Nesta...

SYSTEMIC INNOVATION:

A DISCUSSION SERIES

March – April 2013

About Nesta

Nesta is the UK's innovation foundation. An independent charity, we help people and organisations bring great ideas to life. We do this by providing investments and grants and mobilising research, networks and skills.

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SYSTEMIC INNOVATION:

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ABOUT THIS SERIES

In early 2013 we published a paper on systemic innovation by Geoff Mulgan and Charlie Leadbeater. **To coincide with its publication, we convened a group of leading thinkers and practitioners from the field of systemic innovation to discuss the theories, methods and practices further. It was clear from the session that there is a need to deepen and develop our collective understanding of systemic innovation through generating typologies, collating case studies, as well the methods and tools available to potentially influence and enable systemic innovation.**

To begin developing these resources, we invited the experts who attended this session to write guest blogs. This paper collates these contributions, and covers a range of topics, from the methods available to stimulate systemic innovation, a discussion of systems failure, case studies covering systemic innovation in finance, the importance of communication, replication leading to systemic change, and a number of other topics alongside.

At Nesta we are drawing upon all these resources to inform the development of our practical work and to feed into our skills platform to equip practitioners working on the ground. We hope that others will also find them useful.

We would welcome further comment, input and discussion. Please send thoughts to **ruth.puttick@nesta.org.uk**

The views in this discussion series are the authors' own and not necessarily those of Nesta.

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Monday, 18 March 2013

SYSTEMS FAILURE AND SYSTEMS THINKING

Professor John Seddon

Mid Staffordshire NHS Foundation Trust and successive tragic events in children's services represent the tip of the iceberg of systems failure[1]. Recommendations from subsequent inquiries amount to no more than doing the wrong thing righter, for example improving inspection and accountability, rather than learning how to do the right thing. While the Francis report on Mid Staffordshire acknowledges the adverse influence of corporate foci (targets and costs), it accepts these features as normal and necessary means of control, rather than seeing the consequences as signals that cause us to re–think our theories of control.

Horsemeat arrives in our processed food because the controls rely on form–filling. UK producers, far removed from the sources of production and focused on cost, will place the blame with suppliers rather than consider themselves to be responsible. In the same way health and social care workers feed the form–filling bureaucracy, which, in turn, becomes the focus for inspection, and, as a consequence, health and social care workers lose sight of their purpose, the *de–facto* purpose of the system having become avoidance of failing on the forms. It is the architect of the system who is responsible.

It is now well understood that people who need care or support are visited by a host of form–fillers from a variety of functionalised services who worry about meeting activity targets and protecting their budgets. Seeing what happens to people whose lives go off the rails, the best advice we can give them is, 'don't ask for help from the state' – for while the state intervenes in copious ways, it usually fails to help and can often make people worse off than before. The evidence from adult social care is that those in need have a long wait for support which, when it arrives, often fails to meet the need because the provision is governed through specifications and cost (price). Inevitably getting worse as they wait, people are then driven into care homes, the last place they want to be. Policymaking is now focused on shifting the costs to consumers, compounding the error.

The truth is counterintuitive: focusing on costs drives costs up. It doesn't take a rocket scientist to work out that we'd be better off if we could design a service that meets people's needs, quickly, effectively and once. If further evidence of the need for such a compellingly simple solution is required, consider that in health and social care 'failure demand' *(demand caused by a failure to do something or do something right for the customer)*[2] typically makes up as much as much as 80 per cent of the total. When people re–present, they are treated as new episodes to be processed by the same inflexible industrialised service designs as before. While Jeremy Hunt believes a patient record could alleviate the lack of continuity, the greater priority is to design a system to provide continuity with *care*.

Pathfinders who have taken the latter route discover other counterintuitive truths about control in organisations. Crucial to successful service designs is thorough knowledge of demand – what people need, in their terms – and that becomes the crucible for everything that follows. They build a design that, placing individuals' wishes at the centre of service provision, is super–sensitive to people, their needs and their context.

This sounds too good to be true: according to conventional management wisdom, costs will soar as the normal means of control are relinquished. But studying the services as systems uncovers a different story: that it was the conventional controls that drove the system out of control. In the new design, control is exercised by ensuring that the services

exactly meet the demands placed on them. No longer monopolised by form–compliance, management's attention is instead focused on understanding demand and maintaining a body of expertise that will match that demand's variety; achievement of purpose being measured from the customers' point of view.

The extraordinary consequence of such action is that costs fall out dramatically, commonly 50 per cent and as much as 80 per cent in individual cases. This is a consequence of changing the system. The first step is to understand how the current system affects performance, which creates momentum for re–thinking our theories of management. The second step, designing services to absorb the variety of demand, then requires the emergence of different management practices underpinned by altered management philosophy. Systems failure needs to be understood with systems thinking, and systems thinking, if it is to have merit, must point to better ways to design and manage work.

From a system perspective these include rejecting targets in favour of measures related to purpose, cost–management in favour of value–management, standardisation in favour of designing to absorb variety, commissioning on unit price in favour of commissioning on the basis of cost, inspection in favour of prevention, and putting control where it belongs, in the work. Such challenges to convention need more than evidence (which is abundant); indeed, the way evidence fails to be the basis for reform is itself a system problem[3]. As those who have trodden the path would attest, the challenge requires being there – seeing is believing – something we cannot expect of the current policymaking machine. This machine, in turn, has to shift away from 'accountability' and instead place responsibility at the heart of our theory of control.

About the author

John Seddon is a British occupational psychologist and author, specialising in the service industry. He is the managing director of Vanguard, a consultancy company he formed in 1985 and the inventor of 'The Vanguard Method'.

ENDNOTES

1. Seddon, J. (2008) 'Systems Thinking in the Public Sector: the failure of the reform regime and a manifesto for a better way.' Axminster: Triarchy Press.
2. Failure demand: demand caused by a failure to do something or do something right for the customer, see: Seddon, J. (2003) 'Freedom from Command and Control.' New York NY: Vanguard Press.
3. Seddon, J. (2012) The evidence is clear, but not at Whitehall. 'Public Servant.' June. See: http://www.publicservice.co.uk/feature_story.asp?id=19921

Tuesday, 19 March 2013

A 'HOW TO' FOR SYSTEM INNOVATION – A STARTING PLACE FOR PRACTITIONERS

Anna Birney, Head of System Innovation Lab, Forum for the Future

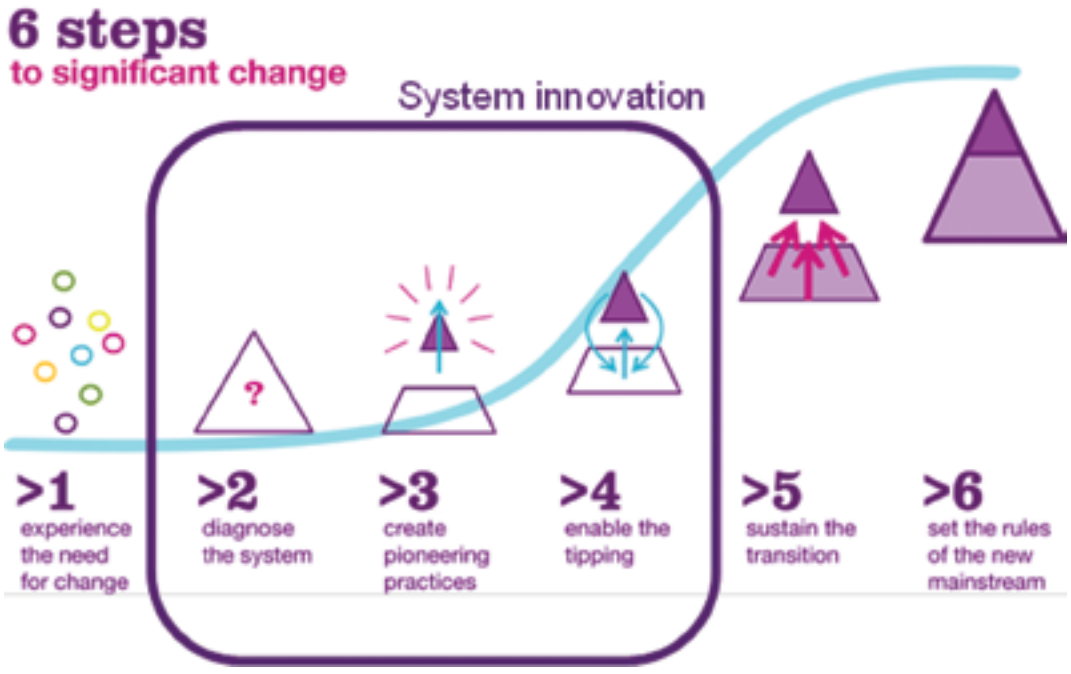
Turning conceptual frameworks into guides for practice

If we need a way to shift systems so that they are more resilient, equitable and sustainable, conceptual frameworks and analysis of what is out there can get us only so far. We, as self–appointed change agents, need to find practical methods, tools and approaches to start to interact with systems and enable system innovation.

At Forum for the Future we have been exploring what these approaches might look like and applying them to our projects and work with partners. We have now created a framework for system innovation to collate the wide variety of existing approaches in order to help ourselves and other practitioners find their route to change and be a starting place for a deeper conversation with others.

What are the steps to change?

Building from the ideas of systems thinking, socio–technical transition theory, transition management and innovation studies we have created our Six Steps for significant change.



System innovation happens in the middle of this change cycle and includes diagnosing the system through to the point at which the change has momentum and is starting to tip. These steps are often the hardest to understand and therefore overlooked by change agents as it is difficult to see where to start and how to grow the impact to a wider system of actors. However, this is also where the magic can happen and is critical for achieving a long–lasting impact.

Approaches to system innovation

Forum for the Future use these to create a variety of different programmes and projects to catalyse system innovation combing these three steps of diagnose, pioneering and scaling up – that follow steps 2,3, and 4.

Systems diagnosis – critical to laying the ground for innovation: In Dairy 2020, Forum for the Future bought together organisations right across the supply chain. Together we co–created possible future scenarios for the dairy industry. Using these, the group agreed a vision for a sustainable dairy industry, and developed a framework of guiding principles for how we can get there. We have found that using futures is both a great way to establish the current state of the system and also to engage with potential participants so that we are ready to act together.

As well as futures scenarios we use other systemic inquiry methods that include sustainability frameworks, systems maps and people–centred research that engage people and helps them to understand the nature of the challenge and make choices about where to start innovating. The most important element of this step is taking a systems–thinking approach which then can be carried forward through all your actions and projects

We have found in our Collaborative Futures processes such as Dairy 2020 and the Sustainability Shipping Initiative, processes that spend longer at this diagnosis stage can build a strong core group and attract other participants. Senior level engagement as well as relationship and trust building can sustain the group through to scaling up the change, and we have found experienced facilitation invaluable to achieving this.

Rapid innovation across different parts of the system: **In** Wired for Change **we are bringing the digital innovators together** to tackle sustainability challenges. The community is armed with tools that enable fast prototyping and testing, which can bring the new ideas required to instigate system innovation. Bringing different perspectives and a fast coalition together around a problem can help unleash the power required for system innovation.

Through our innovation projects we have found that working at a systems level means we need to pay more attention to the mix of types of innovations that include products and services, ideas, new mindsets, behaviours and business models as well as instigating a number of experiments and work streams in different areas. This is what we are doing in the Sustainable Shipping Initiative and we have found it is crucial to create a support structure around these coalition innovation work streams, so as to move towards implementation and scale.

Scale is accelerated through combining multiple approaches: In the Community Energy Coalition we used a selection the different pathways to scale (listed below) to create a coalition committed to promote community energy with members and wider stakeholders. The vision was launched in February 2012 at a roundtable meeting on delivering community energy with the signatories and the UK Secretary of State for Energy and Climate Change.

- Inspire and enable Influencers.
- Communication and behaviour change.
- Networks and collaboration.
- Incubate and accelerate entrepreneurs and technologies.
- New financial models, measures and standards.
- Barrier removal – including policy and advocacy.

We have found that diffusion is the process that underpins scaling up of change, where an idea is grown, replicated and has a process by which it is starting to spread through a variety of different routes, from individual influencers and behaviour change to addressing issues of lock–in to current system behaviours through infrastructure, policy and financial mechanisms.

