

Meta-reflexivity and social mobilisation in action: Greta Thunberg and the 'School Strike for Climate' movement

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Introduction

This chapter offers a contribution to the central reflections advanced in this volume with regard to how new communities emerge and operate in the current global age. It aims to investigate different kinds of social interaction that take place at transnational level. Specifically, the chapter employs a framework that rests on critical realism and more precisely on the morphogenetic approach (Morphogenesis/Morphostasis or MM) developed by Margaret Archer (Archer 1988, 1995 and 2000) as a meta-theory, or otherwise put as an explanatory programme that enable us to theorise about social change. It employs the concept of reflexivity and the notion of a 'reflexive imperative' (Archer 2007, 2012) according to which societal transformations associated with late modernity have generated an increased demand for reflexivity from individuals, and by contrast, have encroached upon routine action.

In this context, particular types of reflexive negotiation of social contexts allow the possibility for new forms of social mobilisations to emerge and for new transnational networks and movements to articulate effectively demands for social change. The chapter will examine specifically the newly emerged youth-led 'School Strike for Climate' movement¹. The argument advanced here is that phenomena such as these need to be understood in terms of connecting the micro-level of individual reflexive situatedness in the world with the macro-level of the social order, via the meso-level of social networks. This entails exploring the capacity the former has, in specific contexts, to disrupt existing structures and to exert transformative pressures on society. This is done by placing reflexivity, and more specifically meta-reflexivity and its relational function in mediating structure, agency and culture interaction at the centre of explaining social dynamics. It uses the case of environmental activist Greta Thunberg and her role in fomenting the basis for a global climate action protest movement.

Implicitly at least, explorations (discussed later on) of the increased role of reflexivity at the expense of habitual action and the accentuation of morphogenetic processes at the expense of morphostatic ones beg for a further theoretical question regarding whether – in broader terms – we are witnessing a shift to a new kind of social formation: a morphogenic society. It is beyond the intentions of this chapter to make any claims about the advance or impending coming of a morphogenic society. Such ideas are currently being posited – in an exploratory way and with appropriate qualifications – in a series of studies that brings together scholars who operate from both within and outside critical realism². The point made here (incidentally) is that the inquiries into the possible advent of a morphogenic society are useful in providing a circumscribing scope for understanding emergent social movements that have a transformative potential in relation to social structures and the social order.

Thus, this chapter starts by presenting the key features of the morphogenetic approach. It then sketches briefly the basis from which Archer and others are exploring the question of a nascent morphogenic society. This leads to a discussion about the increased role of reflexivity

1 The global movement inspired by Greta Thunberg is known among other names as 'Fridays for Future' (FFF), 'Youth Strike for Climate', 'Global Strike for Climate' or 'Strike for Climate' and has an online presence under such names both as websites and as social media groups (with their local versions). For the purpose of consistency, I will refer to this as the School Strike for Climate in order to stay close to the text Greta Thunberg – who was the spark behind this phenomenon – displayed on the strike banner.

2 See the collective works edited by Archer 2013a, 2014a, 2015, 2016, 2017.

in late modernity, highlighting the conditions in which meta-reflexivity gains ground, and other modes of reflexivity become less prominent. Finally, the case of the 'School Strike for Climate' is analysed looking at the relation between individual and collective reflexivity and paying attention to the cultural and structural contexts in which agents operate. The discussion of the movement does not make normative claims about the nature of the values that inform action in this case. It is mainly concerned with identifying a satisfactory explanation for how such movements come into being; it explores in a specific context how structure, agency and culture, 'each of which is relatively autonomous and possesses its own distinctive emergent properties and causal powers [...] simultaneously account for their combined elaboration [...] and together they "make history"' (Archer 2012: 5). The main concern of this edited collection points to global communities, and more specifically to how actors operate and how new types of transnational communities emerge in the current global(ising) context. Since the beginning of the twenty-first century we are seeing a proliferation of protest actions and movements that challenge deeply embedded structures and institutions and that are increasingly trans-national in their visibility and/or in their nature. These new trends are illustrated by the 2003 protests opposing the imminent war in Iraq, which involved coordinated actions by millions of people across a large number of countries; the Arab Spring revolution that started in Tunisia and spread throughout the region and led to regime changes in Tunisia, Egypt and Libya, as well as ongoing violence in Syria and Yemen; the post-financial-crisis Occupy movement against inequality and social injustice, starting in New York in 2011 and spreading to over eighty countries; the anti-racism Black Lives Matter movement started in 2013 by the killing of Trayvon Martin and re-fuelled recently by the killing of George Floyd; the #Me Too movement against sexual harassment and abuse that took off in 2017 after the public exposure of sexual abuse allegations against film producer (and now, convicted sex offender) Harvey Weinstein; and the various groups and actions under the umbrella of climate change. In this context, the *School Strike for Climate* movement offers a suitable springboard for such inquiries. It is a relatively new phenomenon and it has the advantage of allowing a careful examination of structure-action-culture at the individual (reflexively mediated) level, as well as the collective one. As such, it provides scope for an empirical testing of the theoretical construction drawing on meta-reflexivity and morphogenesis.

