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TOWARDS A THEORY OF SYSTEMIC ACTION

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"There is nothing so practical as a good theory."　　　　　　　— Kurt Lewin

"The biggest myth I've encountered in my life is as follows: that the road from practical know-how to theoretical knowledge is reversible – in other words, that theoretical knowledge can lead to practical applications just as practical applications can lead to theoretical knowledge… it is very hard to realize that knowledge cannot travel equally in both directions. It flows better from practice to theory…"

— Nassim Taleb, author of The Black Swan

As our world increases in complexity, more and more resources are being directed at addressing challenges such as climate change, public healthcare, inequality and poverty. The success of these efforts however is a function of how effective our strategies are as opposed to simply how many resources we can throw at a challenge.

Many of these challenges are growing faster than our attempts to address them. For example, acidification of our oceans, greenhouse gases in our atmosphere, demographic shifts leading to either an unemployed youth-bulge or an ageing population dependent on healthcare systems. We have a choice of intervening at the level of symptoms or at the level of causes. Systemic responses can be understood as attempting to address the causal drivers of a situations and not simply operating at the level of symptoms.

The scale of these challenges when taken together threatens to reverse much of what has been accomplished in the modern era. And in the face of such vast challenges we have to ask ourselves- what does action that can address these causal challenges look like? What, in other words, does systemic action look like?

The aim in outlining a theory of systemic action is that it allows us to make better distinctions between these and actions that are non-systemic. That is, between actions with a lower probability of resulting in changes at a root/causal level and systemic actions; those that contain a much higher probability of causal change.

The theory outlined here is grounded in the disciplined experimentation of running multiple social labs. Social labs are

interventions in complex challenges that have three characteristics.

Firstly, they are social, in that the people doing the work reflect the social diversity present at the level of a challenge, as opposed to a homogeneous group (e.g. of scientists, academics, civil servants, etc.).

Secondly, the approach taken is experimental in which ideas for solutions are either tested early or prototyped. This prototyping approach represents a sharp departure from traditional planning-based responses to complex challenges.

Finally, social labs attempt to address challenges at a systemic level, taking the stance of not simply seeking to alleviate symptoms but of addressing root causes.

The approach towards constructing a theory of systemic action has been to start with the particulars of historical social labs. Each element of the theory is derived from hard-won experience and reflection on that experience. From these I have taken an inductive approach and articulated twelve axioms (or rules of thumb) about systemic action. This approach gives rise to four requirements for constructing effective systemic action.

THE TWELVE AXIOMS

- **Axiom 1**. Systemic action has multiple owners
- **Axiom 2**. Systemic action takes place at multiple levels

The first characteristic is the existence of ⊙ multiple owners. A space characterised by a single owner is more likely to be dominated by a habitual Business-As-Usual (BAU) response. The presence of multiple owners usually means that any space that is convened or created must be negotiated. The nature of the negotiation, of course depends on the strengths of the various parties involved and their skill in negotiating. Even if each actor involved in the negotiation is habituated to a particular BAU space, the resultant negotiation is more likely to result in the creation of a hybrid space. Multiple owners coming from different sectors as opposed to a single sector helps create a negotiated space.

• AXIOM 1 / MULTIPLE OWNERS

One of the difficulties with complex social challenges is that no one

owns them. This typically means that there is clearly no single entity with overall responsibility for addressing the challenge. Additionally, the most challenging of complex social problems involve resource pools that belong to the commons. Challenges involving the commons have been named as 'collective action problems' and involve what have been called common resource pool (CRP) problems. Noble Prize winning economist Elinor Ostrom [1] dedicated the bulk of her career to the study of strategic responses to the CRP challenges. The nature of complex social problems is often characterised as a 'tragedy of the commons' with either vertical or horizontally-orientated planning strategies being applied to the commons.

[1] Ostrom, E. (1990). *Governing the Commons*. Cambridge: Cambridge University Press

Ostrom warns against what she calls 'blueprint thinking' in the face of such challenges, which is what happens 'whenever policymakers, donors, citizens, or scholars propose uniform solutions to a wide variety of problems that are clustered under a single name based on one or more successful exemplars'. Drawing on thousands of case-studies from around the world as evidence, Ostrom argues that 'polycentric' governance systems, comprising of actors from multiple levels, self-organising in multiple governance structures are able to cope more effectively with tragedies of the commons.

