



UCL

THE IMAGINARY CRISIS (AND HOW WE MIGHT QUICKEN SOCIAL AND PUBLIC IMAGINATION)

*Geoff Mulgan, UCL STEaPP and
Demos Helsinki*

UCL SCIENCE, TECHNOLOGY,
ENGINEERING & PUBLIC POLICY
WORKING PAPER SERIES

April 2020

ABOUT STEAPP WORKING PAPER SERIES

The STEaPP Working Paper series aims to publish emerging analysis and thought with the aim of improving links between research and policy;

We will make available a diversity of outputs in different formats including pre-published versions of journal articles, drafts of longer academic or policy outputs, multi-media content and policy reports;

We accept submissions from STEaPP and UCL staff, students, honorary fellows and relevant from other academic and policy colleagues.

Department of Science, Technology,
Engineering and Public Policy (UCL STEaPP)
University College London
Shropshire House (4th Floor)
11-20 Capper Street
London WC1E 6JA

www.ucl.ac.uk/STEaPP

THE IMAGINARY CRISIS (AND HOW WE MIGHT QUICKEN SOCIAL AND PUBLIC IMAGINATION)

Geoff Mulgan, April 2020,
UCL STEaPP and Demos Helsinki

Contents

Summary	3
Background – the deficit of social imagination.....	4
PRESENT.....	6
The shrinking future.....	6
Why is social imagination in retreat?	7
Technology and the imagination.....	9
Why does it matter?	9
HISTORY.....	10
Understanding the history of social imagination.....	10
METHODS.....	13
Tools and techniques	13
How to imagine and who?	16
MEANINGS.....	19
Making sense of social imagination – what are the patterns or hypotheses to test?	19
The pull of the future and the push of the prefigurative present	21
The politics of imagination	22
Dialectical imagination – going with <i>and</i> against the grain	22
NEOTOPIA.....	24
Imagination now – ideas we can use	24
Mapping the matrix of social possibility.....	24
Generative ideas	25
COVID-19 and accelerating imagination.....	26
THEORY.....	27
Unanswered theoretical questions.....	27
An ‘idealist’ theory of social change.....	27
The role of consciousness and its evolution	28
The role of limits and isomorphism	30
Good and bad imagination	30
Socio-technical imaginaries.....	31
Imagination and action: communities as heroes in their own history.....	32
Acknowledgements – and the Author.....	34

Summary

We are in the midst of a very urgent, real, global and deadly crisis. But as that crisis hopefully comes slowly under control, some at least will need to attend to a very different kind of crisis, and one which is scarcely visible.

This ‘**imaginary crisis**’ is the result of **a deficit of social imagination**. We find it easy to imagine apocalypse and disaster; or to imagine new generations of technology. But we find it much harder than in the past to imagine a better society a generation or more into the future.

There are many **possible reasons for this decline**; loss of confidence in progress and grand narratives; declining imaginative capacity; slowing down of innovation. Key institutions – universities, political parties and thinktanks – have for different reasons vacated this space. The decline of imagination matters because **societies need a wide range of ideas and options to help them adjust**, particularly to big challenges like climate change and ageing.

Social imagination has **a long and fascinating history**, from utopias to political programmes, model communities to generative ideas and fictions which fuelled our ability to understand and then shape human progress.

There are many **methods available which *can* be used to stimulate imagination** – sparking creativity or cultivating estrangement from dominant beliefs. The most interesting social imagination is often dialectical in that it simultaneously goes with, and against, the grain of historical trends.

Looking to the future we can map out some of the **possibility spaces for the next few decades**: possible futures for care and health, democracy and property, and we can also map cross-cutting conceptual ideas that may have a wide influence (from circularity to platforms, empowered nature to algorithmic decision-making). The most valuable ideas are ones that are sufficiently defined that they can be interrogated and improved – and drawn on for action.

We also need **better theories of social imagination**, and, for example, its relationship to evolving forms of consciousness (since progress has to involve some qualitative evolution of how we think and feel), or how ideas get ‘**thickened out**’ and mobilise implementers.

To **fuel social imagination** we need to engage the many institutions that could be supporting it, but don’t now: research funders; foundations; universities and governments.

And we need to remember the promise of reviving shared social imagination: that **communities can once again become heroes in their own history** rather than only observers.

Background – the deficit of social imagination

‘We need to rewild our imagination. We must learn how to dream again, and we have to learn that together.’ Extinction Rebellion

We are in the midst of a very urgent, real, global and deadly crisis. But as that crisis hopefully comes slowly under control, some at least will need to attend to a very different kind of crisis, and one which is scarcely visible.

This ‘imaginary crisis’ is the result of a deficit of social imagination. Many people find it hard to picture a plausible and desirable society a generation or two in the future.

Some fields are good at thinking far into the future – business invests heavily in visions of future smart homes, smart cities or health. Fiction is adept at exploring the future boundaries of humans and technology. Mainstream culture finds it easy to imagine apocalypses – what would happen if temperatures rose 4 or 5 degrees or AI enslaved humans or even worse pandemics became the norm?

But we struggle to imagine positive alternatives: what our care or education systems, welfare, workplaces, democracy or neighbourhoods might be like in 30-40 years. And we appear to be worse at doing this than in the past.

This lack of desirable but plausible futures may be contributing to the malaise that can be found across much of the world. It’s certainly linked to a sense of lost agency and a deepening fear of the future.ⁱ

The institutions which in the past supported practical social imagination have largely dropped out of this role. In universities social science frowns on futurism. You’re much more likely to succeed in your career if you focus on the past and present than the future. Political parties have generally been hollowed out and lack the central teams which at one point tried to articulate imaginative futures to shape their programmes. Think-tanks have been pulled back to the present, feeding into comment and news cycles.

So although there are fascinating pockets of creative social imagination – for example around the idea of the commons, zero carbon living, radical new forms of democracy, new monies, food systems or ways of organising time - they tend to be weakly organised, lacking the critical mass or connections to grow and influence the mainstream. The World Social Forum used the powerful slogan: ‘another world is possible’. But the fate of the WSF – now only a pale shadow of what it was 15 years ago - is symptomatic of what’s gone wrong.

As a result, the space these ideas might fill is instead filled either with reaction and the search for a better past, with narrowly technological visions of the future or with fearful defence of the present.

So what can be done to address this gap? This is a huge task, involving many people and methods. In this paper I set out a few thoughts on the what, the how and the who.

First (I), I look at the current position: is there a decline of imagination, and if so why, and does it matter?

Second (II), I look at the history of social imagination, and the past role of utopias, new concepts, pre-figurative communities, simulations and fictions.

Third (III), I look at the many methods that can be used to amplify or quicken imagination and make the case for a dialectical approach that simultaneously goes with, and against, the grain of historical trends.

Fourth (IV), I look at some of the patterns and hypotheses to test and examine.

Fifth (V), I show how we might think about the specifics of imagination in the next few decades, with ideas that may be relevant to the future of fields like care and health, democracy and property, including cross-cutting conceptual ideas that may have a wide influence (I also touch on the potential effects of Coronavirus in accelerating new ideas about social organisation).

Finally (VI), I suggest some theoretical perspectives, in particular suggesting an 'idealist' view of how imagination influences social change; an account of its interaction with evolving forms of consciousness, and ideas on how communities can once again become heroes in their own history.

All of these are offered as suggestions, to elicit critique and argument, in the face of the 'imaginary crisis'. I hope they will encourage a more systematic approach for exploring possible social futures, feeding into the *Untitled* programmeⁱⁱ, and in time into the work of political parties, civil society, media organisations and others, and expanding their sense of what might be achievable.

I hope that it will help us to grow ideas that can be seen, grasped, played with, adapted, drawing on, and harnessing the huge latent fertility of popular imagination.

PRESENT

The shrinking future

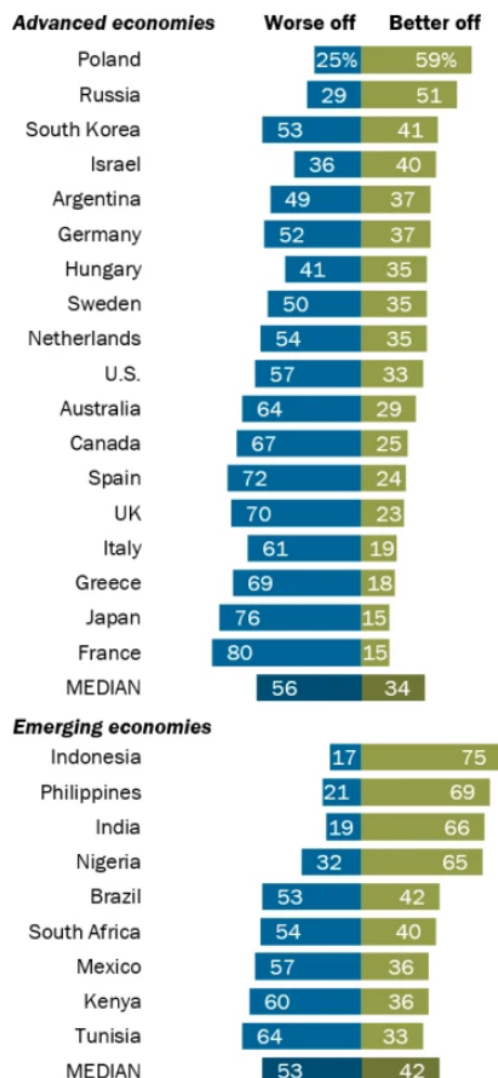
Let me start by explaining *why* there may be a problem. This should be a golden age for social imagination. By most objective measures and in most places this is an era of extraordinary social progress – for health, education, prosperity and freedom, even if large groups are missing out. The internet means that the frontiers of knowledge are available for everyone, and millions more have chances to invent and create. Meanwhile many issues that used to be hidden have come into the mainstream – from transgender rights to domestic abuse.