1. Morphogenesis and nascent morphogenic society

Social changes that these movements are involved in are often summarised in an explanatory way under the label of globalisation. An umbrella term globalisation generally refers to processes of 'shrinkage' or 'compression' of the world or of space and time (Harvey 1991, Robertson 1992: 8, Larsson 2001: 9), an acceleration and intensification of social, political, economic and cultural relations (Giddens 1990: 64; Holm and Sørensen 1995: 12) and an increased awareness of these changes taking place (Robertson 1992: 8, Waters 1993:3). The issue with such perspectives on the current social world is – as Colin Wright (2014: 221-222) suggests – that they refer to globalisation as both a set of processes and as the effect of such processes. In addition to the quasi-conflation between process and outcomes, causal explanations³ for what triggers these processes – even when a multitude of factors are considered – tend to only highlight tendencies, rather than explaining how such tendencies are activated. Put simply, they connect a set of processes (globalisation) with a set of factors of change (be they economic, social, technological, etc.) without a clear indication of how these are activated. In other words, agency is being dimmed out of this relational equation (Wright 2014: 222). Another label attached to the current era is that of *network society*. For Manuel Castells, the technological revolution has led to an information

3 Held, McGrew, Goldblatt and Perraton (1999: 12) summarise the approaches to what drives globalisation processes by distinguishing between monocausal (and thus reductionist) explanations (largely focusing on market capitalist forces) and more complex ones that point to the intersection of a multiplicity of forces that include economic, technological, social and political change.

age and to the reconfiguring of society into a new structure that is comprised of ever-expanding and reconfiguring powered networks interacting within a global system. In this new system, social morphology takes prominence over social action (Castells 2010: xviii, 500). He offers a convincing account of the use and flow of information, and of the powered interactions within and between networks. However, for Castells, rather than operating outside structure and agency or being mutually constitutive of structure and agency, social networks are social structures. In his view, the need to theorise social structures as interactive information networks stems from the fact that what he calls the four dimensions of the new society (technological, globalising, electronic and political) transform social structures into being much more adaptive, flexible, able to expand and reconfigure themselves, making them more resilient (Castells 2008). By focusing on the macro-level, however, it appears that in his account, too, agency ends up somewhat collapsed into the structure, embedded into the power-driven interactions between networks. He nuances this position slightly in the second volume of his trilogy on the network society by emphasising the transformational powers of *project identities*, that may emerge out of *resistance identities*⁴, and pursue the values of communal resistance against global flows (Castells 2009: 421). Still, agency in this framework is only visible at the level of the collective. At the micro-level, his approach does not account for individual agency and its role in forming collective engagement with the new structures. More importantly, at a broad level, he remains more or less descriptive of processes and effects that take place in the context of this new social reality (the network society), as it does not identify how these processes come about and what their generative mechanisms are (Archer 2014b: 103).

By contrast, the morphogenetic approach allows the possibility for an investigation that rests on a stratified social ontology that is concerned with how things work, accounts for the analytical distinction between the material, the agential and the ideational (or structure, agency and culture – SAC), and unpacks their interaction chronologically. A M/M cycle can be summarised in a number of propositions claiming that:

- Structure, agency and culture are analytically distinct and irreducible to one another;
- Structure and culture pre-date agency;
- The M/M cycle captures the interaction in the structural domain between structure and agency (social interaction) and in the cultural domain between culture and agency (socio-cultural interaction), as well as the feedback between them;
- The interaction may result, respectively, in structural or cultural elaboration (morphogenesis) or in the existing structure or culture being reinforced (morphostasis) (Archer 1995, Archer 2013b: 7 Fig.1.1 and Fig. 1.2).

In other words, when exploring any ‘slice’ of social reality, time has to be accounted for in mapping out relational dynamics. Thus, the starting point (T1) is one of conditioning by pre-existing structures and culture (each with autonomous causal properties). The second phase involves agency interaction over time with the enablements and constraints exerted by structure and culture (T2 to T3). The final phase in the cycle (T4) represents the outcome of the interaction which may be morphogenesis or morphostasis. Social change can be accounted for and explained by closely monitoring the interaction taking place within these cycles.

