Recoupling:
The driver of Human Success

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Abstract

This article's point of departure is that most of life's challenges are collective challenges, to be addressed through collective action that can be successful only when people act beyond enlightened self-interest. This is the opposite of the methodological individualism that underlies mainstream economic and political analysis. The core idea is that to address our collective challenges, we need to coordinate our collective capacities at a scale and scope at which these challenges occur. As our

challenges vary through time, often unpredictably, our capacities are continually in danger of becoming decoupled from our challenges. Thus our survival and wellbeing depends on our success in continually recoupling our capacities with our challenges. Such recoupling invariably involves not just cooperation (working with others to achieve one's own goals), but also collaboration (working with others towards common goals). When individuals collaborate, they participate in the purposes and welfare of the social groups in which they are embedded. Recoupling deserves to become a central guide for public policy, business strategy and civic action.

1. Introduction

The basic idea of this article is simple and surprisingly powerful: Most of the challenges we face in life are collective challenges, from the personal level (where we pursue most of our goals in webs of social interdependencies) all the way to the global level (where we confront such problems as biodiversity loss, pandemic preparedness, misinformation, and much more, in large numbers). We address collective challenges by coordinating our actions. This coordination requires that our collective capacities — psychological, social, political, technological and economic — be aligned with our collective challenges. Such alignment promotes our flourishing.

Our collective challenges are diverse. They differ in scale, from the large-scale of climate change to the small-scale of family rifts; and they differ in scope, involving threats to our social belonging, personal empowerment, material livelihoods and environmental health. *To address our collective challenges successfully, we need to coordinate our collective capacities and align them in the scale and scope at which our collective challenges occur*.

Both the scale and scope of our collective challenges also evolve with the passage of time, so that our collective capacities are continually in danger of becoming decoupled from these challenges. On this account, *our collective capacities must continually become recoupled with our ever-changing collective challenges*. We call this the "**recoupling thesis**." This recoupling is the driver of human success, ensuring that we remain adapted to our environment in the pursuit of our flourishing. As such, it deserves to become a guidepost for public policy, business strategy and civic action.

To make headway in understanding how our collective capacities become aligned with our collective challenges, we need to distance our thinking from the individualism that dominates much of economics and political science.

In conventional economic paradigm, individual decision makers have their own, predetermined, individual economic preferences, beliefs, perceptions and skills, on the basis of which they make their economic decisions individually, in the context of a probablistically determinate environment. Economic markets equilibrate their decentralized demands and supplies. Macroeconomic activity is simply the sum of all individual economic activities. Social welfare is the sum of individual welfares.

On account of these default assumptions, within which conventional economics is done, collective capacities come to be viewed as the sum of individual capacities and collective challenges become the sum of individual challenges. Similarly, in conventional political

analysis, citizens have their own, predetermined, individual political preferences. Politicians compete for votes by seeking to represent their citizens' given preferences.

Here we adopt a different point of departure, with different default assumptions. We recognize that people live – and always have lived – in small social groups, from which larger social collectives can be formed. Their welfare arises not only from the satisfaction of their individual goals, but also from their participation in the welfare of the social groups to which they belong. Consequently, their preferences, beliefs, and perceptions are influenced by their social interactions within their social groups. Similarly, their skills and other capacities emerge collectively, since most of their work is done in interaction with others.

Their collective challenges are threats to the collective welfare of their social groups. As these challenges are emergent group phenomena, they are not merely the sum of the threats to their individual welfares. Addressing these threats requires the alignment of the collective capacities with the collective challenges. Such alignment can arise only when the social groups have the size and scope corresponding to the size and scope of the challenges.

People make their decisions in a radically uncertain environment, in which events are often not probablistically predictable. To flourish in the presence of such uncertainty, people and their groups must remain adaptable, so that their collective capacities can become continually recoupled with the unpredictably changing challenges. This is the reason why recoupling is the driver of human success.

In what follows, I explore the building blocks of this recoupling thesis. Section 2 divides human coordination into cooperation (working together to achieve one's own goals) and collaboration (working together to achieve common goals). The section also describes three major features of our collective challenges: their multi-level nature, their multi-dimensionality and their variability. Accordingly, recoupling requires our collective capacities to be multi-level, multi-dimensional and flexible. Sections 3-5 describe how to address the scale and scope of our challenges with the scale and scope of our capacities.

Sections 6-9 argue that, contrary to much popular opinion and traditional economic theorizing, neither the market nor the state, nor some combination of market and state, is sufficient to achieve our collective goals. For recoupling of our capacities with our challenges to occur, society must be mobilized to work appropriately alongside the market and the state. Within society, cooperation on its own is generally insufficient to address our collective challenges; collaboration is essential.

Section 10 explores how to make human coordination work, emphasizing the importance of small social groups at the building blocks of coordination at various scales and across the economic, political and social domains. The coordination of small groups is achievable through polycentric governance.

Sections 11-13 turn to the mechanisms of collaboration – both internal mechanisms that work "inside the head" and external mechanisms operating "outside the head." These two mechanisms need to work consistently together in order for recoupling to be achieved. If the social groups that generate internal allegiance are at variance with the groups that are supported externally (such as ethnic or religious groups that have identities opposed to the

national identity supported by the nation state), the result is social discord and delegitimization of democratic processes.

Section 14 then provides a short overview of major policy and business implications. Finally, Section 15 concludes.

2. Coordination: Multilevel, Multi-dimensional and Flexible

Humans are able to coordinate their collective capacities and align these with their collective challenges. Our collective capacities work both internally (inside our heads) and externally (outside our heads). Internal capacities include psycho-social resources (rationality, mentalizing, empathy, compassion, trust, etc., as well as values, beliefs and narratives, as well as norms, customs, practices and heuristics), political resources (political institutions and organizations, as well as laws and regulations), and economic resources (human, physical and financial capital, as well as technologies). Each of these capacities can operate on various scales. For example, compassion can be practiced towards family and friends as well as towards strangers; political organizations can operate on local, regional, national and international levels; and financial capital can support investment at home and abroad.

We interpret our collective challenges as collective threats to our flourishing. As we face most of life's challenges collectively, the alignment of our collective capacities with our collective challenges promotes our flourishing.

Our ability to align our capacities with our challenges has stood us in good stead throughout history. The reason why humans have been such an evolutionarily successful species is not primarily because of our individual cognitive abilities, but because we are able to coordinate our behavior flexibly, aligning our internal and external capacities with our collective challenges (regarding internal capacities, see for example Barrett, Tooby and Cosmides, 2007; and Pinker, 2010; regarding external capacities, see for example, Henrich (2015), Dunbar, 1998; Dugatkin, 1999; E.O. Wilson, 2012; D.S. Wilson, 2005).

Our ability to coordinate our behavior can take the form of **cooperation** (working with others to achieve one's own self-interested goals) and **collaboration** (working with others to participate in common goals).

I will argue that cooperation does not play the dominant role in the coordination of human behavior, since the pursuit of individual self-interest alone – in the absence of prosocial external constraints – rarely, if ever, promotes systemic flourishing. People pursuing their own self-interest are as likely to promote the health of their social, economic and environmental systems as are cancer cells with regard to the health of the host organism (e.g., Wilson, 2019). I will also argue that cooperation induced through external mechanisms — such as laws, contracts, policing and so on — is rarely sufficient to address our collective challenges. Instead, internal mechanisms — such as norms and values — are essential. This means that *collaboration must be a crucially important driver of human coordination*. Collaboration requires decision making to take place at the level of social groups, not the level of individuals. When individuals collaborate, they participate in the purposes of the social groups in which they are embedded.

We view social groups broadly as any groups whose members are in persistent interaction with one another, regardless of whether these interactions are maintained primarily by psycho-social forces or by economic and political institutions. For collective challenges to be addressed, the purposes and capacities of our social groups must be aligned with the collective challenges to be addressed. When this alignment takes place, then it provides a clear incentive for the group members to participate in the flourishing of their social groups.

The three major features of our collective challenges are their multi-level nature, multi-dimensionality, and temporal variability:

(1) **Multilevel challenges**: Our collective challenges arise at many different scales. There are local challenges, such as air pollution in cities, calling for local policies to promote clean energy and reduce emissions from transport and industry. And there are micro challenges, such a family dysfunction, calling for coordination among family members.

There are national challenges, such as inequality and social injustice, calling for national coordination through policies to improve social mobility, promote equality of access to education and healthcare, and poverty reduction.

There are regional challenges, such as regional conflicts (such as those in the Middle East), calling for coordination that can involve such things as the negotiation of peace agreements and provision of humanitarian aid.

Finally, there are global threats, such as climate change, biodiversity loss and resource depletion, pandemics, international financial instability, cybersecurity, international terrorism, and so on. These threats can only be addressed effectively at the worldwide level.

(2) **Multi-dimensional challenges**: For the purposes of our analysis, it will be useful to think of our flourishing as multi-dimensional. Thus, the scope of our challenges – the threats to our flourishing – may be understood as multi-dimensional as well.

For example, the scope of the collective challenge from climate change may be understood as a threat to solidarity (when climate change disrupts communities), agency (when climate change reduces our ability to shape our lives through our own efforts), gain (when climate change raises the cost of producing goods and services) and environmental sustainability (when climate change disrupts self-regulating ecosystems).

Along the same lines, the scope of the collective challenge from financial instabilities may also be viewed in such terms, since financial crises undermine informal community support systems, disempower the people who lose their fortunes, reduces material wealth, and saps the state's financial resources for environmental services.

(3) **Variability of challenges**: Many of these challenges are variable through time. For example, extreme weather events are inherently variable, including droughts, floods, storms, heat waves and so on, each requiring diverse coordinated responses. Pandemics are variable in terms of their transmissibility, lethalness, mutability, and so on.

These events are not only variable, but often unexpected, meaning that the coordinated responses are difficult if not impossible to plan in advance. The collective action generally requires decision making under radical uncertainty.

For people to thrive, they must be able to address these three features of their collective challenges through corresponding features of their collective capacities:

(a) **Multi-level coordination**: Our capacities are flexible in scale, as explained in Section 3.

For example, the World Health Organization coordinated efforts to develop and distribute vaccines and treatments across countries, while governments of individual countries implemented lockdowns, travel restrictions, social distancing and other measures to slow the spread of the virus, with the help of local groups and individuals.

The Paris Agreement on Climate Change, adopted by nearly all countries worldwide in 2015, provides a framework for global cooperation on reducing greenhouse gas emissions and mitigating impacts of climate change, while individual countries commit to reducing their emissions and participate in financial transfers from developed to developing countries to support mitigation and adaptation efforts under a system of nationally determined contributions (NDCs). The emission reductions cannot happen without micro-level compliance by business, households and civil groups.

The United Nations' Sustainable Development Goals provide a framework for global action on poverty, hunger, health, education, gender equality, clean water and sanitation, clean energy, reduced inequalities and other goals, while many countries have developed their national strategies for achieving these goals.

Local problems such as sustainable consumption and production, poverty and inequality are also addressed by social movements, grassroots organizations and citizen-led initiatives. National directives on recycling, for example, are implemented at local levels, driven by individual decisions to comply with social norms.

The highest levels of human coordination takes place in larger numbers than other primates, which enabled humans to develop complex societies undertaking large-scale projects. There is evidence that humans began forming large social networks around 100,000 years ago (Dunbar, 1993).