If imagination means ‘the faculty of forming images or concepts of objects or situations not existent or not directly experienced’ⁱⁱⁱ we might expect it to have been greatly expanded by mass education and by upward trends in IQ (the ‘Flynn effect’) that are particularly marked for abstract and conceptual reasoning.

But if this is happening, it is not feeding into confidence about the future. There appears to be a widening gulf between what people think is possible or probable and what they think is preferable.^{iv} Many polls and surveys show that young people no longer expect to be better off than their parents and that a pervasive pessimism has taken hold, whether about democracy or the environment. A recent Nesta survey in the UK found that a majority (62 per cent) feel they have little to no opportunity to influence the long-term future of the country. Amongst younger activists the pessimism seems to be even more complete.

Pessimism about children's future is widespread in most economies

When children today in our country grow up they will be ___ financially than their parents



Source: Spring 2018 Global Attitudes Survey. Q3.

PEW RESEARCH CENTER

Pew surveys have regularly shown just how much optimism has declined, though the patterns globally are very varied. Some parts of the world have largely escaped these trends – including much of Asia and Africa. In Africa young people tend to be optimistic about the future, and specifically about the potential of technology. But although there is a generalised optimism in many countries in those continents, there are fewer signs of social imagination than in the past – for example compared to the heyday of Maoism, or for that matter Ujamaa in 1960s Africa and Ubuntu ideas a few decades later^v.

This closing down of social imagination is happening across much of the political spectrum. For the left the overwhelming threat of climate change has amplified the sense that global capitalism is out of control; the best we can hope for is to avert disaster.^{vi} Meanwhile there are now no exemplars - like China or Cuba in the past - that might once have been thought to prefigure a socialist future.

On the right of politics, which at times embraced an optimistic account of ever greater freedom and wealth, fuelled by globalisation, there has been a reversion to a more traditional pessimism about progress, seeing only declining morals and social decay along with new enemies like the spread of rights culture. Both left and right come together in seeing technology in

much darker terms than in the recent past – as more likely to be the source of surveillance manipulation, fake news and malign behaviours than liberation.

The result is that few in politics can articulate in any detail a world in the not-too-distant future where society would be better. There are policies; soundbites; vague aspirations: but nothing remotely at the level of ambition of the past.

Why is social imagination in retreat?

Is this a recent phenomenon, perhaps a result of austerity and the aftermath of the financial crisis? Or is it the result of longer-term trends?

There are many reasons for thinking that the causes may run deep: the rise of highly individualistic cultures; the ever-stronger pull of rationality and science which may push out the space for imagination and intuition (and generate new knowledge which challenges naïve optimism: as the physicist Steven Weinberg put it, ‘the more the universe seems comprehensible, the more it also seems pointless’).^{vii}

Alternatively, the turn away from social imagination can be seen as a natural response to the sheer complexity of the world which leaves us each with less sense of agency; or as the inevitable result of the failures of the great utopian dreams of Marxism-Leninism which fatally undermined confidence in grand social projects; or as the consequence of shifts in power which have tended to weaken the vehicles of collective action.

Other explanations focus on the barriers to imagination. As Roberto Mangabeira Unger has argued, imagination faces powerful invisible enemies – the many variants of rationalisation in the social sciences (for example in mainstream economics) which argue that current arrangements are natural, or the proven victors of evolutionary competition. Their implicit, and sometimes explicit, message is that ‘there is no alternative’ (and the best we can hope for are modest incremental adjustments and upgrades to essentially unchanging systems).^{viii}

Then there is the escapism which seeks meaning only through transcendence in the individual’s own life – so imagination is encouraged, but in a detached way.

Other trends may also be inhibitors. Echo chamber effects in social media tend to dampen curiosity and openness. Since social creativity, like other kinds of creativity, depends on new combinations, it is problematic that the rise of assortative mating means that there is less social mixing. The interaction of the relatively rich and poor in previous eras often drove social radicalism. Now the rich and poor seem to be leading ever more separate lives.

The social field may also be suffering from broader trends that could be slowing down the generation of new ideas. Kyung Hee Kim analysed data from the Torrance test for creativity (which has been run since the mid-1960s in the USA) and suggested that, although various measures of originality and creativity had risen in tandem with intelligence in earlier decades, they have either fallen or remained static since 1990 even as intelligence has continued rising (‘The results indicate creative thinking is declining over time among Americans of all ages, especially in kindergarten through third grade. The decline is steady and persistent, from 1990 to present’).^{ix}

Other studies have shown a steady decline in the productivity of research, with ever fewer new ideas for each dollar or Euro invested (as in this paper by Van Reenen and others, which asks if ‘ideas are getting harder to find’). Ben Jones has shown through detailed studies that the age of Nobel Prize winners has risen and the size of teams involved in science has grown and has suggested that the growing stock or ‘burden of knowledge’ makes it necessary to spend much more time getting on top of the state of fields and digesting them before it’s possible to make new breakthroughs, a trend that also encourages specialisation, again reducing the scope for recombination.

Then there are the imbalances in resources. As suggested earlier there is a striking lack of institutions working to push the boundaries of social imagination. Whereas there are very strong and generously funded ones on the boundaries of science, technology and ideas, or

promoting markets, there are remarkably few working on radical social ideas. Vastly more money and brainpower is devoted to innovation in the military and business than in society, and one result is the common pattern of great wealth and technological prowess coinciding with social stagnation.

California is an extreme example, where the super-rich beneficiaries of the digital economy and pioneers on the frontiers of science live near city centres full of the homeless and mentally unwell, the result of many factors, one of which is the almost complete failure to direct brainpower to social solutions.

Technology and the imagination

California also points us to one other reason for the retreat of social imagination: the sheer ubiquity and visibility of technological imagination. Science fiction; expos; TV programmes, Hollywood movies and magazine articles all explore a world of future data, AI, VR, with blurred boundaries between the real and virtual, and an infinity of possible future societies – some benign like Wakanda in Black Panther but most malign and oppressive.

Technological imagination has often bled into fertile thinking about social organisation, and there are no clear boundaries to the social, which is interwoven with the material world^x. One of the properties of digital technologies is that they encourage you to break down familiar processes and see how they could be reconstructed in entirely different ways – for example transforming the classroom with flipped learning, or transforming health with a big much bigger role for self-management and peer support, or imagining democracy reinvented with rich and fast communication.

The recent surge of AI has prompted even more imagination, both dark and light, about a future world immersed in smarter technologies, many of which will be hard to comprehend let alone call to account. And, for all the hype around blockchain, it has at least encouraged some imaginative thinking about different ways of organising societies – with non-hierarchical organisations, new ways of organising property and monies without the state.

Biological imagination has been just as fertile, feeding off present possibilities like CRISPR-9 and forcing us to imagine worlds where evolution can be accelerated, and human nature can be programmed and enhanced.

Yet one downside of this surge of technological imagination is that it has left even less space for imagination that is primarily social in focus. The intense interest around hardware and software has crowded out space to think about how people might fit in.

Why does it matter?

Does it matter if social imagination has been displaced by other types? Is imagination good in itself – or can it divert attention from practical thinking and problem solving?

There are at least three important reasons for thinking that it *does* matter. The first is that any society benefits from having a wide menu of possibilities to consider. A general feature of evolution is that diversity in the genetic pool of a species makes for resilience in the face of environmental change. We now know very well how dangerous it can be for agriculture to

become monoculture – more vulnerable to pests and less adaptable to climate change. In the same way, societies that become too specialised, or too optimised in a particular way, are likely to struggle when conditions change. In this sense imagination is functional and necessary rather than a luxury.

Second, the sheer scale of the challenges likely over the next few decades makes it unlikely that the status quo will be adequate. Instead we are likely to need very radical reform and innovation to cope with climate change (and the required transformation in lifestyles, values and economic organisation); with rapid ageing; with deep patterns of inequality; and with ubiquitous smart technology. Each of these alone would put huge strains on our social institutions. Add them together and it's clear that we need a very major and rapid boost in our capacity to imagine and design better social arrangements.

Third, if you care at all about emancipation it must matter that seriously organised social imagination is being so monopolised by the already rich and powerful (such as think-tanks in California funded by, and reflecting the narrow worldview, of male billionaires), and so little is being done to shape a world in line with the interests and values of the great majority.

HISTORY

Understanding the history of social imagination

'As great scientists have said and as all children know, it is above all by the imagination that we achieve perception, and compassion, and hope.' Ursula LeGuin

If we are to revive and reenergise social imagination, what can we learn from how this was done in the past? The exercise of social imagination isn't new. Humans have always been able to conceive of different ways of doing things, to dream, to create myths and reimagine a social order.

But the idea that people could imagine a future society and then create it, is quite modern. Although there are long traditions of ethical prescription, or the design of cults and communes, or political designs going back to Plato and Kautilya, these are different from the deliberate cultivation of social imagination, which is really a phenomenon of modernity, and connected to the ability to imagine and transform the natural world.^{xi}

Here are a few of the methods that have been used to imagine in more systematic ways and to expand the space of the possible:

Fully formed utopias, described in prose, from Plato's *Republic* to Thomas More in the 16th century (whose Utopia had no money or property, shared work, provided free healthcare, limited the working day and required everyone to be in bed by 8pm). A century later Francis Bacon's *New Atlantis* offered a utopia shaped by science and experiment. Other utopians included Louis Sebastien Mercier in the 18th century, St Simon, Etienne Cabet, William Morris and Samuel Butler in the 19th. Edward Bellamy – an American socialist - for example foresaw credit cards and home deliveries. Oscar Wilde's famous quip suggested that "a map of the world that does not include utopia is not worth even glancing at, for it leaves out the one country at which Humanity is always landing. And when Humanity lands there, it looks out, and, seeing a better country, sets sail."