The debates from within the morphogenetic approach camp (and not only) concerning the rapidity with which social change occurs in late modernity has recently expanded to incorporate questions on whether we are now witnessing a potential shift to a morphogenetic society. This overall line of investigation starts from the observation that over the last few decades, we have seen an acceleration of the pace at which social change takes place. As Maccarini suggests, ‘late modern society faces the continuous need to question its own foundations, which results in the endemic “crisis” of most institutions, identities, *habitus*, and forms of individual and collective action in their “modern” configuration’ (2014: 49). In this

context, structural and cultural conditionings offer a wider range of possibilities for actions by individuals and collectives, a situation – as Archer has repeatedly put it – of variety producing more variety (Maccarini 2014: 49; Archer: 2014). Technological development, and in particular the rise of high-speed Internet and of multi-actor flows of information (which have escaped the control of the state) are increasingly enabling dissent and supporting the articulation of protest as well as the organisation of social action. These aspects are highlighted in detail by Castells (2015) in his examination of protest movements. What the focus on morphogenesis (and the possible advent of a morphogenic society) does is to provide an explanatory framework for these changes. Simply drawing a causal relationship between the development of new technology and events and movements such as the Arab Spring, Occupy, etc., that have captured the interest of researchers does not allow us to explain such social dynamics properly. New technology itself only represents an enabling mechanism that these new networks and structures display, rather than a causal mechanism that explains social change (Wright 2014: 57). The explanatory power comes out of the exploration of the interaction between structure, agency and culture, at the level of both the individual and the collective, with reflexivity acting as the relational element in this process.

2. Reflexivity and the role of meta-reflexives in social change

The morphogenic approach employed in this present chapter highlights the importance of considering structure, agency and culture as analytically distinct and of explaining social change or status quo on the basis of the interaction between these, over time. In other words, we are neither complete masters of our destiny, nor are we fully determined by the (material and ideational) contexts in which we operate. Instead, through our internal conversations, we make sense of the work around us (the structural and cultural conditioning) from the perspective of our ultimate concerns, and on that basis, derive life strategies and act upon them⁵. In Archer's conception, reflexivity refers to 'the regular exercise of the mental ability, shared by all normal people, to consider themselves in relation to their (social) contexts and vice versa', and it offers an answer to how its subjective power mediates the 'role that objective structural or cultural powers play in influencing social action' (Archer 2007: 4-5). Reflexivity is, thus, the key to explaining SAC interaction. On this basis, Archer opposes dominant positions in current social theory (occupied by Pierre Bourdieu and Ulrich Beck) that engage with reflexivity as a way to account for the crises bought about by late modernity. For Bourdieu, reflexivity is accounted for as a playing a secondary role, with the habitus – as embedded pre-conscious actions, values or dispositions – situated at the forefront. In addition, he sees habitus as a system of internalised structures that is common to all members of a group (Bourdieu 1977: 86). Archer contends that Bourdieu's engagement with reflexivity suffers from elisionism (or central conflation) because in his view agency and structure are not ontologically and analytically distinct. In addition, the emphasis on routine action suggests a high propensity for the reproduction of existing social structures (morphostasis), thus not accounting adequately for social transformation. Beck's articulation of the reflexive modernity is better suited to account for the decline of routine action in late modernity, but conceives reflexivity largely as a process operating at the societal level, and not at that of individual agents; and – linked to that – maintains a central-conflationist approach, that does not allow for an analysis of the interaction between structure and agency (Chernilo 2017: Ch.7; Archer 2007: 29—37)⁶.

Archer proposes a reflexivity model that entails several features. First, it distinguishes between four different reflexive modes that individuals display in their internal conversations,

5 It is through reference to the mediation of cultural and structural conditions via internal conversation that we are able to explain why individuals facing exactly the same circumstances may act in very different ways.

6 Another important criticism directed at Beck's reflexive modernity theory is the fact that it suggests that reflexivity is a feature of late modernity alone, forced upon individuals by the conditions of risk and uncertainty that were not visible in traditional societies. By contrast, Archer maintains that reflexivity is indispensable to any society (whether traditional, modern or late-modern). As she puts it: 'no reflexivity; no society' (Archer 2007: 25—33).

