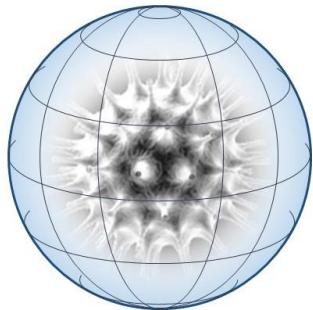




Pandemic-3.0 – from crisis to transformation



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At terrifying speed the Covid-19 global pandemic has brought a multitude of deaths, the lock-down of half the world's population, and the decimation of its economy. The material facts of this disaster bring hard lessons in disaster management and public health, which will keep experts and analysts busy for many years.

But here I would like to open up a forward look on the massive transformations now in motion, negative and positive – and explore questions on what kind of pathways could help steer from one kind of outcome to another.

This draws on the insights and methods of *Deeper-City*- and in particular –

- Exploring the potential of the *collective intelligence*, in mutual learning and thinking, co-creation and co-production;
- *Pathway mapping* for practical steps towards societal transformation;
- Visual thinking which helps to explore ideas which go *deeper and wider* than the normal limits (see www.urban3.net/mind-games for work in progress).

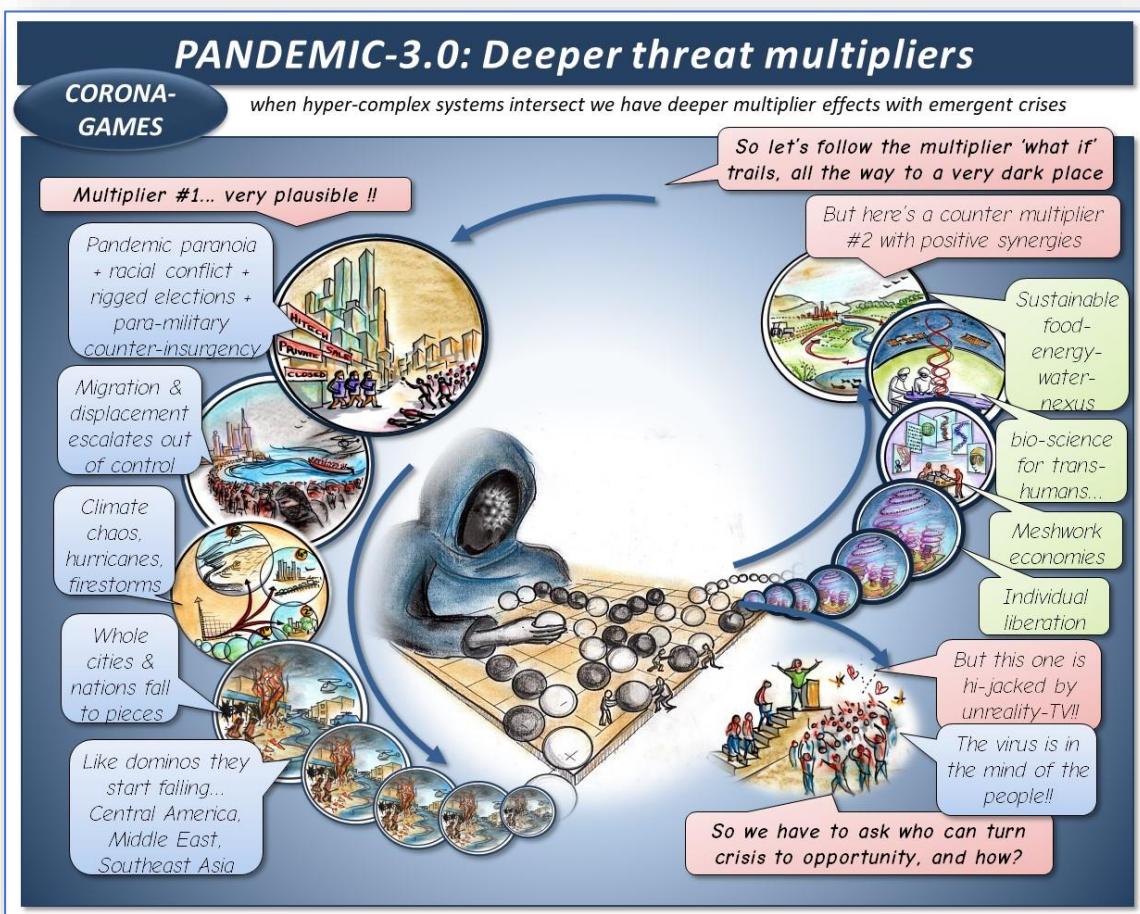
The result is an exploration on the possibility of a *Pandemic-3.0*, where we turn crisis towards transformation. This follows the principles of *collective intelligence* into different *Modes* of system organization, from the technical to *co-evolutionary*:

- *Mode-I* systems are framed as technical problems to be fixed by functional solutions: so the *Pandemic-1.0* is a basically a technical problem of epidemiology modelling and health care;
- *Mode-II* systems are framed with *evolutionary* 'winner takes all' competition: for the *Pandemic-2.0*, we look to markets and smart innovations, and expect waste and inequality.
- *Mode-III* systems are framed as *co-evolutionary* 'winners are all', with deeper layers of logic and value (e.g. social, technical, economic, ecological, political, cultural). A *Pandemic 3.0* system mobilizes deeper forms of *collective intelligence* to bring all these together.

In practice all three *Modes* work in parallel. While *Mode-I* does the basics, *Mode-II* works with incentives and social psychology, and the *Mode-III* brings all layers together for a *Pandemic-3.0* societal transformation.

Deeper threat multipliers

In such global crisis, challenges such as climate change or rampant inequality are not going to disappear overnight. In reality they seem more likely to magnify up, as new forms of power and wealth and hierarchy emerge. If this pandemic can be contained or resolved, then we can get back to work on these challenges and others: but if it continues (as seems likely) to be messy and divisive, or indeed as the next pandemic arrives, then we face new challenges alongside the old. We can use the notion of *Deeper Threat Multipliers* (as in the USA security / defence industry), visualized as a game-play, to illustrate the challenge and opportunity (see full graphic on www.urban3.net/mind-games):



It seems for situations of high urgency with uncertainty and controversy, we need more than standard forecasting or systems tools. Here it seems a **FORESIGHT-III** approach from the Synergistic Toolkit is very useful.¹ This *Foresight Mode-III* or 3.0, builds on standard practice, to explore the scope of *collective anticipatory intelligence*, the learning and creative potential of communities and societies. With simple visual thinking tools we can begin to explore and map pathways, directions for forward change, not only in crisis management, but of transformation in all systems 'social-technical-economic-ecological-political'.