This gives rise to the second characteristic of systemic responses. To be systematic means operating on ⊙ multiple levels. A non-systemic response, in contrast, will focus on one particular level, for example, the local level, the management level or the policy level. The evidence from social labs correlates to Ostrom's reasons for including multiple levels. Operating at multiple levels ensures the inclusion of different types of knowledge, including local knowledge. The separation of planning from implementation results in an exclusion of the tacit dimension, or what James C. Scott [2] calls the 'informal' or the 'vernacular', a detailed and accurate understanding of the system under consideration that does not suffer from temporal lag because the actors we are talking about live within these systems. The other reason to include multiple levels is the ability of one level to resist the plans of another level. All too often top-down plans fail because of resistance at either mid or grassroots-levels. Similarly, plans formulated at the grassroots-level without inclusion of other levels tend to become lobbying and advocacy strategies, with one group lobbying another group at another level for change. Ostrom points out that the inclusion of local knowledge also means 'appropriators can devise rules that increase the probability that others

• AXIOM 2 / MULTIPLE LEVELS

[2] Scott, J. (1998). *Seeing like a state*. London: Yale University Press

are trustworthy and will use reciprocity'.

- **Axiom 3**. The terrain of systemic action is always contested
- **Axiom 4**. Systemic actions generate and welcome friction

The anthropologist Anna Lowenhaupt Tsing [3], in her study of Indonesian deforestation, makes the case that 'a wheel turns because of its encounter with the surface of a road; spinning in the air it goes nowhere. Rubbing two sticks together produces heat and light; one stick alone is just a stick. As a metaphorical image, friction reminds us that heterogeneous and unequal encounters can lead to new arrangements of culture and power'.

[3] Tsing, A. (2005). *Friction*. Princeton: Princeton University Press.

This leads to the third and fourth characteristics of systemic response, which recognize that we are operating on ⊙ contested terrain and the presence of ④ friction. The inclusion of multiple levels, if done with integrity, means giving space to competing and contested claims. If a claim is barred from a space, then it will find expression somewhere else thereby setting the scene for a damaging confrontation. All too often BAU responses relegate contested voices to the outside as their contestation means they will not voluntarily participate in the plan. (Note that in many cases voices contesting a space refuse to enter it, lest they be co-opted.)

• AXIOM 3 / CONTESTED TERRAIN

• AXIOM 4 / FRICTION

Myrna Lewis' work on Deep Democracy postulates a 'terrorist line' which names the stages of disagreement that lead to all-out warfare. The 'terrorist line' begins in the unspeakable. When power ensures that the consequences of speaking out are high, dissent begins in what James C Scott calls 'the hidden transcript' [3] – in jokes and innuendo, in comments that can be taken both ways, and then escalate as the conflict continues until it 'storms the public stage' in the form of demonstrations or strikes, requiring security responses, which then give way to civil war, insurgency and battle responses. Myrna argues that 'simply saying what needs to be said' can halt the terrorist line. The practice therefore of operating on contested terrain is to allow dissenting voices in. This dissent serves in multiple ways. The most fundamental is that what is being contested, via dissent, is the shape of our society. The social lab aspires to be a space where this negotiation can take place productively.

There are other benefits of diversity. Operating in contested terrain is an antidote to groupthink. Groupthink can be understood as a situation

in which a group of people who all think similarly come together, in our case for the purposes of addressing complex social challenges, but cannot come up with more than BAU responses. The presence of actors from multiple levels ensures that the probability of this is lower but consequently the propensity for conflict is higher than in an equivalent homogenous group.

An ineffective strategy can therefore be thought of as one that is frictionless, one within which wheels are spinning and energy is being burned but there is no forward movement. Friction is a pre-requisite for movement. Unfortunately, most people are not well trained in coping with friction because at an interpersonal level it is uncomfortable. Why it is uncomfortable? Because BAU spaces characterised by command and control have evolved a professionalised culture where dissent is unwelcome. Dissenting voices, those speaking unpalatable truths that caused discomfort were generally viewed to be in bad taste. The unspoken threat being that people whose contributions were seen as unconstructive would not be invited back.