Generative ideas and philosophical principles – have been another source of imagination. The principles expounded by political thinkers from John Locke to John Rawls, who hoped that a few guiding ideas could generate, if not a utopia, then at least a good society, were of this kind. The idea of universal human rights promoted by Rene Cassin was certainly utopian, but became enshrined in the UN Declaration; so was the Webbs' idea of free healthcare for all, first mooted at the beginning of the twentieth century and then made a reality forty years later. Recent ideas proposing that everyone on the planet should have a fixed and equal allocation of carbon are certainly utopian now, but may become tomorrow's common sense.

Prefigurative places – these are the places intended to show a future society in embryo. Robert Owen's New Lanark in Scotland in the early 19th century was one of the most successful, his New Harmony project in the US amongst the least. More recent examples include Sri Aurobindo's Auroville in southern India. These all aim to prefigure the future society through their own rules and practices, to inspire others and then to be copied in the wider world.

Prefigurative programmes – political movements have often put imaginative ideas into their programmes. The English Chartists in the 1840s for example called for universal (male) suffrage and secret ballots; the Second International in the 1880s called for equal pay for women and men, an end to child labour and an 8 hour working day. These took a very long time to become reality – but eventually they did.

Speculative social science - there was a time when social scientists saw themselves as shapers and designers of possible futures rather than only as analysts. This was very much the spirit of the founding of LSE in the late 19th century. HG Wells for example wrote that 'sociology is the description of the Ideal Society and its relation to existing societies', a view shared by very few sociologists today. Hanzi Freinacht's ideas on the future 'listening society' are a partial exception, seeing social progress (which in the last century has meant that 'the games of everyday life become 'milder, more sensitive, fair and forgiving') primarily through the lens of psychological growth.

Speculative design – something of this spirit has more recently been taken over by speculative design, usually outside the university, and through the work of designers like Anthony Dunne, Fiona Raby and Anab Jain of Superflux.

Visions for towns and cities – communes often tried to embody a future society, such as those inspired by Cabet or Thoreau in nineteenth-century America, or the Kibbutzim in Israel. Ebenezer Howard's Garden Cities were inspired by a utopian novel and offered a holistic vision of better living as an alternative to 19th century cities. More recent eco-towns like Freiburg in southern Germany play a similar role as models of social imagination.^{xii}

Sensibility: other movements have aimed to fuel social imagination by cultivating new sensibilities and aesthetics rather than organisational form: Futurism which fed into Italian fascism is an example; some parts of the ecological movement have also aimed to achieve influence through this combination of aesthetics and ethics. The ideas of meta-modernism in art (developed by Vermeulen and van der Akker and defined as a combination of irony/sarcasm and sincerity/vulnerability) have been used to guide social and political designs.

^{xiii} And perhaps all good social imagination starts from a sensibility that sees people and societies more in terms of their potential than their current state.

New ways of seeing: many advances in science were preceded by new ways of seeing: the microscope, X-rays and electron microscopes all opened up new ways of understanding the world. The same is true in society: statistical methods of measuring poverty (and surveys like Rowntree) paved the way for the welfare state; new ways of mapping diseases fuelled public health measures; oral histories like those produced by the WPA in the US in the 1930s brought the voices of the poor into the public realm. Today we might expect comparable breakthroughs to be sparked by the flood of new data, network or semantic analyses that literally see the social world in new ways.

Great Exhibitions like London's Great Exhibition of 1851 with its great palaces of glass, Chicago's in 1893 with its phosphorescent and neon lights, its 27 million visitors (and its spirit of indefatigable optimism only partly marred by the mayor's assassination just before it closed), or Paris in 1900 with 50 million visitors, all included some ideas about future society. The same was true of the Shanghai Expo 100m in 2010, Milan in 2015 (partly devoted to ecology and food) and Dubai in 2020, though all struggle with the constraints of state and corporate sponsorship.

Future-oriented political movements – the Marxist tradition placed a strong emphasis on preparing for a future society even though Marx said little about what that society might look like, and some authors in the Marxist tradition (like Erik Olin Wright) have tried to keep this approach alive. Green movements are now more active bearers of this tradition, and drawing on visionary ideas about low-carbon, low waste future food, energy or housing systems.

Future-oriented social movements – like Permaculture or biohacking, cyborgs or transition towns, each of which in different ways tried to combine a vision of the future, a method to be applied in the present and advocacy to promote it.

Pioneer nations – some countries have created cultures that over long periods of time enabled them to imagine and pioneer new ways of social organisation. Since my family comes from New Zealand I like to see it as an exemplar: the first country with universal suffrage (including women) in the 1890s, the first modern welfare state in the 1930s and now things like the first wellbeing budgets today. Finland is another country that has taken up this mantle of being a pioneer.

Futurology – the field has often just focused on mapping out likely futures, but it has also at times tried to encourage imagination, particularly in the strands of work associated with figures like Bertrand de Jouvenel (and *Futuribles*) and Gaston Berger (whose invocation was to use futures to 'disturb the present'), and in a few examples within universities where teams are trying to fuel imagination, such as [ImagineLancaster](#).

Fictions and poetry – novels like Ursula LeGuin's *Anares* (in *The Dispossessed*), Charlotte Perkins Gilman's *Herland*, Marge Piercy's *Woman on the Edge of Time* and the many utopian novels of the 19th century have played a hugely influential role in giving people a sense of just how different the social order could be.^{xiv} There has recently been some excellent analysis of how fiction has helped the imagination of responses to climate change,^{xv} and its contribution to utopian thinking.^{xvi} Poetry has also played its part. Two centuries ago William Wordsworth told us 'to exercise .. skill/Not in Utopia – subterranean fields/Or some secreted island, Heaven

knows where! / But in the very world, which is the world / Of all of us – the place where in the end / We find our happiness, or not at all.’^{xvii} Poetry also plays a role in the present, for example in the poet Dennis Lee’s famous invocation to ‘work as if you live in the early days of a better nation’.^{xviii}

Games like Sim City and methods such as World-Building provide an experience of creating new social worlds, and playing with their internal dynamics.

Exploratory arts like the work of the Nabi Center in Seoul on data, artificial intelligence and future cities (some of it under the title ‘Neotopia’), which helps to open up new avenues of imagination that may be harder through more analytic methods

Entrepreneurship, or the variants of what Flores and Dreyfus called ‘disclosing new worlds’,^{xix} can uncover new ways of organising society (think for example of the implicit messages, both good and bad, of businesses like AirBnB or Uber).

The best of these many attempts to imagine society in fresh ways grappled with the biggest consistent challenge of human history - how to organise cooperation at larger scale while sustaining some degree of freedom and fairness. The best also offered some direction for social change to travel in, recognising just how profoundly uncertain we should be about what the future will actually bring.^{xx}

METHODS

What methods can encourage and quicken social imagination? What can we learn from the many groups, networks and teams working in and around this space?

Tools and techniques

Anyone can, in principle, write a utopia, or describe a possible future society. The challenge is to avoid being trapped by the present – which requires finding a method, a space, or a point of leverage, with which to think thoughts that don’t yet exist. Most social imagination has tended to be either extensions of present trends (technology, markets, cities); reactions against them; or, in the more interesting cases (as I show later), dialectical combinations that go both with the grain and against it.

There are many methods available that are at least partly relevant to doing this well and achieving some distance from the present. They include the worldbuilding methods (used in fiction) to create coherent environments for science fiction (though typically their focus is physical rather than social), or methods for the construction of both disasters and positive futures in fiction like and the work of various communities of sci-fi writers.^{xxi}

The futures field has many relevant methods, including scenarios and simulations and ones like the three horizons framework which aims to connect the first horizon (of the present system), the second horizon of emergent innovations and a third horizon of radical possibility. Its purpose is to help people think about a pathway from the present to the future, and to ask what we might want to conserve as well as what we might want to change. The backcasting methods proposed by John Robinson, and offered as an alternative to forecasting, encourage

a focus on a desirable future and then working backwards from that to the steps needed in the present.

There are many tools from design (such as these ones developed by John Seely Brown).^{xxii} Very different approaches argue for using place and context as a way to avoid being trapped in over-generalised dominant views of the future.^{xxiii} Another set of methods try to tap into unconscious minds like the 'mass dreams of the future' approach which adapted 'past-life' therapeutic methods to the future,^{xxiv} or Susan Long and W. Gordon Lawrence's social dreaming work. Though not a method as such, I like the idea which comes from the Canadian First Nations, that some gatherings need to imagine the presence of the seventh generation out into the future, as well as the voices of seven generations back into the past.

The creativity tools (shown here, which I developed for Nesta) are another accessible prompt for sparking imagination. You can take an existing activity (like care for children or building design) and then imagine a series of transformations being applied to it: extending an aspect of existing practice to its logical conclusion, grafting on new elements, subtracting or adding random elements.



Much of the history of social imagination can be interpreted through this lens. Often all that happens is extension: starting with an existing idea and just taking it further. This has happened repeatedly to ideas. A big strand of thinking on the radical libertarian right has played with extending the market into as many fields as possible, or imagining self-organising networks with the use of each new generation of technology. Others have steadily expanded the range of fields where rights can be used (with rights themselves being an extension of theological ideas about human uniqueness).

Grafting or combining can also be productive: what if schools became places for health; what if democracy was introduced into the workplace; what if platform models were applied to care?

The more radical approaches use inversion. What if farmers became bankers (as with some microcredit schemes); or patients became doctors; or social care was provided by people who had themselves been recipients of care?^{xxv} What if the young taught the old? What if consumers instead became makers?

These tools can be used as methods to generate ideas quickly – taking a field, or function (which could be rural transport, the management of trees or early childhood education) and exploring the possibility space.

Then the creative task is to meld them into new forms, using what Coleridge called ‘esemplastic power’, the ability to shape things into one, to take combinations and make a new whole (he was borrowing from Schelling’s concept of ‘Ineinsbildung’).^{xxvi}

Another approach is to think in terms of patterns – what Christopher Alexander called the pattern language of architecture and places – which can be assembled in different combinations (though no one has managed to describe a comparable pattern language for social organisation).