(b) **Multi-dimensional coordination**: Our capacities are flexible in scope, as discussed in Section 4.

People can satisfy their social needs by coordinating their actions in communities, such as religious communities spanning the world. Nowadays the sharing of knowledge in many areas is worldwide as well, connected through scientific networks and the internet. Such coordination also plays a key role in maintaining social order and resolving conflicts (Fiske, 1992).

We can satisfy our agentic needs, individually and collectively, by making our own economic, political and social choices. Democratic systems allow participation in the policy process covering large populations, while international organizations such as the

United Nations and the G20 provide platforms for coordination on issues such as sustainable development and international security (Keohane and Nye, 2011).

Our material needs can be satisfied through the production and exchange of goods and services, usually in a decentralized manner (Acemoglou and Robinson, 2012).

Our environmental needs can be addressed through coordinated actions in various settings, such environmental conservation programs.

(c) **Flexible coordination**: Humans can coordinate their actions flexibly in scale and scope in response to changing environments in a variety of ways, from informal social networks to complex global organizations. Other primates are known to collaborate in specific ways and limited numbers, such as in hunting and defense, humans can collaborate is much more diverse and complex ways (e.g., Melis, Hare and Tomasello, 2006).

This flexibility arises from a confluence of cognitive and cultural abilities, including symbolic thought, language, intentionality and conception of imagined futures. It is this flexibility that enabled humans to adapt to changing environments, spread into a wide variety of ecological niches all over the world, and develop new technologies to survive in new environments (Boyd and Richerson, 2005). Humans are also able to share knowledge more flexibly and effectively than other primates and thereby build up systems of knowledge from one generation to the next that evolve in response to changing circumstances (Henrich and Boyd, 1998).

In the wake of natural disasters, people have shown remarkable flexibility in their efforts to provide relief and support. For example, after the 2010 earthquake in Haiti, international aid agencies collaborated with local community groups to provide emergency shelter, food and medical care (UN Office for the Coordination of Humanitarian Affairs, 2010). After Hurricane Katrina in 2005, a wide range of organizations and individuals worked together to provide aid and assistance (FEMA, 2013). Such coordination is also vital for global health threats such as pandemics and emerging infectious diseases. For example, the Global Outbreak Alert and Response Network (GOARN) brings together a network of organizations and experts to provide rapid response to disease outbreaks and other health emergencies (World Health Organization, 2021).

Our ability to align our collective capacities with our collective challenges in both scale and scope – including our ability to recouple our capacities with our ever-changing challenges – is the key to human flourishing. Attempting to tackle collective challenges at the wrong level leads to failure. For example, tackling climate change through independent national initiatives is inadequate. Addressing multi-dimensional collective challenges in just one of their dimensions – for example, addressing climate change through economic support, but not through social support for collapsing communities – is inadequate as well.

3. Addressing the Scale of Collective Challenges

As our major collective challenges arise at multiple levels, from micro to macro, the appropriate coordination of our activities requires that we first recognize the scale at which

each collective challenge occurs and then align our capacities with the challenge at that level.

This means that global challenges such as climate change require coordination of global collective capacities, regional challenges such as regional conflicts call for regional coordination, national challenges such as immobility require national coordination, local challenges such as urban renewal need local coordination, and family challenges such as marital dysfunction requires family coordination.

The alignment of the scale of collective challenges with the scale of collective capacities is illustrated in Figure 1. The bidirectional arrows indicate that the variability in the scale of our challenges needs to be matched by the flexibility in the scale of our capacities in order for recoupling to occur.
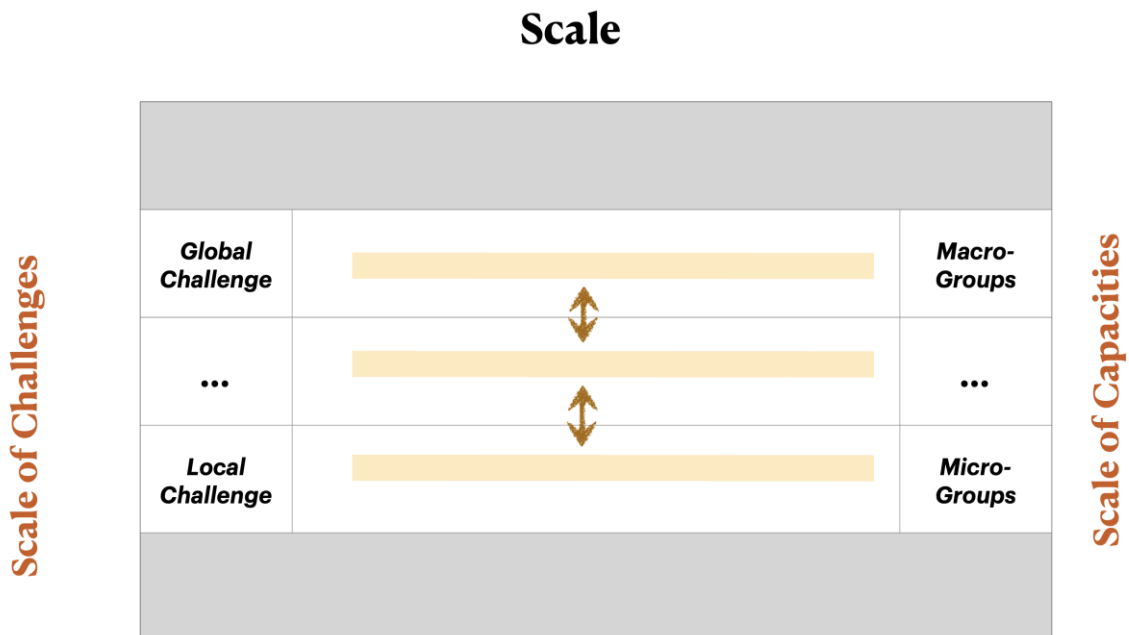
Scale

Figure 1: Scale Recoupling

As noted, this coordination of capacities will involve both cooperation (through international and national laws) and collaboration (adherence to social conventions and moral values, as well as prosocial participation in social groups, from micro to macro). Since humans live predominantly in small social groups, from which larger groups can become constituted, collaborative scale alignment involves the formation of groups-of-groups, each with a common sense of purpose addressing the collective challenge at the appropriate scale.

To see what this means, consider the concrete example of climate action. To address the global challenge of climate change, effective climate action calls for relevant international agreements, whose compliance is supported in part by consonant national climate policies and (since the policing of these policies will inevitably be imperfect) in part by environmental

social norms and values, as well as participation in social groups whose purposes accord with the spirit of the international agreements.

At a lower level, urban amenities and cleanliness calls for urban regulations, supported by local groups working in the same strategic direction. Thereby the regulations acquire local legitimacy and the local groups generate the social solidarity and personal empowerment necessary for the successful implementation of the regulations.

Stated so simply and starkly, this scale-focused recoupling thesis sounds trivially obvious. However, it has a host of implications that are neither obvious nor commonly accepted, particularly in policy making. Let us consider some reasons why this thesis, despite being self-evident, is so contentious.

First, the proposition that our flourishing depends primarily on our collaborative ability to tackle our collective challenges runs counter to the economic individualism on which our policy thinking about market economies is based. The central rationale for the market economy is that free markets, suitably modified by government interventions to correct for "market failures," enable the satisfaction of given consumer wants at minimal resource cost. In other words, the market economy is meant to be "Pareto efficient," in the sense that it leads economic outcomes that make it impossible to make one individual better off without making another individual worse off. The consumer is king" in the sense that the given wants of individual consumers, insofar as they are backed by purchasing power, drive the allocation of resources, production of commodities and their distribution across consumers.

Consumer wants are conceived as the wants of individuals, whose preferences are predetermined and accepted as exogenous to the policy process. If however people derive their flourishing not only from the satisfaction of their individual goals, but also from the satisfaction of their social groups' goals, then a market economy which is Pareto efficient in the sense above is no longer desirable, since it fails to take into account the flourishing people get from participation in social groups with distinct purposes of their own. Under these circumstances, a successful market economy does not merely rely on the maintenance of competition among producers to satisfy consumer wants at minimal resource cost, but also on the maintenance of social cohesion in groups of relevant scale and scope.

Second, the proposition that our flourishing depends primarily on our collaborative ability to tackle collective challenges also runs counter to the political individualism on which our political thinking about democracy is based. The central rationale for democracy is that democratic government gives equal voice to all citizens on how their state is to be run, suitably modified in liberal democracies by political constraints ensuring the protection of minorities, respect for law and order, and the maintenance of checks and balances. The citizens' objectives are conceived as the objectives of individuals, whose preferences are predetermined and accepted as exogenous.

"The voter is king" in the sense that the votes of individual citizens, driven by their individual objectives, drive the allocation of power and the formulation of policy. If however people have not only individual objectives, but also collective objectives arising from the groups to which they belong, then a successful democracy relies not just on the maintenance of competition among politicians and political parties to satisfy individual voter objectives, but

also on the maintenance of a social fabric conducive to addressing the collective challenges. In particular, policy makers must work with businesses and civil society at the level of small social groups to enable the mobilization of collective capacities at the appropriate levels to occur and for people to participate successfully in the alignment of these capacities with the existing collective challenges.

Third, the recoupling thesis runs counter to the conventional individualistic thinking about social welfare. In particular, conventional conceptions of welfare — such as the Benthamite utility that underlies much of economic policy analysis ("the greatest happiness of the greatest number") — locate welfare exclusively within individuals and thus view social welfare as a weighted sum of individual welfares. The recoupling thesis, by contrast, recognizes that flourishing that often arises from tackling collective challenges through alignment with our collective capacities. Insofar as moral values induce people to collaborate to promote their common purposes in response to collective challenges, the aim of policy making should not be merely to maximize some weighted sum of individual welfares, but to create social, economic and political contexts that enable people to live in accord with these moral values.

4. Addressing the Scope of Collective Challenges

It is useful to think of the scope of our collective challenges – such as climate change and financial instabilities – in terms of threats to various dimensions of our flourishing. We will consider four fundamental dimensions of flourishing: solidarity, agency, gain and environmental sustainability (Lima de Miranda and Snower, 2020, 2022; Snower, 2018).

Each of these dimensions is related to a distinct set of moral capacities. Solidarity rests on care and communitarianism, agency on liberty and classical liberalism, gain on utilitarianism and environmental sustainability on eco-stewardship. It is not surprising that these fundamental dimensions of flourishing should be related to moral values, since the functional purpose of moral values is to induce us to address collective challenges collectively.

Let us consider the scope of our collective challenges to cover threats to these four dimensions of flourishing. The scope of our collective capacities, to be aligned with the scope of our collective challenges, covers these four dimensions as well.

First, **solidarity** represents social belonging and affiliation with our social groups. The importance of this dimension is clear, since collaboration is crucial for tackling collective challenges and collaboration rests on participation in the flourishing of our social groups. There is ample empirical evidence that solidarity promotes flourishing. First, solidarity promotes physical health: studies have found that people with stronger social connections have better immune and cardiovascular function and more overall longevity (e.g. Holt-Lunstad, et al., 2010). Second, solidarity benefits mental health: Positive social relationships are associated with improved psychological wellbeing, lower rates of depression and reduced mortality (e.g., Holt-Lunstad et al., 2015). Third, social belonging enhances emotional wellbeing, by creating positive affect, fostering a sense of security and validation, promoting life satisfaction, as well as helping people cope with stress and anxiety (e.g. Baumeister and Leary, 1995). Finally, social belonging provides a sense of identity, worth and

purpose and thereby fosters personal growth, self-esteem and a sense of living meaningfully (Jetten et al, 2014).