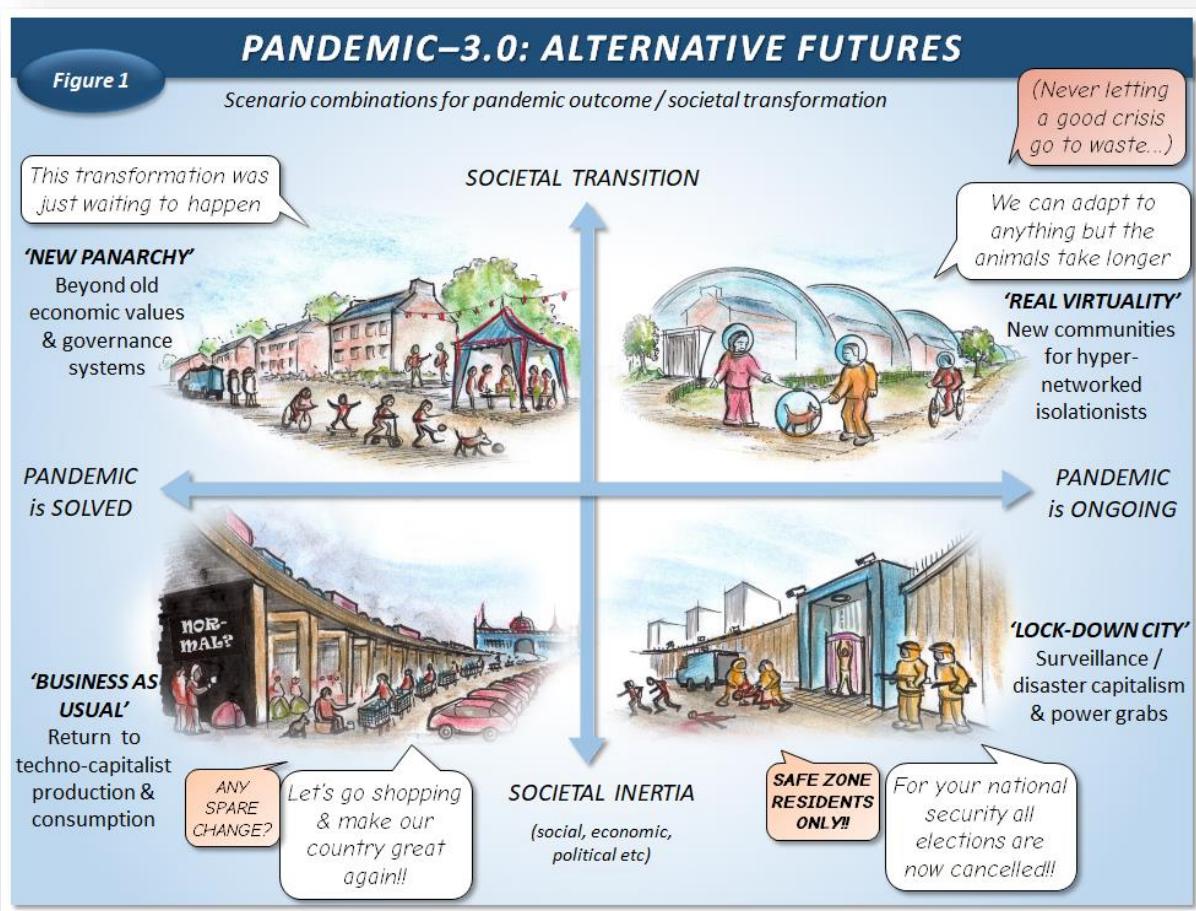
The sketches below shows three angles on this global crisis of critical danger and opportunity. They start with the saying '*never let a good crisis go to waste*' – and then ask, if new systems of *Mode-III* social-political-economic cooperation can

emerge from this crisis, how to let these grow and flourish? And how to counter or bypass the forces of 'winner takes all' populism, of exclusion and intolerance, hijack of truth and expropriation of livelihoods?

This is a brief sketch for a planet-sized challenge, which draws on current thinking on '*collective intelligence and the pathways from smart to wise*'.² This is hopefully enough to start a line of thinking which connects the current crisis with potential pathways – and if this crisis can be resolved, then to better prepare for the next....

Scenarios – unknowns or unknowables?

At this moment it's an unknown whether the Covid-19 virus epidemiology can be contained, or continues to multiply or re-emerge: but it's a *deeper* kind of unknown as to how social and economic and political systems interact with this epidemiology. It's also a *deeper* unknown (perhaps 'unknowable'), whether or not social-economic-political systems could return to the old normal, or transform towards some kind of 'new normal'. So we need to map out the combinations, as possible 'what-if' scenarios, each with a mix of danger and opportunity. Here in *Figure 1* is a basic map of alternative futures: -



- **'new panarchy'**: we ask, what-if progress is resumed and the pandemic solved, while staying vigilant for the next one? Meanwhile there is *deeper*

and *wider* learning from the 2020 episode, and a serious agenda to look beyond old-style hierarchies and extractive systems.

- **'business as usual'**: as the general direction of most official prospectives (OECD, MGI etc) this simply looks to the other side of the pandemic, and aims to reconstruct the familiar game of techno-capitalist-materialist production and consumption.
- **'real virtuality'**: here everything has changed, with technology as the enabler for hyper-networked- isolationists, a new normal of video-holograms, decontamination suits and sterile pods. While humans are endlessly adaptable, this future brings huge challenges for individuals and communities, and maybe opportunities.
- **'lock-down'**: a familiar techno-dystopia of 'Blade-runner' surveillance / disaster capitalism. Here the ongoing pandemic and its effects of disruption and trauma, is an open door for power-mongers and warlords who merge with the tech corporates. The graphic shows how 'safe zones' can easily turn into exclusion and oppression.