and which mediate the way in which people make sense of their social-cultural context and derive courses of action based on their personal projects. *Communicative reflexives* require that others (normally their social circle of 'similar and familiars') provide an external validation for their internal conversation, before that can lead to action. By contrast, *autonomous reflexives* are self-sufficient, and their internal deliberations lead directly to action. For *meta-reflexives* the internal conversation is not limited to being action-oriented. They reflect critically on their own internal conversations, on their actions, and on their impact on society. The final (residual) category comprises the *fractured reflexives* whose internal conversations end up in a loop, unable to derive purposeful courses of action, which, in turn, leads to an intensification of distress and disorientation (Archer 2007: 93). Second, it has to be noted that articulated in this way, these reflexive modes are ideal types. Individuals are likely to display all/most of these modes in their daily social interactions. While the reflexive process is a heterogeneous, multi-faceted one, individuals develop a dominant mode in the way they engage with contexts and situations and deliberate on them. Finally, the reflexive process can be unpacked into a dialectical sequence of *concerns* → *projects* → *practices*. This starts with the individual assessing the context in which they are situated in terms of 'defining and dovetailing concerns' and prioritising among them, leading to articulating concrete courses of action and finally establishing a *modus vivendi* (with sustainable practices) out of these projects (Archer 2007: 88—89).

More recently, Archer's preoccupation has been to explore more thoroughly the connection between the increased prevalence of morphogenesis, at the expense of morphostasis (i.e. faster pace of social change) and reflexivity. A number of observations that can guide the exploration into the *School Strike for Climate* movement emerge from this. First of all, increased morphogenesis renders the individual in a situation of 'contextual incongruity' where past guidelines and routine action do not offer appropriate information to deal with novel, diverse and unpredictable situations; the latter increasingly require reflexive deliberations – what Archer (2012) has labelled the 'reflexive imperative'. The second refers to the first phase of the reflexive sequence: concerns are shaped and prioritised on the basis of the context in which the individual is situated. Faced with 'contextual incongruity' of changeable contexts, personal concerns play an increasing role in how projects and practices are articulated (Archer 2012: 6, 42—43). It is important to bear in mind at this point that at a basic level, human choice is divided between self-interest and morality. The former entails egotistic concerns (about one's individual well-being or – by extension – the well-being of those close to them), while the latter refers to what is right, irrespective of the impact on the reflexive individual. However, the exercise of free will is a mechanism that does not operate in a vacuum. As suggested earlier, we are not full masters of our destiny; our agency is exercised within the contingencies of the existing structural/material and cultural/ideational enablements and constrains (Porpora 2015: 192)⁷. With this in mind, the third observation refers to the fact that nascent morphogenesis does not only impact on reflexivity in a quantitative way through the intensification in reflective practice and a decline of habitual action. There is also a qualitative change of modality: meta-reflexivity is moving to a position of dominance (Maccarini 2013: 40; Archer 2014b: 111). To put it simply, 'faster morphogenesis introduces a completely unprecedented influence of structure and culture upon personal reflexivity, which promotes a distinctive mode of reflexive deliberation – meta-reflexivity' (Archer 2012: 31—32). This is so because, with more relevance given to personal concerns than to fast-changing contexts, self-critique becomes crucial to developing courses of action. In turn, the viability of personal projects in the outer world becomes more and more predicated on social critique. These factors, coupled with structural developments that entail the development and diversification of the third sector, provide opportunities for many individuals to pursue their value commitments, that is to develop a sustainable practices) (Archer 2012: 43—45). Attempting a sketched portrait of the emerging young generation of meta-reflexives,

7 As Porpora remarks, the distinction between self-interest and moral concerns does not mean that they are necessarily mutually conflicting or exclusive (2015: 192).

Archer observes the paradoxical features of the “loners” who seek to devote themselves to social relations’ and who are ‘critically detached from that part of the social order they know best yet dedicated to re-ordering the social through their vocational endeavours’ (2012: 210). Finally, technological developments remove the individuals’ ties to specific locations and act as enablers for nimbler, less structured forms of community organisation. Coupled with the rise of meta-reflexivity, this results in the rise of new forms of collective agency promoting new interests and formulating new ways to advance them (Lawson 2014: 28; Archer 2012: 31).

3. The case of the *School Strike for Climate* movement

The previous sections aimed to draw on the morphogenetic approach as a meta-theory as a platform for selecting theoretical tools that provide an explanatory frame for understanding how global communities form in the current phase of modernity. This is tested empirically in the next section, through looking at the dynamics that led to the emergence and development of the *School Strike for Climate* movement. To sum up, this chapter argues that to make sense of this movement, a SAC examination is necessary as a way to analytically unpick how emergent properties associated with each of the SAC components are being activated through their interaction. At the level of agency, late modern society (and potentially nascent morphogenic society) have resulted in emerging synergies between structure and culture that generate an acceleration of morphogenesis, which in turn has led to increased reflexivity and a decline of routine action. Moreover, it is a particular mode of reflexivity – meta-reflexivity – that seems to gain ground, at the expense of the other three. The dominance of this type of reflexive mediation of structure and culture increasingly allows for projects that are critical of the current social order and aim to change it to emerge and to find novel solutions for social mobilisation and action.