Solidarity may also include belief in the transcendent, i.e., solidarity, interconnectedness and wholeness encapsulated within a transcendent realm. A sense of the transcendent can enhance flourishing in a variety of ways. First, it can give people an overarching framework to make sense of their experiences, give meaning and purpose to their lives and derive significance from their actions (Park, 2010; Steger, 2009). Second, religious and spiritual beliefs can provide comfort, hope and resilience in the face of adversity, thereby promoting mental health and wellbeing (Koenig et al., 2012; Smith et al., 2003). Third, transcendent beliefs are often associated with values such as love and compassion, which can motivate people to engage in acts of kindness and thereby promote collaboration (Batson et al., 2003; Saroglou, 2010). Finally, the sense of the transcendent can foster a sense of collective identity and encourage collaboration to address collective challenges (Van Leeuwen and Park, 2009; Shariff and Norenzayan, 2007).

A second dimension of flourishing is that which arises from **agency**. Agency can be exercised both in one's capacity as an individual (shaping one's life through one's own efforts) and as a member of a social group (contributing to the fortunes of the group). The exercise of agency generates flourishing quite independently from the material and social gains that this activity may produce. When people have the power to make choices and act on them and when they feel a sense of control over their lives, it promotes a sense of self-efficacy and reduces their feelings of helpnessness, leading to improved mental health (e.g., Bandura,1997; Deci and Ryan, 2000). A sense of agency also improves people's self-esteem and self-worth by giving them a greater sense of competence (e.g., Baumeister et al.,1989; Judge and Bono, 2001). When people feel empowered, they are more likely to set goals and gain motivation to achieve desired outcomes, which also promotes flourishing (e.g., Latham and Locke, 2007). A strong sense of agency gives people confidence in their ability to overcome obstacles, enabling them to navigate through difficult circumstances, recover from setbacks and adapt to change. The resulting resilience promotes their flourishing (Masten, 2001; Bonanno, 2004). Studies also show that a sense of agency promotes happiness and life satisfaction (Sheldon and Elliot, 1999; Diener et al., 2003).

A third dimension of flourishing arises from what we will call "**gain**," the consumption of goods and services (the conventional focus of economic analysis) as well as the satisfaction of a broader set of material needs, including physical and mental health, sanitation, shelter, food and water, regardless of whether they are transacted in economic markets. Clearly, consumption that satisfies basic needs – physiological and psychological – promotes flourishing. Once basic needs are largely satisfied, however, the material consumption that remains is largely devoted to the satisfaction of wants, primarily status wants that arise from social comparisons. The empirical evidence suggests that such consumption can lead to increased stress, negative affective states and reduced life satisfaction (e.g., Kasser, 2002; Dittmar et al., 2014). On the other hand, non-material forms of consumption associated with prosocial social connections and prosocial spending are associated with increased flourishing (e.g., Dunn et al., 2008; Carter and Gilovich, 2012).

Finally, our solidarity may be extended to belonging within the natural world, i.e., participation in a thriving **environment**. This includes and goes beyond the wellbeing from the consumption of environmental services.
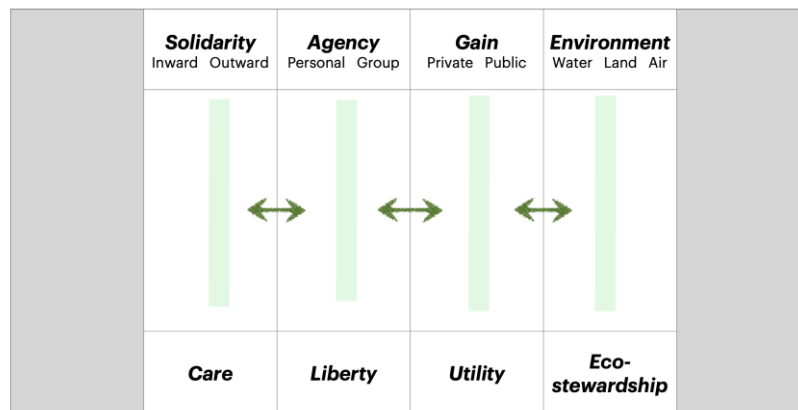
First, there is ample empirical evidence that "nature connectedness" improves physical health. For example, a stronger sense of belonging in nature encourages people to engage in physical activities such as walking or gardening, which contribute to improved cardiovascular health, reduced obesity rates and more physical fitness. Nature connectedness promotes mental health through improved psychological wellbeing and reduced vulnerability to depression and anxiety (e.g., Bratman et al., 2019). It also reduces stress, improves concentration and promotes cognitive restoration (e.g., Hartig et al., 2003; Berto, 2005). Third, connectedness with nature often evokes awe and wonder, which promotes life satisfaction and internal harmony (Shiota et al., 2007; Rudd et al, 2012). Finally, a sense of belonging in the natural world encourages a sense of responsibility and stewardship toward the environment, leading to a sense of meaning and purpose (Kals et al., 1999; Schultz, 2002).

These four fundamental dimensions of flourishing may be summarized by the acronym SAGE, where S stands for solidarity, A for agency, G for material gain and E for environmental sustainability. The scope of our collective challenges may be understood as threats to one of more of these sources of flourishing.

A central claim of this article is that *we flourish when we cover the four fundamental dimensions of flourishing in the service of aligning our collective capacities with our collective challenges*. Thereby we draw on the basic ingredients of flourishing at both the individual and collective levels, while addressing the scope of our challenges appropriately.

Figure 2 illustrates the alignment of the scope of our collective challenges with the scope of our collective capacities. Since the scope of the challenges is categorized by our four dimensions of flourishing, it is natural to pair these challenges with our moral capacities. But naturally alignment requires that all our capacities – psycho-social, political and economic – also become aligned with the challenges above. The bidirectional arrows indicate that, as the scope of our challenges varies through time, the scope of our capacities needs to change in tandem in order for recoupling occur.

Scope of Challenges

Figure 2: Scope Recoupling

This recoupling of the scope of collective challenges with the scope of moral capacities rests on a notion of flourishing that is distinct from the conventional concepts of wellbeing, namely, happiness, life satisfaction and eudaimonic happiness and that is more focused than the prevailing concepts of flourishing.

Happiness refers to positive emotional and cognitive states, involving emotions such as pleasure, joy and fulfillment. It is evaluated in terms of self-report measures (Lyubomirsky & Lepper, 1999; Watson, Clark, & Tellegen, 1988), experience sampling methods (Csikszentmihalyi, & Larson, 2014) and physiological measures (Davidson & Begley, 2012).

Life satisfaction focuses on individuals' subjective appraisal of their life as a whole. It is meant to capture people's contentment and fulfillment. It has been assessed through the Satisfaction with Life Scale (Diener, Emmons, Larsen & Griffin 1985), Multidimensional Life Satisfaction Scale (Pavot and Diener, 1993), the Self-Anchoring Scale (Cantril, 1965), among others.

Eudaimonic happiness is about living a fulfilling and meaningful life. It emphasizes personal growth, fulfilling one's potential, autonomy, purpose in life and self-actualization. It has been assessed in terms of Psychoogical Well-Being (Ryff & Keyes, 1995), meaning in life questionnaires (Steger, Frazier, Oishi & Kaler, 2006), and character strengths and virtues (Peterson & Seligmann, 2006).

Human flourishing, in the literature thus far, is a multidimensional concept that encompasses optimal human functioning, overall well-being and fulfilment. It represents a state of thriving that covers physical, psychological, developmental, virtue-related, meaning-related, social, cultural and spiritual aspects of life.

The physical aspect is about the relationship between physical health, longevity and flourishing (e.g., Diener et al., 2010; Huppert & So, 2013). The psychological aspect includes positive emotions, engagement in activities, accomplishment, positive relationships, a sense of purpose and meaning, and personal growth (Ryff, 1989; Ryff & Singer, 2008; Seligman, 2011). The

developmental aspect examines how personal growth and development promote self-improvement, learning and realization of one's potential (e.g., Maslow (1954) on self-actualization and Dabrowski (1964) on positive disintegration).

The virtue-related aspect is about character strengths and moral foundations of flourishing (e.g., Seligman & Peterson (2004) on character strengths and Haidt (2003) on moral foundations). The meaning-related aspect involves the search for meaning and purpose (e.g., Frankl (1984) on logotherapy and Damon (2008) on purpose as the intersection of our skills with external needs).

The social aspect highlights the importance of social connections (e.g., Cacioppo et al. (2015) on the impact of social isolation and loneliness on wellbeing) as well as love and positive relationships (e.g., Fredrickson, 2013). The cultural and contextual aspects include the influence of social norms and other cultural factors on wellbeing (Veenhoven, 2000) and the role of capabilities (Sen, 1999; Nussbaum, 2000). VanderWeele (2017, 2019, 2020) highlights the role of role of spirituality and religious engagement, in addition to many of the factors above, in promoting human flourishing.

Our notion of flourishing is more narrowly focused. In particular, it understands flourishing as *living in accord with one's moral values insofar as these values promote the pursuit of collective action to address collective goals at the appropriate scale and scope.*

It may be argued that our four dimensions of flourishing are "on a par" (Chang (2017)) in the following sense: (a) each component of flourishing is better than others in some respects, (b) none seems to be at least as good as the others overall, in all relevant respects, and (c) there is no common unit by which they can be measured with regard to overall flourishing, though they may be comparable ordinally for decision purposes. When sources of flourishing are "on a par," they are qualitatively different in terms of overall flourishing, but nevertheless in the same neighborhood of such overall flourishing. For example, when choices between two jobs in different disciplines (e.g. becoming a lawyer or a doctor) are on a par, then offering a slightly higher wage in one job will not make that job preferable. Such choices are "hard choices," because "they are comparable, but one is not better than the other … nor are they equally good." (Chang (2017), p.1)

I will argue that these are separate ingredients for flourishing, much as food, water, air and shelter are needed for human survival. They cannot be readily substituted for one another to any significant degree. To thrive, people need to cover all four dimensions -- their basic material needs and wants, their desire to influence their destiny through their own efforts, their aim for social embeddedness, and their need to participate in the natural world sustainably. Empowerment is valueless when one is starving; consumption has limited value when one is in solitary confinement; and so on. Furthermore, the gains from empowerment, solidarity, economic prosperity and environmental sustainability are different in kind.

On this account, it is useful to think of solidarity, agency, gain and environmental sustainability as a dashboard. Just as the dashboard of an airplane measures magnitudes (altitude, speed, direction, fuel supply, etc.) that are not substitutable for one another (e.g. correct altitude is not substitutable for deficient fuel), so the four dimensions of flourishing represent separate goals whose joint satisfaction leads to flourishing.

