

# Cooperation in an age of emergency? Climate action as the catalyst for rapid transition towards strong sustainability

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*In a period defined by its recent drift away from, rather than towards, global cooperation, it is difficult to imagine a theory of change, democratic or otherwise, that could bring about a global-scale, cooperative and peaceful transition to 'strong sustainable development' at the required speed. In this paper we argue that the widespread acknowledgement of a 'climate emergency' demanding radical, coordinated action on the basis of 'civilisational climate risk', can be the catalyst with the power to rapidly transform values, norms and political discourse. Citizens need to become extraordinarily engaged with a compelling narrative that mobilises a global movement, one that can sustain political influence and overcome powerful denialist and delayer forces and lay the foundations of a more complete 'doughnut' (Raworth, 2017) of strong sustainability. Although, for some, a reformist advocacy coalition operating within incumbent power structures and populated by diverse actors from civil society, business and politics, may seem inadequate to the larger, system-transformative task, in getting from here to there we have to think strategically, and urgently, about the all-important first step.*

*Keywords : climate emergency, rapid transition, sustainability*

## 1. Introduction

Any scenario of 'strong' sustainable development for this century inevitably depends on the assumption of a process of deliberate and large-scale societal transition or transformation (Bonnedahl and Heikkurinen, 2019). It is equally inevitable that this period of 'creative destruction' (Schumpeter, 1942/1994; Hausknost, 2019) will create winners and losers and that the expected losers – fossil fuel incumbents, associated 'sunset' industries and neoliberal think tanks – will seek to defeat or delay it. Of great concern, given what we know about – a) the problem of collective action from local to global scales; b) human cognitive biases that are almost perfectly ill-suited to prioritizing long-term, large-scale concepts; c) the destabilising effects of a worsening environment, widening inequality, austerity, populism and political polarisation – is whether a green transformation *might begin at all*, or *in time* to avert serious disruption by global overheating of ecosystems, societies and infrastructures. Other, more dystopian pathways are also possible, some would say likely (Wallace-Wells, 2019; Wainwright and Mann, 2018; Foster, 2015). The past decade

has seen a plethora of ever more urgent warnings from scientists and international agencies concerning the risks from global heating and habitat loss, and the need for urgent mitigating and adaptive action at all scales (among the latest: Global Commission on Adaptation, 2019; IPBES, 2019; IPCC, 2019; SEI et al, 2019). The common theme in such reports is the enormous gap between the scale of the problems, the policy commitments made by governments and other actors, and the actual level of action achieved to date. Despite the warnings and pledges concerning the limiting of global heating to 1.5C by mid-century, the commitments made by governments worldwide to greenhouse emissions reductions are both inadequate to the task and also undermined by projected commitments to further fossil fuel production (SEI et al, 2019). The decades-long delays in taking serious action mean that very rapid decarbonisation seems essential for advanced economies, which have both the resources and the moral responsibility to lead the process (Jackson, 2019). However, we lack an account of the political, social and cultural changes that could generate widespread and sustained support for such a programme of radical change. Therefore, in attempting to describe scenarios that most embody strong sustainability, it may help to take a strategic look at how this transition – as a “process of deliberate change and restructuring that brings the economy within planetary boundaries” (Schmitz, 2015, p. 171; Köhler et al, 2019; Geels, 2004) – might best be set in motion.

We begin by describing what a strong sustainability scenario for the rich world might look like and the key differences to today’s dominant socio-economic frameworks. We go on to explore some of the political challenges in transition, and conclude that strong sustainability is very unlikely to happen if all goals are pursued in full and in parallel. We then present the case for using one sustainability goal, the mitigation of climate disruption, as the leading echelon or catalyst for a rapid transition towards strong sustainability. We argue that its unique urgency, relative conceptual simplicity, issue-salience and narrative potential hold the power to rapidly transform values, norms and political discourse.