It's only the beginning

As practitioners of system innovation we constantly have to make tough choices, for example about system boundaries, on where to have leverage and who and how to best engage people and start and grow change. Navigating the systemic landscape, of different people and organisations with some of the toolkit described here is only the beginning. It requires us to think in systems, question our assumptions and continually learn the skill of and practice system innovation. At Forum we are keen to hear what you are doing so that we can get better at describing the process of system innovation, what works and what doesn't and to work together to create a better future.

About the Forum for the Future Lab

The Forum Lab is where we learn about, experiment with and share how we can do system innovation better and with greater impact **www.forumforthefuture.org/the–lab**

About the author

Anna Birney is Head of System Innovation Lab at Forum for the Future.

Wednesday, 20 March 2013

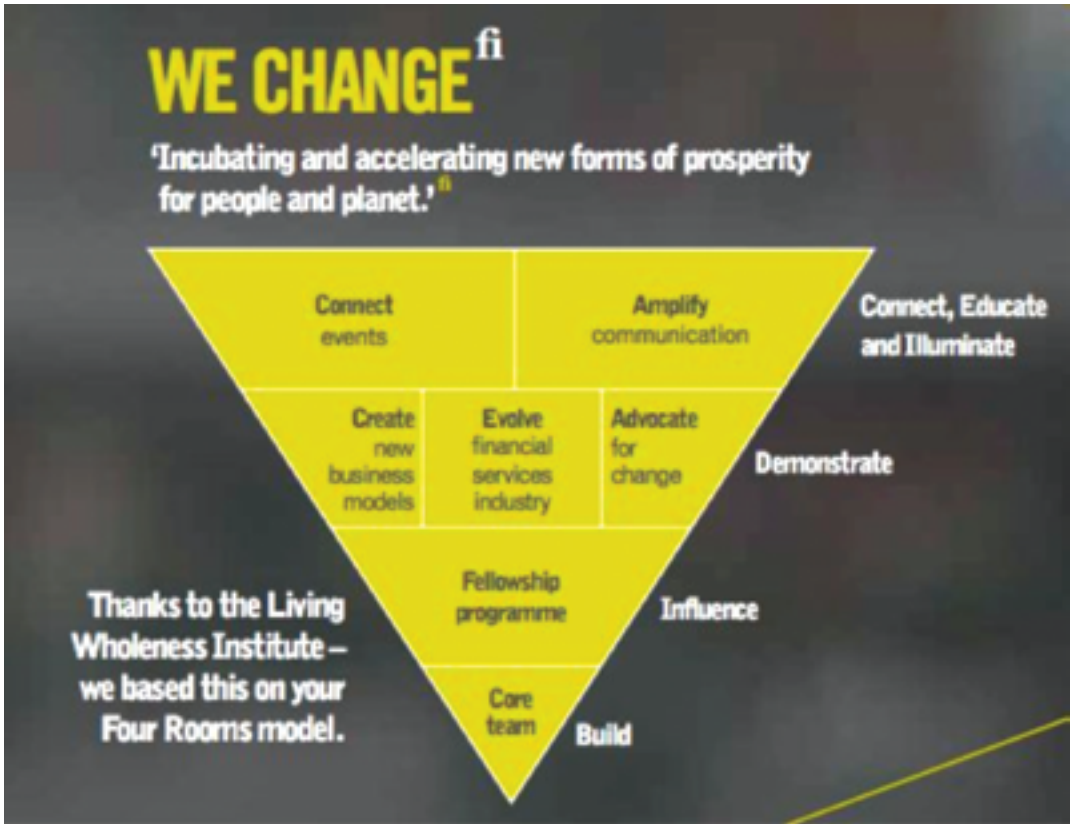
THE FINANCE INNOVATION LAB: A CASE STUDY OF SYSTEM INNOVATION IN FINANCE

By Rachel Sinha and Richard Spencer, The Finance Innovation Lab

How do you change a system?

This is a question which is almost impossible to answer. 'There's so much talk about the system. And so little understanding', as said in *Zen and the Art of Motorcycle Maintenance*. In this case study we're going to tell you all about the dead ends, the mistakes, successes and what we learnt. And here's a picture of what we learnt.

Figure 1: **We Change Model**



Where do you start?

Sun streams through the window at Oxford University, it's a hot day in May 2009. One hundred and fifty bankers, academics, and NGO peeps fumble with umbrellas and string, building 'models of the financial system they want to see', led by a charismatic facilitator. A team from the World Wide Fund UK (WWF-UK) and the Institute of Chartered Accountants in England and Wales (ICAEW) juggle Post-it notes in the background, trying to remember one another's names.

This is about sensing. You always think you know where you're going to start or end up but what we rapidly discovered is that there's a period where you're in the chaordic. There's

chaos and there's order and you play in the middle of it. And at the same time, we're trying to build some credibility and convene people around the subject. Ok so what did we do?

Here's what we thought we'd do

- Convene representatives from different parts of the financial system – get them thinking about what the future of finance might look like.
- Raise a few million pounds.
- Pick a handful of representatives in powerful positions (of course they'd come) and design a programme that will take them through the U-process.
- Support them to create new projects tackling different leverage points in the financial system.

Lessons learnt

- **We didn't raise a few million pounds:** Funders won't believe in you, till you do. From a funders point of view they're asking "Why should I listen to you?"
- **Establish credibility:** As unlikely bedfellows, the WWF-UK and ICAEW brands attracted people to the Lab. Reos, the consultants we worked at this stage, had a process and the confidence to fight for it when the crowd got mutinous. Partnering with Oxford Said Business School attracted high-profile attendees.
- **Core team relationships are crucial:** We spoke different languages at our organisations and didn't spend nearly enough time building understanding. We would spend a week politely 'wordsmithing' one anothers' attempts to describe what we were doing.

Phase 2: Build community, crowdsource and reconnecting with your own values

June 2010, Chartered Accountants Hall, London. A tanned investment banker with shiny brown hair stands up amid a seated audience of 120 in pinstriped suits, corduroys and summer dresses. 'This feels a bit like Alcoholics Anonymous' he says, shuffling. 'In answer to your question; the reason why I showed up today is because I want my children, who are five and seven, to be proud of their father. Right now I don't feel that they can be'.

This phase is all about reconnecting people with their values, giving them permission to speak up and to think the unthinkable. Even flaky ideas are welcome here, in fact they're encouraged. All too often being too deterministic at this stage stifles the sheer beauty and range of ideas that can emerge.

Here's what we thought we'd do

- Build the community and deepen relationships within it. The Hara Collaborative worked with us during this stage and brought with them the Art of Hosting methodology designed to 'welcome and listen to diverse viewpoints, maximise participation and civility and transform conflict into creative cooperation'. They also taught us only to speak when holding a stone (really, it's a good discipline).
- We crowdsourced ideas for a better system using open space technology and got people to cluster around the ideas that inspired them.
- We supported the callers of these ideas, to turn their ideas into innovation groups – solid projects that could be funded.

Success

- There may not have been quite millions, but the money started to come in. We won funding from the Tellus Mater Foundation, which kept our work going for the next year and a half.

- We are named one of the 'Top 50, Britain's New Radicals' by Nesta and *The Observer*, were featured in *Forbes* and invited to speak at various international conferences.

- We built many deeply–connected communities, in different parts of the financial system, from technology innovators, to policy advocates by hosting monthly drinks, workshops and large 'Assemblies' of 100 plus stakeholders.

- We experimented supporting around 20 'innovation groups', amongst the most successful were:

  TEEB for Business Coalition, spearheaded by Pavan Sukhdev of the UNEP was developed in the Lab, funded by Defra and to the tune of $1 million by the Gordon and Betty Moore Foundation and incorporated in Singapore in 2012.

  UnLtd Future, a programme designed to 'accelerate alternative business models that connect people, planet and profit' was funded by a private benefactor and successfully incubated nine social entrepreneurs, six of which secured funding at the end of the programme in 2012.

Lessons learnt

- **Asking the right questions was important.** It's very tempting use as the starting point one's own answer. What we found was being a caller of an issue is all important and working with the community you call to get to the right question. Only then can you hope to get to an answer. Don't worry about holding uncertainty, that's your job as host.

- **Whoever comes are the right people:** Innovation doesn't only occur within the existing system, don't worry if 'mainstream' don't show up.

- **Make gatherings meaningful and fun.** Informality wins. Reconnect people to their values and themselves, build models, draw things, use creativity.

- **Moving from idea to project takes more than convening:** supporting leaders of our 'innovation groups' usually failed because we didn't have a strategy of how to build them into organisations.

Phase 3: **Consolidate, strategise and demonstrate**

June 2012. It's 6.30pm and the Lab core team are curled up on different parts of a large red sofa, shoes off, eyebrows furrowed, staring down at their notes, scribbling and crossing out. "*I think we need to work on three leverage points at once*" says one of them suddenly, "*new business models, innovation in mainstream and leadership in civil society*". The group and coach look up at once, pens down.

This phase is about turning potential energy into action. How do you develop the radical projects you keep talking about and bring them to life?

Here's what we thought we do

- Shirlaws helped us crack the strategy.
- The goal is now 'to incubate and accelerate new forms of prosperity, for people and planet' and do this across the system by:

1. Incubating new business models, innovation in mainstream finance and new forms of civil society.
2. Accelerate the capacity of leaders to create change.
3. Creating the wider conditions for change by raising awareness, creating supportive communities and advocating for policy change.

Success

- We launched AuditFutures in 2012, designed to answer the question 'how can audit better serve society', funded by the big six audit firms.
- We built an influential stream of work Disruptive Finance Policy that included Andy Haldane of the Bank of England and was supported by Carlouste Gulbenkien and the Friends Provident Foundation.
- In January 2013, we launched 'Campaigning for the Common Good' a leadership programme in partnership with **nef** (New Economics Foundation) for 20 economic justice campaigners.
- We published our *Prospectus and Manifest*, a series of interviews highlighting groundswells of innovation within the financial system that are gaining momentum.

Lessons learnt

- **Your strategy takes a lot of work.** You have to be prepared to put the hours in and adapt.
- **Orchestration over emergence:** There's a point at which experimentation is no longer the best strategy. What's needed is a strong, clear intention and strategy.
- **Be rigorous.** Say no to things that are misaligned, set clear boundaries and focus – mission first, organisation second, then the needs of any individual.
- **Funding gets easier:** Once you are clear you attract people and organisations who want the same things and funding has been much easier to secure.

About The Finance Innovation Lab

The Finance Innovation Lab is an incubator for systems change in finance. Jointly hosted by World Wide Fund for Nature (WWF) and ICAEW (the Institute of Chartered Accountants in England and Wales), it was launched in 2008 and in 2012, was named one '50 New Radicals, changing the face of Britain for the better' by Nesta and *The Observer* newspaper.

Further details: **www.thefinancelab.org**

Thursday, 21 March 2013

DYNAMIC VERSUS STATIC SYSTEMS

Greg Fisher, Synthesis

Recently, Paul Ormerod and I were invited to a round table at Nesta to discuss *systemic innovation*. After that meeting, we were invited to write a blog reflecting on this issue. I thought it might be neat to write two articles, one on systems and one on innovation (which will be published tomorrow). Here I will tackle systems and, more specifically, I want to draw attention to the differences between static and dynamic systems. This is often under–emphasised when thinking about whole systems.

How we make sense of, or cognitively frame, a problem is fundamental to how we then solve it. Often we don't realise how we're framing something because this happens in our subconscious and, understandably, we spend little or no time thinking about how we are thinking about something. And, if our aim is to encourage, facilitate or enable innovation within systems, we first need to understand what we mean by a system.

What do you think when you read or hear the word 'system'? I'll share mine: when I close my eyes and consider what I mean, I have a vague notion – a picture if you like – of an interconnected whole. Call it a network of lots of parts, with a complicated set of inter–connections.

The words *vague, picture,* and *interconnected* are key here. The vagueness of the term 'system' suggests we should expect multiple definitions, or meanings, from different people. 'Picture' implies a snapshot – a moment in time being captured. And interconnectivity is central to systems, clearly.

But this is a somewhat static definition of the word 'system'. Few of the words used to describe what I imagine imply any sort of dynamism. In fact, the word 'picture' leans me much more toward a static interpretation.

Is this a problem? Well, yes and no because it depends on the context and how and why I use the word. If I am concerned with a broadly unchanging system then my personal definition of this word isn't terrible. But problems arise when we use words or framings that sit awkwardly with the real world we are trying to grapple with e.g. when the system I am considering changes (e.g. the weather) and I frame it as if it were static.