In order for our collective challenges to be tackled, each type of threat needs to be addressed through the mobilization of capacities aligned with the threat. For example, loneliness may be addressed through psycho-social capacities (e.g., mindfulness and supportive social environments), political capacities (e.g., inclusive political systems) and economic capacities (e.g., subsidies for prosocial living arrangements). The sense of disempowerment can be addressed through providing opportunities for personal growth and development, participatory decision-making processes and access to education and training. Poverty can be alleviated by modifying cultural norms that perpetuate poverty, social protection programs and job creation schemes. Finally, biodiversity loss can be alleviated through community-led conservation initiatives, environmental education, establishing protected areas and wildlife corridors and payments for ecosystem services. Attempting to address a collective challenge through the wrong type of capacity leads to failure. For example, tackling social alienation through the provision of more goods and services may well prove unsuccessful.

This scope-focused recoupling thesis also sounds obvious. But, once again, it has implications that are contentious. Let's consider three such implications.

First, since economists usually measure prosperity in terms of material gain (in particular, by GDP for countries and shareholder value for companies), it is common for them to assume that our collective challenges can all be addressed adequately through the mobilization of economic resources alone.

Even when wellbeing is not measured entirely in material terms, it is often portrayed in terms of a single index, such as utility, happiness or life satisfaction. Under these circumstances, it is still easy to overlook the possibility that collective challenges — such as climate change or pandemics — pose a number of distinct threats to separate aspects of our flourishing and that each of these threats needs to be addressed with the mobilization of capacities aligned with each of these threats. For example, pandemics are not just a threat to our health, but also to our livelihoods, our social solidarity and our sense of agency. Our collaborative capacities should thus be devoted not just to pandemic preparedness, prevention and response, but also to social, agentic, and environmental repercussions.

In short, alignment of collaborative capacities with collective challenges must cover scope as well as scale.

Second, the recoupling thesis runs counter to the application of the prevailing conception of political sovereignty, which centers on "supreme authority within a territory".[1] This means that the holder of sovereignty (a king, a president, a people ruling through a constitution) has supreme authority in the sense of "the right to command and correlatively the right to be obeyed" (Wolff, 1990, 20), i.e., there is a mutually respected source of legitimacy. Though the territory over which sovereignty is held may not coincide with the borders of identity affiliation, some broad overlap is important for legitimate authority to exist.

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[1] See "sovereignty" in Stanford Encyclopedia of Philosophy: https://plato.stanford.edu/entries/sovereignty/

Though the sovereignty over a specified territory is supreme, the scope of the issues over which a sovereign holds authority may be limited. EU member states, for example, are currently sovereign regarding defense but not trade policy. Sovereignty can be circumscribed by institutions such as an international criminal court and international agreements. On this account the sovereignty of the state is potentially compatible with the sovereignty of the individual, since the latter refers to the inherent rights, autonomy and agency possessed by each person living within a state. It is also potentially compatible with consumer sovereignty, in the sense that consumers — through their purchasing decisions — have the power over the demand for goods and services and also in the sense that consumers are considered to be the best judge of their own welfare.

In this context, the recoupling thesis implies guidelines for the scope of issues over which different political The sbodies are to be considered sovereign. In particular, the bodies are to comprise social groups that are coupled with existing collective challenges. As these challenges undergo change, the issues relevant to the exercise of sovereignty by these bodies should change accordingly, enabling an ongoing recoupling of human capacities with collective challenges. This application of the concept of sovereignty is at odds with the prevailing notions.

5. Recoupling in Scale and Scope

As our collective challenges keep varying in scale and scope, so our collective capacities become decoupled from our challenges in scale and scope as well. It is vitally important for policy makers, business leaders and civil society to be aware of the many possible symptoms of decoupling. For example, when globalization and automation promote economic growth while leading to declines in local communities displaced by offshoring and a sense of disempowerment, economic prosperity becomes decoupled from social prosperity, in terms of solidarity and agency.

Decoupling in the scale of collective challenges from the scale of collective capacities occurs, for example, when national governments make unilateral decisions on climate action or when they impose nationally centralized responses to regional problems. The principle of subsidiarity provides the general guideline for the appropriate recoupling in scale: each level of government should perform only those tasks that cannot be performed at a more local level. With the onset of the Anthropocene, various economic and environmental policies that were previously appropriate at the national level became appropriate at the international level. Subsidiarity promotes both agency and solidarity at scales that are aligned with the scales of the collective challenges.

Decoupling in the scope of our challenges from the scope of our capacities underlies many of the social problems that drive modern populist movements — the anger of the "left behind," the mistrust of elites, the popular support for protectionism and strict immigration controls. Under these circumstances, economic prosperity become decoupled from social prosperity. When economic growth is accompanied by a decline in biodiversity, economic prosperity decouples from environmental prosperity.

We often exhibit a natural inclination to overcome such decoupling, as flourishing often arises from collaborative flexibility, namely, the satisfaction we get from forming new social groups to pursue a common purpose. This source of flourishing is ever-present in our lives. Our social interactions and personal relationships within our social groups are in a continuous process of

change, building on the experiences of the past to forge developing bonds of affiliation in future. Our social interactions would be tedious if they were simply reruns of what occurred before. Instead, we are in a continuous process of engagement with our in-group affiliates to realign our bonds of affiliation in response to the ever-changing joint tasks that we face (e.g., Goodwin, 2009). The flourishing that arises from this process may well have evolved to promote survival and reproduction in the presence of variable collective challenges.

Collaborative flexibility may be understood as a capacity to alleviate evolutionary mismatch, in the form of maladaptive behavior patterns that arose in response to ancestral environmental conditions that differ from those prevalent nowadays. Behaviors associated with chronic stress, sedentary behavior, and social isolation can arise on this account (Nesse & Williams, 1994). People often pursue diets that give rise to chronic health problems, such as obesity, type-2 diabetes, and heart disease, which reduce wellbeing and reproductive success (Cordain et al., 2005). Rigid cultural norms, such as those that limit women's access to education and healthcare, can have an adverse effect on both wellbeing and reproductive success (Sen, 1999). In response, people can mobilize their collaborative flexibility to form new groups that address the challenge of unhealthy diets and that promote women's access to education and healthcare. It is the job of higher-level entities – such as the government, NGOs, social institutions – to create contexts whereby this potential may be realized.

Figure 3 illustrates the requirements to recouple both the scale and scope of our collective challenges with the scale and scope of our collective capacities.

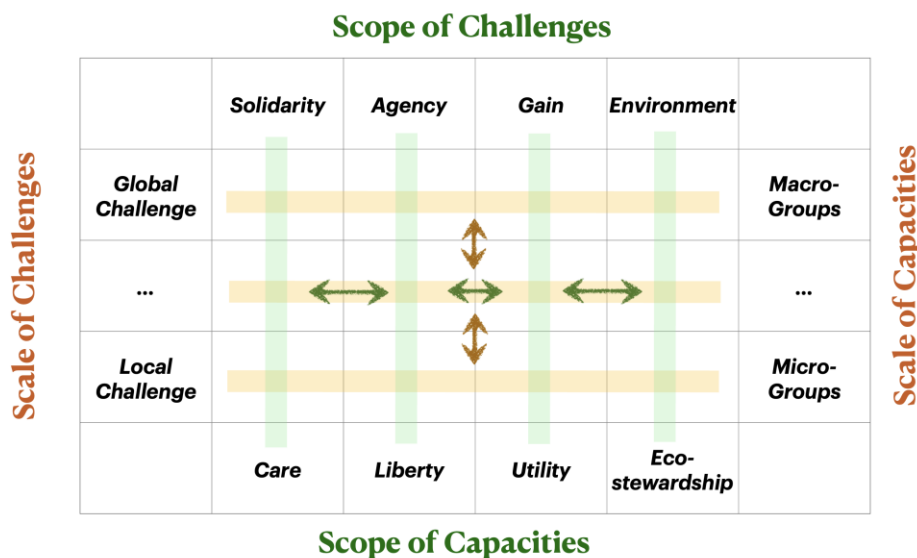Figure 1: Recoupling in Scale and Scope

In what follows, we examine the conditions under which such recoupling may take place and when it fails to do so.

6. Why Cooperation is Insufficient for Collective Action

It is important to recognize why cooperation (exploiting synergies with others to achieve one's own self-interested goals) is insufficient to achieve collective goals. In economics, the

well-known principle of the Invisible Hand is meant to show that economic cooperation is sufficient to generate economic efficiency. In particular, in the absence of market failures, people pursuing their self-interest in free markets manage to satisfy consumer wants at minimum resource cost. In equilibrium, it is impossible to make one person better off without making another person worse off. Thus, there is no waste in the satisfaction of consumer wants.

Market failures can arise from externalities, asymmetric information and market power. In practice, however, these failures are ubiquitous, which means that the pursuit of self-interest never leads to an efficient allocation of resources. Externalities are invariably generated by collective goods, comprising public goods[2] (such as pollution abatement and national defense) and common pool resources[3] (such as groundwater, tropical rainforest or fish at high sea). Public goods are underprovided by the market operating with selfish individuals, since these individuals have an incentive to use the good without contributing to its provision. Common pool resources are overexploited due to the self-interested individuals' incentives to use them without considering the consequences for others.

Since humans are social creatures, psychologically and physically reliant on social interactions, social externalities are pervasive. Asymmetric information (whereby suppliers have an informational advantage over demanders or vice versa) and market power (enabling suppliers or demanders to manipulate prices in their own favor) are widespread in virtually all economic markets as well.

Nor can the pursuit of self-interest lead to an equitable distribution of resources and commodities. The market mechanism is blind to inequities. There exists no "invisible hand" mechanism that ensure that self-interested individuals generate economic equity.

7. Why the State is Insufficient for Collective Action

The standard response to these problems is to suggest that the state correct the inefficiencies and inequities arising from free market activities. In mainstream economic theory, efficiency can be restored through taxes and subsidies that induce people to pay for the uncompensated costs and benefits they impose on one another; alternatively, government regulations can stop inefficient behavior. But since the market failures arising from collective challenges are so pervasive and variable, and since taxes, subsidies and regulations are difficult to change at short notice, it is quite unrealistic to assume that the government could be more than modestly successful in correcting market failures.

Many economic transactions are embedded in social interactions, since buyers and sellers usually do not transact anonymously. On this account, social status, social norms and identities are important influences on economic transactions. Inequities and inefficiencies in the social sphere cannot be corrected through monetary compensation, since the monetization of a social interaction changes the meaning and value of the interaction (as in the case of sex, for example). In short, uncompensated costs and benefits in the social

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[2] Public goods are non-excludable and non-rivalrous, meaning that it is difficult to exclude people from using them and one individual's consumption of them does not reduce their availability to others.
[3] Common pool resources are excludable but rivalrous, such as fish at high sea and groundwater.

sphere cannot be compensated in the economic sphere (Fleurbaey, Kanbur and Snower, 2021).

Economic theory tells us that governments can achieve an equitable distribution of commodities without loss of efficiency through lump-sum transfers, i.e., transfers that do not affect economic incentives. However, since promoting an equitable distribution usually involves redistributing income or wealth from rich to poor and since such redistributions unavoidably affect economic incentives (reducing the incentives of both rich and poor to generate more income and wealth), lump-sum transfers are a practical impossibility.