## 2. A Strong Sustainability Scenario

Efforts simultaneously to implement the full array of strong sustainability goals – as outlined for example in the Global Goals programme of the United Nations (UN, 2019) – require a massive expansion of international cooperation and agreement to manage a hugely complex and interconnected global system of investment, resource stewardship, socio-environmental management and auditing. It would require a complete reorganisation of institutions into nested hierarchies or polycentric governance systems from local to global scales (Ostrom, 1990), and a transformation of the logic of capitalism from a “growth imperative” to an “ecological imperative” (Jacobs (1991). Human well-being, including that of future people and the natural ecosystems that support them, would come first. This priority would be reflected in policy objectives and more meaningful measures of progress than GDP growth. Cooperating nations will have become ‘agnostic’ about GDP growth – high-income nations having undergone a phase of sufficient absolute de-growth in-line with the new objectives based on sustainable well-being. (Hoekstra, 2019;

Hickel, 2020). Aggregate human impacts would be constrained within biophysical boundaries and standards of human well-being would not be permitted to fall below decent social foundations.

The ideal-type scenario for strong sustainability is most clearly illustrated in Raworth's (2017) Doughnut framework (Figure 1), which combines Rockstrom et al's (2009) nine 'planetary boundaries' or sustainable limits with a further twelve measures for minimum social 'foundations' for human well-being as identified in the United Nations Global Goals for Sustainable Development (UN, 2019).



Figure 1: The Doughnut of Social and Planetary Boundaries (Raworth, 2017)

### 3. Political challenges to a transformation to strong sustainability

There are many challenges to transforming to such a strong sustainability scenario in terms of technologies, food systems and resources, decarbonisation, institutions and governance, economies, individual and collective action and urban development (UN GSDR, 2019). In agreement with the German Advisory Council on Global Change's assertion that overcoming the barriers to transformation and accelerating the change "is first and foremost a political task" (WGBU, 2011, p.1), this section explores some of those key political challenges. We identify these types and levels

of action in which the challenges of achieving cooperation for strong sustainable development play out:

- Micro-scale dilemmas;
- Macro-scale coordination;
- Public sector action;
- Private sector action;
- Civil society action.

Each is considered in turn below.

## **The collective action challenge**

*Micro-scale:* Collective action problems (CAPs) (Olson, 1965/1995) or social dilemmas (Dawes, 1980) – defined as conflicts between individual and collective interests (van Lange et al, 2014) – are a key feature of human life with evolutionary origins. Humans are pre-disposed to be largely cooperative, social creatures whose brains make ‘satisficing’, ‘boundedly rational’ decisions on the basis of limited attention and memory capacity, heuristics, association, experience, habit and emotion (Simon, 1991; Batson, 2011; Fehr, 2015; Kahneman, 2011; Ostrom, 1990, 2003; Lebow, 2005). We come poorly equipped for making long-term decisions that affect large groups of people; but we have an in-built, tribal moral sensibility – based on fairness, social norms and reciprocity - that enabled us to cooperate and thus survive for millions of years (Nowak, 2006; Tomasello, 2008; Cosmides, Barrett & Tooby, 2010; De Waal, 2009; Boehm, 2011). These innate, cooperative and moral intuitions make it easier to solve within-group CAPs, but not more expansive between-group CAPs (Greene, 2013). The systems of ‘meta-morality’ that value more abstract and longer-term concepts, up to and including universal and intergenerational human rights, had to await the co-evolution of language, abstract reasoning, reflexivity and eventually the growth of human civilisations.

*Macro-scale:* At the scale of civilisations there is another social dilemma – the cooperation/complexity paradox – which Rifkin (2009) termed the ‘empathy/entropy paradox’. Given favourable conditions, human tribes throughout history have invented or copied the technologies, philosophies and methods of organisation necessary to expand into more complex tribes, chieftains, city-states, nations and empires. Cultural evolution of this kind has been recognised at least since Ibn Khaldun (1377), has developed as a field of study in the West since de Montesquieu (1748), and has included contributions from Malthus (1798), Hegel (1807), Elias (1939), Tainter (1988), Diamond (2005), Lenski (2005), Boyd and Richerson (2005), Turchin and Nefedov (2009), Rifkin (2009) and Turner (2010). Increasingly complex societies build greater connectivity between people through a range of mechanisms including trade, transport, communications, literature, education, widening political boundaries and urbanisation (Pinker, 2011; Shermer, 2015; Benkler, 2011). Over time this connectivity expands social networks of trust, cooperation and common identity (Singer, 1981; Wright, 2000; Hunt 2007; Krznaric, 2014). The dilemma or paradox is this: that although immense quantities of energy, technology and economic

development are necessary to build a globally connected and cooperative humanity, the amount of waste produced and resources consumed to achieve it (the entropy bill) has become unsustainable and threatens our very existence (Rifkin, 2009; Ophuls, 2012; Welzel, 2013). The question is, can we solve the collective action problem fast enough?

