

Systemic ‘biodiversity’ governing

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Biodiversity loss and social purpose

The challenge of the Anthropocene is not to save the Earth per se but to take responsibility for human co-evolution with the biosphere, including other species. Within this dynamic, biodiversity can never be saved in and of itself. Since the arrival of humans, history shows that the quality of what is framed as ‘biodiversity’ arises from the interaction between human social systems and the biosphere¹. Marketisation, commodification, loss of commoning² and place-based sensibilities to name but a few, are vectors of relationship breakdown with the biosphere. The decline and neoliberal elimination of ‘social purpose’ – no longer adequately negotiated by the state and our modes of governance – underlies the crisis in biodiversity. Having a sense of purpose is a common thread across the Blue Zone communities.¹ The Okinawans call it *‘Ikigai’* and the Nicoyans call it *‘plan de vida’*; for both, it translates to ‘why I wake up in the morning’. ‘Knowing your sense of purpose is worth up to seven years of extra life expectancy’^{2,3}. To pursue social purpose requires an understanding of what it means to be social – the reciprocal experience of other humans, species and the biosphere arising as legitimate others in our living.

Contemporary governance systems are inadequate

The principles on which much governance is founded were developed around 200 years ago⁴. Since then new demands have arisen but governance has stayed still. Almost all the elements of contemporary governance predate awareness of, and design for, the Anthropocene and human-induced climate change, extinction rates, water cycle breakdown, etc. In addition, the expansion of the technosphere, the development of hugely powerful corporations and the disruption of civil society dynamics through urbanisation and mass migration, all represent huge extensions in the governance remit, for which existing systems of governing are not equipped.

Nation states have become the focal point of governance, often limiting or preventing local initiative and action. The **global governance** that exists is better than nothing but resembles a rambling superstructure of poor visibility and accountability and without the democratic legitimacy to wield power on the scale now necessary.

Powerful forces have worked out how to manipulate governments for their own ends. The once occasional, but now ubiquitous practice of **preferential lobbying**, whereby business and other large bodies are able to secure their interests at the expense of citizens and biodiversity, has been a key enabler of the domination of the economic system, and a purveyor of inequality. The demise of the biosphere is a quite an

¹ Blue Zones is the description given to a handful of regions of the world where communities have very long life-expectancies, with a high proportion of people who live to 100+.

extraordinary testament to the lack of vision of **most economists**, who have promoted subject exceptionalism such that the 'environment' is treated as an 'externality'. That externality is kicking off in a big way at its human marginalisation. Future history will put all conventional economists in the dock.

Despite intense expressions of concern about the fractured relationship between humans and the biophysical world for over 70 years, governance has failed to deal effectively with the biosphere. Two choices were particularly unhelpful. The first centred on the dualism – a self-negating pair – of **humans and nature placed in opposition**. The second was the 'triple-bottom-line' – **social, economic and ecological pillars** of sustainable development discourses. Both need to be abandoned.

These unhelpful choices arose from systemic failure – common in governance: for example, pollution occurs and is usually only identified after a long delay and then some years later a **regulation**, which may or may not work, is introduced to stop it. Environmental protection agencies and others usually have sufficient powers but if the current political and governing system takes exception, then regulations can be abandoned or bent, compliant regulators appointed and budgets cut.

Take Australia⁵, where **biodiversity enters the governance system** via commitments to an international treaty (The Convention on Biological Diversity) agreed by the federal government and administered through one ministry. The language and mandated actions of the treaty are that of international science and particular disciplinary cliques. It is not the language of local actors who have to effect on-the-ground change. In this case, local actors in Melbourne spoke of improving human-nature relations, not biodiversity conservation. In a federal governance system like Australia, a demand from government always runs the risk of becoming a tick box exercise. It was implemented with undue focus on species and rural habitats (not urban where the bulk of the population resides) with top-down, command and control practices – despite an emerging discourse about the necessity of co-design. Co-design, with local actors, is unlikely to flourish in governance systems that are structure-determined to deliver command and control⁶.

What does the model of nation-state governance look like today? It comprises the state, the law, the private sector including the media and civil society. Each of these elements and the relations between them, are no longer fit for purpose. The institutions that make up the current governance system, plus the understandings and practices on which they are based and enacted, contribute to the systemic failures being experienced not just by the biosphere but in everyday lives⁷. The governance systems we have are the systems we have constructed – in part human invention, happenstance and the product of the cultural norms of a society.

