Four Imperatives for System Transformation

We are in the early months of 2022. Do you ever wonder whether this year or the collection of years surrounding 2022 might actually pinpoint the time when humanity finally faced up to the catastrophic, global crises confronting us all. Pandemic? No, much bigger. Facing up to climate change, social inequality, the shortcomings of today's economic systems, planetary boundaries. In short, facing up to how to survive. After all, the lived experience of how these crises are likely to evolve becomes more obvious with each passing month.

Figure 1: Navigating complexity can be difficult, time-consuming and overwhelming.

Climate migration is now real. Border controls increase as a result. How long before these issues result in problems that cannot be addressed by existing social mechanisms. Devastating floods, fires, earthquakes are now all too common. Financial systems simply seem incapable of weaning themselves off their addiction to fossil fuels. If there was a time to face up it is surely now. If you have managed to pretend this is not happening until now what will be your excuse beyond 2022.

Nexial and its founders have been working for over twenty years now on the world's wicked problems. Specifically, the kind of problems where multiple stakeholders bring multiple perspectives to highly complex, interdependent issues - issues that require systemic solutions, if we are to see real change. We are in the business of trying to make sense of this complexity by mapping systems and helping stakeholders to identify where structural issues are adversely impacting, or having an unintended effect in, any given system, and to assist with creating pathways of change. The Nexial team have now compiled many years of experience in helping people understand how to address systems change for lasting and sustainable outcomes.
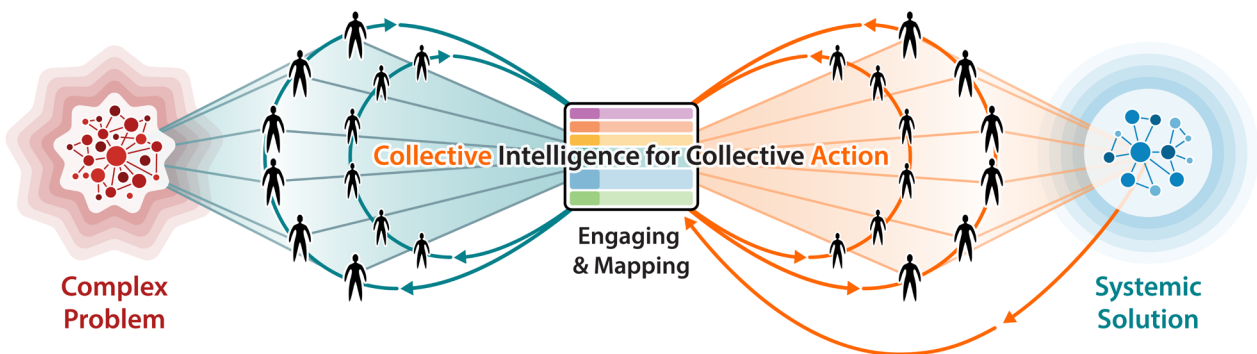

Figure 2: Nexial's purpose is to create change in complex systems. We engage and equip people with the tools and skills to drive sustainable transformation.

Whilst this paper is not intended to dwell on the detailed theory of systems thinking it is worth noting that much of the literature dealing with big issues such as climate change, social inequity, world economic systems, food security, etc. is now predicated on a belief either explicitly or implicitly that "we need system change". Whether these statements are backed up with genuine understanding of what system change might mean is open to debate but again it is worthy of note that pretty much universally, academia, science, government and even some parts of the business environment have begun to be clear (at least in rhetoric), that one cannot solve or move big systems problems and issues on a linear or single-issue basis and certainly not alone. The need to see wider, across interdependent elements of a broader perspective, to see deeper into root causes and collaboration amongst the diverse stakeholders are fundamental prerequisites for any sustained effort for change in a system. Encouragingly, these requirements have gained currency in thinking and been accelerated by the searchlight directed at existing systems mechanisms by the COVID pandemic.