Furthermore, government interventions in the economy are blunt and often dangerous tools, due to a wide variety of government failures. For example, rent-seeking occurs when the political process is used to obtain special privileges or subsidies, rather than to generate productive activity (such as some subsidies for fossil fuels and various agricultural products). Regulatory capture takes place when regulatory agencies become dominated by the industries they are meant to regulate, leading to regulation that benefits those industries rather than the public interest (such as some financial regulation in advance of the 2009 financial crisis). Bureaucratic inefficiency can lead to delays, misallocation of resources and cost overruns (such as in some government-run healthcare systems).

Many of these government failures are not the result of sloppy governance or incompetent policy design; instead, many are simply unavoidable. Since governments have the power to redistribute income and wealth, they inevitably create incentives for rent-seeking behavior. Regulatory capture often arises because industries usually have superior information about their operations and thus governments come to rely on them for regulatory purposes. Bureaucratic inefficiency is often the outcome of rules that are meant to ensure equality of treatment and to prevent misuse of public funds. Beyond this, government officials, much like private-sector agents, are often driven by self-interest, leading to inefficiencies and corruption (Buchanan and Tullock, 1962). It is unrealistic to assume that people are self-interested when they participate in the private sector, but become public spirited as soon as they enter the public sector.

8. Why the State Plus the Market are Insufficient for Collective Action

Though there is much that can be done to minimize the occurrence of market failures and government failures, it is misguided to imagine that the problems of inefficiencies and inequities can be solved by some combination of top-down government intervention and bottom-up, decentralized market activity. There is a common assumption that drives much of the debate between right-wing and left-wing approaches to economic policy, namely, that the government can compensate for market failures and that the market can compensate for government failures. On this account, it is alleged that the design of economic policy just requires the "correct" combination of free-market activity and government intervention in order for major inefficiencies and inequities to be overcome. There may be differences of political opinion on what this correct combination is – with the right wing favoring more latitude for free market activity and the left wing favoring more government intervention – but both sides of this ideological divide implicitly agree that inefficiencies and inequities can

be adequately addressed through economic markets that are tempered by government. This common assumption, however, is mistaken.

Far from compensating for the failures of the market, government failures often aggravate them (e.g. Acemoglu and Robinson, 2012; Buchanan and Tullock, 1962; Stiglitz, 2010). One example concerns the role of government failure in augmenting the problem of market power. In a free market, firms compete with one another and the outcome of this competition is the economic success of some relative to others. In the absence of externally imposed, exacting and ongoing constraints on their behavior, the successful firms will use their dominant position in the market to increase prices, reduce quality or stifle competition. Furthermore, they will translate their economic success into political success by lobbying the government to pass laws and regulations that benefit them, often at the expense of consumers and competitors. In short, economic success tends to lead to a concentration market power, which tends to lead to rent-seeking that augments such concentration. The government failure of regulatory capture promotes this process. For example, the U.S. pharmaceutical industry is one of the most profitable in the world, but also one of the most heavily regulated. The high cost of prescription drugs in the U.S. has been attributed, in part, to the lobbying efforts of pharmaceutical firms, who have been accused of using their financial power to influence policymakers and regulators, resulting in laws and regulations that protect their monopolies and prevent competition.

Another example of government failures aggravating market failures concerns the handling of asymmetric information. Free markets are often characterized by asymmetric information. For example, firms may have access to information about production costs or consumer demand that is not available to its consumers, competitors or the government. This can allow them to set prices above competitive rates, resulting in efficiencies. In the presence of such an information advantage, the government may become reliant to these firms to provide the information required for the incentivization or regulation of their activities. The resulting tax-subsidy schemes and regulations are likely to enhance the market position of these firms. For example, Indian government subsidies to the agricultural sector, including subsidies on fertilizer and water, are often poorly targeted and benefit large landowners more than small farmers. The result of such interplay between market failures and government failures is often greater inequality and more wasteful use of resources.

In sum, cooperation – the exploitation of synergies among people pursuing their own self-interest – falls far short of generating either efficiency or equity in practice, and governments are not able to correct the problem. Neither decentralized, bottom-up decisions of individual economic agents in free economic markets nor the centralized, top-down decisions of governments, even working together, can prevent waste or achieve social justice.

9. The Market, State and Society as Collective Action Mechanisms

This insight is important, since it implies that the long-standing debate between the mainstream right- and left-wing political parties is misguided. This debate is primarily about

choosing between the size of the economic pie and the equal division of this pie. The underlying assumption is that (i) laissez-faire policies enable free economic markets to maximize the size of the economic pie (aggregate income), often at the expense of income equality and (ii) government intervention can promote income equality, often at the expense of aggregate income. The democratic process is meant to give citizens the opportunity to choose where on this spectrum of aggregate prosperity versus equally distributed prosperity they wish to reside. The issue is framed entirely in terms of two pillars of coordination: the market and the state.

What this debate overlooks is the third pillar of coordination: society (see Rajan, 2019). By "society" we mean any collective of people living in some sense of community. A society can coordinate human activity through social norms, values, identities and common narratives. Over the past century, the coordination domains of the market and the state have grown at the expense of society, particularly in developed countries. Care of infants and the elderly used to be performed by families and friends; now it is largely in the hands of private- or public-sector care providers. Healthcare was previously provided within small communities, and now has been largely parcelled out to the state and the market. Education of children has been transferred from communities to the state. Social security, unemployment support and retirement provision has also been relinquished by society to the state.

These large-scale transfers of responsibility have far-reaching implications for human flourishing, because the market, state and society coordinate human action quite differently.

The market does so through anonymizable transactions. This gives people great flexibility in decentralized coordination, since they are free to switch their trading partners in pursuit of personal gain. But this flexibility comes at the cost of social cohesiveness. Personal gain encourages collaboration when people are prosocial, but there is no assurance that their prosociality is adequate for the collective challenges they face.

The state may but recognize collective challenges at the national level and it has policy instruments – tax and subsidy incentives, regulations and laws – to induce people to coordinate their activities at that level. This centralized coordination may come at the cost of personal agency. It may also involve less flexibility, since the state has less access to local information than individuals do.

Society can coordinate activities at the meso level, lying between the micro level of individual decisions that are coordinated by decentralized coordination by markets and the macro level of centralized coordination by the state. Social coordination in response to meso-level collective challenges can be encouraged through social norms, moral values, social roles within specified networks of association and hierarchies of power, narratives of common purpose (along lines described below). Since this method of coordination works not only through external rewards and punishments from other members of one's social group, but also through internal psychological incentives, the resulting coordination involves collaboration. Thereby social cohesiveness is promoted, but at the cost of flexibility, since the relations among people are not anonymizable. Since humans exhibit great flexibility in the scale and scope of collaboration (also described below), the meso level can in principle adapt to changes in the scale and scope of their collective challenges.

Insofar as collective challenges vary through time and across the economic, political and social domains, collaborative flexibility is particularly important for the realignment and recoupling of collaborative capacities with collective challenges. This collaborative flexibility can be delivered by society responding directly to changing collective challenges or by society working through and alongside the state and the market. The state can deliver external mechanisms of enforcing cooperation and the market can deliver self-interested cooperation, but it is society that can potentially deliverlive prosocial collaboration. Both the state and the market are governed by institutions that tend to be inflexible. Society may be run by social, norms, values and identities that may be inflexible as well, but the potential for collaborative flexibility must come from society, if it is to come at all.

Society is not invariably the best method of promoting collaboration. The market and the state each have their distinctive comparative advantages. But it would be foolhardy to rely on the market, the state or some combination of market and state to address our collective challenges single-handedly.

When the domain of the market and the state grows excessively relative to the domain of society, then people fall prey to a sense of disempowerment and alienation. The disempowerment arises from a lack of agency when people find themselves at the mercy of market forces and government interventions. The alienation comes from a lack of solidarity when communities falter because their social functions have been appropriated by the impersonal hand of the market and the state. Disempowerment and alienation are powerful drivers of social fragmentation. In many developed and developing countries nowadays, this fragmentation expresses itself in the form of social discord generated by identity politics and grievance-driven nationalist populism.

This insight – that society must be mobilized to work alongside the market and the state in order for collective challenges to be addressed appropriately – calls into question the conventional wisdom about the appropriate division of responsibilities among the participants in modern economies. According to this conventional wisdom, commonly advocated by both right- and left-wing parties in capitalist economies, consumers, businesses and government bodies all should pursue distinct roles. Consumers should pursue their own consumption wants, businesses should pursue their own profits and the government should set the rules of the game so that the resulting economic activity is in the public interest.

The considerations above imply that this division of responsibilities is misguided. The business of consumers is not just the gratification of consumption wants. The business of business is not just the pursuit of profit. And the business of government is not just keeping self-interested agents in check.

We now proceed to explore an alternative division of responsibilities that could enable all participants in the economy, polity and society to work together to achieve common goals that align people's collective challenges with their capacities. This division of responsibilities must enable the ongoing realignment and recoupling of capacities with collective challenges.

10.How to Make Human Coordination Work

The first step towards understanding how to make human coordination work appropriately is to recognize that, from time immemorial, humans have lived in small groups, interacting face-to-face to coordinate their actions to survive and reproduce collectively. We have never lived solely as individuals, with our individual abilities and preferences, making our individual decisions along the lines of Homo Economicus of the economic theory that underlies the conventional understanding of how economic markets work or Homo Politicus of the political theory that underlies the conventional understanding of how representative democracy works. The small groups and groups of groups in which humans lived ave evolved through time. In the early hunter-gatherer societies, these groups were centered around distinct collective challenges, such as childcare, hunting, gathering, defense, and so on. Needless to say, the cohesiveness of these groups relied more on collaboration than cooperation.

These groups have kept constituting and reconstituting themselves in response to the circumstances they faced. Environmental changes required the formation of new groups to promote survival and propagation. As humans left Africa and populated the rest of the world, the nature of their life tasks adapted to their new environments. With the invention of agriculture, humans invented new forms of social organization, building the complex social and political hierarchies of large agrarian states. With the industrial revolutions came yet new ways of organizing societies, focused on factories in urban centers that were separated from home life. Currently we are in the midst of a digital and biotech revolution that is engendering yet further innovations in our social relationships. All these massive changes bear witness to our prodigious capacities for collaborative flexibility.

Throughout all these social transformations, our reliance on small social groups has continued. These social groups are the foundation not only of our societies, but also our political and economic systems. They are not only the basis for our families and friendship circles, but also for our workplaces, political units, military, schools, religious institutions and philanthropies. It is from these small social groups that larger social organizations are built. Without them, the larger organizations cannot thrive. They are the starting point for understanding how to make human coordination work.

The next step is to recognize how these basic social building blocks constitute the four major domains of human life: (1) the environment: the natural world within which all life unfolds, (2) the society: the totality of all social relations among people living in persistent interactions with one another, (3) the polity: the set of social relations and institutions concerned with the allocation of power and (4) the economy: the set of social relations and institutions concerned with the allocation of resources, production, distribution, consumption and exchange of goods and services, all taking place within the society and polity.