Then there are thought experiments, which can help with the distancing and estrangement that is vital for more radical imagination. For example, challenging dominant orthodoxies and being willing to accept the discomfort this often brings. For example, what if instead of encouraging growth in consumption we focus on frugality, restraint and reducing material use,

with social norms that make eating meat, air travel or waste unacceptable? What if the same approach is taken to digital and data? What if instead of focusing primarily on equal rights we focus on difference and differential rights, adapted to widely different physical and cognitive capabilities? What if, instead of maximising freedom, we see restraint and self-discipline as virtues to be promoted? What if instead of promoting equal voice we see voice as something to be earned? What if instead of promoting free speech as a good in itself we look for ways to temper it to other values – truth, sensitivity to others? What if we challenge rights to privacy and explore a radically more transparent society? What if ‘the sacred’ once again became central to daily life and the use of space? Exercises of this kind at least help us to see current orthodoxies more clearly and can spark more creative leaps into the mentality of other possible societies.

The best of these methods militate against the kind of one-dimensional imagination that is all too common. For example, radical free market and libertarian thinking tends to assume a simple model of human nature (such as maximisation of self-interest), a model of organisation (market transaction) and then extends it without limit. Its mirror is the wishful thinking that hopes that if only we could extend friendship or love we would achieve a good society.

More useful exercises of imagination recognise the complexities, and contradictions of human nature, and try to imagine institutions and arrangements that can cope with them. Familiarity with methods of this kind cultivates an imaginative discipline, very parallel to learning a musical instrument or painting.

These methods quickly take you to the question of narrative: for social imagination to be compelling it needs to be turned into a narrative form, and the best narratives are textured and nuanced rather than linear and simplistic. The 19th century utopians and 20th century science fiction writers were often brilliant at reaching large audiences. Nikolai Chernyshevsky’s *What is to Be Done?* published in Russia in 1863, and Edward Bellamy’s *Looking Backward* were both huge best-sellers. So the task today too may be more like making films than academic journal articles – shaping appealing but plausible stories of how the world might overcome adversity to grow in strength and character.

Institutions: sometimes institutions give a license to imagine. Finland’s parliament has a Committee of the Future, first set up in 1992; Hungary had a Parliamentary Commissioner for Future Generations; Israel’s Knesset a Commission for Future Generations. Britain had the Sustainable Development Commission, abolished in 2011. Wales in 2015 passed a ‘future generations act’ and created a new post of future generations commissioner^{xxvii}. Bologna has had [a civic imagination office](#) and there are many individual initiatives like Dan Lockton’s [Imaginaries lab](#). Singapore’s Centre for Strategic Foresight has for the last ten years provided a space for imagination close to the core of a government, while Dubai’s Future Foundation and its imminent Museum of the Future have been able to explore fascinating ideas around issues like AI, government and ethics.

How to imagine and who?

Clearly everyone is able to imagine to some extent. We are all endowed with an ability to picture things which don’t exist. But is social imagination a highly specialised activity? Or can

it be democratic – is any random group of the public well-placed with a bit of help to describe their own utopia?

The lesson of the arts is that it may be difficult to create compelling works of imagination without hard labour, learning, repetition and experience. It would be surprising if the same was not true of social imagination – which also requires some dedication of resources and time to allow for practice, emulation, criticism, trial and error. Indeed, it seems to depend on quite a few conditions which are similar to other fields of imagination.

Practice, time and repetition: it takes time to be able to conceive, design and describe imaginative possible futures. The distancing needed often requires silence and space, being detached from everyday reality. It cannot easily be squeezed into rapid fire seminars or discussions, or the speed of social media. This is a major constraint, and opens up the practical question of how to organise, and finance, this kind of work.

Milieux: as with other creative activities individuals and teams are likely to flourish best in a vibrant milieu, that brings together comment, criticism, competition with peers, and the feedback of an informed audience. The occasional genius may be able to imagine when detached from such a milieu, but they are the exception.

Professionals and amateurs: in some past periods artistic production involved only a tiny number who were privileged enough to have access to the instruments of creative production. But the resources can be opened up to many more to participate to some extent, so that - like music – a highly professionalised activity can co-exist with mass participation in both production and consumption.

Diversity and inclusion: precisely because social imagination requires investment of time it tends to be dominated by the relatively privileged. Futurology is very much dominated by highly educated white males and reflects their worldviews (though recent science fiction has been a powerful outlet for feminists). So a major concern must be how to ensure that the space for social imagination is opened out to multiple voices and experiences.

Wayfinding skills: much of the language of social imagination is spatial. Utopia meant no place. We talk of looking forward, and what lies ahead; navigating our way to the future; pathfinding; seeking out new routes. In physical space these skills of being attentive to environments, reading the better and worse routes, are highly prized in some societies and carefully learned through experience. Perhaps we need a comparable attentiveness for our more conceptual journeys into the future.

Silence and separation: there is some evidence that, although creativity is fed by connectedness and milieux, it also depends on a degree of separation. Too much connectedness tends to drown out originality, or denies it the space to develop. The biologist Ilya Prigogine developed interesting theoretical perspectives on this, and it seems intuitively right: too much engagement with social media, or crowds, feeds a shallow conformism rather than true originality. It is intriguing to observe how many thinkers now seek long periods away from others and social media on silent retreats of different kinds to escape the chatter of the collective monkey mind.

MEANINGS

Making sense of social imagination – what are the patterns or hypotheses to test?

‘Imagination is more important than knowledge. Knowledge is limited. Imagination encircles the world’ Albert Einstein

How should we interpret the myriad of efforts to generate and spread social imagination, and the various methods described above? Some ideas had a huge and very obvious effect – like the idea of human rights; welfare states; free healthcare; or garden city movements.

Others look in retrospect quaint and eccentric like Cabet’s promise of absolute cleanliness and absolute symmetry, helped by laws to specify everything from food to dress (though his promise that all citizens engaged in government (as well as voting), supported by a Department of Statistics to provide them with the facts they needed looks quite prescient).

Some consciously looked forward, others backwards. Kropotkin and Tolstoy (and other aristocrats) favoured an anti-industrial, anti-urban idyll of voluntary cooperation in the countryside, that would have been hard to square with the population levels of already industrialising countries.

Some were prescient in their faith in a progression and extension of ideas – for example spreading democracy, or extending notions of rights or voice to nature. Others were not – like the advocacy of paedophilia by Michel Foucault and others who put sex with children in the same broad category as gay sex.

So how can we make sense of these patterns? There is now quite a large literature on modern utopias^{xxviii}, and on futures methods^{xxix}. Here I suggest a few hypotheses we might use to interrogate the past and present examples of social imagination before ending this section with two broad conclusions about how we should think about it.

Between open or closed? Utopias and proposals can be very open or very closed. By this I mean that open ones do not provide too much detail whereas closed ones offer a complete programme. The more open ones may be more likely to survive and spread, as they are recast and reshaped, often in ways very different from the intentions of their creators. Blueprints may be admired but not loved.

Fit with socio-technical systems? There is clearly a question of the fit between ideas, environments and socio-technical systems (how much do prevailing technical systems determine which ideas spread and which don’t?). Many of the medievalist ideas that were popular in the late 19th century were probably just too distant from the logic of societies already built on railways, telephones and cars. For our own times we need to wonder what limits may be set not just by carbon and climate but also by ubiquitous data and AI.

Cool and hot? The most compelling imagination combines the heat of emotion along with cooler analysis, and integrates these in ways that are cognitively and emotionally coherent. Increasingly in the context of highly educated populations that has meant a bigger role for science as well as creativity. The heat can come from a bad future avoided – such as climate

collapse – as well as from the appeal of a qualitatively better alternative (this is explored well in a recent piece by Manjana Milkoreit).^{xxx}

Intentions and results? History tells us repeatedly that the possibilities that materialised had only a tenuous connection to the aims of the imaginer. Hegel called this the ‘ruse of reason’ or history (for example, how America’s actions to wipe out terrorism in the middle east had the opposite effect, or Hitler’s aim of destroying communism instead strengthened it...). Yet other ideas do manifest in straightforward ways – like veganism, or the promotion of hospices. A hypothesis might be that the closer ideas come to core questions of political power the less likely they are to manifest in the ways intended.

Timing? a general pattern of innovations is that timing is all important. There may need to be complementary technologies in place, complementary institutions or attitudes. Many social ideas are imagined far in advance of the conditions being ripe for their implementation.

Path dependence? Some schools of social science strongly emphasise path dependence. The options open to any society are greatly limited by where they have been – and how that shapes their institutions and beliefs. An alternative view highlights how often the ‘path dependence’ view has misjudged societies’ ability to reinvent themselves (like the assumptions that east Asian societies were condemned to stagnation because of their Confucian roots). Escaping from path dependence may rely on strong social consensus for change and abilities to mobilise across sectors.

Ends and means? some imagineers try not just to describe a future society but also to show how we might get there. This was what the revolutionaries tried to do – explaining how the vanguard party and the revolution would sweep away the old and create the space for the new. Others believed in the power of example – Owen thought that showing his model community at New Lanark, and promoting it, would persuade others (and he was of course substantially right). Others put their faith in the power of ideas – a bestselling book would be enough. These are what today are sometimes called theories of change. Yet most utopias have no plausible account of how they might come about and perhaps this doesn’t matter. History finds a way to make the best ideas happen.

Complements? – to have an impact, imaginative ideas need to attract adherents. They also often need to fit with complementary ideas or methods; and then they need to be able to mobilise implementers (as I suggest later, social imagination like most creative work is 1% inspiration and 99% perspiration).