However, despite these increasing calls for system change and the need for collaborative action across a wider and deeper perspective, progress on the big issues facing us as a civilisation and the planet on which we depend, is painfully slow. Recognition of the problems we face is one thing. Dealing with them seems to remain another thing altogether. System lock-in and the Success to the Successful dynamic (see Figure 3), the meagre alignment across the system about metrics and standards, the embryonic nature of alternative operating models that move from growth and profitability to overall system sustainability… all of these and more remain major obstacles to meaningful and sustainable change.
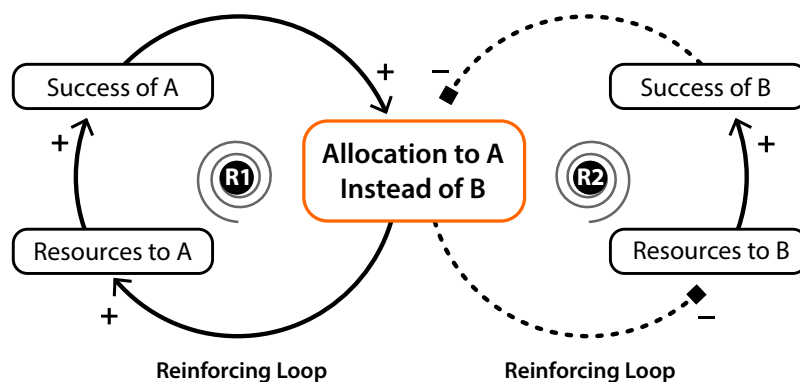

Figure 3: The Success to the Successful dynamic.

In the twenty or so years of working with these wicked problems and in the associated interviews, workshops and conferences that we've attended or facilitated, our Nexial team has seen constantly reinforcing themes coming through work on systems change, almost regardless of the issue being discussed. We have consulted in such diverse matters as dealing with obesity, land management, water conservation, gender finance, economic systems, impact investment, fashion sustainability and social equity, amongst others. In all these projects, we have identified four imperatives for system change and they recur with persistent similarity.

They are…

DEPTH   COHERENCE   FORCE   URGENCY

Let's take a closer look…

DEPTH

Depth describes how far down the iceberg (see Figure 4) or how far along the Donella Meadows ladder an intervention sits, that in turn determines the likelihood of real systemic change. In our world of short termism and instant gratification, the attraction of dealing only with the symptoms of a problem is to be expected. However, it should be becoming more obvious that the sort of systems changes required to meet global crises cannot be enacted at the symptom or even organisational level. Most often, these types of interventions meet the necessities of only one part of a system, leaving other components possibly in worse shape, they suffer from a tendency to backfire, and they are invariably unsustainable over time.
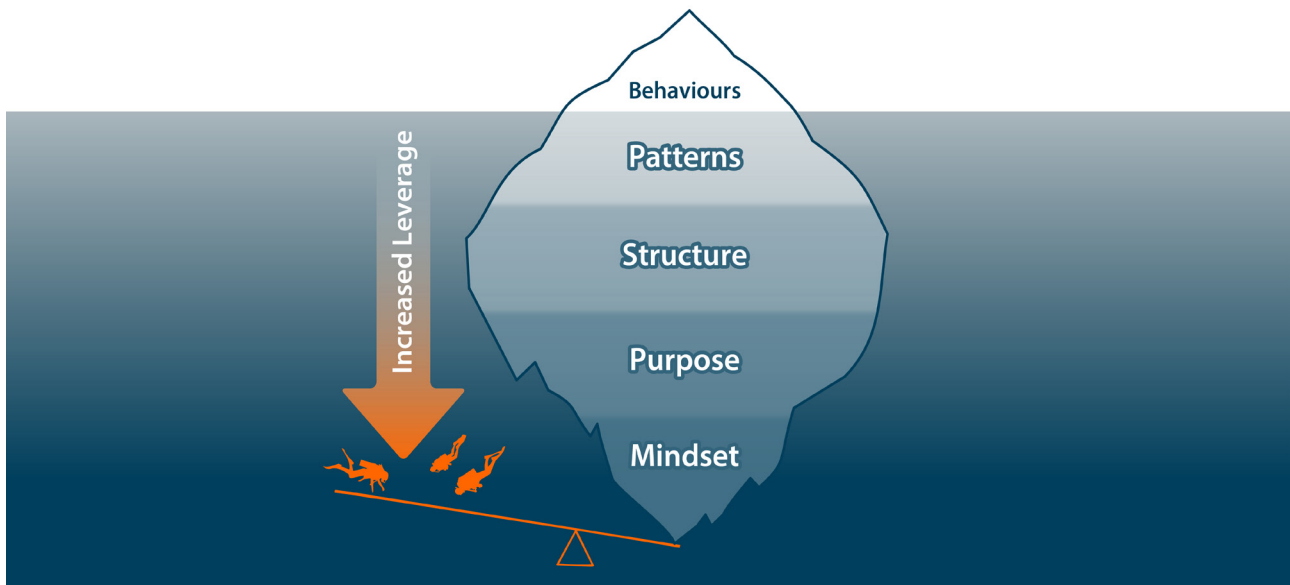