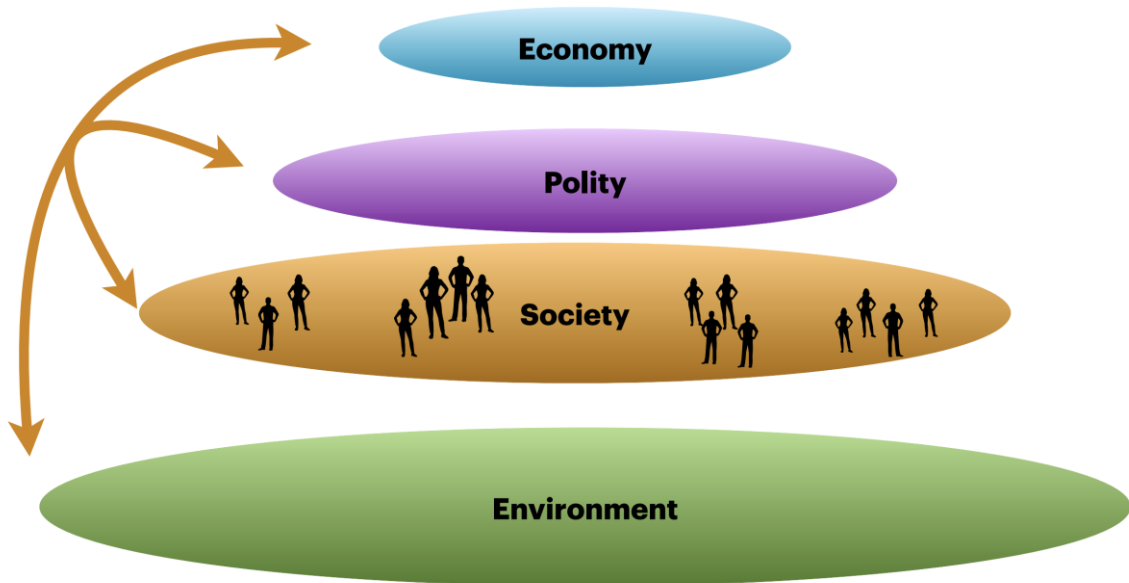These four domains are nested within one another, as shown in Figure 2.

Figure 2: The Social Building Blocks of Life Domains:

The figure describes how the economy functions within the bounds set by the polity and society, within the natural environment. It also shows how small social groups are the basis for human organization in the political and economic domains.

Given that small social groups are the basic forms of human coordination and that larger scale coordination involves the interaction among such groups, what is required to make the larger-scale coordination work? The answer to this question is *polycentric governance*, which allows for multiple centers of authority to exist in the management of collective goods (Ostrom, 2010). Polycentric governance connects small social groups into a network involving larger-scale entities, including institutions, organizations and higher-level actors that work together to address common challenges. Each decision making center within the network has the ability to make and enforce rules within its jurisdiction. The interactions within the network enable local autonomy, foster collaboration across governance levels, and facilitate the coordination of the network across scales, from micro to macro. This framework recognizes the importance of diversity in institutions, decision making authorities and governance arrangements in addressing collective challenges.

Polycentric governance has the following core features:

- Local autonomy and self-governance: By empowering small social groups and communities to manage their own resources and make collective decisions that directly affect their lives, polycentric governance allows for context-specific solutions and fosters a sense of ownership and responsibility among community members (Poteete, Janssen and Ostrom, 2010).

- Cooperative and collaborative arrangements: Polycentric governance facilitates information sharing, knowledge exchange, and joint problem-solving, enabling diverse stakeholders to work together towards common goals (McGinnis and Ostrom, 2014).

- Coordination mechanisms: Polycentric governance involves coordination mechanisms that connect small social groups into large-scale management of collective goods. These mechanisms can include networks, forums, or institutional arrangements that enable communication, negotiation, and the resolution of conflicts among different levels and scales of governance (Ostrom and Janssen, 2010).

- Adaptive capacity: Polycentric governance facilitates learning and adaptation by allowing for experimentation, flexibility, and the ability to adjust governance approaches based on feedback and changing conditions. The resulting adaptive capacity enables continuous improvement and innovation in the management of collective goods (Folke, Colding and Berkes, 2003).

- Macro-micro integration: Polycentric governance acknowledges that collective challenges occur at multiple scales. Global challenges such a climate change requires governance arrangements that can address these challenges at all the appropriate levels, from micro to macro, providing local agency, participation in higher-level decision making, and coordination at the macro level (Biermann, F., and R.E. Kim, 2016).

- Innovation: Polycentric governance can foster innovation by providing an enabling environment for research and development, promoting knowledge sharing, and facilitating collaborative networks among stakeholders.

Next, we consider the psychological, social and political mechanisms that enable us to keep realigning and recoupling our challenges with our capacities through polycentric governance.

11. Mechanisms of Collaboration

People achieve collaboration through two broad sets of mechanisms: (i) **internal mechanisms**, which operate "inside the head," i.e., psycho-social forces that induce different people to contribute to a common purpose by participating in the welfare of a social group and (ii) **external mechanisms**, which operate "outside the head," i.e., through social and political institutions that generate external incentives to induce people to contribute to a common purpose. Whereas the internal mechanisms give rise to intrinsic rewards and punishments that induce people to serve the welfare of their groups, even if this is not in their enlightened self-interest, the external mechanisms give rise to extrinsic rewards and punishments for this purpose.

"Narrow self-interest" may be defined as the pursuit of one's own payoffs, taking the behaviors of all other decision makers as given. "Enlightened self-interest" denotes the pursuit of one's own payoffs, taking the responses of other decision makers to one's own behavior into account. A person who sacrifices personal gain to benefit someone else in the expectation of direct reciprocity – "if I help you, you will help me" – is acting out of enlightened self-interest. Sacrificing personal gain in expectation of indirect reciprocity – "if I help others, I will gain a reputation for being helpful, which will induce others to help me" –

is also pursuing enlightened self-interest. Cooperation is driven by self-interest, both of the narrow and enlightened variety; collaboration, by contrast, involves pursing the goals of one's social group beyond one's enlightened self-interest.

We now turn to the internal and external mechanisms of collaboration in turn.

12. Internal mechanisms of collaboration

Major internal mechanisms collaboration can be divided into three broad areas: (i) psychological motives, (ii) moral values and (iii) narratives. Many of our psychological motives are social, guiding our interactions with others. As such, they can be viewed as potential mechanisms of collaboration (though they can also become instruments of conflict). Moral values can be understood as instruments that guide psychological motives towards collaboration, at least within one's social groups. Finally, narratives are devices whereby moral values are tied into a broader account of reality, within which these values are substantiated and motivated.

Psychological motives

Psychological motives are a good starting point. In motivation psychology, a motive is a force that gives direction and energy to one's behavior, thereby determining the objective, intensity and persistence of the behavior (Elliot & Covington, 2001, following Atkinson, 1964). There are many ways of classifying motives. For example, McClelland, et al. (1953, 1967) focused on three motives: affiliation ("need to be liked"), achievement ("desire to do something better/more efficiently") and power ("desire to have an impact, to be strong, influencing people"); Jutta Heckhausen (2000) identified five motives: achievement, affiliation, power/status, aggression and prosocial altruistic behavior; Bruckmüller and Abele (2013) identified the motives of agency and communion; and Gilbert (2009, 2013) highlighted the motives of threat/self-protection, seeking/acquisition, and affiliation/contentment/soothing.

For the purpose of understanding an array of economic decisions, it is useful to highlight the following motives:

- care, which is concerned with nurturance, compassion, and care-giving (e.g. Weinberger et al., 2010);

- affiliation, related to the desire for social approval (McClelland 1967; H. Heckhausen, 1989; Heckhausen & Heckhausen, 2010);

- achievement, related to the desire to do something better or more efficiently than before, particularly with reference to socially valued activities (Atkinson & Feather, 1966; J. Heckhausen & Heckhausen, 2010; McClelland et al., 1953; Weiner, 1990),

- consumption-seeking, aimed at the satisfaction of appetitive material wants, is close to the standard economic conception of utility from consumption, but does not receive much attention in the motivation psychology literature (e.g., McDougall's (1932) propensity for foraging and ownership, Reiss' (2004) desire for eating, and Gilbert's (2013) seeking drive, an acquisition focused system;

- power and status-seeking, related to the desire for influence and social standing (H. Heckhausen, 1989; J. Heckhausen, 2000; Heckhausen & Heckhausen, 2010),

- threat avoidance, related to the emotion of fear (Lazarus, 1991; McDougall, 1932; Thorndike, 1898; Lewin, 1936; Hull, 1943; Murray, 1938; and Trudewind, 2000); and

- threat approach, related to the emotion of anger (McDougall, 1932; Murray, 1938; Heckhausen, 1989; and Reiss, 2004).

Note that, for each of these motive categorizations, most of these motives are social, concerned with one's relation to others. With regard to the seven motives above, for example, the care and affiliation motives are explicitly prosocial, inducing people to promote the wellbeing of others, independently of one's enlightened self-interest. The other motives can also be channelled towards collaboration. For example, the achievement and status-seeking motives can reflect the desire for prestige, attained through the fulfilment of a social purpose; threat avoidance and threat approach motives can promote the collaboration when directed towards actions that undermine destructive competition or destructive dominance. Needless to say, the social motives can also be directed towards conflict, which is the opposite of collaboration, but for the purposes of our analysis it is sufficient to observe that people have access to psychological motives that are indeed capable of inducing them to work with others towards a common purpose beyond enlightened self-interest.

The activation of these motives depends on the context within which people find themselves. This context-dependence of motives is important, since it implies that cooperative social settings (such as ones that promote teamwork) give rise to prosocial motives, which in turn contribute to the cooperative social settings. It also provides a link between the external mechanisms of collaboration (described below) and the internal mechanisms. Cooperative social settings may be ones where one person's contribution to a common purpose enhances the capacity of others to contribute to this purpose as well (commonly known as "strategic complementarities", as shown in Bosworth, Singer and Snower, 2016).

Social challenges at different levels – from the micro challenges of family collaboration to the macro challenges of social cohesion at the national level – may promote collaboration at these different levels. It is on this account that psychological motives are a flexible instrument for promoting realignment and recoupling with ever-changing social challenges.

The alignment of our collaborative capacities to address our collective action problems generally often us to subordinate our self-interest to the group interest. Doing so calls for the activation of psychological motives to promote the goals of groups that have the composition and size to provide public goods and manage the commons at the appropriate scale and scope. This is a central challenge for human flourishing throughout the ages.

Moral Values

Due to the human flexibility in our collaborative capacities – enabling us to be self-serving under some condition and altruistic under others – it is inevitable we should experience an ongoing conflict between pursuing our self-interest within our social group and pursuing the interest of the group. As noted in the introduction, the functional purpose of moral values is to promote collaboration within specified social groups and to suppress destructive selfishness. It is difficult, if not impossible, to conceive of moral values that do not serve one

of these two purposes. After all, morality is concerned with the principles of right and wrong behavior and these principles are generally meant to govern our interactions with others in ways that promote coordination and prevent conflict.

For example, fairness (listed as a universal value both in Haidt's moral foundations (Haidt, 2012) and Schwartz's values circumplex (Schwartz, 1994)) is critical for collaboration, since it ensures that resources are distributed equitably, creating a sense of social justice and reducing the potential for conflict. Care (another universal value appearing in both Haidt's and Schwartz's accounts) also promotes collaboration, since it induces people to show compassion for the suffering of others and to participate in each other's flourishing. Moral values such as responsibility and accountability discourage destructive competition, ensuring that individuals are held responsible for their actions and accountable for their decisions.