A new model for governance

What is missing from current conceptions of governance to create a system fit for the Anthropocene? We propose the **addition of three new elements** (Figure 1), which would create the means for discovery based on practical experience – a heuristic model which is able to influence contemporary discourse. It would realise new systemic relationships with the potential for a very different dynamic in the way governance is practiced. The new model is a profound change in organisation. The biosphere and

technosphere cannot speak for themselves and for systemic governing practice to emerge, new institutions and practices have to be invented and institutionalised (through constitutional reforms). In addition, the old will need ‘killing-off’, because social purpose requires institutions to begin with ‘not knowing’, and progress in situations of unfolding uncertainty.

Most analyses of governance failure are partial rather than systemic and stop at first-order change (improving the current system) rather than **radical second-order change (transforming the current system)**. There is a need to liberate thinking and practice from the debilitating shackles of historical governance and institutions that foster only first-order change. Commitments to first-order change are among the systemic reasons why biodiversity ‘is not a compelling object’⁹.

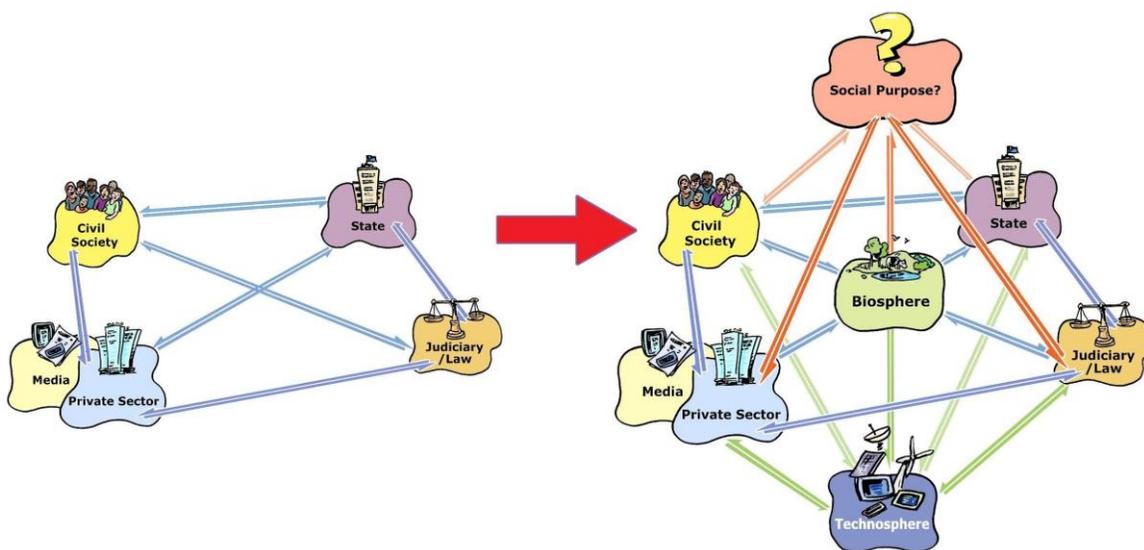


Figure 1 A key challenge – how to transform for governing in the Anthropocene: from a failing governance system (left) to a new ‘governance diamond’ (right) with the biosphere as central, the technosphere and social purpose as additions, adapted from Ison et al.⁸

Effective Anthropocene-governing responses mean making a **framing choice** that places two intrinsically interrelated systems (social and biophysical) into a new joint trajectory based on a clear understanding about what is to be governed and how governing functions. Framing is the social construction of a social phenomenon – by mass media, political or social movements, leaders, or other actors and organisations. An economist will see government in a different frame from a sociologist. Reframing facilitates a fresh perspective and new answers. When an Italian sociologist was asked about his country’s approach to road safety, he reframed the situation by replying ‘*Build better hospitals*’.

De-framing and reframing are the first critical steps of a sequence needed for thinking differently and heading towards second-order change:

1. Take responsibility for *framing choices* applied to situations of concern and explore what those choices could mean in practice;

2. Invite different actors, so that a starting conversation is populated with *multiple partial perspectives*;
3. Explore and design for *purpose*. Revisit articulations of purpose regularly, and know that purpose is what a system does.

Designed human activity systems to carry out these steps will come in many forms to affect the praxis (or theory-informed practice) necessary for a shift to second-order change. The new institutions for social purpose would use principally deliberative and participative forms of democracy such as **citizens' assemblies** run as systemic co-inquiries, which can address effectively situations of uncertainty and complexity that centralised administrations cannot¹⁰. Independent and **cybernetic feedback** on the results or outcomes – in their many forms – of government actions and policies would be institutionalised through an additional component that operated alongside legislature, executive and judiciary powers. As we have found, the world cannot run on lies¹¹.

The global forces of the status quo are not 'natural laws', the only way, tablets of stone or any other platitude for extraordinary degrees of biosphere-human and intra-human inequality. The governing, political, social and economic systems we have are all human inventions, which can and must be reinvented so as to alter the trajectory of on-going human co-evolution with the biosphere, including other species.

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