: where satisfying work and healthy food is in abundance ... real aspiration or impossible dream? His aspiration is that his work will make the development of such a future more possible.

He introduced "Well-health 3.0" as a simple form of words, to summarise a wide and complex agenda. Perhaps it is no coincidence that 'well-health' starts to sound like 'wealth', in the sense of real prosperity. The idea of "3.0" comes from sustainable cities, which overlaps on 'healthy cities' – where experience shows this is not so much about static 'solutions' to problems as dynamic 'evolutions' of ways to live well.

The lecture was only partly about current issues and political divides in public health/ healthcare. Instead, Dr Ravetz attempted to offer a more fundamental exploration of the whole landscape of public health/healthcare. The insight from such exploration, he summed up as the "3.0" model, or 'synergistic thinking' – from thinking in new ways about the combination of areas such as economics, governance, ecology, urban policy and so on, so closely associated with wellbeing.

To help such thinking Dr Ravetz and his team have developed a method and toolkit, the Synergy Foresight approach. This is designed to facilitate discussions on inter-connected problems, using foresight and transition methods, to help promote creative collaboration and shared intelligence. It can also work alongside a prototype technology, the Synergy Forum.

The role of inter-connections

Why focus on inter-connections? He observed that if we work in public health, it seems very inter-connected with housing, education, food, employment and welfare. If we work on climate change, it seems very inter-connected with urban issues, economics and psychology. In each, there are links between local and global levels, between different sectors and professions, between government and citizens, or providers and consumers. We live in an age of inter-connections – this calls for more inter-connected organisations, and inter-connected governance systems – and in turn, for more inter-connected kinds of knowledge.

How to develop such knowledge? He suggested that mainstream public services, professions and education systems often face the other way by specialising. The Synergy Foresight method puts the inter-connections at the centre of the discussion, not only as add-ons on the side. The process has four stages:

a) **Scoping / landscape mapping:** (questions – who / what is involved, how are they inter-connected?)
b) **Scenario / stretching:** (questions – what are the drivers of change, trends, tensions and alternatives?)
c) **Synergy / opportunities:** (questions – what are the most creative and collaborative opportunities, and who could realise them?)
d) **Strategy / road-mapping:** (questions – what to do next / soon / later, and who to do it?)

This 4-stage cycle can look to different horizons, short-term practical issues: then more strategic thinking: and beyond that, wider 'transitions' and evolutions, at each stage we ask some leading questions.

a) Scoping/mapping

Generally, a landscape mapping approach is really useful for inter-connected situations. Where there is a process or metabolism going on, we can see multiple levels. Where there are many actors ('stakeholders') involved, we can draw a 'round table' with many interactions: and where these actors have more than one kind of relationship (economic, social, technical etc) we can draw a family of round tables. He suggested that the public health agenda is ideal territory for inter-connected thinking:

• Firstly, there is a basic metabolism of health and healthcare – from background causal factors, a vulnerable person develops a condition, gets a diagnosis from the doctor, receives treatment, monitors the recovery, etc.
• Such a metabolism can be seen at other levels – the service or organisation level: NHS or community level.
• But we know that things aren't always linear. There is a community surrounding the patient / client: and a community of professionals who all need to interact and inter-connect.

- Looking at public health systems, we know that things are often not well connected – many causal factors then build up patterns of addiction, inequality, obesity, etc – factors in other domains such as employment and occupations: food and diet: climate and environment: housing and community: culture and lifestyle: education, security, substances and risk-taking.

To start mapping out a landscape we could ask different actors around the table –

- *What are three key relationships / interactions / inter-connections, with others in your work?*
- *Which are three key relationships with other domains?*

b) Scenario/testing

With a map in hand we can then look at the dynamics of change, trends and projections, alternative outcomes, uncertainties and wild cards, and three horizons for understanding the nature of change.

For public health, the trends in the UK are well-known – lifestyle conditions and addictions; financial pressure on healthcare; ageing population with rising expectations; fragmentation of public services; new technologies and treatments with rising costs; new ethical dilemmas on genetics, environmental risk, lifestyle risk, etc. Meanwhile we could also take a more fundamental view of tensions and challenges. For instance. there is a growing difference between 'linear' healthcare as above, and more 'relational' or 'holistic' healthcare. There are widening gaps between the syndromes of the poor and the rich – more than 'inequality' this is as if people inhabit different worlds.