Sustainability is therefore a collective action problem at multiple scales. It is in the short-term self-interest of individual countries, politicians, citizens, businesses and even the entire present population (vis a vis future generations) to “free-ride” on the actions of others by doing nothing or too little; but it is in the long-term collective interest of all actors to cooperate to avoid a planetary catastrophe (Zenghelis, 2016). One example of the difficulties that nations face in solving their collective action problems is that, after almost thirty years of efforts to devise a binding plan to stop the planet’s atmosphere from overheating to dangerous levels due to greenhouse gas emissions, the best efforts of the international community have resulted in The Paris Agreement (2015), a list of non-binding ‘Intended Nationally Determined Contributions (INDCs)’. When added up together, these INDCs are predicted to lead to around +3.2°C of overheating, well beyond the safe limit of ‘well-below +2.0°C’ and well into the territory of potentially catastrophic positive feedbacks or tipping points. No G20 country is currently on track to honour even their INDC commitments. It is also important to point out that ‘potluck pledges’, as the climate scientist Katherine Hayhoe has characterised the INDCs, or ‘self-determined fair shares’ (Raworth, 2017), do not even amount to cooperation.

The sustainability literature is full of scenarios, proposals and recommendations to enact policies, redesign systems or change practices. But as Ronzoni (2019) points out, deliberate transformations to a strong sustainability scenario do not just happen ‘dei ex machina’. Who initiates deliberate, radical change in the collective interest? Clearly, after half a century of increasingly urgent and alarmed warnings, ‘the facts’ are not enough. Let us consider the three sectors of society in turn – the public sector (governance, including political parties, police and the judiciary); the private sector (business and industry); and civil society (including religious organisations, trade unions and social movements) – to examine where change begins:

*The public sector:* according to theories of majoritarian electoral democracy from Aristotle to de Tocqueville, public policy responds to the preferences of the average citizen (Gilens and Page, 2014). Electoral candidates compete for voter support and must therefore be sensitive to the interests and concerns of the majority. Candidates with radical policy proposals, such as a strong sustainability scenario, would not therefore be selected. This follows from Olson’s (1965) logic of collective action and supports Willis (2018) whose recent empirical work with UK parliamentarians showed that UK politicians understood the need for more radical climate policy but were mostly unwilling to make a strong case for it, partly due to a lack of support from constituents. Alternative theories of economic-elite domination, majoritarian pluralism, and biased pluralism offer even less reason to assume that politicians would pro-actively instigate policy agendas for the long-term collective good (Gilens and Page, 2014);

*The private sector:* business and industry play an important role in sustainability transitions as the innovators of new technologies, services and business models (Köhler et al, 2019). However, this role is subservient to their need to survive in a competitive commercial environment. The private sector usually requires government finance and investment to accelerate the pace of change and overcome path dependencies and incumbent resistance (Sovacool, 2016; Mazzucato, 2015). Olson's (1965) 'free-rider' problem also applies here: no incentives exist for private companies to burden themselves with the unnecessary, additional costs and risks of coordinating and financing strong sustainability goals for their sector for the long-term common good (Geels, 2011);

*Civil society:* includes a wide range of organisations and social movements involved in sustainability transitions (Köhler et al, 2019). The role of Civil Society Organisations (CSOs) can be divided into three pathways: political pathways, including the creation of publicly supported advocacy coalitions for rapid transition policies (Kern and Rogge, 2018; Markard, Suter and Ingold 2016); grassroots innovations, e.g. Transition Towns; eco-village movement (Seyfang and Smith 2007); cultural initiatives that challenge entrenched practices, meanings and values (Spaargaren 2013).

While Olson's free-rider problem equally applies to civil society, i.e. that large-group cooperation tends to be undermined over time (Bowles and Gintis, 2011), theories of common pool resource governance (Ostrom, 1990; 2008), social movements (Leach and Scoones, 2015) and societal change (Green, 2016; Crutchfield, 2018; Sunstein, 2019; Dunlap and Brulle, 2015) offer a strategy for overcoming it: as demonstrated in all successful social movements from the abolition of slavery to legalisation of same-sex marriage, a sufficiently motivated network of citizens and organisations have the potential to mobilise around a common cause long enough to exceed a critical 'mass' and 'momentum' for change (Ronzoni, 2019; Centola, Becker, Brackbill and Bronchelli, 2018; Chenoweth, 2013; SCNARC, 2011). The key challenge in the longer-term lies in maintaining the authentic commitment of the social movement base and its connections to the network and organisations of the coalition (Leach and Scoones, 2015). As Crompton (2010, p. 18) summed it up: "public appetite and demand for change is...of crucial importance in setting the pace and level of ambition with which governments and businesses respond".