Moreover, I would argue that quite a few people think of systems in a similarly static way. In fact, some of my colleagues in the complex systems arena deliberately avoid using the word system because they interpret it in a narrow, static way, which jars with the inherently dynamic and creative nature of complex systems.

A good example of this is Ralph Stacey, who has written extensively about *systems thinking* and *systems approaches*, and who has argued that complex systems are fundamentally different from static systems. The word he uses to characterise complex, dynamic systems is *transformative*: their fundamental nature is one of continuous, unpredictable change. By contrast, he argues, systems approaches are broadly static, and this approach is highly problematic if we are concerned with social systems, because these are constantly evolving.

Personally I think Stacey goes too far in his criticism of systems thinkers because he seems to impose a narrow and prescriptive definition on what is in fact a heterogeneous collection of people and thoughts. If you look at the work of Professor Michael Jackson (Hull University) and John Seddon (Vaguard Consulting) for example, their work implies a

much greater fluidity in human systems than Stacey seems to think. People like John have sensibly applied systems approaches to real world problems with a good dose of common sense, accounting for the dynamic nature of people on the ground. Of course, this is not to say that systems approaches haven't been misused by others – they have.

When thinking about evolving, interconnected systems I sometimes prefer to use the term *dynamic networks*. The academic literature tends to use the term *complex systems* but I mean the same thing. 'Networks' imply interconnectivity and they are associated with the now enormous literature of network theory; and the adjective *dynamic* helps to orientate us away from a static view of systems.

So in thinking about systemic innovation we must not get trapped by a static meaning of the word 'system'. Nesta's CEO, Geoff Mulgan, has catalysed a work theme around systemic innovation in social systems, which means they are dealing with inherently dynamic systems. Geoff wrote a book called *Connexity*, which in my language was mostly about complex social systems, where he captured this point well. But, nonetheless, it is important that this valuable work theme starts with clarity about static and dynamic systems, leaning toward the latter if it is concerned with social systems.

A useful way of thinking about dynamic networks is to think of them as a mixture of patterns and change. I described this briefly in a blog article *Patterns Amid Complexity*. I wrote this article because the emphasis on dynamics and uncertainty in the complexity sciences can lead to a random view of human systems. This is a mistake. In complex social systems we benefit from structure, or patterns (like language and institutions), which are key parts of these systems. Such systems also change because of creative innovation, which is the subject of the next article.

About the author

Greg Fisher is the Managing Director of Synthesis. See: **www.synthesisips.net/about-us/meet-the-team/**

Friday, 22 March 2013

INNOVATION IN DYNAMIC NETWORKS

Greg Fisher, Synthesis

This is the second of two blog articles that follow on from Nesta's round table on *Systemic Innovation*. Yesterday's blog focused on systems, whereas this one is about *innovation*.

How we view social systems has been fundamentally challenged in recent decades by the emerging science of complex systems. Stuart Kauffman described this well in his book *Re-Inventing the Sacred* where he contrasted the Laplace view of a clockwork universe with one of an inherently creative and uncertain universe.

In the Laplace–inspired view, which emerged during the Enlightenment, there is only fundamental physics (the study of sub–atomic particles and even smaller 'stuff') and applied physics. In Laplace's view, the latter can be determined from the former, which means the present can be fully understood and the future predicted. In this interpretation of the universe, there is only stuff bouncing around in the void with a set of fixed and – in principle – identifiable laws that fully describe how they bounce. In this universe, creativity is irrelevant.

Our understanding of the universe's complexity has improved significantly in recent decades, through the new science of complex systems, which has helped us see that innovation plays a central role in it. Moreover, while my two blog articles emphasise different things – systems and innovation – it should be clear that they are related: innovation plays a fundamental role in the dynamics of complex systems.

Kauffman explained that a core concept missing from Laplace's view is that of emergence. Some people view this as the central principle of complex systems because from it springs from a fundamentally different view of the universe at large and social systems more specifically. Emergence is the idea that if we combine two or more 'things' then what we get might be something genuinely different from the two constituent parts, which was not predictable beforehand. For example, Kauffman pointed out that nobody has been able to determine the properties of water from its constituent atoms of hydrogen and oxygen. We only know the properties of water from empirical observation. This might sound unbelievable but it is nevertheless true and it holds for all molecules and their constituent atoms. Kauffman described this as a 'quiet scandal', explaining that the properties of water are emergent, meaning the universe is inherently creative.

Anyway, this is all very interesting but what does it mean for systemic innovation? Here I thought it might be useful to distinguish between two different forms of innovation. My description of emergence is important for distinguishing between these two types.

There is no point in me reinventing the wheel here because I can refer to the work of W. Brian Arthur. Specifically, Arthur wrote a book called *The Nature of Technology*, in which he usefully distinguished between two forms of innovation. The first I will call *rearranging the furniture*, and the second I will call *creative innovation*.

By rearranging the furniture, I am referring to the type of systemic innovation that adjusts the patterns of relationships between parts of a system without any creative, emergent phenomena. Arthur referred to this in his book as 'new solutions given existing technology'. Importantly, rearranging the furniture does not mean no value is added because the new arrangement might well be useful all round. As an example, we might think of a company changing its management structure, including its lines of authority and accountability.

The second form of innovation is what Arthur referred to as 'novel technologies'. This is where something genuinely creative has occurred i.e. where something genuinely new has emerged. Above I referred to the properties of water emerging from the constituent atoms. In his book, Arthur discusses how novel technologies are invariably built from combinations of existing technology but where the act of combination creates something genuinely new. We might think of this as when the whole is different from the sum of the parts.

Of course, the lines between these two types of innovation can be blurry. For instance, the example of a company changing its management structure might follow some new intellectual technology developed in the management sciences (Arthur argued these were also forms of technology). If so, we could view this management change as part of the cascading of some novel technology across a whole system.

The implications of all of this for Nesta's new work theme of systemic innovation are, I think, twofold. First, I think both these forms of innovation can be included in their work; and, second, I recommend that Nesta warmly embraces the 'complexity revolution'. That revolution is moving us away from the clockwork view of the universe in which there is no creative innovation of any description and where systems are fundamentally static. In fact I asked Arthur if his important book, *The Nature of Technology* was informed by the complexity sciences at all and he replied in a private correspondence in the following way (reprinted with permission):

> *"I don't think my book would exist at all without my immersion in complexity. Complexity is in no small part about the emergence of new patterns, and new objects, out of the old. And my book – especially the main Chapter, 9 – is squarely about that. Novel entities arise out of a given network of previously–arising entities. It doesn't get any more 'complexity' than that. Combinatorial evolution is very much part of complexity sciences."*

About the author

Greg Fisher is the Managing Director of Synthesis. See: **www.synthesisips.net/about-us/meet-the-team/**

Monday, 25 March 2013

HUMAN-CENTRED SYSTEM INNOVATION: TRANSFORMING PERCEPTIONS OF WHAT A 'SYSTEM' CAN BE

Jesper Christiansen, MindLab

How do we help or support people that live in situations that do not fit into the system's categories? This question is constantly reoccurring in the development of our public service systems. Rather paradoxically, it seems that we almost have to advertise it when we are in fact attempting to create human-centred service systems. Why else did we put them in place if not for serving human-centred purposes? Given that systems are put in place to authorise activities and procedures that create value for society, are they creating the outcomes that we want them to create? In this blog, I wish to emphasise the need for abandoning the assumption that systems are meant to 'systematise' authorisation by specifying every activity in a direct causal relationship with certain stable outputs. Instead I wish to ask more openly: what is it exactly that we want systems to authorise and how does this influence our perceptions of what systems can or should consist of?

A very obvious example where this matter is persistent is the area of social care for vulnerable families. This area is increasingly becoming a nightmare scenario for Western nation states across the world. These are often at-risk families, which access many different services and are involved in several case plans at the same time. The challenge is to coordinate and integrate services that are addressing such different issues like child behaviour and education, domestic violence, drug or alcohol abuse, unemployment or work injury, financial crisis, unstable housing, physical or mental illness or other more or less common hardships of everyday life.

Working with Australian design agency ThinkPlace, MindLab took part in a project that set out to address these issues and transform the service system dealing with vulnerable families in the ACT region of Australia. The purpose was to develop new capabilities and processes to co-design and co-produce services with current service users as part of introducing a new human-centred, systemic approach to improve outcomes for vulnerable families. In this project, new ideas and policy proposals for rethinking and reshaping the service system were developed in the continuous interaction between strategic decision makers, front-line staff and the families themselves. More importantly in relation to a broader systemic change, there was a profound recognition of the project as a first iteration in a larger cultural change in the ACT government. This not only meant that, in relation to every insight or idea, the question of its systemic implications was raised as an inherent part of the process. It also implicitly implied that the project productively questioned the current perceptions of what a 'system' was or could be.

Currently, most interventions focus on one family member or address one aspect of the problem because public agencies are focusing on living up to the standards that are defined within their own formal area of responsibility. Families then have to adapt to the agenda of the system rather than the other way around. Being evaluated on individual criteria rather than focusing on the whole family situation has many negative consequences. These include leaving vulnerable families misunderstood by the system in a fragile state while frequently experiencing having their cases closed before they feel that their problems have been solved. This results not only in a lack of continuity in interaction with public services, but also means that much of the efforts of families are being directed at opening their case again rather than addressing the actual problems in a meaningful and productive way.

Consequently, instead of being helped or supported in productive processes of change, the system becomes an additional risk factor for the families and a barrier to (rather than driver

of) change. This is not only an inefficient and ineffective use of public resources, but also becomes a question of public legitimacy. Especially since prolonged involvement with services without achieving progress results in families' mistrust in the system's ability or even intention to help them. In the UK, people involved in the 'Life–project' have called this the 'gyroscope problem' (see Figure 1). Outside of the family, a lot of agencies, organisations and institutions ensure a tremendous amount of system activity. Yet on the inside, for the family, nothing changes.

Figure 1: **We Change Model**

The outcomes in the life project, the co–design project in the ACT and similar approaches across the world are overwhelmingly positive. Among the families, there are significant improvements in health, education and well–being as well as lowering rates of crime and unemployment. For public agencies, this is also creates much needed space in budgets as well as creating a more meaningful work environment for the employees working with the families on an everyday basis. But some questions emerge here: on a case level, does becoming more 'human–centred' mean that you automatically become less 'systemic'? And on a systemic level, how do we move from extensive piloting of seemingly valuable human–centred ideas and make these rather isolated interventions more than the sum of their parts?

These questions raise the additional question of whether we are somehow caught up in an unproductive understanding of a 'system'? The insights coming out of the project to a large extent coincide with some general points from our experience in MindLab. We continuously find that involving citizens and other users in innovating public service systems and taking the complexity and context of their situation seriously poses at least three important design challenges that all seem to challenge or expand existing perceptions of what a 'systemic' approach can consist of:

Unscripted deliveries: how do we become systematic in an 'unscripted' way?

There is a need for becoming less scripted and work with citizens rather than deliver services to them and instead work unscripted with focus on outcomes. Are unspecified approaches necessarily 'un–systemic' or unsystematic?

Relational approaches: How do we build relationships and alliances around the problem/situation?

There is a need for taking ownership of the whole problem by building and facilitating effective relationships and networks around citizens to ensure continuity, coordination and 'case–handovers'. Does sharing responsibility in a relational way counteract a consistent and systemic approach in dealing with citizens in complex situations?

Providing context: how do we create a continuous and iterative connection to the specific context?

There is a need for an approach that can ensure that the whole contextual complexity of the situation is taken into consideration when decisions are made and case plans are defined.

A fundamental challenge seems to be how to, on a systemic level, apply and scale services that are highly relational and inherently rely on significant levels of mutual empathy and

trust. Again some questions emerge: what kind of policies and regulations do support these human–centred approaches? How do we create 'systematic relationality' that works with citizens in improving their situation? How do we scale services that by their very nature require to be understood in their unique social context? And what kind of accountability and authorisation are human–centred innovations introducing?

All of these questions are pointing to a broader issue recognised by Bruno Latour some years ago when he reminded us that *"everything that we thought were modern is now a matter of uncertainty".*[1] One consequence of this is that the systems of organisation that we ourselves have put in place to create safety, assurance and accountability have themselves become sources of uncertainty. So when we explore whether our systems should be capable of being more human–centred, we might have to abandon the assumption that they are meant to 'systematise' authorisation by specifying every activity in a direct causal relationship with certain stable outputs. Instead, we might adopt the notion that in order to be human–centred, we need to explore what the relationship between systems and new authorising environments could look like. Environments that inherently change not only how systems work, but also transform (or should transform) perceptions of what systems can be.