Philosophy and ontology? – how much does social imagination rest on a philosophical foundation, or an ontology – a view of what kinds of people may exist in the future? Many of the future visions that have had most impact in the past were consciously built on such ideas: liberal, socialist or anarchist; or on a belief in unrealised human potential and, at the extreme, the potential for people to become god-like. Technology-based futures tend to be unsatisfying because they have no such animating idea. But what are the philosophical principles on which social imagination should rest today?

Grace? - perhaps the best works of imagination offer a vision of enhancement or even transcendence, a plausible but compelling account of how we can be more alive, more human, better: Ruth Levitas wrote about this interestingly in her work on utopian methods that combine

grace and holism.^{xxx} Perhaps this spiritual dimension – addressing future *being* as well as *doing* – is what's most missing from the mainstream technological pictures of the future. Some similar issues are covered in Maureen O'Hara and Graham Leicester's work on the competencies needed by 'persons of tomorrow'.^{xxxii}

Aesthetics? – we might like to believe there was some connection between the beauty of social ideas and their truth, but there is little reason to believe this. However, their beauty (which can be in their language, visualisations as well as emotional resonance) clearly does influence their appeal. Social ideas that feed off deeper ideas of communion, unity, love, harmony, equilibrium, self-organisation; or that offer simplicity, symmetry, karma, universality; seem to have an appeal as do stories of threat/protection, struggle/overcoming/liberation, or stories that relate a social fact (like a nation) to the family. Their persuasive power may come in part from their aesthetic form - but then of course we need to engage critical faculties so as not to be too captivated by their aesthetic appeal.

Estrangement? – an oddity of genuine social imagination is that it has to reject the present, and that may in turn require that we learn to see the present as artificial and unnatural, so as to break free from reification and false consciousness. Perhaps the most serious threat to imagination now is a cynical worldliness, which can no longer be shocked or indignant, and believes it understands everything, but is in fact trapped in the arbitrary naturalness of things. One hypothesis might be that the most radical ideas had their roots in some kind of distance or estrangement, or at a minimum a willingness to suspend rationality. Keats famously wrote of the 'negative capability' of being able to cope 'in uncertainties, mysteries, doubts, without any irritable reaching after fact and reason'.

The pull of the future and the push of the prefigurative present

In the list of examples given earlier some were very abstract accounts of a possible future – like the utopian novels – while others were very concrete, like a town or commune that was meant to inspire by its example.

Two forces tend to interact in social imagination. One is the *pull* of a possible future, set out in stories or accounts, acting to inspire or energise. The other is the *push* or movement forward from the fertile present – multiplying options, testing and experimenting in practice.

These are two very different mindsets, and approaches. Imaginative, speculative work involves ambiguity, uncertainty, spotting connections, and creating compelling visions. It has had many labels over the years: finesse, intuition, insight or right-brain. Ernst Junger argued that the active seeing that is able to get beneath the surfaces of things is a kind of 'master key'. But it is much more commonly valued in literature and the arts than in the social field. Applied to societies in its pure forms it *can* be very destructive – leading to purely intellectual constructs that simply don't work in the real world. This was true of some of the ideas around the French revolution and of much Leninism, and reached its extreme in Pol Pot's Cambodia. One of the ironies of recent history has been the way some neoconservative and neoliberal movements took on a similar exaggerated belief in the power of ideas.

The complement to the pull of ideas is the willingness to try things out, experiment and learn. One positive recent development is the much greater use of experiments in governments and

beyond. This recent Nesta survey showed just how many different experimental methods can be used (while the award of the 2019 Nobel Prize for economics to Duflo and Banerji usefully encouraged economists to focus more on real-world experiments than abstract deduction).

A healthy ecosystem of social imagination needs to combine speculative discovery on the one hand and analytic intelligence and experimentation on the other. Rather than being alternatives these can complement each other, so that navigating the movement forward from the present connects to the pull of a possible future, and so that the active, deliberate, conscious imagination of alternatives, is joined where possible by a willingness to test them in ways that are reversible.

This combination can also be achieved in the ways that analysis is done. A current oddity is that much less attention is paid to rigorous, systematic analysis in the social field than in others (notably the military, finance and some parts of big business, often supported by the big consultancies). When I ran the UK government Strategy Unit we had a team of 150 doing very in-depth medium to long term analysis of how systems might evolve, from childcare to energy. We also tried to design imaginative policies to steer them. This work had to be interdisciplinary; analytic; quantitative; making use of models; exploring scenarios; engaging a community of stakeholders and testing policy ideas, and at its best married vision and imagination on the one hand and rigour on the other (which wasn't easy – it's hard in practice to combine rigorous, systematic analysis on the one hand, and radical imagination on the other, in the same people, teams or organisations^{xxxiii}).

But relatively little of this work is done now. Since the financial crisis governments have largely vacated this space. Big foundations talk a lot about systems change but none fund or run teams doing this kind of work. Universities usually lack the relevant skills and work through separate disciplinary silos.

The politics of imagination

The stance suggested here – of combining imagination and experiment - challenges many dominant political traditions. One is the traditional conservative claim that what is is because it is the only way things can be, a view that has been repeatedly disproven by history and the achievement of changes that few in retrospect would wish to undo (moderate conservatism by contrast recognises the need periodically to adopt new ideas, and tends to be favourable to practical experimentation).

The approach also challenges the purer utopian or radical view that through an act of will and imagination a radical new blueprint for society can be realised. And it challenges the more deductive political traditions, which hope that if only we could establish some unchanging principles, then we could deduce the good society, a strain very common in liberalism from Locke to Rawls.

Instead what's suggested here is the conscious, deliberate, iterative, experimental design of a better world, fed by expansive imagination, informed by systemic analysis and operationalised through experiment.

Dialectical imagination – going with *and* against the grain

My second main conclusion concerns dialectics – and the importance of learning ways of imagining that are dialectical rather than linear – that help to think through how each action, or new design, creates its own dynamic and its own new challenges, rather than offering an end-point or a final utopia.

Dialectical thinking can mean many things: the transformation of quantity into quality; the interpenetration of opposites; negation of the negation,^{xxxiv} but at its core is a dynamic way of thinking that grasps tensions and contradictions rather than wishing them away. This again, is a vital counterpoint to simplistic one-dimensional offerings of libertarianism and radical market thinking, or of naïve socialism and communitarianism.

My suggestion is that if we look at imagination over the last two centuries we can broadly divide examples of imaginaries into three categories:

A first category aims to go **with the flow of change and with the grain** – using extension to widen or deepen already visible trends in technology, values or social organisation. Its visions are aligned with the interests and values of the powerful, or with emergent powerful groups. Much traditional liberal thinking fits into this category, as does contemporary work on issues like smart cities and most ‘futurology’.

A second category deliberately goes **against the grain** and aims to point in an opposite direction. It has been common since the beginning of the industrial revolution, in romantic ideas, or radical ecological thinking that encourages people to go off grid, return to small communities, to create ascetic communes, or to counter over-centralisation with radical decentralisation. The advocacy of a new Islamic Caliphate is another important current example.

A third category goes **both with the grain and against the grain**. This was true of Marxism in the 19th century – going with the grain of technology and industrial organisation but with a very different take on the options. Marxism saw in capitalism a great leap forward in human cooperation which could be taken in alternative directions, and as a result became at times infatuated with the frontiers of business, from Taylorism in the 1920s to post-Fordism in the late 20th century. Some strands of green thinking do the same today – making the most of science, data and new forms of economic organisation.

My premise would be that this kind of more dialectical imagination is much more useful than the first two. By grasping the contradictory nature of change it opens up more possibilities and reasserts the scope for societies to bend the future. Real societies are always impure, hybrids of multiple cultures.^{xxxv} Overly pure organisations or societies quickly fall apart.

So to engage in this kind of more dialectical reasoning requires a combination of good sensing of the underlying trends; an ability to think critically; skill in generating combinations and hybrids (of the kind I describe below in section IV); and then an ability to reintegrate them into a coherent vision, concept, a narrative or a turn of phrase.

NEOTOPIA

Imagination now – ideas we can use

How might we draw on these lessons to look into the middle distance and articulate plausible and desirable pictures of possibility for the years 2030-50?

We know a fair amount about the *likely* broad direction of travel of technology, climate change, values shifts and other long-term secular trends, but can also use methods from speculative design and other fields to jump beyond linear trends.

Our modern societies succeeded to a remarkable degree in largely solving many of the problems of the past – extremes of poverty; vulnerability to infectious disease and early death; everyday violence; and many of the risks of oppression and exploitation.

But they stumbled into new problems and of course created their own. So now our challenge is to imagine solutions to the rather different problems that surround us, from new forms of psychological poverty to economic insecurity, ecological vulnerability to digital misinformation.

The physicist Wolfgang Pauli once said of an unimpressive theory that “it’s so bad it isn’t even wrong,” meaning that it wasn’t sufficiently sharply defined to be proven either true or false. Good theories aren’t always right: but they can be useful. Utopias tend to be wrong, but they can be useful even in their wrongness. This is why I am particularly interested in ideas which are sufficiently specific that they can at least be interrogated or disagreed with, rather than ones which are very vague. Far too much recent futurology has been frustratingly opaque and therefore not much help to the job of designing a better future. My hope is that if we can map out richer shared landscapes of the possible these can then be used to shape political programmes and social projects of all kinds – and to help us know better what we may need to resist.

Mapping the matrix of social possibility

To map out possible spaces for the future we can look both at functions and fields, and at generative ideas that may shape many different fields. Here I start with the first before moving onto the second, beginning with some of the building blocks of the future society, and their possibilities:

- **care for children and the family**; what if the family further fragmented into more complex forms? What if frozen eggs and related technological developments gave women far more control over the timing and organisation of childbirth?
- **care for the elderly**; what if this was either wholly industrialised or alternatively re-embedded in communities, with neighbours rewarded for care provided?
- **energy systems**: what if a shift to hydrogen as an energy source allowed radical decentralisation and localisation, or conversely what if energy production was ever more integrated into building design?
- **democratic decision-making**; could we see genuine collective intelligence in democracy with radical forms of jury (like in the novel *Gnomon* where most decisions are taken by randomly selected juries of 200)?