Without wishing to downplay many important contributions at 'lower' levels of states, cities and regions, we concur with other analysts that it is political pressure directed at *national* governments by an internationally coordinated coalition of civil society actors, that is the key to solving the collective action problem and accelerating progress to match the scale of the strong sustainability challenge (Data Driven Yale, 2018; Green, 2016; Crutchfield, 2018). Furthermore, and as discussed in more detail below, the effectiveness of this coalition would be improved by the participation of all sectors of civil society – citizen activists, social movements, environmental groups, lawyers, scientists, journalists, artists, politicians, religious groups, trades unions and business associations – that are committed to maintaining political pressure for strong sustainability solutions (Pralle, 2009).

## The political economy challenge

Another dilemma concerns the debate over whether a reformist theory of change is capable of delivering a transformation to a sustainable future, or whether a political revolution is required to supplant capitalism with something else (Newell, 2015). The three main political economy options advanced so far in the literature are green growth capitalism (e.g. World Bank, 2012), post-growth capitalism (e.g. Daly, 1991), and post-capitalism (e.g. Magdoff and Williams, 2017). We discuss these in turn below.

*Green growth capitalism:* this is the dominant reformist model that argues for variations on a 'green growth' or 'clean growth' pathway to weak (rather than strong) sustainability, ranging from market-led to post-Keynesian approaches. It relies upon a mind-boggling expansion of hypothetical negative emissions technologies and invites further incredulity due to a complete lack of empirical evidence that sufficient absolute decoupling of GDP growth from resource use and carbon emissions is even possible (Raworth, 2017; Hickel and Kallis, 2019). It is, however, the most politically attractive option and aligns with the dominant 'GDP growth/human progress' narrative and strategy. This strategy succeeds up to a certain level of GDP in improving human well-being in the short-term, but which if not constrained within longer-term sustainable limits leads to ecosystem and therefore economic system collapse.

*Post-growth capitalism:* post-growth ecological economists, supporting steady-state, de-growth or growth-agnostic political economies, believe that capitalism - if strictly defined as private ownership and control of the means of production - not only could deliver a transformation to strong sustainability, but should deliver it, at least in the short-term — because of the urgency of the climate and ecological emergency (Newell, 2015). This might take the form of a strengthened social democratic steady-state model, featuring a range of private firms, shared ownerships and co-operatives in a monetary economy that constrained aggregate impacts within environmental limits and social protections (Douglas, 2019; Raworth, 2017; Daly, 1997; Jackson, 2009). It may further require *de-growth* of production/consumption in high-consuming nations and a shift away from growth-focused development in the global South (Hickel and Kallis, 2019). The crucial question is whether a steady-state or de-growth model could win and maintain popular support. In theory, a 'grown-up' steady-state economy need not hinder science, technology, creativity or any other tools for human improvement (Trebeck and Williams, 2019). However, considerable historical evidence suggests there is a correlation between stagnant or falling real incomes, zero-growth and rising income inequality on the one hand, and social unrest, intolerance and regressive policies on the other hand (Friedman, 2005; Harrington and Gelfand, 2014; Scheidel, 2018; Inglehart, 2018; Anhicier, Kaldor and Glasius, 2012). Nobel Prize winning behavioural economist Daniel Kahneman claimed that "No amount of psychological awareness will overcome people's reluctance to lower their standards of living." (Marshall, 2014, p. 58). This does, however, leave open the possibility that, given compelling reasons, people may be capable of rapidly changing not what they truly value, but how they define it (Jackson, 2017).

*Post-capitalism:* some climate activist organisations have become aligned to anti-capitalist and eco-Marxist movements since the late 1990s (Leach and Scoones, 2015). However, the popular demand for

eco-Marxism is not strong. The record of centrally planned economies, in which in the absence of markets goods are rationed, jobs are allocated by the state, industry and agriculture are nationalised, personal savings and the nation's currency and ability to borrow money are decimated, is not widely considered an attractive option. It is also unclear why a non-capitalist system would necessarily be any more sustainable than the system we have, while being less able to invest in renewable technologies or social protections in the transition.