Another reason is that neither *episteme* nor *techne* [4] are concerned with practical skills such as how to have a productive argument in a group. Conflict is largely viewed as a problem. Looking at famous arguments in the natural sciences and philosophy, in art, or in any creative endeavour, we can see that diverse positions and arguments unleash tremendous energies – and risk causing much personal damage. On the social labs we have run, and more generally in our own practice, we have drawn on Deep Democracy and in later years on Adaptive Leadership [5] to develop practical skills around conflict. Deep Democracy is particularly well-suited because its approach toward conflict is not to avoid it or minimise it but is precisely concerned with how conflict can be embraced as a form of friction to move a group forward.

Adaptive Leadership equally encourages practitioners to actively 'raise the temperature' when a group is not moving. Political philosophers like Chantal Mouffe [6] argue that this lack of antagonism on a political level is catastrophic for democracy as it marginalises and radicalises anyone who thinks differently, leading to phenomena such as the rise of the Far Right.

- **Axiom 5.** Causal power structures and relationships within systemic actions are negotiable

[4] Flyvbjerg, B. and Sampson, S. (2001). *Making social science matter.* Cambridge: Cambridge University Press

[5] Heifetz, R., Grashow, A. and Linsky, M. (2009). *The practice of adaptive leadership.* Boston: Harvard Business Press

[6] Mouffe, C. (2005). *On the political.* London: Routledge

•   **Axiom 6**. Roles within systemic actions are fluid

The requirement of friction leads us to perhaps the most challenging of characteristics; ⑤ negotiable causal power structures and relations, and ⑥ fluid roles. In order to understand the underlying power dynamics during one social lab, we drew on a broader reading of the social situation through the work of James C. Scott. Scott argues that situations of power imbalance and domination result in a marked separation between the public and the hidden. [7] Those who harbour even a subconscious fear of the repercussions of speaking aloud tend to speak more openly in safe, private conversations rather than in large group conversations.

In Deep Democracy, [8] the theoretical backdrop to conflict comes from something Myrna calls 'role theory'. A role, defined within Deep Democracy, is a behaviour (or what Bordieau might call a disposition). It could be anger, it could be nervousness or any affect, or it could be what we traditionally think of as a role, such as 'leader'. An individual takes on a 'role', and typically individuals are attracted to certain roles – such as being the optimist in a group for example, or being silent in a group. Deep Democracy makes the case that a system is healthy when roles are fluid and unhealthy when roles are 'stuck', that is, we are unable to let go of our roles and play other roles. A conflict can be productively addressed, insofar as participants in the conflict learn to recognise the roles they are playing in the conflict, let go of them, and step into other roles.

Social situations can be seen then as a performance of the public transcript. According to Scott, [9] 'The theatrical imperatives that normally prevail in situations of domination produce a public transcript in close conformity with how the dominant group wish to have things appear. The dominant never control the stage absolutely, but their wishes normally prevail. In the short run, it is in the interest of the subordinate to produce more or less a credible performance, speaking the lines and making the gestures he knows are expected of him. The result is that the public transcript is – barring a crisis – systematically skewed in the direction of the libretto, the discourse, represented by the dominant. In ideological terms the public transcript will typically, by its accomodationist tone, provide convincing evidence for the hegemony of dominant values, for the hegemony of the dominant discourse. It is precisely this public domain where the effects of power relations are

[7] Scott, J. (1990). *Domination and the Arts of Resistance*. New Haven: Yale University Press

[8] *Lewis Deep Democracy / CoResolve – The Lewis Method (2017) Deep-democracy.net.* Available at: https://deep-democracy.net/

[9] Scott, J. (1990). *Domination and the Arts of Resistance*. New Haven: Yale University Press

most manifest, and say analysis based exclusively on the public transcript is likely to conclude that the subordinate groups endorse the terms of their subordination and are willing, even enthusiastic partners in that subordination'.

When this public transcript becomes unbearable, when we have a revolution, the hidden transcript storms the public stage and roles change. A revolution can be thought of as an uncontrolled explosion of the desire to change an unacceptable public narrative in which roles are ossified. People refuse to play the roles that they are publicly expected to play and instead start speaking a different set of lines on pain of persecution or death. In Deep Democracy, the basic idea is to attempt these changes voluntarily, to learn how to perform a number of roles, to create a fluidity of roles that do not ossify into an unjust public transcript.