- **media**; could we see full personalisation, a revival of a local public sphere or a renewed focus on truth-assessment (rather as regulation of financial services emphasises reliability, assurance etc)?
- **data and machine intelligence**; what if data was owned and curated by a new family of data trusts, and made publicly accountable? What if machine intelligence was not proprietary?
- **health**; how should we think of vivid visions of data, self-management, prosthetics, multiple forms of life, or of the political economy of enhancements whether physical or mental? What if health became the primary lens determining how cities were built?
- **social contracts**; what might these look like? Would they focus on risks we cannot handle alone (unemployment, isolation, ill-health, disability, mental illness)? How might they be linked to behaviours? Will there be new forms of universal income or services or rights to assets?
- **animals**; what if we radically reinvent humans' relationships with animals, making meat-eating taboo and recreating wildernesses protected from human interference?
- **the firm**; what if new organisational models took over, like B-Corps with multiple goals embedded in their DNA, or employee voice?
- **investment**: what if investors exercised values as well as value in systematic ways shaping where their money was used?
- **taxation**: can we describe a shift both to taxing digital and land (the return of Henry George being an interesting example of the recycling of old ideas)?
- **transnational governance**: the old dreams of world government appeared anachronistic at the turns of the century but may become unavoidable in the second half of the 21st. What might these look like – focused on challenges like cybersecurity, refugees, carbon reduction?

Generative ideas

We can also look at interesting generative ideas that may be relevant to many fields:

- **deconstructing property rights**: imagine ownership of something like a building or a firm as a stack of rights and responsibilities?
- **new social feedback and credit systems**: China's social credit system is now being copied in many countries, but there are many ways of imagining feedback systems that sit somewhere between the full force of law and existing commercial credit systems?
- **empowered nature**: giving animals, nature and ecosystems the equivalent of rights and legal claims
- **finance markets linked to algorithms and material facts** – could we design asset classes whose value is directly linked to physical facts such as levels of carbon, deforestation; air quality in buildings
- **quadratic voting and quadratic finance models** – could these become a more mainstream alternative to current non-quadratic forms?
- **twin economies and parallel currencies** - for example to organise the huge amount of time liberated by the combination of reducing working hours and greater life expectancy.

- **the spread of commons for land, housing, energy or data** – how should these best be organised? Do they require new democratic forms (such as triggered contestability models)?
- **true sharing economies** – how might these be run for homes, cars, goods, and how might tax treatments favour them?
- **new welfare models** such as UBI, UBS and alternative variants (such as central banks as sources of loans secured on lifetime earnings)
- **automated decision-making tools** – eg for neighbourhood planning
- **society as laboratory** – public health, experimentalism, moving beyond traditional living lab models
- **fallback designs** – sustaining low technology alternatives to high technology systems for when the latter collapse: traditional radio networks, offgrid power, local food etc.

I set these lists out at length to give a sense of the spaces we might want to fill in a richer conversation about social imagination.

There are obvious risks in focusing either too much on the specific fields or too much on generic generative ideas. The first can lead to too much caution and conservatism, the latter to over-abstraction and misleading conclusions since no society is deduced from a few principles. So it may be better to think of many different domains but then with big concepts and ideas washing across them – in the way that in recent years the concept of rights has been greatly extended; or the concept of organising through platforms has affected multiple fields; or zero carbon and circularity. From these we can then generate specific ideas which fall between very detailed blueprints and very vague possibilities, and we can interrogate them: is there a sufficiently clear description of its architecture/mechanism? Is it clear what purpose or need it fulfils? How might it fit into a context of power and economics?

My personal bias is towards one part of this picture: social imagination that takes collective intelligence and wisdom seriously. Some of the greatest opportunities of the 21st century are ones that create new kinds of commons – pooling data, insight, ideas and turning fragmented communities into a real-time functioning shared intelligence, with observation, creativity and learning all interlinked in what I've called 'intelligence assemblies'.

This is a meta-idea that has application to almost every field of social life. What if the city could think as a one, for example about air quality? What if a whole nation's jobs and skills system could become a living collective intelligence? What if a profession – such as children's social care – could become a collective intelligence, sharing knowledge, data, experiments and insights in real time? And how do these kinds of assemblies move from data and information through knowledge to genuine wisdom, that is fully attuned to the specificities of time, place and people?^{xxxvi}

COVID-19 and accelerating imagination

Like so many crises and wars in the past COVID-19 is prompting an acceleration of innovation. Necessity is the mother of invention and sometimes of imagination.

Some of these accelerations are in how states work – for example with much more active use of data to analyse, track and predict (with Singapore, south Korea, Israel and Taiwan as

exemplars). These may speed up the design of new governance arrangements to ensure that while data is linked it isn't abused.

There's been an explosion of community projects to support the isolated and frail elderly, often using social media platforms; accelerated thinking about the design of mass welfare systems for businesses and the public including variants of Universal Basic Income, and vast loan systems; and a dramatic acceleration of innovation in education as so much has gone online.

Over the next few months I will be tracking these innovations and their implications ([here](#) is my first take on the longer term implications). Once the crisis starts to come under control attention will turn to another set of questions: how could some of the innovations developed for it be applied to other problems? The obvious example is climate change. Given that so much has been done for COVID-19, a very rapid, visible and deadly crisis, could we not use a similar set of tools – from data and tracking to behaviour change and new forms of state support – to cut carbon and speed up the shift to a zero carbon economy?

THEORY

Unanswered theoretical questions

Social imagination has not had much theoretical examination. Where does it come from? How does it work? Some of the theoretical questions overlap with long-standing dilemmas of social theory, such as: how much does imagination precede change and how much does it reflect emergent realities, the age-old question of idealism vs materialism? How much latitude is there for imagination? If we accept that all social institutions are to some extent collectively imagined, does that imply a large degree of plasticity? Here I briefly touch on some important theoretical questions.

An 'idealist' theory of social change

Implicit in this paper is what could be called an 'idealist' view of social change (in a philosophical sense): the view that ideas have considerable autonomy from underlying technological and economic forces and can, indeed, shape society, and that, indeed, nothing else does. Ideas are subject to some limits (including material and biological ones) but these are hard to define in advance and tend to be exaggerated (because our minds tend to see social structures as more solid and natural than they really are).

All human institutional reality begins with imagination. As the philosopher John Searle points out 'there's an element of imagination in the existence of private property, marriage and government because in each case we have to treat something as something that it is not intrinsicallychildren very early on acquire a capacity to do this double level of thinking that is characteristic of the creation and maintenance of institutional reality. Small children can say to each other 'Okay I'll be Adam, you be Eve, and we'll let this block be the apple'.^{xxxvii}

So we are well designed to imagine, and to create realities that exist only because many minds are willing to believe in them. It follows then, that shared imagination can create new shared realities. But in order to feed into social change, imaginative ideas need to be shared by many minds, becoming a part of collective intelligence (something which is increasingly easy to track

and measure). Interestingly, this seems to require that they take a linguistic form – asserting a particular reality – and that they become embedded in habits.

I would also argue that imaginative ideas spread most when they are ‘thickened out’ with complementary ideas, concepts and techniques. Few travel well on their own. In the same way, to achieve impact they need to mobilise implementation capabilities (indeed we could say that social change is 1% inspiration and 99% perspiration). As that happens, they are often grafted onto existing systems.

A good example is the idea of equal pay, promoted from the mid-19th century by socialist parties, and eventually implemented through mobilising an array of legal, regulatory and other capacities. Universal Basic Income is an example in transition at the moment which was struggling to find the right fit with other systems – but may now leap ahead because of CRV. The circular economy concepts are likewise now mobilising, and being grafted onto, existing capabilities (production engineering, supply chain design, project management methods and so on). In each case we can see imagination co-evolving with material systems.

The role of consciousness and its evolution

Perhaps the most difficult theoretical issue around social imagination concerns consciousness – how people think and feel. Societies shape ways of thinking and feeling which in turn shape how societies function – whether through the damage and violence sometimes embedded within people or through habits of collaboration and tolerance.

A useful premise is that radical social imagination always entails *some* shift in consciousness, and some progress to a more ethical, richer, deeper and broader consciousness. The biggest changes in retrospect are changes in ways of seeing; how people have come to see the connections between things, or to empathise with strangers and enemies, or to see different groups as worthy of dignity and respect, as ends not just means.

One character in Ursula LeGuin’s *The Dispossessed* delivers a key speech which sums up some similar sentiments, and serves as a template for a society with less material wealth but perhaps a more advanced state of consciousness: ‘We have no law but the single principle of mutual aid between individuals. We have no government but the single principle of free association.... if it is the future you seek, then I tell you that you must come to it with empty hands... You cannot buy the Revolution. You cannot make the Revolution. You can only be the Revolution. It is in your spirit, or it is nowhere.’^{xxxviii}

The importance of consciousness – and spirit - to social progress is a crucial reason why over-analytic, incremental or evidence-based approaches are less useful for understanding social imagination, since there can, almost by definition, be no hard evidence for an imminent change in consciousness.^{xxxix}

Yet these shifts happen all the time. Often they involve a change of perspective and scale - seeing our own lives in much wider contexts of history, geography and culture.

This sense of a bigger now, and a bigger ‘here’ can be seen in each step of consciousness, with more awareness of how both past and future may influence our lives; more awareness of

distant strangers; more imaginative empathy with others; more awareness of the vastness of the universe and the micro and nanoworlds.

Some theories suggest linear evolutions, as in the influential work of Jean Gebser in the mid-20th century. Drawing on his work Spiral Dynamics ideas were first developed by Clare Graves at Union College in New York, taken further by Don Beck and Chris Cowan, and given the label “Integral Theory” by Ken Wilber. Frederick Laloux’s book *Reimagining Organisations* then spread these to a wider audience.