The dilemma therefore is that although endless GDP growth is irreconcilable with strong sustainability; and although attitude polling shows that people want a clean, healthy, sustainable future for themselves and future generations, it is not evident that they are prepared to give up a growth-based economic system to achieve it (Barasi, 2017; Poortinga, Fisher, Böhm, Whitmarsh, Steg, Ogunbode, 2018; Phillips, Curtice, Phillips and Perry, 2018).

## **The narrative challenge**

A transformation to strong sustainability requires systemic change, which requires a global social movement, which in turn requires mass mobilisation using a compelling, unifying narrative or vision of “shared meanings that inspire people to collective action (Tarrow, 2011, p. 31; Givan, Roberts and Soule, 2010; Jackson, 2017; Monbiot, 2017; Evans, 2017; Klein, 2014; Raskin, 2016).

There is evidence that positive/optimistic messaging (PIRC, 2018; Nordhaus and Schellenberger, 2007; Gifford and Comeau, 2011; Bain, Hornsey, Bongiorno and Jeffries, 2012; Stern, 2012) is more effective than negative messaging. However, there is also evidence that negative, fear/loss-invoking narratives can be highly motivational (Wallace-Wells, 2017; De Moor, Doherty and Hayes, 2018; Thunberg, 2019) where there is high perceived self-efficacy and response efficacy (Maloney, Lapinski and Witte, 2011).



| <b>Table 1: A Typology of Narrative Framing</b> |   |  |
|---|---|--|
| <b>Motivation</b>                               | <b>Designed to appeal to</b>  | <b>For the sake of</b>   |
| <b>Ego +</b>                                    | Positive, self-enhancing rewards/gains, e.g. to one's reputation, legacy or personal well-being <sup>1</sup>    | Climate stability for humanity and planetary ecosystems<br>---<br>Conserving the local environment<br>---<br>Energy security<br>---<br>Energy efficiency/cost<br>---<br>Jobs<br>---<br>Regional regeneration<br>---<br>Business development<br>---<br>Technological Innovation<br>---<br>Public health |
| <b>Ego –</b>                                    | Negative emotions: e.g. shame, guilt; or negative consequences: e.g. punishment, sanctions <sup>2</sup>         |  |
| <b>Natural/cultural capital</b>                 | A desire to conserve goods of natural or capital value; the love of the land, home and heritage <sup>3</sup>    |  |
| <b>Altruistic</b>                               | A concern for the welfare of others; to evoke sympathy for their suffering <sup>4</sup>                         |  |
| <b>Collectivist</b>                             | A concern for the welfare of a specific group and associated feelings of group loyalty/ solidarity <sup>5</sup> |  |
| <b>Principlist</b>                              | Ethical principles of justice, fairness, humanity, rights, freedom or the greatest good <sup>6</sup>            |  |
| <b>Normative</b>                                | The human tendency to imitate others and conform to perceived social norms <sup>7</sup>                         |  |
| <b>Self-transcendent</b>                        | The extension of one's own limited existence into a self-transcending, transgenerational cause <sup>8</sup>     |  |

Researchers continue to investigate the ability of various narratives to influence public attitudes and activism (Corner, Shaw, Clarke and Wang, 2018; Whitmarsh and Corner, 2017; Chapman, Corner, Markowitz and Wang 2018; Nisbet and Markowitz, 2016). Table 1 above offers a typology of narrative framings inspired by Batson (2011, p. 227), who encouraged “anyone interested in stimulating action to benefit others...to shift attention from the behaviour sought...to the different motives that might encourage or discourage this behaviour”. Several consistent research findings reveal the importance of:

<sup>1</sup> Batson 2011; van Vugt, 2009; Wade-Benzoni and Tost, 2009.

<sup>2</sup> Fehr and Gaechter, 2000.

<sup>3</sup> Leopold, 1949; Birnbacher, 2009; Scruton, 2017.

<sup>4</sup> Batson, 2011; intentional confrontation designed to induce sympathy and outrage at injustice lay at the heart of the suffragette movement, Gandhi's independence movement and the U.S. civil rights movement.

<sup>5</sup> Batson 2011; combining sympathetic concern for one or more individuals with group solidarity is the basis of ‘The Hero's Journey’ (Campbell, 1949).