Figure 4: Interventions have more power when addressing dynamics at the deepest levels.

Have another look at COVID. Now, one could argue that the obvious response to a pandemic that is killing people all over the world and hospitalising millions more, should be symptomatic. Lockdowns, distancing, masks and finally vaccination, all intervene at the symptom level and have had varying degrees of success depending on a range of influencing factors. However, two years on, the planet continues to grapple with the virus. The vaccine production and rollout was interesting in that the failure of any government, business, science or community to take the high ground and establish a compelling and aligned version of the "truth", has led to wide tranches of global population arguing against vaccination and an unbelievable amount of news traffic about efficacy of various manufacturers in a typically competitive, growth motivated, money focused race. The pandemic exposed a range of systemic issues both related to the pandemic itself and in the myriad governance, economic, social, health, aged care, food systems interdependencies. One might have hoped that these issues would, by now, have been studied, investigated and ameliorated. For sure, the incentives to do so are high and the manifestations of problems were immediate and relatively obvious. Yet "back to normal" slowly and insidiously, replaces "Build Back Better" as the catch cry. As the pandemic threat recedes, "normal" feels so comfortable and the pain and death and anguish also recede except for those still grieving over lost loved ones. After millions of deaths, tens of millions of people struck ill and hospitalised, the health system in many countries at or near collapse, the aged dying helpless and alone in care homes, how much better are we now dealing with the current crisis and, worse, how much better prepared are we for the next one? After all, COVID viruses are known, scientific phenomena. What happens when the ice caps finally melt, and release bacteria not hitherto, known to homo sapiens?

This writer cannot profess to be any sort of expert about COVID. The point is that sustainable and systemic solutions to the big complex problems of our age do not exist on the surface. Any concerted effort at system change will require us to go deep into that system to discover its roots, its antecedents, its intended purpose. It will require us to address those root causes in values, culture, economic motivations, power structures, accountability mechanisms, etc., at their deepest level and to forge partnerships with others at this deep structural level to find and execute actions that will lead to sustainable change. This is going to be hard work. Some have been there, deep in the system. It's dark and scary. The ways are not obvious. This is not a place for the faint hearted.

And now for the bad news… finding the leverage points deep in the system and forming coalitions of change to unwind existing structural issues and reformulating the bases of system operation is only the beginning. Depth, of itself, is not a panacea for system change.