About MindLab

MindLab is a cross–ministerial innovation unit which involves citizens and businesses in developing new solutions for the public sector. Further details can be found here **www.mind–lab.dk/en**.

ENDNOTE

1. Latour, B. (1993) 'We have never been modern'. Cambridge MA: Harvard University Press.

Tuesday, 26 March 2013

THE HEART AND SOUL OF SYSTEMS INNOVATION

Alister Scott and Neil Scotton, The One Leadership Project

As Professor Andy Stirling of SPRU at the University of Sussex has long pointed out, cries for 'innovation' are too often uncritically uttered without any consideration of the crucial counterpart: 'for what?'.

It is surprising see how discussions about systems innovation seem to be for systems innovation for its own sake – there is little mention of what we want those systems to do.

So we get systems that attempt to maximise outputs but lose humanity, are not sustainable, or don't pay attention to interconnections with wider aims, the long game or the bigger picture.

We see it in the health system – compliance at the expense of compassion.

We see it in the financial system – clever financial instruments that end up bringing volatility.

We see it in the food system – obesity and hunger in equal abundance.

Part of the problem seems to be that 'objective' commentators fear that any discussion about outcomes will rapidly become political. Yet it's not as if there they aren't some high–level goals that reasonable people can agree on in the above examples – compassion, stability, health.

So how are systems transformed? At its most fundamental, it's worth remembering that systems do not transform themselves – people do. So to transform a system, people have to want it, have to work to make it happen, have to care.

One such catalyst for change is Andy Bradley, winner of one of the 2012 Nesta New Radicals awards and founder of Frameworks4Change, which works to bring about cultures in care settings that are consistently kind (for further details see Andy's TEDx Brighton talk at **www.enablingcatalysts.com**).

At the heart of any effort to transform a system must be a good 'why'. And that 'why' should touch our hearts and not simply be an adolescent desire for control, power, self–gain, cheap–for–the–masses, something 'new and shiny' and other aims that are ultimately based on insecurities of various kinds. As we grow up as a race we can take a more mature approach to how we want the systems we build to serve us.

Instead, all too often in these debates we see a weary, postmodern dissembling – the active search for reasons not to act. This goes beyond 'avoid' (too difficult) or more simply 'freeze' (too complex for me to cope with). Such dissembling – for example the religion around avoiding picking winners – may help us feel sophisticated but ultimately it does not serve. We should get on with the business of driving systems innovation for the greater good – on current trends, it seems likely that the future of humanity depends on it.

We therefore suggest that those involved in these debates consider the need for a healthy balancing of:

- Activity with purpose – a compelling shared vision provides the 'why' – essential especially when things become difficult.

- Technology with care – so that we put our knowledge to good use, a pragmatic form of knowledge born of public service that Aristotle called 'phronesis' in contrast to 'techne' (technical knowledge) and 'episteme' (abstract, theoretical knowledge).

- Innovation with leadership, so that we don't just seek change for change's sake, or the narrow interests of the few, but harness it for the greater good with courage, commitment and a generous spirit.

In short, it's about getting our wonderful brains working in harmony with heart. And a bit of soul.

About the authors

Alister Scott and Neil Scotton are co–Founders of The One Leadership Project **www.enablingcatalysts.com**, Twitter: **@OneLeadership**

Dr Alister Scott is also Visiting Fellow at SPRU, University of Sussex. He has worked on many aspects of systems change for the greater good in the fields of energy, finance, risk and new technologies, public perceptions, expert systems and in the care sector.

Neil Scotton is also Director of Coaching Professionals. Twenty years ago, Neil led systems change for the triple bottom line in an engineering environment. More recently he has led transformational change at the International Coach Federation when he was its UK President. Both of these won Neil global awards in two different professions.

Wednesday, 27 March 2013

SYSTEMS FIT FOR THE FUTURE: HOW TO SUPPORT AN AGEING POPULATION

Halima Khan, Nesta

The ageing population is often described as a burden, or even a tidal wave of need, which is relevant to systems innovation because this perspective is driven by a fear of system collapse. The systems in question – such as pensions and care – are creaking to the point of failure and are major causes for concern. This means the widespread negativity towards older people is actually a symptom of system failure and that systems innovation provides a way out by creating ways of living and working fit for the future, not the past. The demographic shifts are too strong for us to muddle along with existing, out of date systems.

The problem with many existing systems is that they were designed for different demographic conditions – both fewer older people and older people living shorter lives. And the mismatch between these systems and demographic reality means that the great success story of the 20th century – humans living significantly longer – is being treated as a problem. This bizarre situation is testament to the power of systems, both as enablers when they work well and disablers when they're out of synch.

We've recently published a report *Five Hours a Day: systemic innovation for an ageing society*, which argues that we are part way through systemic change on ageing. Some progress has been but there is much further to go before we will have successfully adapted to an ageing society. The report also makes the case for social innovation because while scientific and technological innovation continues apace, innovation in our social institutions is lagging far behind.

This misalignment is felt keenly in the labour market and healthcare systems which are both founded on different demographic assumptions. Our employment market has developed on the assumption that we might expect just a handful of healthy years after 60. And our healthcare system is designed for the effective management of acute and infectious disease. But our ageing society means that the big challenges are different now – how to enable people to remain purposeful for several decades in the second half of life and how to live well with multiple long-term health conditions. Both employment and health systems are struggling to adapt to the new demographic reality.

So, what can be done? Well, it isn't easy but it is important. We'll soon be publishing our work on People Powered Health which sets out the changes needed in our health system to meet the long-term conditions challenge. And in *Five Hours A Day* we make the simple point that systems change needs different types of change at once – in terms of market innovation, political innovation, cultural innovation and product innovation. It's surprising how often the multi-dimensional nature of change is lost as we all search for the single 'silver bullet' that will solve the issue. We know, however, that systems change requires cultural shifts as well as new business models, new policies and new services. It takes time, leadership from multiple sources, commitment to realise the vision and perseverance to succeed. The prospect of change seems overwhelming but we should remember that systems are created, not fixed, and that we have the power to change them.

Halima Khan is a Director in the Public Services Lab at Nesta

Five hours a day: systemic innovation for an ageing population has been published along with the living map of ageing innovations at **www.ageinginnovators.org**

Thursday, 28 March 2013

LABORATORIES FOR SOCIAL CHANGE

Zaid Hassan (@zaidhassan) | Reos Partners

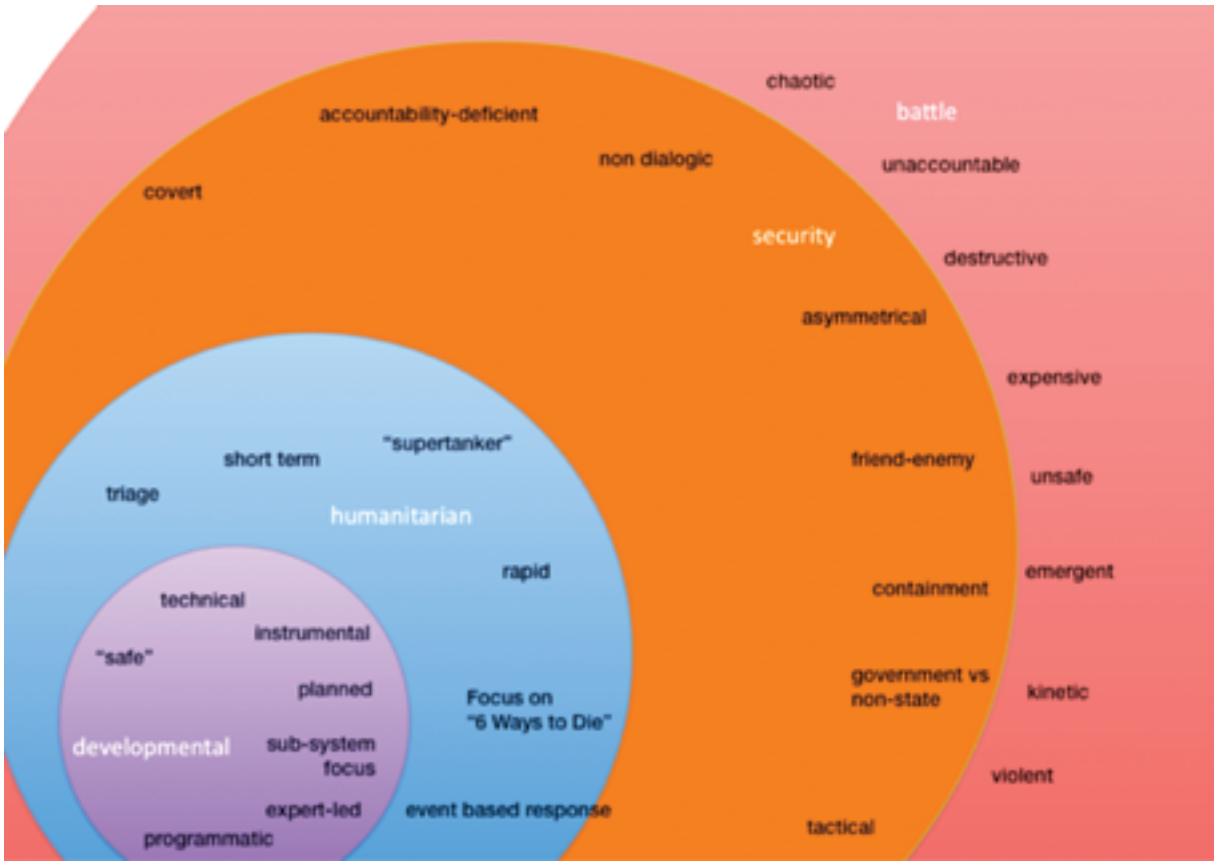
Current approaches to addressing complex social challenges are not working. While there is much to celebrate in terms of the numbers of people involved in change initiatives, in the increasing amounts of money being invested and attention given to social innovation, the underlying trends, from species loss to public debt, continue to deteriorate. Social fabrics are increasingly strained under loads they were never intended to contain.

Why is this?

Examining responses to a range of complex social challenges we find a combination of technical and planning–based approaches are widespread. These together form a culturally dominant technocratic approach. This approach characterises current efforts at addressing challenges as diverse as public healthcare, environmental degradation, poverty and inequality.

We can think of this approach as Business–As–Usual or BAU.

Figure 1: **BAU Spaces**



In the spectrum of all possible strategies, BAU responses represent 'frictionless' strategies. Imagine a bell curve, on the right of the bell curve are market–orientated strategies and on the left are non–market strategies (such as the welfare state). BAU strategies represent

the narrow middle of this bell curve of possible strategies. They can be divided into four spheres (or spaces), developmental, humanitarian, security and battle.

BAU responses are rooted in the expert–planning paradigm. Such responses typically consist of the formulation of a strategic plan by experts that then leads us to the inevitable execution challenges of implementing the plan. According to McGill Professor Henry Mintzberg, 80 per cent of strategic plans usually fail. In their most destructive forms 'plans' that are 'too big to fail' are kept alive at enormous cost to stakeholders despite all evidence pointing to their ineffectiveness. This happens in domains as different as development aid, finance and the military.

Technocratic strategies targeting complex social challenges are in most cases optimisation strategies. That is, technocratic approaches are concerned with optimising efforts to incrementally improve a situation, for example addressing the issue of hunger by feeding more hungry people every year. Optimisation does not address the root cause of the issue, for instance, why people are hungry.

In certain situations, optimisation responses are certain to fail. In situations where challenges are growing at an exponential rate while our capacity to optimise is at best growing in a linear way or at worst shrinking, optimisation will lead to a mathematical certainty of collapse. Juxtaposing trends such as population growth with declining freshwater resources illustrates such a situation.

Unfortunately, such situations are becoming increasingly common as we use natural capital up faster than it can be replaced. We are in dire need of a new strategic response.

Over the last decade, a growing movement of practitioners has come together to explore alternatives to BAU strategies. We at Reos Partners have been part of this global movement. At the heart of this movement is a phenomenon that can be thought of as a social laboratory. Social labs focus on practical actions as a strategic response to complex social challenges. Examples of social labs are becoming more and more common, from Nesta's Public Services Lab, to the Helsinki Design Lab, and the various Labs we have been involved in launching including the Sustainable Food Lab, the Bhavishya Alliance and the Finance Innovation Lab.