It gets interesting, as it emerges these scenarios are not only neutral visions of a possible distant future – they are more like active and contested grabbing of the present and near future (about a week at the time of writing). It also gets more interesting to explore the scenarios not as distinct and separate, more like different angles on a chaotic bundle of *deeper* realities.

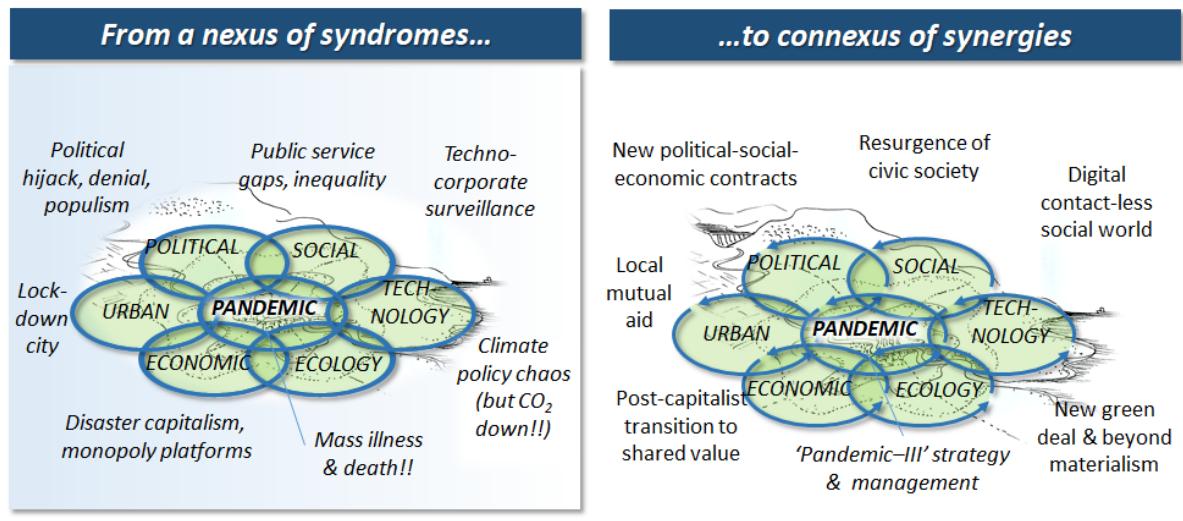
Societal transformations – by accident or design?

To unpack such a bundle, we can follow the domains of social, technology, economic, ecological, political ('STEEP' for short), around the material facts of the pandemic, in the centre of a nexus of inter-connections. As sketched on the left of *Figure 2*, each of these involves not only material facts such as economic growth, but the underlying layers of discourse and myth between all involved.³ With more time we would look for the many cross-connections between them, many of which are again 'unknowable'. And for each part of the *nexus* there's also a potential counter-case, shown in the *connexus* on the right, where we can map out the synergies and cultivate the seeds of transformation.

PANDEMIC-3.0: TRANSFORMATION AGENDAS

Figure 2

Scoping of the nexus of challenges, compared to the 'connexus' of transformations



In the **social domain**, the pandemic response locks down all forms of direct social interaction, along with one third of economic activity in service consumption: it also exposes the gaps and shortfalls in public services, and the underlying inequality and exclusion. However there's a resurgence of social and cultural values, organizations and systems, from singing on balconies to a mass volunteering in the health service.

For **technology**, the door is open ever wider for techno-corporate surveillance and financial-ization: while local businesses go down, and while community apps and 3D printing emerge, the global 'GAFA' platforms are expanding without limit.

Meanwhile in a possible future world of distancing and 'contactless community', the same digital platforms and networks will be indispensable.

Production in the global **economic system** has been through possibly its greatest ever shock and reduction of GDP, with untold suffering from the newly sick, unemployed, uninsured and homeless. However there are new patterns of part-time and home-working, along with a new questioning of materialist debt-fuelled production and consumption.