COHERENCE

Coherence focuses on how the initiatives identified from the exercise in Depth, are combined in a "change chain" (see Figure 5), a coordinated set of actions that cover the spectrum of activities in a change effort. Any such effort will require a complex combination of activities in data gathering, analysis, white paper writing, lobbying, strategic litigation, technology, alongside the communications, legal, media, etc. required. Then, likewise, that strategic interventions across a given change strategy exhibit a thread that pulls all the activity together.
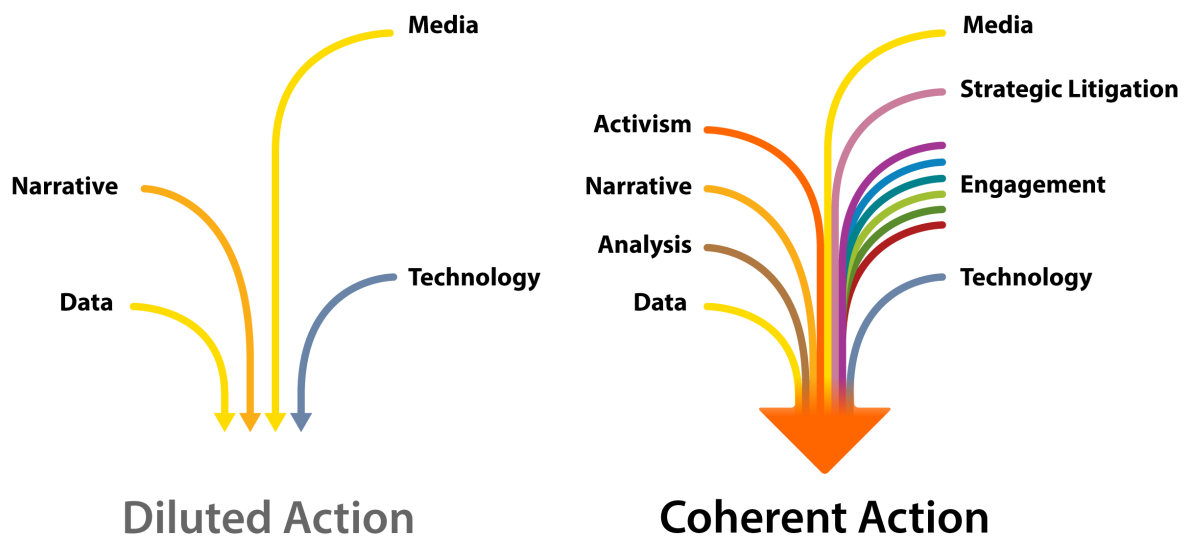

Figure 5: Coherent action creates a "change chain" - a coordinated set of actions that cover the spectrum of activities in a change effort.

It is noteworthy from hundreds of interviews that change agents will often describe themselves as being in a part of a change activity (we are about data… about analysis, we write papers, we lobby, we convene, etc.) in a specific change area (government policy, standards and regulation, business strategy, finance sector, etc.). Further, in the world of academia, foundations, philanthropy and government granting where much of the thinking and funding for system change is currently occurring, there appears to be limited collaboration between such bodies to coalesce on who is doing what and avoid the duplication of activity or, sometimes, disagreement on a single point of strategy leading to wasted or inefficient resource deployment and mixed messages appearing in the wider network.

The first dictate of coherence is to find the resources who are working in a change effort and to identify and fill the gaps in the change chain, work together with other organisations already in each space and identify how each part of an effort combines. If gaps are to be filled by other organisations, then alignment on problem statement, leverage points, and thus, proposed intervention will be crucial. This is not a place for ego, competitiveness, primacy or grandstanding. It is a place for collaboration, willingness, alignment and recognition.

Having looked at coherence across activities in a change chain, it is then important to look at coherence across interventions. It is logical that a series of interventions should act in concert rather than in conflict with each other. For example, consider the popular intervention strategy of "convening". Convening is, indeed, a powerful way of getting diverse groups to a shared understanding of both problems and possible solutions. However, we often see the idea of convening being applied separately for different groups, with different agendas, on different issues. Drawing a thread through a strategy of convening might allow for better identification of overlap or conflict and efficiency by tackling interdependent issues. There are only so many times that business leaders will agree to be convened when all of investment strategy, fiduciary duty, ESG reporting, labour rights, civil society empowerment, capital flows, policy and new economic models might all be of interest to them, and each has touchpoints with the others. Further the treatment of each convening as a stand-alone intervention might give the impression of stand-alone solutions (the antithesis of systems thinking and the source of possible conflicts).

Another… consider still the business actor. Much is made in interventions and assumptions relating to business and its ability to effect change. There is no doubt that coalitions of progressive businesses or business leaders will help to move change in a system, but this activity should not be considered as good "of itself". It may well be that business will come to change via its own motivations, but it is not guaranteed that such movement would advance the cause of, say, environmental considerations or social equity. On the contrary, new models might embrace technology advances in AI and robotics into new business models before either government regulation or societal interest is even ignited. An intervention around business behaviour must be explicitly intertwined with complementary activity in government regulation, rules of accountability, social inclusion, workers, producers, etc.