In a decade of prototyping social labs at Reos Partners, we have learnt that for social labs to effectively address complex social challenges they must have three key characteristics:

Firstly, their social character, where the primary work is conducted by teams of diverse stakeholders (as opposed to simply experts), secondly, their ongoing experimental (rather than project–based) nature and third, they are designed to be systemic in nature, addressing challenges at a root cause level (as opposed to alleviating symptoms).

The outputs of social labs are multiple forms of capital, for example, human, social, intellectual and physical capital. These forms of capital if produced in sufficient amounts can help arrest the collapse of vital systems.

Successful social laboratories rely on a set of hard–won heuristics, that is, a set of rules–of–thumb that are gained through trial and error. A bit like learning how to cook, practitioners need to build their skill at making use of heuristics. Through observations of labs we have run over the last decade, four key sets of heuristics emerge.

The first three heuristics are requirements for systemic action, they are:

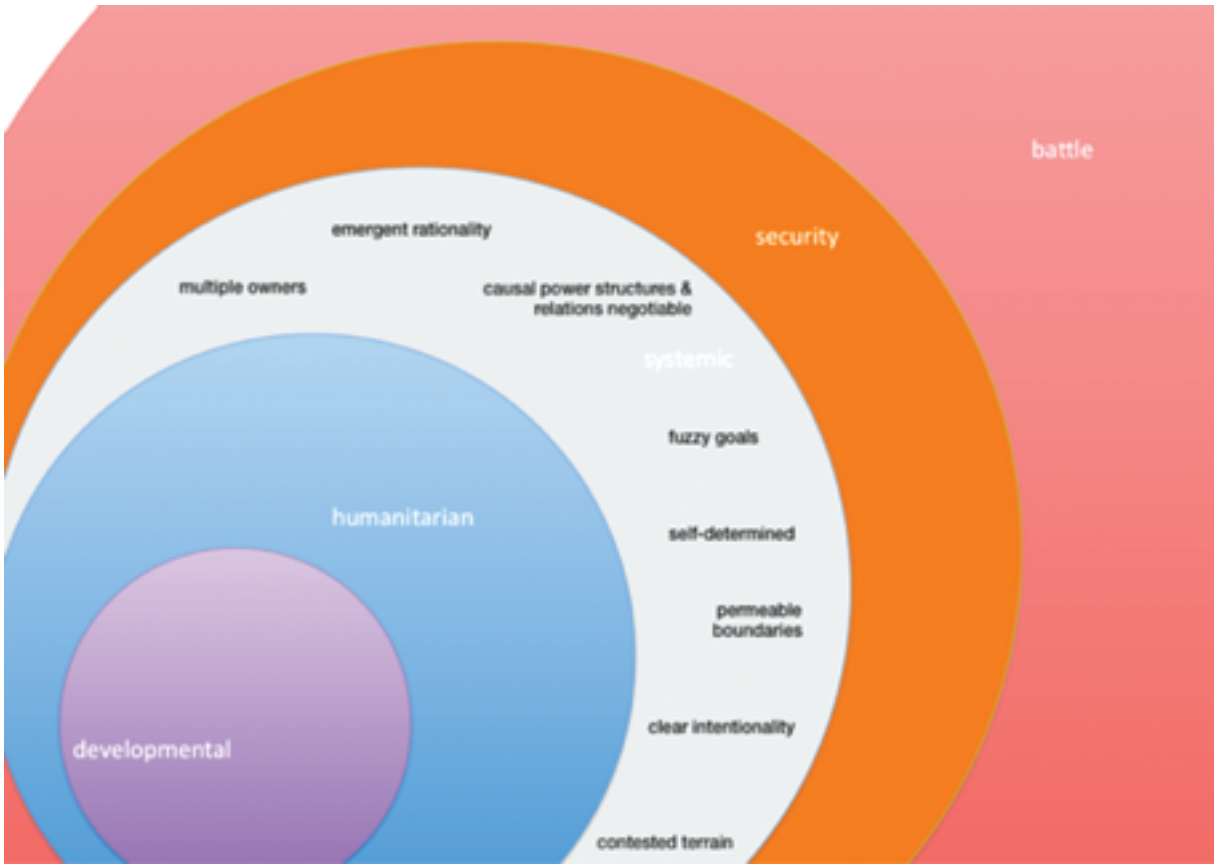
(R1) **constitutional**, the constitution of a diverse team of actors with a shared intention;

(R2) **processual**, iterative processes that support an ongoing search for solutions;

(R3) **organisational**, the social lab, or an ontologically novel organisational space designed to support practical action.

The final set of heuristics concerns a description of what constitutes action that is systemic, that is, actions that are focused on root causes as opposed to the alleviation of symptoms. They include characteristics such as interventions being owned by multiple owners, through operating on multiple levels and by the presence of healthy conflict and friction. This set of systemic heuristics can be used as design criteria in the construction of interventions.

Figure 2: **BAU spaces + Systemic**



Together these heuristics constitute a new theory of systemic action. Building on this theory, we have started work on launching a new series of next generation social laboratories. These next-gen social labs draw on the experience of the many experiments we have run to date.

We are working on next-gen labs such as the Gigatonne Lab, which involves reducing global carbon emissions by one gigatonne within a two-year time period; the Community Resilience Lab, which involves improving the resilience of communities across the UK to systemic shocks and a number of other labs.

We now have at least two decades of reflecting on how to best tackle complex social challenges. These decades have resulted in critical lessons. We have learnt that instrumental, technocratic and planning orientated project-based approaches do not work in situations of complexity. They are largely a waste of scare resources and precious talents. Technocratic approaches only work when complexity is eliminated from the frame, focusing on one isolated part of the problem at a time – an activity akin to slamming a car door shut only to have another pop open on the other side of the car. Those who are at the coalface of working on complex social challenges already know this. Those who are responsible for our resources will come to recognise this.

The odds of overcoming complex social challenges depend primarily on three things. Are we willing to abandon Business–As–Usual approaches? Are we willing to embrace, even partially, new innovation approaches such as social laboratories? And finally, are we willing to act with imperfect information? Our future depends on how we answer these questions.

The ideas presented here are elaborated in the book *Laboratories for Social Change*, written by Zaid Hassan, forthcoming in 2013. For more information visit **www.labsforsocialchange.org**

About the author

Zaid Hassan co–founded Reos Partners in 2007 where he serves as Managing Partner of the Oxford office. Reos Partners is an international organisation dedicated to supporting and building capacity for strategic action in complex social systems, which also has offices in Cambridge (MA), The Hague, Johannesburg, Melbourne, Sao Paulo and San Francisco.

Tuesday, 2 April 2013

CATALYSING COMMUNITY EVOLUTION: THREE PRACTICAL IDEAS THAT SHOW US THE WAY

Alice Casey

The issues affecting local communities today are many and varied; local budget cuts, youth unemployment, flooding, and the challenges of an aging society to name just a few. They are particularly difficult to address because they require multiple bodies to change their own practices and systems; they also demand personal behaviour change from many individuals. In fact, they represent the very type of systemic challenges that our current local systems are not really set up to deal with effectively.

However, this also means that *everyone has a role to play* in catalysing the rapid evolution that current community systems need to be effective. Individual citizens, associations, charities, private contractors and Local Authorities must all take part in stimulating such change; and, crucially, in changing themselves and their own practices.

Current local systems developed in ways that followed the logic of their time and had good reason behind them. They were often characterised by institutions and professionals centrally diagnosing problems and prescribing solutions for people. Things have moved on, and a new logic and set of approaches that could help us evolve how we handle complex systemic challenges is already being developed and practiced.

This is characterised by a mirroring of features seen in those complex challenges – for example, where behaviour change is required, these approaches include more collaborative relationships and higher levels of engagement and trust; where more timely reactions are required, they include real–time analysis and responsiveness; where more or different resources are needed, they place value on existing underused assets.

Three promising ways that this is happening in practice

There are many brilliant people working on some very promising and practical innovations of this kind. They have the potential to catalyse an evolution of community systems but have yet to break into the mainstream. Below, we take a look at three promising approaches which could show us the way.

1. Structures that value collaboration

- Groups like Spice are creating structures that are designed to take account of informal/non–financial contributions. This is important in ensuring we make the most of all assets available within a local system, and enable their effective exchange. Currently much community energy and skills go untapped, and local spaces are too often underused or neglected. If communities are willing to put time into meeting broad social aims then authorities need better ways to value and to nourish that input; actively encouraging continued and expanding exchanges and new collaborations across the community.

- Exploring how people naturally think and want to work together rather than restricting people to narrow service silos is another critical shift. Community groups such as those we have worked with in Brixham and Walthamstow are evolving to become providers of holistic community services; this practice will not scale and sustain without a corresponding change in Local Authorities' behaviours. For example, commissioning approaches which make it easier to extend beyond traditional service provision boundaries and the siloes of local authority budgets; the Social Value Act is

a positive and timely move to encourage Local Authorities to be driven by the wider issues of social and environmental well–being that span service siloes.

2. **Relationships that enable power sharing**

- Too often, communities are defined by their needs – they become labeled as problem areas. This in itself is disempowering as it results in a deficit view of communities which can leave people feeling powerless to change the local status quo. Recognising the resources in a community (people, places, ideas) is one way of addressing this top down view. Rather than looking at needs and problems first, an asset based approach works *with* the community to recognise and identify the positives and to connect those resources into new networks. It is based on the concept that everyone can offer something into the community, and can enjoy taking part – this is an empowering and enabling seed of an idea – and one which gives people something to rally around and pass to others. Projects we have worked with in Darwen, Reading and Devon offer examples of the method in practice.

- Co–production can also help create collaborative and trusting relationships that give people the risk–friendly space they need to engage and behave in different ways. Holy Cross in Camden is one good example of how behaviour has been changed through collaboration, breaking through traditional roles around service delivery, and questioning who is best placed to help whom. To achieve this, a risk averse and performance indicator driven culture has to be replaced with meaningful ongoing accountability. Human Resources and staff empowerment within agencies is also an important part of making this shift last and spread more widely.

3. **Internet platforms that reveal patterns, help scale and lead to behaviour change.**

- More intelligent identification and timely allocation of resources is now possible through using online platforms; for example a real–time look at what is happening across a given system. Projects we have supported through our open data work like Glasgow Gritting or Birmingham Civic Dashboard and others show great promise. However, many such platforms are still small and experimental with relatively low uptake, so the challenge is how we can work alongside users to create tools that are so helpful and reliable that they can replace older systems which in turn helps us better meet local needs, and in future, to even predict how system dynamics are likely to play out and to act accordingly.

- Online tools could also be a powerful accelerator for behaviour change. Research and practice in this area is helping us understand how behaviours spread across offline community networks and whether we can accelerate this process through smart use of online tools. When thinking of local systems, can we apply this to spreading social norms and practices like time–banking, contributing data and information to enrich system analysis, or participating in opportunities to become involved in community life? Finding effective ways to spread positive, constructive social behaviours is an integral part of the change required; success will depend upon exactly how we go about working closely with users and commissioners to develop the potential applications of tools that already exist.

Getting a breakthrough

The three approaches above help us see our community differently, redefine how we interact with one another, and account for what is valued in communities. They are social in their method and in their outcome which is why they could be some of the practical ways to stimulate new forms of networked system that we need. However, they are not yet rejuvenating entire local systems; only components. Why is this? The answer could be a simple one – we won't get a real breakthrough until more of these approaches actually

begin to *replace* aspects of current service provision systems instead of augmenting them; until that happens, we simply won't get the system–wide evolution our communities really need.

What's your view?

About the author

Alice Casey works in Nesta's Public Service Innovation Lab

Alice has led a number of major community–driven innovation programmes, including *Neighbourhood Challenge* – learning about how to unlock untapped assets in communities and supporting funders themselves to become enablers of change; and *Big Green Challenge* – a £1 million prize fund to incentivise and support community–led innovation on Co_2 reduction and energy generation. Alice is currently leading on the development of a portfolio of work looking at how digital technologies including crowdfunding are transforming social and civic interfaces.

Wednesday, 3 April 2013

THE NEED FOR REGIME CHANGE

Charlie Leadbeater

We need regime change and not in some far away land, in which a wayward dictator threatens our oil supply. We need regime change in some of our most important public and private systems, from education and health, to banking and energy.