- •   **Axiom 7**. Participation in systemic actions is self-determined
- •   **Axiom 8**. Systemic actions display clear intentionality

This leads us to the seventh and eighth characteristics, that of ⑦ self-determination and ⑧ clear intentionality. The nature of participation in a systemic response must be self-determined. The trouble of course with this requirement is that the nature of institutions and representation make it extremely hard to discern a self-determined response. All too often actors are political appointees, professionally representing interests not present in a room. The requirement of self-determination is a measure of will. The difficult and unpredictable work of changing vast systems can only really be undertaken by someone who is willing to submit themselves to the challenge of travelling over unknown terrain and the existential threats that may bring. The analogy is with going on a journey or expedition in a group. If the journey proves to be long and arduous, then in all likelihood there will be instances of great pain and instances where team-members rely on each other to survive. Such moments are not when you want to discover that an actor does not really want to be there at all.

• AXIOM 7 / SELF-DETERMINATION

• AXIOM 8 / CLEAR INTENTIONALITY

- •   **Axiom 9**. Systemic actions display emergent rationality
- •   **Axiom 10**. Systemic actions are iterative

The ninth and tenth characteristics of a systemic response based on a critique of strategic planning-based approaches and 'blueprint

thinking' involve ⊚ emergent rationality and ⑩ iteration. Planning-based approaches separate out the process of strategy formulation ('planning') from its execution ('implementation'). In doing so, what is actually formulated is a strategic response to a situation as it was, not as it is. In other words, the fast-changing nature of complex social challenges necessarily means that plans necessarily suffer from temporal lag. The defence of plans then becomes what can be thought of as a 'rationalisation' – an argument constructed in defence of a pre-determined course of action. Flyvbjerg [10] posits the axiom 'rationalisation presented as rationality is a principle strategy in the exercise of power'. In contrast, an emergent rationality is a response to the situation in the moment. The other key reason for emergent rationality and iteration is the dialectical nature of a group engaging in practical wisdom. Actors come together, often for the first time, in the space of the lab which serves as a quasi-public sphere and is governed by discourse ethics. The convenors and process-designers of the Lab strive in practical ways to create what Jurgan Habermas has called an 'ideal speech situation'. The practical ways such situations are created range from the seating arrangements in a room (shifting from a traditional lecture style to a circle), sharing of key information to all participants before a physical gathering through to a variety of approaches taken 'in the room' such as to facilitators negotiating ground rules with a group, or bringing a group's awareness to its own processes and behaviours and inviting them to change their behaviours in the moment.

The rules of an ideal speech situation are as follows:

1. every subject with the competence to speak and act is allowed to take part in a discourse;
2a. everyone is allowed to question any assertion whatsoever;
2b. everyone is allowed to introduce any assertion whatsoever into the discourse;
2c. everyone is allowed to express his/her attitudes, desires and needs;
3. no speaker may be prevented, by internal or external coercion, from exercising his rights as laid down in (1) and (2).

These idealised rules are, of course, impossible to meet completely in practice. Repeated attempts to reach such an ideal speech situation generate, in a dialectical sense and through 'friction', deliberation between actors about what is to be done and not done. If the group

is concerned with effective strategy then at some point the group moves from deliberation and dialogue into action, for example through working with their hands to build physical models and then to build prototypes of interventions in the world itself. Up until the point prior to models being built, participants are undertaking a very special form of action, that is, talking. Whilst talking in itself is a form of action, action itself, as Aristotle observes, '… is choice, and that of choice is desire and reasoning with a view to an end'. Arriving at a place where actors can exercise choice requires uncovering desire (or what could be thought of as desired end-states or goals in the modern sense) and reasoning as to the best course of action to be undertaken in exercising a choice which results in new arrangements of capital, be that informational, human, social or physical, in order to achieve that end.

In order to maintain the quality of emergent rationality, a systemic approach must be iterative in nature. While a plan follows a linear, unbroken path from formulation to implementation the idea of an iterative approach is to move forward in a cyclical way. Agile approaches to project management are all designed on the premise of the cycle; a twenty-four-hour cycle, a weekly cycle, a monthly cycle and so on. Each cycle allows for the surfacing of emergent rationality and the factoring in of new data that characterise complex adaptive challenges. This also allows for the dialectical nature of reasoning to adapt to changes in situation and context and iteratively strive for an ideal speech situation.