Consequently, this section will start with a brief account of how the movement developed and gained ground. It will then explore the question of agency starting from the level of the individual (primary) agent, with a particular focus on Greta Thunberg – the catalyst for the movement – to the transformative formation of collective (corporate agency). The cultural paradigm in which the debates about climate change occur will be briefly outlined, then followed by a discussion of the structural entanglements and constraints. Inevitably, the analysis will only be sketched as a way to illustrate empirically the theoretical claims relating to morphogenesis and (meta-)reflexivity. After all, this exploration starts from the premises that (social) reality is stratified and SAC causal properties and interaction may constitute new structures new causal properties that are different from the parts in the stratum below and their aggregation. Thus, the analysis will only pick up on a number of SAC components, without assuming that they are the only ones exerting causal efficacy or that they operate in a vacuum.

3. 1. Context

On 20 August 2018, Greta Thunberg, a young Swedish girl, then fifteen, started a one-person protest in front of the Swedish Parliament. Prompted by the wave of wild fires and drought in Sweden that year, she held a sign that said ‘School Strike for Climate’ (Skolstrejk för klimatet in Swedish), and committed to strike from school until the general elections due on the 9th of September that year, demanding tougher government action on combatting climate change (Crouch 2018). Over the following days, other people joined her strike, and soon one young girl’s act went viral and acted as a catalyst for a growing youth movement opting for direct action in order to secure social and political changes in relations to what has been labelled as the current climate emergency. The social movement developed as a broad umbrella for a wide range of individuals and organisations, and operates as a broad network of nodal groups with loose organisational structure and quasi-autonomy in organising and coordinating activities locally. As a result, since 2018, this movement has grown and is characterised by scale, geographical coverage and sustained activities. For example, between the end of 2018 and the beginning of 2020, the FFF website mapped up strikes taking place

in over 160 countries (involving over four million people) at the peak of the period, stabilising towards the end of the timeframe at over 140 countries (but with very small numbers of participants) (see Table 1).

Country \ Date	30 Nov	15 Feb	15 Mar	3 May	24 May	21 Jun
#Countries	17	31	135	78	131	98
#Cities	287	233	2370	603	1976	649
#Events	294	270	2613	730	2372	836
#People	26493	10505	2289750	40401	751649	60219

20 Sep	27 Sep	29 Nov	6 Dec	13 Dec
167	163	156	144	142
3972	2381	2419	1561	1458
4716	3237	3398	2443	2283
4031255	3761485	1199065	523323	56804

10 Jan	17 Jan	24 Jan	31 Jan	7 Feb	14 Feb
141	143	143	143	143	144
1461	1480	1477	1482	1488	1518
2294	2317	2314	2332	2342	2390
1873	2978	760	401	837	6648

Table 1. Source: Fridays for Future 2020a.

In addition to snowballing its own success, the movement and its initiator have had an important contribution in giving impetus to other groups sharing similar concerns and targeting similar outcomes. For instance, the youth action has inspired the older generation into action, with equivalent Parents against Climate Change groups organising. More importantly, other organisations, such as the Extinction Rebellion (XR) – established earlier in 2018, were spurred into direct action, against the background of the prominence of the climate emergency debates generated by Thunberg's actions. The XR engaged in protest blockades, site occupations and civil disobedience activities in London towards the end of 2018 and such activities expanding to North America and Australia at the beginning of 2019⁸.

3. 2. Primary agency and moral grounding

The case of Greta Thunberg presents an interesting empirical illustration of meta-reflexivity in action. The public developing of this case provides access to observing how individual internal conversations play out in the social world. The first aspect indicating the

8 Some of the XR actions in the UK led the counter-terrorism police placing the group on a list of extremist organisations and to issuing guidance about it with regards to safeguarding young people against extremist ideologies. The guidance was later recalled, and officials stated publicly that they did not consider XR to be an extremist organisation (Dodd and Grierson 2020).