Regimes are not just groups of people – despotic politicians, kleptomaniac ruling families, corrupt military junta – who hold onto power by bullying the public. Regimes can be powerful when they are impersonal, embedded in routines, hidden in norms, conveyed in rules, which govern what people do, shape how they think and provide the justification for their actions. As Professor Frank W. Geels from the Science Policy Research Unit at Sussex University shows in his detailed accounts of how industries shift from one pattern of organisation to another, regimes condition what we regard as feasible and worth trying. They organise what comes to be regarded as business as usual.

In the 1930s the regime governing civil aircraft designs was set by the DC3, one of the finest propeller planes ever made. Designers, engineers and airlines worked within the confines of the DC3's fuel consumption, speed, payload and altitude, to maximise its potential. Only slightly mad people thought the future lay in jet engines. Yet by the 1960s the regime for air travel had completely shifted with the introduction of Boeing's first jets. These could fly at higher altitudes, above the weather, for longer distances and carry more people. But they also required longer, stronger runways and that in turn implied new airports, with extra capacity. Larger planes could take more people but that meant that air travel had to appeal to a mass rather than an elite, business market. So new routes for tourism came into existence. More people travelling needed greater capacity to take people to and from larger airports and hotels. The entire regime of air travel changed in the course of a couple of decades.

There are five main ingredients to this kind of process.

The first is that failures and frustrations with the current system multiply. The financial crisis was caused by systemic failings in an increasingly interconnected and complex banking system. Our resource-hungry systems of energy, transport and production need to be redesigned to minimise waste and prevent catastrophic climate change. Our systems of health and social care seem to be failing ageing populations beset by rise of long-term conditions such as diabetes and obesity. There is a growing consensus that the post-war welfare state needs to be designed to reduce long-term dependency on benefits. Political systems are too detached from and distrusted by citizens.

The second is that the landscape on which the regime operates shifts to leave it at odds with the world. That is precisely what is happening to industrialised forms of schooling. The tide is turning against it because the knowledge and capability it develops are so at odds with the world children inhabit and the world they will work in. Modern hospital-based health systems in which increasingly specialised doctors diagnose illnesses and offer expensive high-technology cures are out of kilter with a world in which the main challenges are long-term conditions and the main solutions are to motivate and support people to manage their own health more effectively at home and in their community.

The third is that alternatives start to develop and gain momentum, in multiple, overlapping niches. Regimes change because many people, with different but overlapping causes, create a coalition which coalesces around the principles of a new approach.

Fourth, these new approaches are energised by the application of new technologies, which open up new possibilities for organisations, businesses and consumers. These rising new technologies add to the momentum and excitement for change. In the past decade we have embraced vast new systems for creating, sharing, processing and analysing information from the Internet and the world wide web, through to new generations of mobile phones and social media to the possibilities of cloud computing, the semantic web and the Internet of Things. These digital platforms could allow us to create more distributed, networked systems to achieve feats of coordination previously associated with large hierarchical organisations. Industries in which the technology and knowledge base are stable – electricity, soap – provide little scope for entrepreneurs and innovators to exploit new and untested ideas. But when science and technology suddenly shifts – for example to allow teachers to deliver courses online to thousands of students at the same time – then new forms of organisation and business models can be come into being.

When these four ingredients come together in an industry they are enough to make regime change a real possibility: mounting frustrations among a diverse group of clients; shifts in the external landscape which leave the regime flat footed; a gathering coalition of experimenters; new technologies which give added momentum to the efforts to create new approaches.

However, without a fifth ingredient far reaching regime change is often impossible: the regime itself begins to splinter.

Powerful regimes can survive a long time despite growing disaffection. The intellectual case against them can be batted away. New developments can be marginalised, patronised or selectively incorporated into the ruling orthodoxy. Even the changing landscape can be ignored so long as the regime has enough stores of stamina and resources to keep it going. Authoritarian regimes rarely change without external pressure but what really tips the scales is internal dissent. Members of the regime start arguing among themselves. Factions appear, followed by a trickle of high profile defections. People inside, especially younger people with a future, see the writing on the wall and decide it's time to switch sides. Regimes fall when they bring themselves down.

Back in the 1930s, the propeller powered DC3 maintained its position as the dominant design regime for aircraft because none of the airlines wanted to step out of line to explore the potential of the jet engine. They waited to see who would go first. Regimes really change when insiders break ranks and make common cause with new entrants and legitimise disruptive innovators. That is what Pan Am did in 1958 when it became the first airline to order jets.

Regimes do change. Dictators can be toppled; ruling parties ousted; juntas exiled.

Cesspits gave way to sewers and flush toilets. Piped water replaced wells and canals. Electricity started as a niche product used by only the wealthy in large cities. But 50 years after it was first used in a home it had become a national system, supplying a new form of power the millions of households and factories. Landlines and pay phones have largely been superseded by mobiles, Skype and other forms of communication. Without necessarily knowing it in industry after industry we are the early stages of regime change. If we are to meet the challenges of the next 30 years to mitigate climate change, reduce environmental impacts, limit inequality, stabilise the global economy, make the most of our technological cornucopia, then we will need more than bright new products and services. We will need regime change.

About the author

Charles Leadbeater co–authored Nesta's recent publication *Systems Innovation*.

Charles is a Nesta Fellow and a leading authority on innovation and creativity. He has advised companies, cities and governments around the world on innovation strategy.

Thursday, 4 April 2013

SYSTEMS INNOVATION AND THE HEALTH INFORMATION REVOLUTION

Laura Bunt

Health systems are a crucial client for systems innovation. Today's health system is made up of an increasingly complex set of interactions between the public and medical and care professionals, an infrastructure of hospital buildings and other primary and secondary care settings, providers within and beyond the NHS and a world-class network of academic institutions and funding bodies generating new knowledge about what makes us well. Where are there opportunities for change?

As others in this series have argued, health is an area where the costs of failure within this system are profound and potentially life threatening. Yet without innovation, the risk of system failure becomes more pronounced as a system designed to cure disease and fight infection is increasingly stretched to deliver the kinds of services today's most frequent users need – support in living with long-term conditions, help in changing behaviours and lifestyles and checks to prevent crisis.

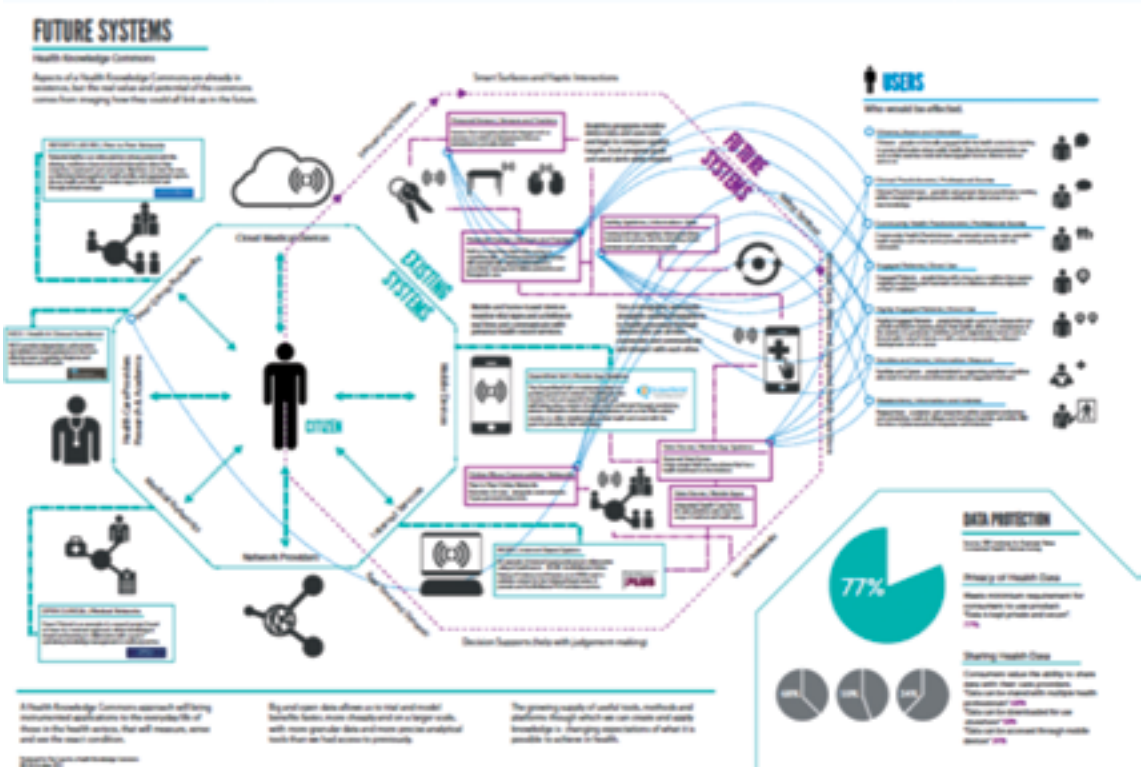
In our recent publication *Doctor Know: a knowledge commons in health*, we explore the need for systems innovation in health to improve the relevance, reliability and applicability of health knowledge and argue that in the future, how we access safe and useful information about our own or another's health will come to define effective healthcare. Innovation in how we create and share information has transformed other fields; analysing big data, collaborative platforms, open-source tools and so on will also enable health systems to become more dynamic and human-centred.

For example, how could health systems use real time information? Health knowledge is always changing, and what we know about the best ways of improving our health is growing so quickly that it is becoming near impossible for anyone to advise care or treatment with the efficacy, consistency and safety that the full extent of current knowledge could support. Could we imagine a system that works in real time, establishing diagnosis and tracking prognosis based on live data and interaction?

How can we make decisions about our own or another's health informed by data on all aspects of our lives? How could new sources of data such as from individual websites and health tracking devices help to design more person-centred care? Halima discussed the potential for a more people powered health system in her blog, drawing on lessons from our work with teams building a robust evidence base and business case for more people-centred healthcare, from commissioning peer support and social prescribing in Newcastle to more systematic risk stratification and health and social care integration in Leeds. The ability to generate and access to shared information is an important prerequisite to more joined up and people-centred decision making.

There is much innovation already happening in the creation and application of useful health knowledge. Many patients are already participating in online communities such as PatientsLikeMe, sharing data about shared conditions to advance clinical knowledge. The premise of open patient records and routinely using patient data for research is becoming more widely accepted. There is a growing market for decision support tools, and devices and apps that collect data about our lifestyles such as fitness and diet trackers. Yet how to bring this together as systems innovation is difficult to grasp, and requires action in a range of different domains.

Part of this challenge is systems which are hard to visualise. Trying to map or visualise a system can be influenced by individual experience of it; a clinical professional's demands of a health system will differ substantially from a family's or a community provider. In creating the visualisation below, we used 'personas' to plot different people's pathways through a system to help consider a range of perspectives on what a different system of knowledge generation and application might look like.



But conceiving a system is one thing, changing it is another. We know that systems innovation requires multiple innovations in a range of domains; new products and technologies such as apps, sensors and other devices that capture structured data on our behaviour and physiology; new policies and regulation such as for better structuring of data and clinical guidelines through commons standards, open patient records and new governance frameworks around data access; new business models and organisational forms, such as open online networks and citizen–led models; and the new skills, behaviours and cultures to make a new system work.

We know that this vision for an open, dynamic health knowledge system is still somewhat in the future, but the future is something we make, not something we discover.

About the author

Laura Bunt is Lead Policy Advisor on Public and Social Innovation at Nesta. She recently co–authored *Doctor Know,* a report exploring systems innovation in health.

Friday, 5 April 2013

SYSTEMIC INNOVATION AS A CONCEPTUAL TOOL

Daniel Miller, Systemnovation

The parable of the elephant

Perhaps you have heard of the parable where three people who had never seen or heard of an elephant are given the task of describing one after examining it blindfolded. One, only having time to examine the elephant's leg, describes the elephant like a tree. The other two, each only having time with the trunk or side, describe the elephant like a snake and a wall.

The lessons of the parable are like the lessons of Nesta's present blog series. There are diverse perspectives on the elephant and on 'systemic innovation' (SI) – from Forum for the Future's understanding of SI as a specific series of steps in a system change process, to Greg Fisher's interpretation of SI as either a rearranging of relationships or as emergence within dynamic networks – which have validity and value. Understanding another's interpretation of either an elephant or SI requires knowledge of their underlying experiences and theories, which the blog series connects us to. In turn, communication across interpretations allows for better understanding of the whole elephant and the whole of the multifaceted concept 'systemic innovation'.