FORCE

Consider here the size of a rock needed to be placed on a lever to move the lever, the weight of a punch required to knock someone off their feet. In the context of systems change, these rocks and punches might be thought of as money, people, knowledge, movement, etc. The point is that the identification of a leverage point is only one part of the equation. The force applied at the leverage point is the final key to movement. Lots of small rocks at different points on a lever might add up to sufficient force to move the lever but most often fail the test of coherence and, possibly, depth. The more structural a leverage point, the more likely it is to create sustainable change, but it still needs to be applied with the force necessary to move the lever.
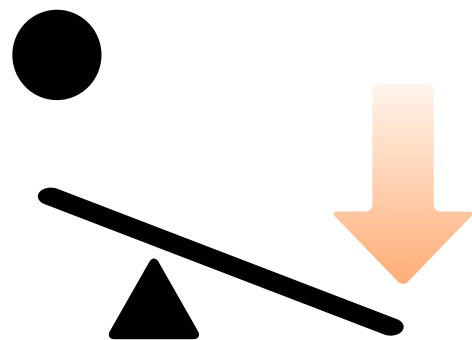

Figure 6: Sufficient force is required to create sustainable change.

Multiple combinations of levers and points of depth will affect the force required. But this is not a matter of simple physics. In nearly all instances of systems change there is a David v Goliath dynamic occurring. Massive forces, organisations, processes and structures exist to either resist or actively fight against change and the resources at their disposal are enormous, amplifying when challenged. The size of the entrenched lock-in and the Success to the Successful dynamic, alongside the continued rise and degenerative effect of the unintended consequences of these dynamics implies the need for great force to effect change. David had a lucky shot, it was easy to destroy the Death Star, Smaug never had a chance against Bard's arrow, Achilles succumbs to a shot in the heel. I am sure we can all think of those magical silver bullet moments when relatively little work had to be done to achieve a goal if you knew exactly the opponent's weakness. However, we regret to report that such instances are rare when working on deep systems change and change agents most often complain of insufficient money, people, data and skill to forcefully impact the Goliath who watches.

David needs to be equipped for the fight. Organisations need to consider ways to make investments in systems change that multiply exponentially in benefit terms and this may require a more focused spend on prioritised interventions that act on deeper leverage points and to be patient about when and where to add more activity. And David cannot do it on his own. Force implies activism, social movement, government intervention with teeth, regulatory bodies with teeth and a rethinking of the jurisdiction of global organisations (whose inception was founded in the early days after WW2) to encompass political, economic, regulatory and legislative enforcement on global issues. Do we really need to rely on independently wealthy individuals or other sovereign governments to buy parts of the Amazon Forest to protect it from so called local sovereignty?
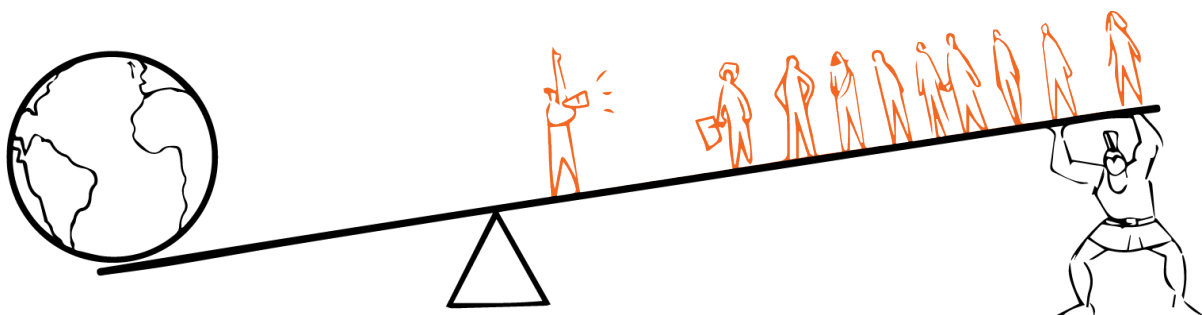

Figure 7: We need collective action for effective system change.