dominance of the meta-reflexive mode in the case of Greta Thunberg concerns her critical positioning assumed with regards to the self and to her immediate and wider social interactions. Numerous accounts drawn from her own public statements and biographical details coming from her parents showcase, on the one hand, the difficulties in engaging in meaningful social interactions with her peers and the detachment from her most proximate social bonds (the family), and on the other hand, the critical evaluation of her own internal conversations in terms of formulating and endorsing personal projects as well as the value-oriented nature of this process (Archer 2007: 300—303; Archer 2012: 2010). Greta, herself spoke about her sense of social inadequacy, positioning herself in contra-distinction with what is socially perceived as ‘normality’: ‘I was too bad at socialising, I just hated making small talk and constantly being around so many people’ (Rowlatt 2020). Having been diagnosed with Asperger’s syndrome (which prior to the diagnosis had led her to eating disorders, depression and serious health concerns, as well as to further social marginalisation in school⁹), Greta Thunberg has embraced her situation often referring to it as a ‘gift’ or a ‘superpower’ which has helped her articulate her commitment to the climate emergency cause:

Some people mock me for my diagnosis. But Asperger is not a disease, it’s a gift. People also say that since I have Asperger I couldn’t possibly have put myself in this position. But that’s exactly why I did this. Because if I would have been ‘normal’ and social I would have organized myself in an organization, or started an organization by myself (Thunberg 2019: 30).

The lack of resonance with and distancing from the family social bonds or the critique of the values and social goods available within that environment – a characteristic of meta-reflexivity – is expressed by Thunberg in unequivocal terms: ‘It felt like I was the only one who cared about the climate and the ecological crisis [...] My parents didn’t care about it, my classmates didn’t care about it, my relatives didn’t care about this (Rowlatt 2020).

Her reflexive sequence of *concerns – practices – projects* is guided by a conflict between the self-interest and ethical concerns, with the latter taking primacy over the former, the moral drive then shaping projects, which in turn, are dedicating to ‘re-ordering the social through [...] vocational endeavours’ (Archer 2012: 210). In personal terms, this is illustrated by her choice to become vegan and to stop flying as a way to ‘walk the talk’ and to exert influence on her parents to follow that example (even though they confessed to changing their lifestyle for her sake rather than for the cause she is pursuing) (Dolsak and Prakash 2019; Thunberg 2019: 5). In terms of the broader exercise of agency, she has been able to subvert and disrupt existing morphostatic structures and agents. Her strong public profile and popularity have enabled her to exert powerful agential emergent properties by galvanising collective support for the climate emergency struggle, shaping the organisation of a global community of like-minded agents and setting the tone and agendas for global summits and enhancing a counter-narrative to other strong agents advocating status quo in terms of environment protection of articulating climate-denial narratives¹⁰. While there is no scope for wider generalisation on the role of individual meta-reflexivity in shaping collective action and social change based on a single (albeit very relevant) case, existing research on climate change offers further evidence for the dominance of meta-reflexivity in generating morally-informed social practices. Empirical research by Davidson and Stedman on reflexivity and climate change attitudes based on over 1000 respondents shows ‘a strong association between Meta-Reflexivity and willingness to engage in climate-related behaviours’ (2018: 80).

9 A detailed account of Greta Thunberg’s health struggles and how they led to shaping her values and actions in relation to climate change comes from her parents (see Thunberg et al. 2020).

10 There are numerous examples in this respect: setting the ground for the *School Strike for Climate* movement, speaking at various climate marches, protests and actions, speaking at international for a such as the UN Climate Change Conference in Poland, in 2018, at the World Economic Forum in Davos in 2019, at the European Economic and Social Committee in Brussels, in 2019, at the European Parliament in Strasbourg, in 2019, etc. (Thunberg 2019).

At the very least this discussion on primary agency and meta-reflexivity in relation to climate change movements shows a propensity of these actors to derive courses of action based primarily on concerns that are *deontic* rather than *aretaic* in nature (Porpora 2015: 192). In the right conditions (as the Greta Thunberg case shows), individual agency has the power to exert significant morphogenic force: when agents activate their causal powers and confront structures that are incongruent with their *modus vivendi*, the interaction can result in the elaboration of new structures (Archer 1995). Causally, however, this has to be understood relationally, in terms of its interaction with other structures, culture and other agents.