Moral values motivate, i.e., they activate psychological motives promoting collaboration among the reference group. Beyond that, they drive collaboration at particular levels, which may be aligned with the levels at which collective challenges are faced. It has been argued that the problems of collaboration are often similar across cultures – such as in the allocation of resources among kin, coordination to mutual advantage within social groups, reciprocal exchange without free riding, and conflict resolution through hawkish and dovish displays, property rights, and norms of fair resource division (Curry, Mullins & Whitehouse, 2019) – and thus the moral values associated with such collaboration problems are also valid across cultures (Curry, 2016; Joyce, 2006).

Narratives

Narratives are "mental representations that summarize relevant causal, temporal, analogical and valence information" (Johnson, Bilovich and Tuckett, 2022). They enable us to make sense of our environment, focus attention on particular events and characters, motivate action by associating moral values and social relationships, assign social roles and identities, define power relations and convey social norms (Akerlof & Snower, 2016). Narratives are the frames that transport moral values and activate psychological motives for the purpose of encouraging collaboration and discouraging conflict.

"Conviction narratives" enable us to make conditional predictions concerning the consequences of our actions and thereby give us the conviction to act (Johnson, Bilovich and Tuckett (2022)). Conviction arises when the narratives induce us to form beliefs about what will happen as result of our actions and combine these beliefs with our moral values guiding our actions. The degree to which we are convinced of the conditional predictions generated by the narratives depends on the emotions that the narratives evoke, the degree to which the narratives reduce anxiety in the presence of uncertainty, our perception of the plausibility of the narratives and our trust in others who believe in the narrative (Tuckett & Nikolic, 2017).

Narratives arise within social groups, within which the associated beliefs are communicated. By linking beliefs with moral values, narratives activate psychological motives that lead to action. In short, each of the internal mechanisms of collaboration described above – motives, moral values and narratives – are nested within one another.

13. External mechanisms of collaboration

External mechanisms of collaboration comprise extrinsic incentives that induce people to act in the public interest, even when this would diverge from the unconstrained private interest. These incentives can arise from government (such as taxes and subsidies, or regulations associated with fines for violation) or social institutions (whereby people voluntarily observe particular social norms and submit to common patterns of interpersonal exchange).

It goes without saying that national government plays important roles in creating external mechanisms whereby citizens cooperate for the common good. These include maintaining law and order, providing national security, conducting foreign relations, providing public goods and services (such as education, healthcare, public safety services and transportation infrastructure), regulating the economy (through monetary and fiscal policies, regulations to promote competition and protect consumers, trade agreements and more), redistributing income and wealth, and protecting the environment. However, the government failures discussed above imply that these external mechanisms are insufficient to deal with many collective challenges. While the state is essential for dealing with collective action problems on a national level and the market is valuable for exploiting synergies in anonymizable trade in goods and services, external mechanisms of collaboration are also required at the meso level of social institutions for societal challenges and the supra-national level for international challenges.

Elinor Ostrom showed that people are capable of managing common pool resources, provided that they observe eight Core Design Principles (Ostrom, 1990, 2010a, b). These principles were subsequently generalized to apply to all collective goods, including public goods, by Wilson, Ostrom & Cox (2013). These generalized principles may be summarized as follows: (1) shared identity and purpose, (2) equitable distribution of cost and benefits, (3) fair and inclusive decision making, (4) monitoring of agreed behaviors, (5) graduated responses to prosocial and anti-social behaviors, (6) fast and fair conflict resolution, (7) recognition of authority to self-govern and (8) collaborative relations among groups (polycentric governance). These Core Design Principles (CDPs) are simply generalizations from observed empirical regularities; they are not meant to be necessary or sufficient conditions for the appropriate management of collective goods.

Ostrom's CDPs play an important role in explaining how people can collaborate in response to collective challenges and how they can adapt to ever-changing collective challenges. The reason is that they encompass both internal mechanisms (that are necessary for achieving CDP 1) and external mechanisms (required for CDPs 2-8).

In applying these principles, it is important to keep in mind that they are not meant to replace, but rather to supplement, the roles of the market and the government in organizing collective action. After all, governments may operate at the top of the polycentric governance pyramid, provided that they enact the appropriate forms of participatory democracy. In particular, governments can play a crucial role in implementing CDPs 2-8. Doing so requires due attention to the principle of subsidiarity (allowing control at the lowest level relevant for addressing a particular collective challenge), for otherwise they

become inflexible and unresponsive to local conditions or stakeholder participation (Grafton et al., 2007). Subsidiarity promotes agency and solidarity in communities of purpose.

Market-based mechanisms, such as carbon pricing or emissions trading, can be useful in promoting collective action, particularly in conjunction with CDPs 2-6. Without these CDPs, however, these mechanisms are vulnerable to economic and political manipulation by agents with market power (Shapiro et al., 2007).

Community-based management of collective goods is of course useful to ensure participation in the collective action process, but on its own it may be vulnerable to power imbalances within communities and between communities and external actors (Berkes, 2004).

Co-management of collective goods, involving local communities as well as external actors (such as government bodies and NGOs), is important for balancing local knowledge with external expertise, but it may be difficult to implement on account of power imbalances and conflicting interests among stakeholders (Armitage et al., 2007). Advance commitment to Ostrom's CDPs is a way of addressing such power imbalances and conflicting interests.

In short, Ostrom's CDPs are a way of establishing an appropriate balance between the market, the state and society in managing collective challenges.

Whether Ostrom's CDPs are indeed wholly scale-independent – in particular, whether they can be applied to global collective goods, such as climate action – is subject to debate.

For example, DeCaro and Stokes (2018) argue that Ostrom's principles are applicable to global climate governance, and suggest that the creation of nested institutional arrangements at different scales can promote effective governance of the global climate system. Other scholars, however, disagree. For example, Kanie and Biermann (2017) suggest that the management of global public goods requires a more comprehensive approach, including the mobilization of global public opinion and the use of innovative financing mechanisms, than is captured by Ostrom's principles.

From the perspective of recoupling, the crucial feature of both the internal and external mechanisms of collaboration: their flexibility. They can be applied to collaboration in a wide range of scales (from micro to macro) and a variety of domains (economic, political and social domains). Thereby these mechanisms become potentially well-suited for recoupling collective capacities with ever-changing collective challenges.

14. Implications for Policy Making and Business Practice

The implications of this analysis for policy making and business are far-reaching. This section only seeks to provide a rough guide to some of the main themes.

Scale Alignment

A host of our collective challenges – at the local, national, regional and global levels – can be addressed successfully only through the appropriate coordination between policy making and business. Examples of such collective challenges include financial instability, misinformation, digital manipulation, cybersecurity vulnerability, food insecurity, water

shortage, pandemic vulnerability, energy insecurity, climate change, biodiversity loss, international terrorism, threat of nuclear war, and much, much more.

Tackling each of these collective challenges calls for an answer to the question, What is the appropriate scale at which these challenges must become aligned with our collective capacities? For the challenges listed above, the answer invariably involves a coordinated response from policy makers and business leaders. Appropriate coordination is frequently missing from the conduct of economies and polities nowadays.

The underlying problem is simple. The goal of business is profit. The goal of democratic politics is votes. The pursuit of these two goals, under the conventional pathways to profit and votes, generally does not lead to alignment of capacities and challenges at the requisite scale.

Take the challenge of climate change. Despite countless little rays of hope in the spirit of corporate social responsibility, there is incontrovertible evidence that, in aggregate, business activity is contributing to the fateful march of the world economy towards a climate precipice. The pursuit of profit, as currently conceived, is environmentally unsustainable. Governments, despite countless climate action measures, have not been able to create a legal, regulatory and policy framework that corrects the problem. The pursuit of votes, within current political processes, also leads to unsustainable outcomes.

Governments' national carbon emission targets are generally incompatible with the regulations that these governments impose on businesses. If all businesses complied with all carbon emission regulations, the resulting carbon emissions would not add up to the specified national targets.

Business leaders often claim, with some justification, that emission regulations contribute to the underlying problem when they do not give businesses a predictable regulatory context in which the transition to carbon neutrality is feasible. Under these circumstances, businesses divest themselves of dirty assets that are bought by companies who are not subject to the regulations. This is a source of the "carbon leakage" problem. Policy makers often claim, also with some justification, that when businesses are given the transition periods that they request, they make inadequate progress towards transition.

Business leaders claim that many emission regulations are inefficient, while policy makers claim that business leaders continually seek to evade regulations, thereby inducing an onerous regulatory policy response. Business leaders claim that emission regulations are often not in tune with the latest technical knowledge about carbon abatement, while policy makers claim that the technical information supplied by business leaders often serves business interests and leads to regulatory capture. These claims and counterclaims are also frequently justified.

These difficulties are all symptomatic of scale misalignment. Both policy makers and business leaders operate at scales that are inappropriately small for the systemic challenge to be confronted. The operating system of business and politics does not permit viable solutions to the climate crisis.

The problem cannot be solved alone through good will or marginal adjustments of green policies and green business practices . Corporate leaders have a fiduciary duty to their shareholders, who cannot be relied on to sacrifice financial gain for environmental gain. This is so even when the environmental gain far exceeds the financial gain. The reason is that the environmental gain materializes only if all shareholders of all companies are willing to make the financial sacrifice. Policy makers have a duty towards their electorates, who cannot be relied on to prioritize environmental gain over livelihood gain.

On the basis of our analysis, the way forward can be summarized in a few simple, but pathbreaking, steps. First, policy makers, business leaders and citizens need to recognize the symptoms of scale misalignment. Only then is it possible to acknowledge the necessity of seeking solutions that involve coordination across the economic, political and social domains, instead of the repeated, well-meaning but ineffectual endeavors of business leaders, politicians and social activists to go it alone.

Second, seeking solutions at higher scale means distinguishing clearly between environmentally friendly decisions make within the current operating system (i.e., the current legal, political, regulatory, contractual and social status quo) and those that are made under a new operating system. Given that the current operating system leads to widespread scale misalignment, it is clear that scale alignment can be achieved only within a new operating system. Politicians, business leaders and civil society representatives should therefore recognize that engagement in negotiations over the new operating system is one of their most important social responsibilities. These negotiations must be conducted in the spirit of systems thinking.

Third, policy makers, business leaders and citizens require more familiarity with systems thinking across the economic, political and social domains. This involves recognizing interdependencies and feedback loops between social, political, economic and ecological systems, understanding the nonlinear, dynamic nature of systems (where small changes can lead to large consequences) and acknowledging that complex systems often exhibit emergent properties that cannot be understood by analyzing the individual properties alone (e.g., Meadows (2008) and Sterman, (2000)).

Systems thinking as important implications for policy making. It calls for (i) integration of policy frameworks across the economic, political, social and environmental domains; (ii) stakeholder engagement across these domains to understand multiple perspectives and co-create systemically effective policies; (iii) long-term perspectives that take into account the long-term nature of most systemic challenges and the need for sustainable solutions; (iv) conceptual pluralism, which takes into account the need for a diversity of conceptual frameworks in order to respond resiliently to unpredictable events that arise because decisions are made under radical uncertainty; and (v) adaptive management across domains, emphasizing iterative learning and feedback, so that policies can adapt readily to evolving knowledge and unpredicted system behavior (e.g., Meadowcroft (2009), Pahl-Wostl (2007)).