The parable of the Swiss army multi-tool

Imagine a similar parable where the blindfolded examine a Swiss army style multi-tool instead of an elephant. Further, instead of describing what it is, they describe how it could be used. Depending on which function of the multi-tool is opened, they might describe how gadgets could be taken apart, how wood could be carved or how it might help when administering first aid.

Systemic innovation as a conceptual multi-tool: five insights

Beyond the lessons of the elephant, this parable gives five insights useful to thinking and practice of systemic innovation.

First, systemic innovation is perhaps most appropriately thought of as a conceptual tool. This reminds us that it is a set of ideas we use to understand systems (as John Sneddon's blog does), design solutions for them (as Mindlab is doing) and strategise our changing of them (as Greg Fisher's framing of dynamic vs. static systems can help us do). If it does not make a difference to our work, or if in trying to achieve/do systemic innovation we miss our real goals, we can change the concepts to change the tool or work with different tools altogether.

Second, it is even more effective to think of it as a conceptual *multi*-tool. The multiple available interpretations of SI are not competing, but can be seen as distinct facets of an interconnected set of ideas. A craftsperson might use only the saw on her multi-tool for a wood carving project, but multiple tools when building a mailbox. Likewise, one systems change initiative may both use Charlie Leadbeater's typology of systems while understanding how the system works and setting goals and then develop innovation strategy according to Geoff Mulgan's definition of systemic innovation. A different project may choose to only open the innovation lab component of the multi-tool.

Thirdly, our past experiences will shape our understanding of systemic innovation. Whether a bottle opener is described as a gadget dismantler or an aid for first aid depends on the blindfolded examiner's past experience. In order to use and spread the benefits of distinct

interpretations of SI, thinkers and innovators will need to help others understand the distinct underlying theories and experiences.

Using networks to innovate throughout entire systems is an emerging best practice. Re-AMP, an American environmental network, is a great example. Meanwhile, Werner Ulrich's Critical System Heuristics can be used to critically and more effectively examine and design problem boundaries for systems strategies. The prospect of practitioners of each approach learning from the other depends on their engagement with each other's foundational theories and experiences.

Fourthly, there are many parts of the multi-tool that we are only beginning to discover, and we should remain open to discovery. There are many answers to the question "*What might systemic innovation be?*" beyond those already mentioned and linked. It might be: as Stephen Huddart of the J.F. McConnell Foundation has written about, initiatives generated by a 'social innovation system'; as the Center for Eco-Literacy is discovering while changing education systems in California, an innovation process designed around 'living systems' principles; a methodology for getting an entire system involved in changing itself. There are more interpretations available still; elsewhere I have captured these and others in a review of 31 possible interpretations of systemic innovation.

Fifth and finally, we can only understand the uses and potential impact of our conceptual multi-tool by using it. The blindfolded in the parable that would use a bottle opener to help administer first aid might benefit from more experience with a bottle opener. Of course, learning from practice will require us to be explicit about which interpretations we are using and why. But most of all, learning from practice requires practice. Even with the blindfold off, we can only understand how a multi-tool can build a better world by going out and building one.

About the author

Daniel Miller first started thinking hard and creatively about systemic innovation while working for Engineers Without Borders Canada. Currently he is independently exploring the depth and potential of this concept and practice and edits the blog site, *Systemnovation* – **www.systemnovation.com/about/**

Daniel also has a personal blog on learning, creativity, transformation and social change: **www.danielmillerblog.wordpress.com/**

Monday, 8 April 2013

THE IMPORTANCE OF LARGE-SCALE COMMUNICATIONS

William Perrin

You can't bring about systemic change without large-scale communication. Large-scale communications in society have changed radically with widespread adoption of mobiles and the Internet. This has implications for people interested in systemic change.

Traditional communications on a systemic scale tended to be top down or centralised. This was shaped by the tools available and in turn shaped an approach to systemic change, especially in public policy. The explosion of Internet communications tools allows new forms of communication that turn traditional methods inside out.

Rather than being passed down, communication now wriggles, writhes and squirts in all sorts of directions. People can start and take part in very large-scale communities without seeking substantial investment or 'permission' from the state or other vested interests.

Proponents of systemic change usually want to fix a set of problems. It's now common to see people using the Internet to form their own communications networks around systems that are either broken or incomprehensible. People construct a form of information scaffolding to prop up the system, which they will also use to understand any attempts at systemic change.

Take for instance the unarguably broken UK 'benefits system'. Hundreds, possibly thousands of benefits advisors come together in a public forum known as Rightsnet [link] run by a small charity, Lasa. In the forums the advisors help each other out with live client cases, in public. Discussion often goes 'I've got a client with x, who is also a y, but they live in an A and are being assessed for a B. Oh and they speak Serbo-Croat'. Then another advisor will come in with 'I had one a bit like that last week, ring the Midfordshire Contact centre and ask for Betty and form 27A'. The forum has tens of thousands of posts. People have helped each other altruistically to create or retrieve knowledge about the system that they can't get from the system itself in an efficient manner

Big cities are complex systems, where information is paramount for people to make the most of living working or trading there. Sheffield (population 450,000) has in Sheffield Forum a startling example of an information support system. Sheffield Forum has over six million posts and 160,000 members. People use the forum to discuss places to eat and drink, properties, sport, hobbies and pastimes and business services. The forum is at times a rough and tumble environment a million miles from anything the city council or *Sheffield Star* could ever endorse. But it provides a remarkable information network to make sense of the complexities of urban life.

Mutual support forums attract over 100 million posts a year in the UK alone. There are several well-known forums where people support each other on what are often described as public policy issues – *Netmums*, *Mumsnet*, *Rightsnet*, *The Student Room*, *Moneysavingexpert* etc. These are only the tip of an iceberg of mutual support forums on the web covering everything from Ford Cortinas to HiFi .

In an excellent Consumer Focus pamphlet Phillip Cullum says:

> *"Our findings suggest that UK consumers are leaving well over 100 million comments a year on the realities of service performance...According to our survey, more than two-thirds of people (68 per cent) say that they trust what other consumers tell them more than what companies say; just 5 per cent disagree."*

There are huge networks of people helping each other where there is no authoritative, trusted central source of advice. The help is sourced horizontally from peers not vertically dispensed from on high. People get on and empower each other rather than waiting for the state or company to do so. They create a form of social capital as they do so. Indie support forums have weaknesses though – they can be hard to fathom to newcomers, slightly intolerant and most of all hard to search. It requires substantial effort for someone to take the knowledge created in historic forum exchanges, label it properly (the definitive solution to problem X at date Y) and capture it on a web page where it is easily indexed by search engines.

Can someone interested in driving systemic change work with or create a mutual online support environment to improve a system or help that change along? If a forum of some sort already exists then work with it, drizzling in helpful expertise from a team of advisors who 'get' interacting online. Any number of big organisations have set up their own forums when there are good indie ones already running. Only to find themselves trounced by the indies that have a huge, loyal fan base that unites against the organisation that has in their view created the problems the indie forum was set up to solve.

The fact that big companies find this hard to do can be seen by the success of corporate support forum services like **GetSatisfaction.com** that help organisations engage with their customers in a neutral online space.

Any attempts to drive large–scale systemic change in a developed country with well over 70 per cent of the population online needs to work with a modern mobile internet. Independent mutual support forums are the place to start.

About the author

William Perrin is Director of Talk About Local a small internet consultancy specialising in grass roots online communications – he'd be happy to talk about any of the above contact him on **William@talkaboutlocal.org**

Tuesday, 9 April 2013

INDIVIDUALS ON THE WEB

Alex Stobart, Mydex CIC

Are we able to innovate systemically and freely on the Internet? Some individuals are now online for more of the day than off; is the Internet empowering individuals, and what experiences, value, behaviours, purpose and outcomes is it creating?

When you were young, did you enjoy playing on your own, or taking part in team games?

Most innovative-thinking people probably possess a good dose of ambition and determination. Innovative systems, organisations and people will also engage in co-design and co-production whenever possible, as they recognise that the customer is almost always right. For innovation to flow, and be encouraged, it also relies on an individual and collective willingness to question, to be open and to embrace diversity.

We all know examples of innovative people, groups and organisations, or do we ?

Karl Albrecht, founder of Aldi, is credited with stating Albrecht's Law – *Intelligent people, when assembled into an organisation, will tend toward collective stupidity*.

Individuals can learn on their own, and as a team, and as a collective. Does the so-called 'shrinking' of the world as a result of the web, and globalisation, mean we should do better to revert to self-learning or participating in mass online courses (MOOCs)? We are promised that innovation will flow from big data, open data and yet what we really want may be more personal data and trust in those who handle our data.

A story broke in *The Guardian* about Raytheon RIOT (Rapid Information Overlay Technology); this software is about threats to systems and individual's liberty. The Internet is a dangerous place – anything we do can be intercepted by government or organisations, without us knowing. Caveat emptor becomes caveat internautor.

Organisations such as the one above are building products and services that break the trust between individual and others. However, these are behaviours that have existed since the tie groups sought to dominate individuals; governments, organisations, managers, parents, those in authority inevitably feeling that they need to know more in order to know anything.

One commentator on *The Guardian* article says:

I have about as much faith as the state and the police using my data in a benign fashion as I do in my boss giving me an unexpected pay rise.

People will therefore elect to become more wary; already, youngsters are becoming more careful about what they post and share online. Many delete their social media histories when they first go for a job interview. People also recognise that multinationals are more innovative than governments, and are likely to be one step ahead. People learn from others, and will react to the privacy battlefield events.

Privacy-friendly Internet platforms are emerging in an attempt to reverse these darker trends. Mydex CIC in the UK, QiY in the Netherlands, Personal, Singly, Reputation in the US are a few of the early, emerging names. These may be examples of trust frameworks that seek to offer systemic, creative, liberating networks and ecosystems on the web. Such organisations aim to empower the individual by providing ways for them to secure their

personal information, and to share only those aspects of their lives that they wish to make available to others. In similar vein, log-ons and passwords may be replaced over time by federated identity. Over time, trust may build up between participants in the ecosystem, and this may result in collaboration and innovation.

Aggregates of people, collectives, co-operatives, social enterprises are all innovations that may enable people to make a difference. They are built on trust, mututality, respect, common outcomes and they may have an advantage in a more democratic web. Examples abound – Avaaz in lobbying, digital public services on the web underpinned by identity, are generating transfers of power and issues. Soon, Internet-savvy patients will expect to access their health records, care home residents may tweet conditions in their building, and so forth.

The Local Government Association started building a Knowledge Hub in about 2005. This was open, participative and quickly grew to have 100,000 members and many different groups sharing innovation with the third sector, business and individuals also allowed in. Then in 2011 it went through an upgrade, and it seems to have less activity now. The innovation did not bite.

Why did no-one report the incidents in Mid Staffs hospitals? The NHS is clearly not a leading example of systemic innovation, and yet it must learn how to combat MRSA, or how to improve surgical procedures. Commentators suggest it suffers from suppressive regulation and crushing target-setting. New models ought to embrace measurement by kindness and compassion. The NHS has Patient Opinion for Internet-based feedback, innovation centres, care inspectors, doctors and the Hippocratic Oath, the BMA, the GMC and yet it failed to declare, admit or notice what was happening. Systemic innovation can quickly be snuffed out by the 'Corporate System' breaking the individual's free spirit.

About the author

Alex Stobart is a social entrepreneur living in Scotland. He has previously worked in food, technology and drinks industries, and also for Scottish Government. Now, he works for Mydex CIC who empower citizens with personal data stores, to give people a more equal voice and role in digital transactions. This can empower individuals and communities to work together in many aspects of their lives, and enable them to navigate self-directed support, self-management, personalisation etc. Alex also has experience in developing models for social investment.

Wednesday, 10 April 2013

FROM REPLICATING PROVEN IDEAS TO SYSTEMIC INNOVATION

AS PROVEN SOCIAL PROJECTS REPLICATE ACROSS THE WORLD, COULD THEIR INTERACTION LEAD TO REAL SYSTEMIC INNOVATION?

Dan Berelowitz, ICSF – International Centre for Social Franchising

We've all seen something out of the corner of our eye, only to find it disappear when we look at it directly. I think like that – finding inspiration in the boundaries between ideas. I spend a few weeks exploring ideas, hearing practitioners and academics, constantly collecting pieces of the jigsaw. Then I notice the corners and start to fill in the middle. Sitting at a round table at Nesta I found a transformative set of corner pieces; replication, scaling, systemic innovation and food poverty.