3. 3. Corporate agency and social action

So far, I have discussed the case of Greta Thunberg as a catalyst for climate justice action. This has been explained through the propensity of meta-reflexives to pursue value-based personal projects. As a next step to make sense of how the *School Strike for Climate* emerged as a global collective that exerts its own causal powers (operating in the context of the stratified social reality at a level above that of individual agency) it is important to differentiate between primary agency and corporate agency involved in the SAC interaction and capable of change in the area of climate emergency. In simple terms, individuals and collectivities exert causal powers, these powers are – due to a lack of organisation and strategic pursuit of interests – less effective in initiating social change. Corporate agents – as Archer puts it – ‘pack more punch in defining and re-defining structural forms’ (Archer 1995: 190—191). As such, the impact of private agency on society is merely expressed as an aggregate at best. Mobilisation of primary agents into corporate ones enables for agency to operate at a different level and exert more influence on structure. Here, again, the nature of late modernity and dominance of meta-reflexivity provide a context in which transformation of primary agency into new forms of corporate agency is possible, with organised groups drawn more towards the social justice and the third sector (which provide increase attraction in terms of reflecting the value commitments of meta-reflexives) and articulating aims on a global scale (Archer 2007: 313 Archer 2012: 45). In the social-political realm corporate agency during modernity has largely been organised alongside the state and the market (with a particular dependency on electoral politics structures). Thus, collective interests have been articulated alongside political parties, unionised worker groups, and employer groups¹¹. Late modernity has given way increasingly to political engagement and the coagulation of interest groups that are active outside the electoral politics and display novel forms of interaction. Climate change action and the *School Strike for Climate* movement specifically fall in this latter category. The transformation of agency from primary into corporate involves a morphogenic process that develops over time, starting (as with any morphogenic process as articulated in Archer’s approach) with a T1 moment of socio-cultural conditioning of groups, a T2 to T3 process of interaction and a T4 moment of group elaboration (Archer 1995: 194).

Following this process in the case the *School Strike for Climate*, the T1 moment is characterised by contingent compatibilities (specific structural and cultural configurations to be outlined later) which provide the context for primary agency interaction. The engine for this interaction was, here, the strike action initiated by Greta Thunberg on the 20th of August 2018. Soon after, several other fellow students, teachers and parents joined her at her spot in front of the Swedish Parliament. Widespread social media coverage shot the profile of the direct action sky-high, giving it global exposure and sparking similar school walk-outs among school children with 17,000 students organising strikes in 24 countries by September, the same year (Gould 2019). This stage of interaction takes the shape social protests spreading across the world designating Fridays (following Thunberg’s example) as days of action. This corresponds to an aggregation of primary agency and further mobilisation and organisation results in corporate agency taking shape, with the *Fridays for Future* movement establishing its Internet

¹¹ These agents were able to operate within states as well as (with increased globalisation) in the international realm (through inter-governmental organisations, trans- and multi-national corporations, etc.).

presence, gaining more coherence in organising protests, and stating demands (see Fig 1.)¹². Related groups, such as the Global Climate Strike, follow the same pattern of organisation. They operate at a different level (meso-level) than the aggregation of primary agency because of their capacity to articulate their collective interest, are organised and ‘can engage in concerted action’ (Archer 1995: 258).

3. 4. Enabling cultural factors

As discussed, culture as a key element of the SAC interaction plays an important role in the conditioning taking place at the T1 moment of the M/M process. It comes with its own set of enablements and constraints that are reflexively mediated by agents via internal conversation, and that influence outcome. As the overall purpose of this chapter is to explore how new global communities of action emerge in late modernity, the focus would be on the elements that are more conducive to morphogenesis. In the case of the *School Strike for Climate* movement, agent action (from both the primary and the corporate circles) takes place against a particular set of growing dominant cultural frames relating to climate change. There is, in other words an increasingly visible culture of environmental concern.

This context can be summarised by referring to several inter-connected factors visible during late modernity. To begin with, environmental concerns have been on the political agenda since the 1960s and have become an increasingly salient aspect of political debates. This has happened through the growing number of green parties being established, entering competition for power and gaining parliamentary representation¹³. Such developments also led to an indirect effect of ‘greening’ of established parties (Carter 2007). To put it simply, the environmental issue has gone mainstream: it is quasi-impossible for a contemporary political party not to have an official position (whatever that may be) with regards to the environment. In parallel, there has been a consolidation of the relevance of the environment as a political issue especially in the developed world. The most recent Eurobarometer Survey, for instance, shows that 94 per cent of EU citizens stated that the protection of the environment was important to them, 91 per cent thought that climate change was a serious concern and 83 per cent felt the necessity for European legislation to target environment protection (European Commission 2020). Finally, growing evidence has led to the emergence of a consensus among the scientific community with regards to the anthropogenic nature of climate change. A claim that has been widely circulated in the academic literature among various political figures is that of a 97 per cent consensus on the human-driven climate change¹⁴. Whether or not the 97 per cent figure is accurate, there is widespread recognition that a majority of the scientific community is positioned in the anthropogenic paradigm (Ritchie 2016, Tol 2016).