URGENCY

Thresholds are being passed, forests are dying, carbon sinks being eliminated, GHG emissions continue to rise, fossil fuels remain the cheap and preferred energy source, ice caps are melting, climate is changing inexorably, inequality still rises despite the many gains for the poorest, systems need reform. Everything screams urgency. So why is the world not awash with panic to deal with crisis? We hear people crying that we cannot leave these problems for our children or grandchildren, but we appear to be steadfastly on track to do exactly that. Alongside the emergence of the belief in the need for system change is also the recognition that the issues are urgent.

Recent precursors to COP26 in Glasgow, after the IPCC report on climate, seemed like they would provide the necessary flash paper required to make urgency meaningful and it may still hurry things along. However, the problem with urgency is that it is not dealt with consistently.

Think about Paris Agreement and the promises made by signatories about commitments for 2030. Let's leave aside whether those commitments would save us and the planet if met. Just consider that 2030 is now less than 10 years away and many of the countries signing up to commitment under the Paris accord are going backwards in GHG emissions. COP26, just completed, has failed, six years on, to reach credible likelihood of reaching even those goals that keep us firmly on the path to disaster. So many believe that we can keep doing what we are doing… a solution will present itself. Well, even if one does present the targets for 2030 will already be made meaningless by our collective waste of the time available to do something urgently.

Time and again in projects we see longer term goals being described that do not have the critical pathway and necessary milestones in place to have any hope of achieving the desired goal in the time frame suggested. Real urgency requires that plans start now and are assessed against whether they will reach the target. This approach to urgency might have some chance of avoiding the clear risk of failure but would also help to identify whether current trajectories indicate that the plan might be wrong or the implementation flawed, or both.

In short, urgency can be just a catch cry and often is used exactly that way, somehow excusing ourselves from taking the necessary action behind talk that recognises the imperative. Instead, urgency should be demonstrated in thought, words, action, KPIs, end targets and enlistment of resources. The bifurcation point is here already (see Figure 8). We must choose to act now or following generations will face the consequences. If there is indeed an opportunity to use the collective intelligence of the system to create meaningful change… it is now. Urgency can not just be an adjective to describe the system. It must be a real call to immediate action.
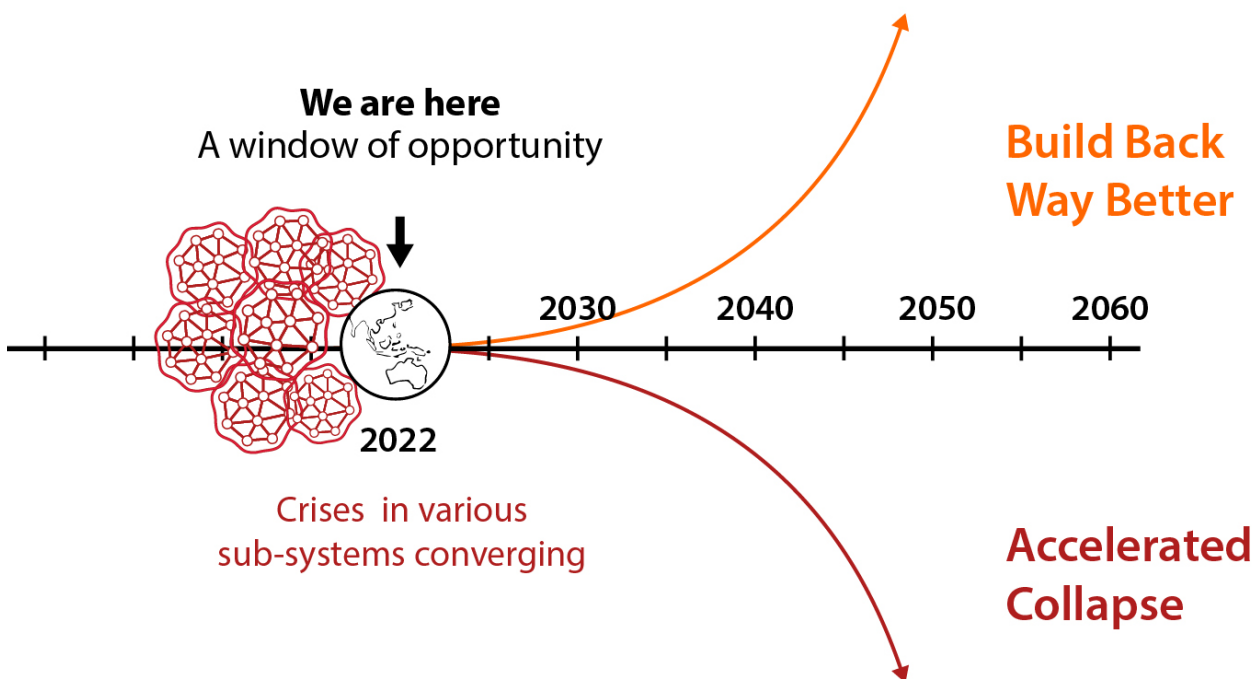