At the International Centre for Social Franchising our mission is to replicate proven social innovations to scale. Not everyone's an innovator, but many are keen to give their all to achieve social change. We aim to harness this cumulative energy to replicate and scale up social ventures. Take the potential of one of our partners, FoodCycle. FoodCycle's recipe involves combining volunteers, surplus food and free kitchen space to create nutritious meals for people suffering food poverty in the UK. The ICSF is working with FoodCycle through four phases of replication; validate the model, design it for scale, systematise processes and then pilot the model to see if we can replicate it elsewhere.

When we work on a project like this, we tend to largely focus on their 'internals'; how things like financial sustainability, marketing and many other critical factors might work if replicated. At Nesta's systemic innovation event, I started to map out great projects that are growing through replication in the food poverty sector and two others jumped out: Trussell Trust Foodbanks and FareShare.

These days, more people in the UK are going hungry, and teachers are reporting a worrying rise in child hunger. Trussell Trust Foodbanks provide a minimum of three days' emergency food and support to people who just can't afford to buy food. Foodbanks are proving amazing at meeting this growing need, with over 320 across the country and over two more opening every week. FareShare, for example, is a UK charity helping communities relieve food poverty by providing quality surplus food to organisations working with disadvantaged people, providing training and education around nutrition.

Individually, these three organisations tackle food poverty from a different, and valuable, perspective. Yet when looked at through a lens of systemic innovation, their combined scale and interconnectedness can start to solve a problem in an exponential way. Together, these excellent interventions become more than the sum of their parts – they become individual pieces of a bigger puzzle to eradicate food poverty in the UK.

If more and more proven social projects are replicating to scale, it is my hope that their interconnectedness may make true systemic innovation possible.

About the author

Dan Berelowitz is the Chief Executive and co–founder of the International Centre for Social Franchise (ICSF). See: **www.the-icsf.org/peoples/dan-berelowitz-chief-executive-and-co-founder**

Thursday, 11 April 2013

‘GOOD’ SYSTEMS FOR WHOM?

OUR FINAL BLOG IN THE SYSTEMIC INNOVATION SERIES ARGUES THAT IF WE REALLY WANT TO SHAKE UP HOW THINGS ARE, THEN WE NEED TO START WITH A DIFFERENT KIND OF CONVERSATION.

Sarah Schulman, Kennisland

- By 9am, Katie had dealt with four systems.
- Her partner, Nick, was out drunk with his mates.
- Her ten kids were in various states of undress. If they were even awake.
- The social worker was in the driveway, getting ready to drop in.
- The school attendance officer was on the phone, asking about her older son’s whereabouts.
- The pharmacy was texting to confirm her methadone appointment.
- Katie just wanted a hot shower. And some peace and quiet.

I spent a week living with Katie and her ten kids, in a spotless three–bedroom house, in a leafy Australian suburb. From the inside, systems weren’t the abstract entities that descriptors like ‘dynamic’, ‘interconnected’ and ‘complex’ seem to suggest. Systems were groups of people clumsily interacting.

- They were a mum, dads, kids, aunties, uncles, mates, grandparents.
- They were clients, social workers, psychologists, police officers, managers, policy advisors, ministers.
- They were students, parents, teachers, a principal, school attendance officers, education consultants.
- They were a patient, a pharmacist, a drug supplier, doctors, healthcare administrators, ministers.

Few of these people were getting what they needed, or wanted. Katie needed support from Nick. The kids needed attention. The aunties and uncles wanted to know what to do. The social workers needed to ensure the kids’ safety. The family wanted to stick together. The policy advisors wanted to avoid a headline. The teachers needed the kids to stop getting into trouble. The principal needed the kids to come to school. The pharmacist wanted Katie to show up.

We could diagnose these systems as strained and stressed; inefficient and ineffective; even perverse and pathologising. There’s no shortage of solid analysis about the failures of our systems, particularly our public ones, clearly shown by the other blogs in the Nesta series. John Seddon identifies ‘corporate foci of targets and costs.’ Jesper Christiansen talks about the lack of ‘coordination’ ‘integration’ and ‘continuity’. Halima Khan uses words like ‘out of synch’ and ‘disenabling’. Zaid Hassan names ‘expert–planning’ and responding to ‘symptoms’ versus ‘root causes.’ Alice Casey describes ‘budgetary silos’ ‘risk aversion’ and a ‘deficit orientation.’

The technocratic problem

At the core of much of our collective analysis is a critique of technocracy. Of taking problems (say, family crisis), breaking them down into smaller and smaller pieces, and assigning professionals with increasingly narrow specialities to each puzzle piece. Katie regularly interfaces with attendance officers, family support workers, intake workers, social workers, cultural affairs coordinators, housing workers, pharmacists, nurse practitioners, and doctors.

Yet I would argue that many of our proposed solutions – be it personalised services, empathic professionals, learning networks, change labs – are open to the same critique. We focus on the technological means – on methods, processes, tools, approaches – and on instrumental ends: creating efficiencies, enabling collaboration, integrating services, empowering people, and being more human–centred. We neglect the ethics. We neglect to ask what is good.

Efficient, collaborative, integrated, empowering, strengths–based, human–centred systems aren't necessarily good systems. Who are they *good for*?

The master value

Richard Kraut, in his book *What is good and why*, convincingly argues that 'good' is the master value of practical life. Other values like collaboration or justice or virtue or autonomy are actually underpinned by whose good and harm are in view. He writes, *"This way of thinking is not quantitative or reductive. It holds that it matters a great deal whether what we do is good or bad for this person rather than that; that the kind of good we create and the pattern according to which we do so, not merely the amount of good we do, are significant."*

Katie's many workers regularly convened interagency meetings to share case notes and join–up their decisions. An 'effective' system might be measured by the amount of information exchanged, by the frequency of professionals calling each other to talk about Katie, by the percentage of paperwork reduced. But, I would argue a 'good' system has little to do with the system itself, such as whether it's a seamless service experience or a satisfying interaction. And instead has much more to do with whether the system is good for peoples' lives. For Katie's life. For Nick's life. For their kids' lives. For the social workers lives.

But what is good for someone? Kraut concludes that, "*What is good (for someone) is determined by what it is for them to flourish…A flourishing human being is one who a) possesses, b) develops, and c) enjoys the exercise of cognitive, affective, sensory, and social powers* (p.137)."

You wouldn't say Katie, Nick, or the kids are flourishing. Nor would you say the social workers and managers are flourishing. Ask Katie and Nick to talk about what is good, and they define it as the absence of bad. *Not* having welfare in their lives. *Not* having a dirty house. *Not* going hungry. That's what the social workers told them was good. Ask the social workers to talk about what is good, and they also define it in terms of the absence of bad. *Not* having to remove kids or to get court orders. *Not* having to encounter abuse and neglect. Living in a clean house, with food on the table, and without abuse or neglect does not make for a good life. It just makes for a life.

Our beliefs about what is good matter. Behaviours follow beliefs. Katie spent three hours every day mopping floors, wiping down cabinets, doing laundry, making spaghetti Bolognese. She hated clutter: she packed up the kids' books and toys and threw out their school work. Few of these behaviours facilitated living well: developing over time: receiving loving attention; forming close bonds; communicating with others; enriching and

gaining mastery over emotions; reasoning and deliberating to make decisions, etc. Indeed, Katie, Nick, and the kids were always so busy reacting to the past that they didn't have a language to talk about the future, about what was good and what they really wanted. What they really wanted was shaped by what they thought was possible – by what they had directly experienced. The same was true of the social workers, managers, and other professionals in the systems.

A few mechanisms for change

To make our systems better – be it our families, our schools, or our child protection systems – we have to understand, shape, and align lots of peoples' conceptions of what is good. And then we have to learn how to apply these conceptions to our everyday circumstances. So if we were Katie, we have to decide what a good use of our time is: cleaning the house, playing with the kids, going out. Of course, how Nick and the kids and the social workers and her mates react will all factor into Katie's decision. Changing Katie's decisions, and increasing her capacity to act, means changing not only what she thinks but what others around her think.

This is not at all easy to do. Over the past three years, we (the Radical Redesign Team at The Australian Centre for Social Innovation) worked with families, social workers, older people, and care workers to co–design and prototype interventions that re–conceptualised 'good' families, 'good' older age, and 'good' care work. We had mixed success.

In 2010, we partnered with 100 families to co–design, prototype, and scale Family by Family: a network of families helping families to thrive. In 2012, we worked with 150 older people to co–design and prototype Weavers and Care Reflect. Weavers is a new kind of peer support for friends and family in caring situations. Care Reflect is a new source of ideas and know–how for care workers.

Source: TACSI (www.tacsi.org.au).

All three of these solutions draw on some common *mechanisms* for change. A mechanism is a specific interaction (or set of interactions) that shift what's behind our beliefs and behaviours.

Here are three of the mechanisms we often used for shaping peoples' *and* professionals' beliefs and behaviours.

Mechanism 1: Modelling

Seeing is (often) believing. To change your 'stuck' beliefs and behaviours, you have to be exposed to people who have different beliefs and behaviours, and see that those beliefs and behaviours enable flourishing. So in Family by Family, families like Katie and Nick are linked–up with families a lot like them. Families who are in a similar socio–economic class, or who have faced similar challenges, but who are living well. The closeness of their experiences is critical. So too is spending time together in each other's daily environments – where the messiness is not shielded from view.

Mechanism 2: Space

It's not often we make our beliefs explicit, and look at things from a few different points of view. Creating the time, space, and structure for people to air their values and beliefs can help to debunk assumptions or logical fallacies. In Weavers, we use a book of prompts to get carers to name some of their hidden beliefs (e.g., nothing can change, I just have to grin and bear it, etc.), first to normalise their way of thinking, and then to understand alternatives.

Mechanism 3: Feedback

Most of the time, it's hard to know whether we are doing 'good.' Particularly where 'good' isn't defined. Often, the hardest question for professionals to answer is: are you doing 'good' work? Care workers would say 'yes' if they got to their clients' houses on time, or if one their clients expressed gratitude for their service. They knew very little about their client's day after they showered them or gave them their medications. In Care Reflect, we developed a range of ways for care workers to get more direct, constructive feedback. To learn about their clients' whole weeks, and to track their ups and downs. And ultimately, to generate ideas for conversations and experiences they could have with clients that might enable better living when they weren't around.

Of course, these mechanisms are not a panacea. They didn't prompt change with many senior civil servants, service delivery managers, and with lots of older couples like Gill and Martin. Perhaps they weren't at the right intensity or dosage or directed to the right person or deployed in the right way. Or perhaps they aren't the right mechanisms: not powerful enough to challenge deeply embedded norms. So, what mechanisms would be?

Source: TACSI (www.tacsi.org.au).

Gill and Martin came from a very close-knit Greek culture. They'd just celebrated their 30th wedding anniversary when Martin was diagnosed with early onset dementia. Gill often thought about putting Martin in a home. She was almost at breaking point. She never saw the grandchildren anymore. Martin, in his more lucid moments, cried at the thought of a nursing home and asked Gill to promise that she wouldn't abandon him. Gill thought the situation was insoluble. Her 'good' life was at odds with Martin's 'good' life. And she couldn't be that selfish. We tried to give Gill (and other older people like her) time and structure to reflect; to expose her to different ways of organising caring; to encourage her to do some small experiments, such as writing a letter to her children. But she thought it was hopeless. We also never found a way to engage Martin. Or the children and grandchildren. We weren't able to help the family articulate a shared conception of good, and re-structure how they approached caring. Respite workers, in-home nurses, and cleaners came and want. They helped keep things as they were.

If we really want to shake up how things are, then, we'd start with a different kind of conversation. A conversation about what is good and what is bad for each person that makes up the system. We'd take the opportunity to listen, to understand, to critically examine our lives from *ethical* angles. Not merely *technocratic* ones.

About the author

Sarah Schulman is currently a visiting scholar at Kennisland, where she is writing a book very tentatively called, *The good, the bad, and the feedback*.

From 2010–2012, Sarah co-led The Radical Redesign Team at The Australian Centre for Social Innovation where she helped to develop three new social solutions: Family by Family, Weavers, and Care Reflect. She also co-founded InWithFor.

More of her writing can be found at **www.sarahschulman.com**

Nesta...

Nesta

1 Plough Place
London EC4A 1DE

research@nesta.org.uk
www.twitter.com/nesta_uk
www.facebook.com/nesta.uk

www.nesta.org.uk