- **Axiom 11**. Learning is an output of systemic action
- **Axiom 12**. System action generates non-local impacts

Finally, systemic responses give rise to ⑪ learning and ⑫ non-local impacts. Due to the fact that complex social problems are adaptive in nature, this means that understanding both the problem-definitions and the solution-definitions requires learning. This learning, when captured and disseminated, results in non-local impacts; those outside of the system that participants are engaged in. This learning should not be confused for 'best practice' but understood more generally along the lines of new ideas, new informational capital and new research. The applicability of this new information capital is not the concern of phronimos, because they are busy acting and do not know the particularities of other contexts. Instead, they put their learning out there and others decide on the applicability of these outputs.

• AXIOM 11 / LEARNING

• AXIOM 12 / NON-LOCAL IMPACTS

The learning aspect presents a particular challenge when it comes to social challenges. If we think about scientific labs, there are well-established protocols for the dissemination of learning in this domain including journals, publishing, peer review and so on. This ecology of disciplined learning is largely absent in the social domain.

The absence of this learning ecology means that many strategies, actions and interventions have limited, 'localised' impact because learnings are not captured and disseminated in any disciplined way. Non-local impacts – where an experiment taking place in one domain has impacts in another domain or geography, are another characteristic of systemic action.

THREE REQUIREMENTS

These twelve axioms provide us with a description of systemic change, which can be used both as design criteria as well as to assess the probability of an action being systemic. Additionally, there are three requirements, (1) constitutional, (2) processual, and (3) organisational for systemic action.

These three requirements include:
- REQUIREMENT 1 / the constitution of a diverse team of actors with a shared intention;
- REQUIREMENT 2 / a set of iterative processes suited to situations of high complexity;
- REQUIREMENT 3 / the creation of an ontologically novel organisational space designed to support phronesis.

A PHENOMENOLOGY OF SYSTEMIC CHANGE

Our experiences have shown there is an immense amount of confusion about how we go about changing systems. This is, from one perspective, entirely unsurprising. We have never really had to consciously try and change such vast, complex and inter-connected systems such as the financial system, the global food system or the assemblage of individual behaviours that result in climate change. Each of these systems is characterised in ways that we have little experience with historically.

The challenge then becomes to ask: what can usefully be called 'systemic change'? Without knowing in more detail, any attempt at changing a system, no matter what it is, can be labelled 'systemic change' as long as it is labelled as such. In other words, it is hardly sufficient for us to accept at face value that what is purely an intention to effect systemic change actually constitutes systemic change.

On the other end of the spectrum, 'systemic change' can occur without any individual agent expressing the need for systems change. Systems evolve from natural pressures and as a sum of many millions of individual actions, none of which in themselves could be called systemic actions.

Not knowing what types of actions are systemic in character is extremely problematic. We essentially have no idea if the system is going to change or not. We just accept, rather subjectively, that someone has an intention to change the system and is doing something about it. We then apply subjective, opaque criteria to this intention. We look at their track record; we ask ourselves if the actor is credible. The crux of the problem remains. We have no idea if an action is simply alleviating symptoms of deeper systemic problems. We may even be unwittingly strengthening the dynamics causing the problems in the first place.

To take a simple example, if we focus our efforts on alleviating hunger and in the process we promote farming practices which destroy topsoil and poison the water table, then ultimately we are ensuring that fewer people in future will be fed. We are, in effect, degrading our capacity to feed people in the longer term in order to feed people in the short term. Such actions are clearly not systemic.

What we need, no matter how crude or rough, is a phenomenology of systemic change. We need to be able to make an assessment of the claim that an initiative is somehow addressing the underlying problem, the underlying causality of a system. How probable is that an action is addressing root causes? What is the probability that an action is going to impact the very engine that is generating hunger or malnutrition or climate change? We need to be able to examine the phenomenon, the intervention that claims to shift systems, and somehow to assess the claim.
Our experience with social labs allow us to name a number of

characteristics we have observed which increase the probability that a change is systemic in nature. In broad terms, a systemic change is understood to be one that addresses a situation at the causal level, as opposed to a change that simply addresses the symptoms of a situation. Over the course of a decade of experimentation, these twelve axioms and three requirements have arisen again and again. These twelve axioms de-scribe a phenomenology of systemic change. Taken together they constitute an initial theory of systemic action.

These characteristics do not guarantee systemic change but they do serve to increase the probability that an intervention is systemic in nature. Where they are wholly absent, it is likely and probable that an intervention is not systemic in nature.