Figure 8: We are at a bifurcation point. Inflection is not guaranteed. Urgent action is required.

As an aside, consider language. Many strategic documents use words like converge, investigate, monitor, support, review, contribute. These are in most part passive verbs, and they sow a latent seed of complacency. For impact on urgency consider words like drive, attack, force, demand, push. Urgency is not a passive requirement. It is an active component and should "live" in any effort for change.

Finally, on urgency. Consider the first question posed. Why is humanity not in a state of frenzied panic about the visible collapse of multiple systems at the same time? Still in 2022, and with all the warning signs provided by the pandemic and cataclysmic climate indicators, most beneficiaries of existing systems whether in business, finance, government or even community remain somewhere on a spectrum from actively opposed to and working against any change to the status quo to any one of the multiple definitions of "greenwashing" that proliferate. Have they not yet read the memo… everything is urgent… we need system change? Clearly not. Vested interest in existing system dynamics is not currently moved by calls for urgency and change. That is why depth, coherence and force need to be applied at the same time.
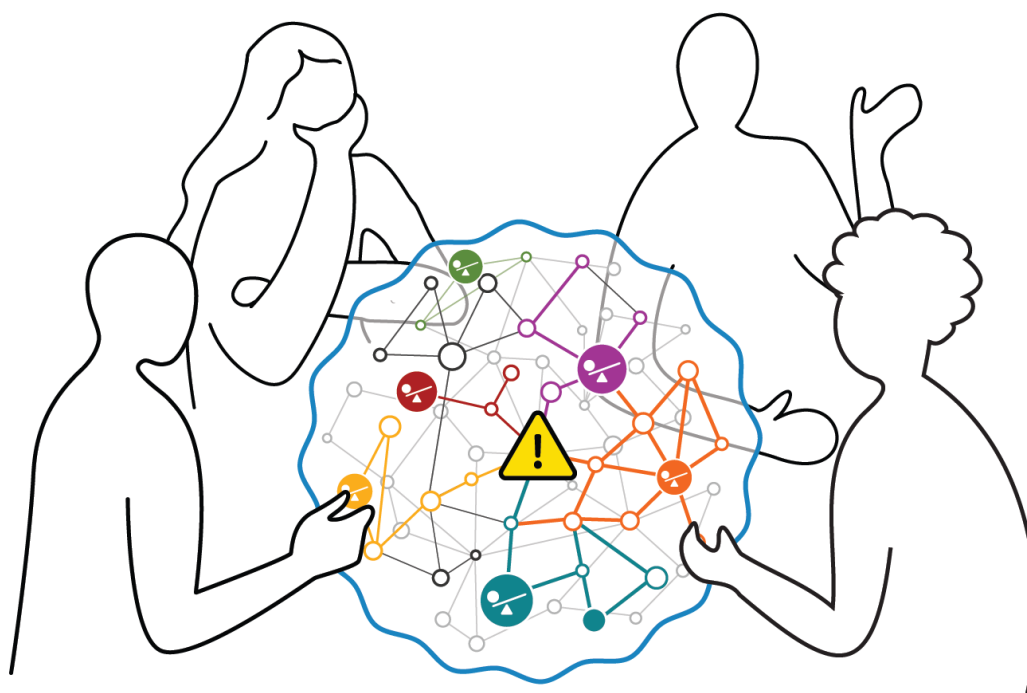

Figure 9: We need collective intelligence to work through the mechanisms of the system.