Their shared account was of a linear progression over thousands of years, with successive stages of consciousness (each summarised in a colour) becoming mainstream. In their model, older ideas – like the ‘red’ ideas that survive in organised crime or street gangs, or the ‘amber’ of organised religion and the state – persist rather than disappearing, even though the direction of travel is towards much greater self-organisation, and better integration of self and organisation, and a holistic mindset, and a contemporary shift from ‘green’ to ‘teal’ to use one framing. There are many other such accounts of progression, one of the most interesting of which is Michael Commons’ ‘Model of Hierarchical Complexity’, which focuses on the complexity of tasks to be handled by consciousness (with 15 levels up to ‘cross-paradigmatic’).

There is much that is attractive in these accounts, despite their lack of evidence or scientific support. They chime with many of the claims of wisdom studies which has sought to understand what is seen as wise in many different societies and cultures: what they see as an historical progression is close to what past thinkers have seen as a progression in individual awareness, and to traditions of mindfulness that have encouraged the cultivation of habits that enable more intense awareness of self and others.

They are also right to assume that new ways of thinking will tend to emerge in very small groups and persist on the margins for a time before some spread to become mainstream (most disappear).

But they are flawed by the tendency to generalise from the author’s own values (which are taken to be the norm of the future), and to set up a hierarchy in which, again, the author is at the top. They downplay how contexts both encourage and require different values, and usually ignore what has been learned about the very complex interactions of biology and social organisation. And they have surprisingly little to say about how, while often being preceded by, in many other cases doing influences being too as habits crystallise, sometimes through the form of rituals.^{x1}

We’re left in an uncomfortable position. In my view these writers are asking a good question and have some glimpses of new insights. Indeed, it’s impossible to have a serious view of social imagination without some conception of the accompanying progression of consciousness.

But the theories are not yet giving good enough answers. It’s clear that ways of seeing and thinking evolve; that more complex, dense, knowledge intensive societies have different values than more rural ones; and that it is meaningful to talk of collective intelligence and wisdom. Any serious view of social imagination has to also take a view of how consciousness evolves – so that people can see, interpret and judge in many dimensions; can solve complex multi-dimensional tasks; and can achieve depth as well as breadth of understanding.

Yet it is also obvious that any society will struggle to imagine a way of thinking that does not yet exist^{xli}, and has no reliable way to select which current values are the true harbingers of the future.

So we have to work hard – to try to spot the things which utopias cannot yet think; to use exercises of estrangement and dreaming to break free from assumptions; and to resist the appeal of overly neat linear historical stories.

The role of limits and isomorphism

How far can imagination go? How diverse can societies be? I earlier suggested an ‘idealist’ approach that emphasises the autonomy of ideas. But there is no doubt that one of the striking patterns of history is the strong trend of isomorphism, or convergent evolution, that pulls apparently diverse societies in similar directions, and suggests limits to social imagination. When Columbus reached the Americas for example, civilisations which had been wholly separated for at least 15,000 years, on opposite sides of the Atlantic, turned out to have very similar forms: governments, urban planning, schools, taxes, organised religion, roads, writing, slavery. Many of these were practical solutions to problems of scale – how to organise large settlements with food, housing, water, energy, mobility – for which there are only limited options at any particular stage of technological development. Today, too, even apparently very different societies share a lot: much of north Korea doesn’t look so different from dozens of other countries. In 2100 the same may be true, and there may turn out to be relatively few stable ways of organising societies flooded with data, full of advanced AI, managing behaviour to sharply cut emissions and waste, or caring for large populations of the frail elderly.

There are plenty of obvious limits too. There are ecological and material limits; no society can defy the laws of physics, and can only denude natural resources for a limited time. Human nature may be flexible and fluid (for example population densities are now 1m times higher in some cities than they were for hunter gatherers) but it is not infinitely flexible, and societies which depend on implausible views of humanity don’t last long. Other limits include the need to organise reproduction (many communes could work with celibacy but for obvious reasons this doesn’t work for whole societies), to satisfy basic biological needs, and to satisfy needs for meaning and recognition.

Path dependence also matters, so that in any project of social imagination it’s important to strike the right balance of freshness and conservation (and avoid year zero thinking, a common vice of futures work). Nowhere starts with a clean sheet. Everywhere we have histories, attachments and belongings and these can be a strength not a weakness. So we should think of social imagination as not discarding the best of the past, but rather finding ways to conserve the most resonant traditions, the fertile rather than sterile heritages, and combining them with the new.

Good and bad imagination

In any field imagination can be good or bad, healthy or pathological, though it may be hard to reach a consensus on the boundary lines. That something is novel doesn’t make it desirable,

and imagination can conjure up nightmares, dystopias and horrors of all kinds. Utopia for one person can serve as hell for another.

There is the imagination that amplifies the worst not the best of human nature – assuming human selfishness as a fundamental truth and then building all institutions around it, or assuming a will to power,^{xlii} or as with Pol Pot's Khmer Rouge seeking to eliminate whole strata of society who come to be seen as enemies, in the name of a utopian vision.

Then there are kinds of imagination that are more mixed, such as deliberate randomisation – which like serial music can occasionally throw up interesting new patterns but also risks draining meaning and coherence out of works, suffering the problems of 'freedom with nothing left to push against except the empty air' in Jacques Barzun's phrase on the excesses of 20th century arts, once the old boundaries had disappeared.

There is also the imagination of pushing things to extremes – like imagining no property, no government, no police – which can be useful as a thought experiment but less so as a practical programme. Ursula LeGuin, again, put her finger on this ambiguity: *'My imagination makes me human and makes me a fool; it gives me all the world and exiles me from it.'*

Socio-technical imaginaries

Another area of theory is the relationship between the kind of imagination I have described and the various social science traditions that have understood social structures as imagined. This tradition is associated with figures including Benedict Anderson and Charles Taylor. John Searle has also written in detail about the mental foundations of social structures. Their interest is in how imagination supports the present order – shared imagination (or 'necessary fictions') allow people to endow constructs such as the nation, the rule of law or democracy with an air of solidity. This work is impressive and convincing. But strangely these writers have shown little interest in imagination of the future.^{xliii}

The 'Science and Technology Studies' field has some parallel interests, and parallel blindspots. It has rightly emphasised the social role in technological development, and why, to understand the impact of anything from contraceptive pills to the car, mobile phones to drones, it's vital to grasp the multiple ways in which societies shape, direct and constrain the technologies. It has also emphasised the ways in which socio-technical imaginaries (defined by Sheila Jasanoff as 'collectively held and performed visions of desirable futures') function in societies, sometimes with multiple alternatives in contention, sometimes with one dominant. Her work with Sang-Hyun Kim suggested four main phases for the evolution of these imaginaries - origins (often involving small numbers of individuals and their ideas), embedding (turning their ideas into material, institutional and behavioural realities), resistance (by defenders of the previously dominant imaginary) and extension as they become embedded in identities. This framework is useful but, again, the purpose of this analytical framework has mainly been for analysis and critique rather than creation.^{xliv}

Imagination and action: communities as heroes in their own history

'Companions the creator seeks, not corpses, not herds and believers. Fellow creators the creator seeks -- those who write new values on new tablets. Companions the creator seeks, and fellow harvesters; for everything about them is ripe for the harvest.' Nietzsche

So what might be done to fuel social imagination? What could enhance our collective capacity to imagine and find a way to a better society? How do we break out of resigned fatalism where the best we can hope for is to preserve the best of the present?

Here I suggest some tentative practical answers, all of which overlap. There are many potential supporters of social imagination who aren't doing much to help it, whether because of habit or fear. They include funders – research funders and foundations - and organisations that could be convening, encouraging and promoting imagination, including governments whether national or local; political parties; and universities.

Imagination in other fields – such as film or the visual arts – rests on an ecosystem of funding, some philanthropic, some public, and some commercial. We need an equivalent for the social field:

- **Cultivating milieu** – that combination of creativity, audiences, criticism, conversation that is so crucial to almost any kind of imaginative activity. Just as the arts thrive best with intensive fields of creativity, criticism, competition and engagement so do we need an equivalent for social imagination, not least to raise the quality of work done in this space.
- **Creating institutions with an economic base and space** – we need more institutions for social imagination that are comparable to the very well-funded ones around science and technology, with universities one obvious location for them. Some need to be devoted to the more analytic side – understanding complex systems, how they work and change (and learning from the heavy investment in such work in fields like defense). Others need to be more open, speculative and creative.
- **Cultivating imaginariums** – we need more places, virtual and physical that gather, curate and promote imaginative ideas
- **Spreading methods** – social imagination is helped by many people becoming fluent in the methods described earlier, which requires practice, and conscious reflection on what methods work best, partly to discourage one-dimensional imagination.

Finally, we need users. John Dewey once commented that every political project needs to create the public who can be its author. In the same way every utopia has to call into existence the public necessary for its creation, a public who can champion and own it. Yet having called forth a public there's no certainty that it will choose the utopia prescribed for it. An act of social imagination has to create its own subject - and then set it free to roam.

The promise of doing this well is that more communities can, once again, become heroes of their own history. Too often today the only narratives that matter are personal ones (and many have seen a widening gulf between their individual hopes and dreams and those of the world around them), and too often people feel like powerless observers of forces and trends they cannot control.

The rekindling of social imagination is one aspect of taking back control – describing a future in which we can feel at home, and then using the power of that vision to catalyse action today to help us get there.

Acknowledgements – and the Author

This paper is very much a first draft – intended to elicit commentary, examples, improvements and to prompt a shared exploration of its themes. I'm grateful to Demos Helsinki for commissioning it and to the many people whose conversations have fed into this paper. They include: Soh Yeong Roh (who first prompted it), Louise Pulford, Cassie Robinson, Noah Raford, Juha Leppanen, Olli Bremer (and other colleagues at Demos Helsinki), Roberto Mangabeira Unger, Jessica Seddon, James Wilsdon, Jo Chataway, Rufus Pollock, Indy Johar and many others.