<sup>6</sup> Batson, 2011; Birnbacher, 2009; Jonas, 1984; Singer, 1981.

<sup>7</sup> Cialdini et al, 1991; Turner, 1987.

<sup>8</sup> E.g., Birnbacher's (2009) ‘transgenerational solidarity’; Jonas' (1984) ‘imperative of responsibility’; Laudato si' (2015) ‘intergenerational solidarity’.

*Emotional engagement:* targeting deeply held morals, values and identities is more effective than providing information and deliberative thinking (Stern, 2018; Lakoff, 2010; Kahan, 2010);

*Human stories:* these are much more effective than statistics (Evans, 2017; Jones, 2014; Stern, 2018);

*Non-violent, democratic aims:* violent, anti-democratic or revolutionary language limits a social movement's potential pool of support (Glover, 2018; Della Porta and Diani, 2006; Meadowcroft, 2011);

*Inclusive, superordinate goals:* 'us versus them' enemy narratives are counterproductive (Krznicar, 2014; Marshall, 2014).

*A values-inclusive narrative:* a number of U.S. studies have revealed that many political conservatives may not be rejecting sustainability and the risks to future generations per se, but are rejecting the prevailing 'liberal-focused' environmental discourse and framing because it challenges their social identity, ideology and values (Feinberg and Willer, 2013; Feygina et al, 2010; Kidwell, Farmer and Hardesty, 2013). According to value theories, in wealthier, western countries conservatives tend to identify more readily with 'binding' values that emphasise tradition, authority, loyalty and sanctity, whereas liberals tend to identify with 'individualising' values like welfare, justice and rights (Haidt 2008/2012; Graham, Haidt and Nosek, 2009; Kahan et al, 2012; Shwartz 1992/2012). Wolsko (2017), experimenting with a values-inclusive moral framing based on Gaertner & Dovidio's (2000) common in-group identity model, succeeded in increasing pro-environmental attitudes in both political liberals and conservatives, supporting Stern's (2018, p. 85) assertion that "activating...common moral foundations can help to...grow social movements."

*Unity and Diversity:* In social movements and policy coalitions it is essential to have a strong, unifying, grand narrative or central purpose (Tarrow, 2011; Sabatier and Weible, 2007). But political effectiveness also depends upon the potential of this grand narrative to be favourably re-presented as sub-narratives to a wide range of constituencies with diverse interests (Meadowcroft, 2011; Klein, 2014; Eikeland and Inderberg, 2016). In this way, actors may be recruited to the cause who are motivated for reasons other than the long-term interests of humanity and the planet (see Table 1: column C) – e.g. for energy security, job creation, business development (e.g. renewables), regional regeneration or public health (Schmitz, 2017; Hess, 2018). An example (for which we hold no sympathy) was the UK Vote-Leave 'Take Back Control' narrative, which unified over half of those who voted with a simple, clear concept that could be re-interpreted to appeal to the perceived interests of: a) ideological nationalists; b) the financially dispossessed 'precariat'; and c) financial/business elites looking to evade European regulations. A much earlier example was the "Am I not a man and a brother?" narrative that cultivated a strong inter-class coalition in the late 18th - early 19th Century English abolition movement between Quakers, Anglicans, secular enlightenment scholars and the early trade union movement (Yerxa, 2012);

*Appealing to the values we have:* due to the time-urgency for a sustainability transformation – particularly in relation to climate change, biodiversity and ecosystem breakdown – persuasive communications need to have an immediate impact. Narratives therefore need to “draw out deep-seated principles and values which are already harboured by people” (Capstick et al 2015, p. 13), rather than rely on some future ‘moral awakening’ (e.g. Heinberg, 2017).

*Modelling new norms:* Appiah (2010) argued that moral revolutions – for example the abolition of footbinding in China – don’t happen because people are persuaded by new moral arguments but because a committed movement of change-makers mobilise to redefine ‘honour’, or what is considered socially acceptable. Scheffler (2018) claims that people already value sustainability and future generations, which suggests that, with the help of influential leaders, language and behaviours that are currently ‘honoured’ – such as exotic holidays, or the ‘socially organised denial’ preventing discussion of the climate emergency (Norgaard, 2011) – might rapidly become ‘dishonoured’, as happened with many moral revolutions from the abolition of slavery to same-sex marriage.