It ought to be clear that any concerted action for change should encompass all four elements and a specific action will require an equally specific combination of these imperatives. A sense of urgency will go nowhere if not supported by deep understanding of issues and a coherent plan. Exerting force will not be successful unless all elements of the change chain, have been considered. Depth without force will probably raise awareness of the root causes but will likely remain largely educational. We must remember always that system change is not an exercise in pushing open doors. Gateways to change, existing metrics and operating systems, power structures supporting the status quo, all act as massive resistance to changes, no matter how well meant. The recent release of a new IPCC report on climate change, the "deafening warning" that it is already too late to avoid a 1.5 degree rise in global temperature is perhaps a case in point. The report is long on explanation of the issue and its dire consequences. It screams urgency. The science is deep and compelling. It should almost naturally result in unprecedented action. It might yet. However, it still lacks the coherent responses necessary and does not yet envisage the force required to implement change. Awareness is critically important but Goliath, well informed and conscious of the consequences of their actions, will take time to come to the necessary changes in the system on their own, if at all. Force through social movement, government

intervention, legislative change, regulatory changes to economic imperative must be applied (preferably all at the same time). It was to be hoped that in the face of improved science, more depth, a greater coherence and certainly a whole new rhetoric on urgency, COP26 and world leaders would step up more boldly to the challenge. Sadly, it was left to the PM of Barbados to make a heartfelt plea for life over death and she was praised for her oratory rather than highlighting the current inertia and dismal prospects for the future that made her speech necessary. Clearly, the correct cocktail of depth, coherence, force and urgency has not yet been found. Even if global warming and social inequality were found not actually to be the fault of humanity, would we not be moved, in any case, to try and save the world on which we live? Would we not recognise that continuing to do things the way we have been doing them is leading us to problems of staggering enormity?

Systems change cannot be half done… it's all in. All four imperatives must be brought to bear.

To close there is probably another important ingredient... WILL!

Without will there is little point in considering the four imperatives we have discussed. Let us assume that anyone brave enough to confront the need for systems change head on, does not lack will. In that willingness then, let us, together, identify, real depth v dealing with symptoms, coherence v fragmentation, real urgency v platitudes and abdications and force, force, force to deal with the lock-in of the status quo that surrounds us everywhere and allow us to take the correct path at this point of bifurcation.
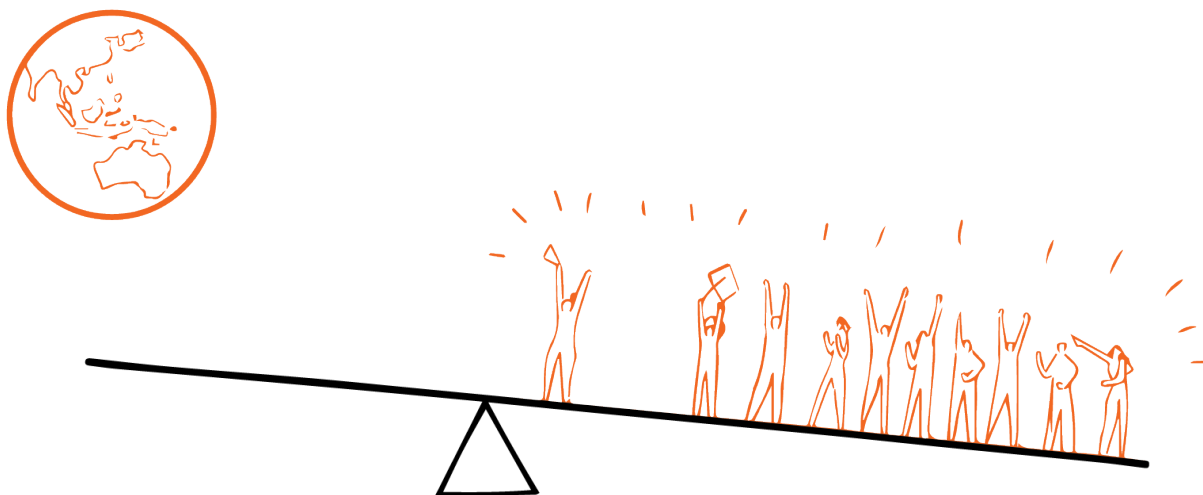

Figure 10: Systems change cannot be half done… it's all in.