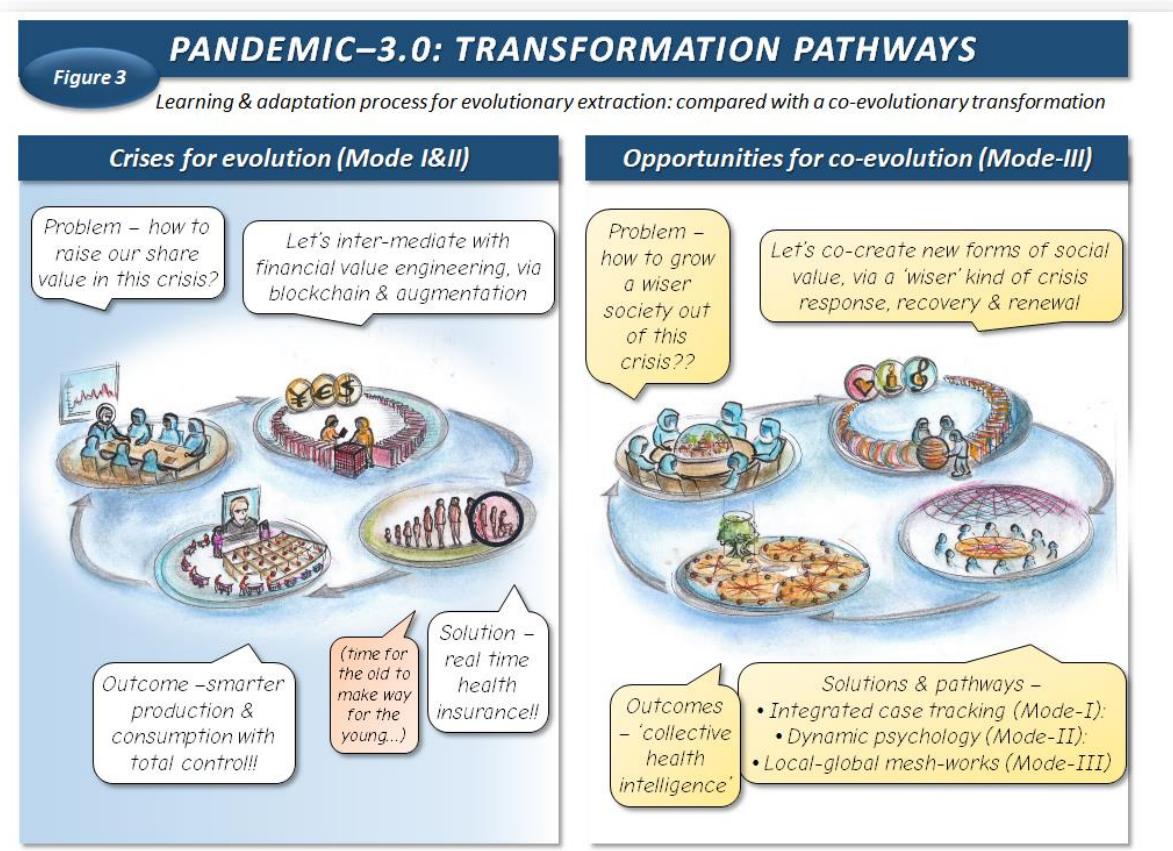
For the **ecological and climate** agenda, the pandemic slowdown has brought clear skies for the first time in generations, even while climate change, species extinction and toxic overload continues. While international cooperation will be more difficult, it seems possible that in a post-pandemic era, new forms of the green deal will emerge along with non-material lifestyles.

Political implications spread in all directions – the most obvious being the extraordinary acts of the state underwriting businesses and workers (in many countries) – and the most extreme where large (tax-avoiding) corporates carve up the multi-billion bailouts. Again in a post-pandemic era we look for pathways for transformation, with new political-social-economic games in play, and a potential emerging *collective political intelligence*.

Scientific knowledge and expert practice in a post-truth society may yet emerge as the source of trust and confidence. But the massive uncertainties in the basic science are now entangled with existential controversies: it seems *post-normal science* is one way to approach this, if it can link 'science' with other forms of knowledge.⁴

Collaboratorium – from evolution to coevolution

Here the players are not letting their crisis go to waste... rather they are pushing their interests by whatever means, in *Figure 3* below. Another time we would map the whole disaster cycle, from anticipation to preparation, initial response and recovery, and then to resilience and/or transformation. Here we sketch a typical process of learning, thinking, co-creation and co-production – asking the question, how would kinds of different actors adapt and evolve with these challenges and opportunities? For this we explore different levels of system organization and learning, from linear (*Mode-I*), to evolutionary (*Mode-II*), to co-evolutionary (*Mode-III*).