## **Implications**

Efforts to simultaneously implement the full array of strong sustainability goals seem highly unlikely to progress to the level of serious international discussion in the foreseeable future. Transformative change begins with civil society activism, even if its most significant, longest-lasting consequences are, eventually, state-led legislation and new societal norms. Social movements also tend to reach scale and diffuse over multiple generations, whereas the scientific evidence suggests that a global programme of investment and implementation for strong sustainability needs to be realised as soon as possible. In terms of scale, complexity and time-urgency, there is no historical precedent to the current movement for a sustainable future. One essential element of a successful movement or political coalition for change is a unifying, values-inclusive grand narrative that can be re-interpreted to appeal to diverse constituencies and thereby help to mobilise a broad-based global movement. Narratives that resonate only with a narrow, liberal elite of global-intergenerational worldviews are unlikely to generate sufficient support. It can sometimes be difficult to provide the facts about the risk of civilizational collapse without making people fearful, depressed or triggering irrational defence mechanisms. Positive, reassuring visions embodied in ‘green growth’ or ‘Green New Deal’ just transitions are attractive narratives, but governments have yet to explain how strategies relying on infinite growth can be compatible with the resource and ecosystem services limits of a finite planet. Furthermore, many people distrust the motives and the competences of an expanded state, a distrust that is shrewdly exploited and amplified in the counter-narratives of a powerful and well-financed blocking coalition.

### **4. The climate emergency as the catalyst for rapid transition**

Our argument for using one of the sustainability goals, the climate emergency, as a catalyst to accelerate a movement towards a strong sustainability that encompasses the remaining ecological and social goals, rests on the unique urgency, conceptual simplicity, public and political salience and narrative potential of this issue.

## **The climate crisis is uniquely urgent**

As scientists and activists point out with increasing alarm, there is literally no time left to start treating climate change like an emergency, ‘war-mobilisation’ situation. And if we don’t succeed in stabilising the climate, the other sustainability goals become otiose. For high confidence of limiting global warming to a ‘safe operating space for humanity’ of +1.5C above the pre-industrial average, and without relying on the large-scale deployment of largely hypothetical carbon dioxide (CO<sub>2</sub>) negative emissions technologies (NETs), the Intergovernmental Panel on Climate Change (IPCC) concluded that CO<sub>2</sub> emissions must peak immediately, reduce 40-50% from 2010 levels by 2030, and reach net-zero by mid-century (IPCC, 2018; Hausfather, 2018; Rockström et al., 2009). A recent analysis by Jackson (2019), while emphasising the important point that “policy must specify both a target date and an emissions pathway” (Jackson 2019, p. 1) and acknowledging principles of equity and precaution, argues for a U.K. net-zero target of 2030 or earlier.

## **The climate issue may solve the collective action problem (CAP)**

As previously discussed, the CAP is a feature of human life that makes it difficult to sustain ‘between-group’ cooperation or large-scale, long-term change for the common good; particularly when, as is the case with sustainability, the change is systemic, entails significant perceived cost or sacrifice, and challenges prevailing norms and incumbent power structures that deploy persuasive counter-narratives. However, radical change can be instigated by civil society activism: the history of successful social movements demonstrates that the CAP can be overcome when a sufficiently motivated network of citizens and organisations mobilise around a common cause long enough to exceed a critical ‘mass’ and ‘momentum’ for radical change.

This network appears to be far closer to critical mass in the case of the climate emergency movement than any other environmental issue or the sustainability issue in general. The evidence is the millions of climate protestors occupying streets and public spaces around the world and the phenomenal increase in media exposure of climate issues, commitments to avoid flying, policy initiatives and political discourse.

Currently, this network is comprised of a wide range of actors (see table 2) often with incompatible decarbonisation targets, pathways, economic visions and narratives. It remains to be seen whether these groups develop the closer alignment that is vital for creating rapid transitions (Roberts et al, 2018; Weible and Sabatier, 2018; Schmitz, 2015; Crutchfield, 2018).

| <b>Table 2: sectors and examples of actors engaged in the climate emergency</b> |   |
|---|---|
| <b>Sector</b>   | <b>Actor example</b>                          |
| Politics  | The Green Party                               |
| Urban government  | C40 Cities                                    |
| Judiciary   | Climate Litigation Network                    |
| Religion  | Global Catholic Climate Movement              |
| Citizenry   | Extinction Rebellion; School Strike 4 Climate |
| Business  | Aldersgate Group                              |
| Finance   | 350.org                                       |
| Labour  | Trades unions                                 |
| Academia  | Climateemergencydeclaration.org               |