I am writing this from my new role as Professor of Collective Intelligence, Public Policy and Social Innovation at UCL's STEaPP, and as a fellow at Demos Helsinki. Before that I was CEO of Nesta (2011-19), CEO of the Young Foundation (2004-11), and director of the UK Government Strategy Unit 2000-2004. I have had quite an active involvement in social imagination over the years, including the creation of many new organisations and policy approaches; running teams working on the practical side of social design and strategy; writings (eg on utopias in *The Locust and the Bee*, and on futures work in *The Art of Public Strategy*); commissions, including Nesta reports on participatory futures, and several surveys of futures practice globally over the last 20 years. I have also been involved in some large-scale futures exercises for whole nations, such as Australia 2020. I'll leave to others to judge whether that makes me well qualified to comment, or too trapped by the assumptions of the recent past.

ENDNOTES

ⁱ I like this comment from artearthtech: ‘The reassertion of our utopianism matters because we have forgotten our imaginations. We have not dared to dream because too many of our dreams became nightmares’. <https://artearthtech.com/2017/10/20/pragmatic-utopians/>

ⁱⁱ Untitled is a programme of events and discussions being coordinated by Demos Helsinki with a large network of organisations

ⁱⁱⁱ This is the Oxford English Dictionary definition

^{iv} To use the categories suggested by Wendell Bell.

^v There is a very lively African sci-fi scene – and interesting networks like this one in the UK, ‘a collective of researchers, artists, programmers and activists exploring new ways of examining blackness and futurism’ <https://afrofuturesuk.wordpress.com/>

^{vi} There is now a growing literature on the relationship between climate change and imagination: Shaw, A, Sheppard, S, Burch, S, Flanders, D, Wiek, A, Carmichael, J, Robinson, J and Cohen, S 2009 Making local futures tangible – Synthesizing, downscaling, and visualizing climate change scenarios for participatory capacity building. *Global Environmental Change* **19**: 447–463. DOI: [10.1016/j.gloenvcha.2009.04.002](https://doi.org/10.1016/j.gloenvcha.2009.04.002); Yusoff, K and Gabrys, J 2011 Climate change and the imagination. *Wiley Interdisciplinary Reviews: Climate Change* **2**: 516–534. DOI: [10.1002/wcc.117](https://doi.org/10.1002/wcc.117); Levy, DL and Spicer, A 2013 Contested imaginaries and the cultural political economy of climate change. *Organization* **20**: 659–678. DOI: [10.1177/1350508413489816](https://doi.org/10.1177/1350508413489816)

^{vii} Of course new knowledge of the universe or the nano-world can also expand our sense of awe and wonder.

^{viii} Even for those engaged in everyday politics, radicalism can constrain imagination if too much faith is put in the indivisibility of social systems, or the idea that history follows a course of linear progression.

^{ix} Of course, these trends may just reflect recent educational policies that have tended to focus much more on exams and teaching to the test.

^x I avoid using any particular definition of the ‘social’ here: the standard definition ‘relating to society and its organisation’ is pretty capacious, and encompasses many aspects of technology, though without any precise boundary.

^{xi} This recent way of thinking also allows us to see the present as surrounded by an infinite array of parallel possible worlds – pathways we could have taken, imagined futures that could have materialised, just as we can look out to a future which has myriad possible routes forward, none of which is pre-ordained.

^{xii} There’s also now a lively field of utopian urbanism, led by figures like David Pinder.

^{xiii} In Hanzi Freinacht’s work

^{xiv} Explored in Jameson, F 2005 *Archaeologies of the Future: The Desire Called Utopia and Other Science Fictions*. Verso.

xv <https://www.elementascience.org/article/10.1525/elementa.249/>

xvi Kim Stanley Robinson describes the social functions of science fiction as follows:

“Science fiction can be regarded as a kind of future-scenarios modeling, in which some course of history is pursued as a thought experiment, starting from now and moving some distance off into the future. ... it is a way of thinking about what we’re doing now, also where we may be going, and, crucially, where we should try to go, or try to avoid going. Thus the famous utopian or dystopian aspects of science fiction.”

xvii The full section is: ‘Now was it that both found, the meek and lofty,

Did both find helpers to their hearts desire

And stuff at hand, plastic as they could wish –

Were called upon to exercise their skill,

Not in Utopia – subterranean fields –

Or some secreted island, Heaven knows where!

But in the very world, which is the world

Of all of us – the place where in the end

We find our happiness, or not at all’

William Wordsworth, *The Prelude*, Book XI

xviii In Dennis Lee’s *Civil Elegies* Toronto Anansi 1972. A version is on the Scottish Parliament building.

xix *Disclosing New Worlds: Entrepreneurship, Democratic Action, and the Cultivation of Solidarity*, MIT Press, 1999 by Charles Spinosa, Fernando Flores and Hubert Dreyfus

xx Few in 1900 expected a brutal world war and revolutions in the next generation. Few in 1925 anticipated boom, Depression and another war. Few in the 1950s expected the scale of cultural change in the 60s, few in the 1980s expected the collapse of the USSR, personal computing, Internet, and few in the 2000s anticipated the scale of financial crisis, or surging populist authoritarianism. Imagination doesn’t solve the problem of uncertainty. But it does give us places to head for.

xxi Such as the London Science Fiction Research Community: <http://www.lsfrc.co.uk/>

xxii Dark Matter Labs, Atlas of the Future, Doughnut Economics Action Lab, Constellations and many others

xxiii Sandford, R. (2013). Located futures: Recognising place and belonging in narratives of the future. *International Journal of Educational Research*, 61, 116–125.
doi.org/10.1016/j.ijer.2013.02.007

xxiv Chet Snow, *Mass Dreams of the Future*, Deep Forest Press, Crest Park California, 1989

xxv As in TACSI's 'Family by Family' programme

xxvi Gary Lachman, *Lost Knowledge of the Imagination*. Coleridge liked to contrast fancy with imagination: fancy being decorative and incremental, whereas imagination was a true act of creation.

xxvii <http://futuregenerations.wales/about-us/future-generations-act/>

xxviii John Urry *What is the future?* is a good overview; Erik Olin Wright's *Envisioning Real Utopias* has some good criticism of social science, but is surprisingly short on offering interesting utopian thinking. The Listening Society by Hanzi Freinacht is an interesting recent attempt at a forward looking social vision.

xxix See for example Riel Miller's extensive work on futures literacy: *Transforming the future: anticipation in the 21st century* published by UNESCO and <https://en.unesco.org/themes/futures-literacy>

xxx Milkoreit, M., 2017. Imaginary politics: Climate change and making the future. *Elem Sci Anth*, 5, p.62. DOI: <http://doi.org/10.1525/elementa.249>

xxxi Ruth Levitas, *Utopia as method: the imaginary reconstitution of society*

xxxii <https://www.triarchypress.net/dancing-at-the-edge.html>

xxxiii For example, it's sometimes commented that organisations like McKinsey almost never generate new ideas but can be brilliant at using and distilling the ideas of others

xxxiv This is Engels famous definition for his dialectics of materialism

xxxv I've written about this in many places, including the chapter on Mary Douglas in my recent book 'Social Innovation'.

xxxvi In my book Big Mind I explore the idea of intelligence assemblies and also discuss the relationship between intelligence and wisdom.

xxxvii John Searle, *Making the Social World*, p121

xxxviii The full quote is: 'We have no law but the single principle of mutual aid between individuals. We have no government but the single principle of free association. We have no states, no nations, no presidents, no premiers, no chiefs, no generals, no bosses, no bankers, no landlords, no wages, no charity, no police, no soldiers, no wars. Nor do we have much else. We are sharers, not owners. We are not prosperous. None of us is rich. None of us is powerful. ... if it is the future you seek, then I tell you that you must come to it with empty hands. You must come to it alone, and naked, as the child comes into the world, into his future, without any past, without any property, wholly dependent on other people for his life. You cannot take what you have not given, and you must give yourself. You cannot buy the Revolution. You cannot make the Revolution. You can only be the Revolution. It is in your spirit, or it is nowhere.'

xxxix Rousseau, who attempted to understand these shifts of consciousness, and arguably was one of the greatest contributors to them, suggested that they require 'a superior intelligence,

capable of contemplating all human passions without feeling any of them'! (*Oeuvres Complete*, 381)

^{xi} For a well-informed recent book see for example *Human Swarm* by Mark Moffett, HeadofZeus, 2019

^{xii} There are many flaws in these arguments claiming a linear progression of consciousness in definable phases; a lack of almost any evidence; and lots of contradictions – some of which I set out in the final chapter of my book *Big Mind* and others which are laid out in this punchy review by Zaid Hassan: <https://social-labs.org/is-teal-the-new-black/>

^{xiii} Brecht, too, wrote about how utopias can be heaven and hell simultaneously, in a poem about Hollywood: 'In these parts/ they have come to the conclusion that God/ requiring a heaven and a hell, didn't need to/ plan two establishments but just the one: heaven. It/serves the unprosperous, unsuccessful/ as hell.'

^{xliii} Benedict Anderson, 1983, *Imagined Communities*. Verso. Charles Taylor. 2003. *Modern Social Imaginaries*. Duke University Press. Cornelius Castoriadis *L'Institution imaginaire de la société* (translated into English in 1987 as *The Imaginary Institution of Society*) took a similar stance. Another angle on this is *Imagined Futures: Fictional Expectations and Capitalist Dynamics* by Jens Beckert which examines how, when imagined futures fail to materialise, this creates dynamics of alienation.

^{xliv} Sheila Jasanoff and Sang-Hyun Kim (eds) *Dreamscapes of Modernity: sociotechnical imaginaries and the fabrication of power* University of Chicago Press 2015