The implications for business practice follow analogous lines. It involves (i) life cycle thinking, taking into account the entire life cycle of products and services to identify climate impacts; (ii) circular economy thinking, (iii) long-term perspectives on the economic, social and

environmental effects of business practices and (iv) emphasis on adaptability and resilience as criteria for business success, alongside efficiency (Geels, et al (2020; Loorbach and Wijsman (2013)).

Scope Alignment

Many of our collective challenges involve threats to multiple dimensions of flourishing, which we have characterized simply in terms of solidarity, agency, gain and environmental sustainability. For example, climate change poses a threat not only to our environment, but also to community embeddedness and societal cohesion (due to the forced migration that climate change is beginning to necessitate), personal and community empowerment (since the economic and social disruptions from climate change may leave people feeling helpless) and material livelihoods (since climate change alters the location of production and work, access to energy, food and water, as well as the composition of goods and services).

Disregard for some of these dimensions of flourishing can lead to the failure of climate policy. An example is President Macron's attempt to address the climate challenge through a fuel tax rise in 2018. While this tax was designed to reduce carbon emissions, its negative repercussions on the livelihoods of the working poor, the damage to communities relying on fossil-fuel intensive employment and the disempowerment of commuters were not adequately taken into account. The protests of the gilet jaunes (yellow vests) were the outcome, leading to the abandonment of the fuel tax rise.

Addressing collective challenges at the appropriate scope again requires a coordinated effort by policy makers and business leaders. This coordination is often missing for a variety of reasons. One is that public policies are often designed in silos, with environmental policy commonly driven by economic policy measures that are formulated independently of welfare and social policy.

Another reason is that the various dimensions of flourishing do not enjoy comparable policy attention. Gain (primarily in terms of GDP) is measured consistently across countries and regularly through time, environmental variables are measured less consistently and regularly, while solidarity and agency receive at best cursory and superficial quantitative assessment. Consequently, policy makers are frequently blind with respect to issues that are of great concern to citizens. The nationalist populism in the US and UK that led to the election of Trump and Brexit, respectively, arose in part from the anger of the people "left behind," who felt socially alienated (Donald Trump's "Build a Wall!") and disempowered (Boris Johnson's "Take Back Control!"). Politicians who believed that "It's the economy, stupid!" and "You have never had it so good" were swept out of office (e.g., Eatwell and Goodwin, 2018).

Yet another reason for scope misalignment is that the fiduciary duties of business leaders focus on financial performance, rather than social and environmental effects of business activities.

Finally, a host of government failures (such as regulatory and bureaucratic capture) help explain why policy makers do not respond flexibly to non-financial threats to flourishing.

The guidelines for tackling scope misalignment are in many respects similar to those addressing scale misalignment. First, the multiple stakeholders who can mobilize the relevant collective capacities must be able to recognize the symptoms of scope misalignment. Second, these stakeholders must acknowledge the need to negotiate a new operating system that permits the alignment of collective challenges with collective capacities. Third, the stakeholders must engage in the requisite systems thinking, allowing an integration of policy and business frameworks across the various dimensions of flourishing. Fourth, profit – the goal of business – needs to be redefined in terms of contributions to dimensions of flourishing, so that flourishing gains become increments to profit while flourishing losses become decrements from it. The fiduciary duties of business leaders are to be focused on this notion of profit. Fifth, the effectiveness of public policy should also be measured in terms of contributions to flourishing. The duties of policy makers are center on such measures. Sixth, the flourishing-based measures of business performance should be consistent with those of public policy performance. Seventh, business and government reporting and accounting is to be based on these measures. And finally, incentive and governance systems in business and public policy are to be reconfigured accordingly.

Recoupling

Beyond this, policy making and business practice should be reoriented towards recoupling our collective capacities with our ever-changing collective challenges.

Public Policy

The major purpose of public policy is to induce people to work together in response to collective challenges. In mainstream economic analysis, this can be done directly through government interventions (such as regulations) or indirectly through incentives (such as taxes and subsidies or behavioral "nudges"). What has received relatively little attention thus far are policies to promote collaborative flexibility.

Such policies may be called "adaptability policies." They are essential to human flourishing in the face of unexpected crises and unexpected opportunities. As noted, people are flexible in the scale and scope of their collaborative capacities. Their internal mechanisms (such as motives, values, narratives) and external mechanisms (such as polycentric governance and subsidiarity) promote collaborative flexibility, since they can be employed at varying scales and across economic, political and social domains. While people have the wherewithal to collaborate flexibly in response to ever-changing collective challenges, their mechanisms for doing so are context-dependent. It is the job of higher-level entities such as the government to create contexts that induce collaboration at the appropriate scale and scope.

At the global level, policies that enhance international cooperation and coordination can enhance adaptability, if these policies are formulated with adaptability in mind. International organizations such as the World Health Organization (WHO) and the International Monetary Fund (IMF) can help coordinate efforts and provide resources during crises. Policies that support global trade, investment, and migration can also enhance adaptability by increasing access to resources and knowledge across borders.

At the national level, policies that enhance adaptability may include investments in education and training, social safety nets, and infrastructure. Education and training can help individuals acquire the skills needed to adapt to changing circumstances, while social safety nets can provide a buffer during times of economic hardship. Investments in infrastructure, such as transportation, telecommunications, and energy systems, can improve the adaptability of communities to shocks (World Bank, 2019). Policies that support innovation and entrepreneurship can also enhance adaptability by promoting the development of new technologies and business models (Acs & Audretsch, 2005). Adaptive social protection supports poor and vulnerable households by building their capacity to prepare for, cope with, and adapt to the shocks they face (World Bank, 2020).

At the regional and local levels, policies that enhance adaptability may include investments in local infrastructure, community development, and disaster preparedness. Regional and local governments may have a better understanding of local conditions and can tailor policies to meet the specific needs of their communities. Research shows that community development programs can enhance adaptability and social well-being by promoting collaboration and building social capital (Putnam, 1993; Woolcock & Narayan, 2000). Disaster preparedness measures can also enhance adaptability by reducing the impact of natural disasters and other shocks (Hallegatte et al., 2016).

Business Practice

Companies induce their workforces to collaborate in response to ever-changing challenges primarily through corporate culture. By "corporate culture," we mean a set of values, norms and beliefs that guide the behavior of employees in an organization. Corporate culture shapes the social relationships among employees (e.g., Denison and Mishra, 1995; Schein, 2010; Truss et al., 2013).

Corporate culture can also play an important role in fostering collaboration and particularly collaborative flexibility, since monetary incentives are generally not sufficiently flexible to promote such flexibility. After all, the ability to keep realigning and recoupling one's collaborative efforts with continually varying challenges is often driven by the tacit knowledge of employees working at the grass roots, in close touch with the needs of customers, capacities of suppliers and plans of designers. This tacit knowledge is often not available to those who design the remuneration schemes.

Corporate culture is particularly significant and effective under the following circumstances: (i) when the tasks require a high level of personal autonomy, so that the culture can induce workers to feel that their work is intrinsically rewarding; (ii) when the tasks call for a high degree of creativity, so that the culture induces workers to experiment and learn from experience and (iii) when employees are motivated strongly by non-financial factors, such as social responsibility (Deci, Koestner and Ryan, 1999; Pink, 2009; Schein, 2010). Beyond that, of course, corporate culture can instil purpose and belonging whenever management aims to incentivize its employees to play responsible roles with regard to the environment and society at large.

Since corporate culture is meant to provide employees with a sense of belonging and purpose, it can motivate them to work towards a common goal. A collaborative corporate culture encourages employees to share ideas, solve problems together and make decisions

as a team, thereby creating a sense of team ownership. In a values-based corporate culture, employees gain a sense of pride from ethical behavior and living up to their social responsibilities. In large multinational companies, corporate culture can help employees overcome cultural differences and build a sense of teamwork that extends across geographic regions.

Regarding the common goal towards which corporate culture can motivate employees, the important questions in this regard are twofold: (i) Does the common goal address only the narrow, short-term financial interests of the company's shareholders and investors, or does it aim to tackle collective challenges at a higher level, encompassing the objectives of all the rest of the company's stakeholders, including customers, employees, suppliers, local communities in which the company operates? (ii) If the latter, does the common goal take account of only the direct effects of the company's activities on its stakeholders, or is it also sensitive to third-party effects on the environment and society (e.g., environmental impacts that do not affect the company's immediate stakeholders and social impacts on communities that the company no longer works in, but that were part of its supply chains in the past)?

Companies are usually constrained regarding their answers to these questions. Most have a fiduciary duty to their shareholders, whose interests may not be aligned with the company's other stakeholders and third parties. Clearly, governments have an important role to play in shaping the company objectives, by setting the legal responsibilities of companies, targets (such as those for net zero emissions) and government policies (such as procurement conditions, taxes and subsidies). In these ways, governments can define the boundaries within which market economies operate with a view to aligning the companies interests with those of society at large and the environment (Kelly and Snower, 2021).

Corporate culture can also support realignment and recoupling by promoting collaborative flexibility. This can be done is a wide variety of ways. A flexible company is a business organiation that creates a flexible working environment and practices to accommodate and support the diverse needs of its employees. Flexibility in the workplace refers to the ability to adapt work arrangements, schedules, and locations to accommodate individual preferences, life circumstances, and work-life balance (Allen, Golden and Shockley, 2015; Gajendran and Harrison, 2007; Grant, Wallace and Spurgeon, 2013). An *agile company* focuses on customer-centric adaptability and iterative development to respond effectively to changing market conditions and customer needs (Dikert, et al., 2016; Rigby, Sutherland Takeuchi, 2016; Stettina and Horz, 2015). Of course, the degree of flexibility and agility of companies can be influenced by government policy. Adaptability policies (considered above) are particularly relevant in this regard.

15. Concluding Remarks

The main message of this article can be summarized simply along the following lines.

- Most of the problems and opportunities that people face are collective challenges. These collective challenges occur at a variety of levels, from micro (such as divorce and family feud) to macro (such as global warming) in a variety of domains (economic, political, social and environmental).

- To address these collective challenges, people need to engage in collective action at levels corresponding to the levels of the challenges. This means that small-scale challenges require collective action in small groups (such as families), whereas larger scale challenges call for collective action in correspondingly large groups (such as nations).

- Collective action at the appropriate levels can take the form of cooperation (working with others to achieve one's own goals) or collaboration (working with others to participate in common goals). Most collective action involves collaboration, since cooperation is hostage to changes in individual self-interests.

- Since collective challenges at various levels often arise unexpectedly, people can address them effectively through cooperative and, especially, collaborative flexibility. In other words, people's group affiliations must respond to the variability in the levels of their challenges.

- Cooperative, particularly collaborative, flexibility promotes an ongoing process of realignment and recoupling of human capacities with ever-changing collective challenges.

- Thus, human flourishing depends crucially on collaborative flexibility in the context of polycentric governance. Collaborative flexibility is a source of flourishing and the pursuit of this flourishing promotes our ability to keep realigning and recoupling our ever-changing collective challenges with our capacities.

- A major purpose of public policy is to induce people to work together in response to collective challenges. This is usually done directly through government interventions (such as regulations) or indirectly through incentives (such as taxes and subsidies or behavioral "nudges"). What has received relatively little attention is "adaptability policies" to promote collaborative flexibility.

- Businesses can promote collaborative flexibility through various mechanisms, often associated with corporate culture. This flexibility can be shaped through adaptability policies.

16.   Acknowledgements

17.   References

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