To 'stretch' the landscape with 'what if' thinking, we could ask the actors around the table –

- *Which are the three most rapid changes in your work?*
- *Which are the three most challenging tensions in your work?*

c) Synergy/opportunity

'Synergy' is at the heart of inter-connected thinking, in economics, governance, ecology, technology etc. What is synergy and how does it work? Literally it is the capacity to 'work together' – but there are different kinds of synergy, from different dynamics of change and different types of system. He suggested three levels:

- *1.0:* 'mono-functional systems' responding to direct short term change (a metaphor of a *mechanical* system).
- *2.0:* 'complex adaptive systems', responding to wider shifts and transitions (a metaphor of a *biological system*).

- *3.0: 'Synergistic Systems'* are shaped by human qualities – thinking, learning, questioning, creativity, strategy, self-awareness, shared intelligence (a metaphor of *cognitive and personal development*).

For the well-health agenda, this is where it gets crucial. If we are looking at whole humans, not just bodies to be fixed, then we need to design holistic, learning kinds of treatments and organisations, with the 3.0 model as a guide. If we are looking at whole communities, not just statistics on social types and clinics, then we need to look systematically at relational background factors, and look for synergies and collaborations with other domains – housing, workplaces, lifestyles, etc. To do all this we need to design treatment paths and organisations, not just in terms of structures, but in terms of many-layered forms of knowledge, learning, shared value generation from all sides. Following through the logic, we then find that "Well-health 3.0" overlaps and inter-connects to parallel opportunities in other domains –

- *Economy 3.0*: An economic / financial system which includes for plural and non-material values, responsive to global limits, creative and resilient, self-organising and self-stabilising.
- *Governance 3.0*: A relational and networked way of decision-making and management of shared resources, with pro-active participation, based on shared intelligence for real-time collaboration.
- *Community 3.0*: Application of social enterprise, mutual aid, community cohesion and cultural diversity across all sections of society, with creative enabling for the excluded and vulnerable.
- *Ecology 3.0*: Networks 3.0 ... Urban 3.0... etc...

To test all this out, we would ask further questions of our actors around the table –

- *Which three 'synergies' / creative opportunities, could take shape in your domain?*
- *Which three 'synergies' / creative opportunities, could make positive links with other domains?*

d) Strategy/roadmap

The final stage is to converge – to turn the what-if possibilities and creative synergies back towards concrete actions. This can draw on experience of strategy and policy development, organisation change management etc. However, there are vital ingredients, which are often lost in mainstream policy work – i.e. the '3.0' qualities such as creative learning and shared intelligence. How to design policies, organisations, projects, knowledge systems or treatment paths, where such qualities are at the centre, for both providers and clients?

For example, one healthcare debate which will run and run is about State versus Market. Yet from the 3.0 perspective, we can see another divide which could be more useful to explore – a divide between the 'efficiency' of 1.0 type organisations, and the 'synergicity' of 3.0 type organisations. Such qualities show up already in

many places: where nursing depends on human empathy: where patients use Facebook to self-organise: or where local shopkeepers keep an eye out for local youth. The question is then how to design organisations and incentives and investments, whether public or private, with synergistic qualities, all the way up the tree to national level or beyond.

There is no single blueprint for this, but some very interesting possible directions: a) professions with the remit to 'follow the humans' across the system; b) organisations which are more like rhizomatic networks, rather than hierarchies; c) financial value flows which follow social / ecological value flows.

To complete the circle, we should test out some final questions with our actors:

- *Which three 'synergies' / collaborative opportunities could be put into practice within your work?*
- *Which three 'synergies' / collaborative opportunities could be linked with other domains?*
- *Also ... which of the above are next / soon / later?*

What next?

Dr Ravetz reminded us that his lecture had been but a brief tour of a growing landscape of possibility with ideas and insights from many directions (ecological economics, innovation studies, urban planning, overseas development, complexity theory etc). It is not a 10-point checklist, although such things could be produced along the way – it is more like a journey into a next phase, where hopefully we can start to learn how to work together towards the benefits of greater synergy.

He concluded by saying there is a technology prototype which aims to help this kind of thinking process, currently on http://synergy-demo.hedtek.com. The ideas he presented are also taking shape in the book *Urban 3.0* due for publication next year (Routledge / Earthscan, 2014)

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