### **The climate issue is relatively conceptually simple**

In contrast to the complexity of some of the other sustainability goals, for example the link between nitrogen loading, soil health and food production, the importance of climate stability is a relatively straightforward issue to understand – certain gases act like greenhouse glass by trapping the Sun’s heat; the more you pump into the air the hotter it gets. The consequences of failing in this particular goal are also tragically understood by the victims of extreme weather events around the world – wildfires, floods, storm surges, droughts, etc. – and by those who witness them remotely through news media. Likewise, the accelerating rate of glacial retreats, coral reef die-offs and species’ extinctions can be shockingly observable from one decade to the next.

### **The climate issue may solve the narrative problem**

We have contended that an effective global coalition for rapid transitions needs to be a broad-based movement. One pre-requisite of an effective broad base rests in the strength of the movement’s narrative frames, which ought to address human cognitive biases and heuristics, cross-cultural differences and be values-inclusive. It should also reflect the importance of emotional engagement, human stories and a positive, non-threatening vision. Perhaps most importantly, an effective narrative should be capable of being re-presented or re-interpreted in ways that appeal to diverse constituencies and transcend ideological divides. And lastly, it must either find a way to disprove Kahneman and “overcome people’s reluctance to lower their standards of living” or help them to re-evaluate those standards.

In recent years, two very different kinds of phenomena have provided clues to what this elusive grand narrative might look like: the first is the increasingly frequent links made in television and print news media

between extreme weather and climate change. Whether in reference to the migrant crises in Central America or the Mediterranean (The World Bank, 2018), water scarcity in Rajasthan (UNWWDR, 2018), hurricanes in North Carolina (The Washington Post, 2018), flooding in the Yorkshire Dales or bushfires in New South Wales (Reuters, 2019), climate change is increasingly being understood and discussed as something happening right now that could destroy my home and local environment. The second is the meteoric and completely unpredicted rise and spread of Extinction Rebellion and the school strikes for climate inspired by the Swedish teenager Greta Thunberg. The leadership shown by the young people in these protests is particularly important because it gives the future a real face - the face of a child.

Far from the abstract and global concepts for the sake of humanity and the planet that have often epitomised sustainability narratives, the current 'climate emergency' moment has the potential to forge a grand narrative that is entirely 'down-to-earth', one that evokes a strong, emotional call-to-arms in defence of what we love most - our homes and our children. In doing so it captures motivations that are truly values-inclusive and transcend ideology, being based on love for one's land, home and heritage (natural and cultural capital in Table 1) and with concern for the welfare of the people we love most who will suffer the worst consequences (altruism in Table 1) if we fail. This 'home and heart' narrative can be re-presented or narrowcasted to more closely define the local experience and issues of concern to the audience in question. It is a positive, conservative vision that also aligns with religious notions of the sacred, purity and sanctity. And finally, it may even have the potential to prove the great Daniel Kahneman wrong (as we are sure he was hoping) in that we may decide, after all, that living more simply is not a sacrifice if it means that our children may simply live. In this sense, as every parent knows, sacrifice is an expression of one's own values and comes freely, from within (Maniates and Meyer, 2010).

## 5. Conclusion

This paper claims that the international community currently lacks the degree of mutual trust, cooperation and popular support required to even discuss, let alone to simultaneously implement, the full 'doughnut' programme of strong sustainability. The climate emergency could be a useful catalyst to break the inertia and accelerate a movement towards strong sustainability. If a binding framework agreement for a genuinely equitable and sustainable climate regime could be introduced – in which the 'growth imperative' is replaced by the 'ecological imperative' with respect to this one planetary boundary (alongside essential social foundations for a just transition) – it may become easier to incorporate the remaining planetary boundaries and social foundations of strong sustainability at the earliest opportunity. A disruptive – and possibly brief – political window may be opening, driven by a mass mobilisation for more radical climate action, that can unify diverse groups, overcome opposition, and rapidly transform prevailing norms. In contrast to that required for the complete 'strong sustainability' scenario, a compelling narrative for radical climate action does not depend on a global, intergenerational worldview; merely on what the vast majority of people already care most about.

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