With a **linear Mode-I** response, seen on the left of *Figure 3*, we plan ahead with best available evidence, with enforcement on transmission paths, with full backups of medical equipment, and with fully functional social communications (seen in one or two countries so far). This is the framing of epidemiological analysis, such as the modelling study which informed the UK response.⁵

When the shortcomings of the linear emerge, then **Mode-II evolutionary** thinking then comes into play, with advanced risk management, socio-psycho 'nudges' or incentives, and smart urban micro-engineering. But if the overall problem 'frame' is

how to maintain business or power structures, the crisis is also an opportunity to accelerate ‘control’. The sketch on the left shows the direction of travel towards a dystopian logic of digital / social engineering solutions.

In contrast the ***co-evolutionary Mode-III*** shows deeper aspirations – where the problem ‘frame’ is about how to use such a crisis for transformation of social-economic-political systems. Here we are talking not only ‘solutions’ but extended pathways, which combine all three Modes. We look for advanced systems of integrated tracking of cases and transmissions (*Mode-I*): and for the best dynamic social psychology, with incentives and communications for hearts and minds (*Mode-II*). And most of all we look for a co-evolutionary mesh-work structure (*Mode-III*), a *collective social intelligence* in the learning and thinking capacity of communities / organizations / networks. All this points towards a transformation in systems of mutual aid and collective empowerment. It also highlights some fundamental political choices, between a ‘bounce back’ to structures of inequality and expropriation, or a bounce-forward to a ‘*Resilience Mode-III*’ kind of transformation.

So, whether the future is one of hazmat suits and video-holograms, or new-found communities partying in the streets, these will emerge in the months and years to come. The main question here is how the world can best respond, and make the choice between power-grabbing alienation, and a *Pandemic-3.0* kind of transformation. In this it will need many of the ‘*pathways from smart to wise*’ which are beginning to emerge. It will need collective financial intelligence, integrated positive health systems, inclusive social media mesh-works, synergistic business-enterprise models, deliberative-associative multi-level governance, and so on.

And more than any of these as such, this crisis / opportunity calls for a collective open mind and creative spirit, to realize the potential emerging from the ashes.

¹ Ravetz, J, & Miles, I.D, (2016) Foresight in cities: on the possibility of a “strategic urban intelligence”, *Foresight*, Vol.18(5), pp469-490, <http://dx.doi.org/10.1108/FS-06-2015-0037>

² Ravetz, J, (2020), *Deeper City: collective intelligence and the synergistic pathways from smart to wise*. NY, Routledge. <https://www.routledge.com/Deeper-City-Collective-Intelligence-and-the-Pathways-from-Smart-to-Wise/Ravetz/p/book/9780415628976>

³ Inayatullah, S, and Black, P, (2020). *Neither A Black Swan Nor A Zombie Apocalypse: The Futures Of A World With The Covid-19 Coronavirus*. Journal of Futures Studies. <https://jfsdigital.org/2020/03/18/neither-a-black-swan-nor-a-zombie-apocalypse-the-futures-of-a-world-with-the-covid-19-coronavirus/>

⁴ Waltner-Toews, D, Annibale Biggeri, Bruna De Marchi, Silvio Funtowicz, Mario Giampietro, Martin O’Connor, Jerome R. Ravetz, Andrea Saltelli, and Jeroen P. van der Sluijs. (2020) *PostNormal Pandemics: Why Covid-19 Requires A New Approach To Science*. Discover Society: <https://discoversociety.org/2020/03/27/post-normal-pandemics-why-covid-19-requires-a-new-approach-to-science/>

⁵ Imperial College COVID-19 Response Team, (2020). *Impact of non-pharmaceutical interventions (NPIs) to reduce COVID-19 mortality and healthcare demand*. Imperial College. <https://www.imperial.ac.uk/media/imperial-college/medicine/sph/ide/gida-fellowships/Imperial-College-COVID19-NPI-modelling-16-03-2020.pdf>