The narrative scientific consensus on climate change represents a powerful opportunity provided by the cultural system. Indeed, it has been treated as such by the agents involved in climate change mobilisation. At the individual level, Greta Thunberg has repeatedly made reference to her reliance, in her speeches, on the evidence coming from the scientific community, urging politicians to ‘talk to scientists’ and to ‘listen to them’, to act on predictions that are ‘backed by scientific facts’ coming from the Intergovernmental Panel on Climate Change (IPCC) and remarking that ‘every major scientific body arounds the world unreservedly supports the [...] findings of the IPCC (Thunberg 2019: 38; 50—51). The official

12 Their August 2019 ‘Declaration of Lausanne’ names keeping the global temperature rise under 1.5 degrees Celsius, ensuring climate justice and equity, and drawing on scientific consensus as their key demands (Fridays for Future 2020b). The group defines itself as a global movement and claims its birth to be the day Greta Thunberg started her strike. Despite the fact that the claim blurs the different moments in the articulation of the movement, the difference between the aggregation of primary agencies and the emergent corporate agency is analytically important for unpacking the process.

13 Looking at the electoral performance of green parties in Europe, Carter shows a visible pattern of success since their emergence (Carter 2007: 89, Table 4.1).

14 This specific figure has been subjected to criticism from various camps, including those who recognise the human causes for climate decline (see Tol 2016).

FFF website also makes ample reference to the scientific discourse and evidence on climate change as a way to both justify their action and articulate demands (FFF 2020).

3. 5. Structures of opportunity

The final element in the SAC interaction concerns the structural context within which agency operates in the case of the *School Strike for Climate*. It is suggested here that specific contingent opportunities have contributed to the emergence of the movement as a global community of organised action.

The first set of enabling structures that help to explain this new form of social organisation is represented by the technology-aided networks within which primary agents interact. Thus, at the micro-level of social interaction, these networks emerge – as Castells (2008) argues – as new structures characteristic of what he calls *information society*¹⁵. However, the critical realist approach recognises the stratified nature of social reality where ‘what appears as a structure at one level becomes an agent at another level’ (Wright 2014: 225)¹⁶. Earlier, I have outlined the corporate agential role that emerge out of the interaction at a micro-level of primary agents (with meta-reflexivity as a dominant mode), in their attempt to operationalise their value commitments. In that context, these networks of communication and interaction emerge at the meso-level as agents exerting a different kind of emergent properties, in a different stratum of social reality. The same networks act as structures at the lower (micro-)level. It is in recognising the potential dual nature of a social component, depending on which level of social reality it operates, that the M/M approach to explaining late modernity differs from the network approach proposed by Castells. In addition, the focus on technology and information only describes some of the enabling conditions visible in late modernity; it is necessary to look to deeper social processes and phenomena and interactions (Wright 2015: 57). In the context, it is important to point out that the interaction and aggregation of primary agency through these networks of communication have contributed to the processes of organisation of social protests. Regular calls for strikes under the FFF ‘banner’ have resulted in coordinated action across large numbers of countries and ultimately helps to explain the emergence of the *School Strike for Climate* global movement.

The other important phenomenon is the emergence over the last few decades, of several organisational and legal structures that provide further opportunities for climate change engagement. The United Nations Millennium Summit in 2000, for instance, included environmental sustainability as one of the eight key goals set up in the Millennium Development Goals (MDGs) framework, which committed all UN members to action. Its ‘heir’, the Sustainable Development Goals framework, established in the 2015, has positioned the issue of sustainable environment at its core (being embedded in goals such as ‘Health and Well-being’, ‘Affordable and Clean Energy’, ‘Sustainable Cities and Communities’, etc., as well as being articulated in its own right, in the ‘Climate Action’ goal) (UN [no date]). In a more focused way, the emphasis on climate change concerns at an international level has led – at the Rio de Janeiro Earth Summit in 1992 – to the setting up of the United Nations Framework Convention on Climate Change being founded¹⁷. From there, the Kyoto Protocol (in 1997) and the Paris Agreement (in 2015) set up mechanisms to operationalise the framework (UNFCCC [No date]). All these structures, as well as emerging equivalent initiatives at regional and state

15 It is useful to point out here that Greta Thunberg was not the first young girl to speak publicly about the environment. In 1992, Sevem Cullis-Suzuki, a 12-year-old Canadian girl and founder of the Environmental Children’s Organisation spoke at the Earth Summit. Arguably, social media tools such (Instagram, Twitter, Facebook and YouTube) – not available in 1992 – contributed to the significantly higher impact of Thunberg’s initiative (Han and Ahn 2020: 6).

16 He exemplifies the different levels of analysis in the context of the international system where at a lower level, there is interaction between bureaucracies (as structures) and individuals (as agents), replaced at the level above by the nation state (as structure) and bureaucracies (as agents) and further above by the international system (as structure) and nation-states (as agents) (Wright 2014: 225).

17 The Framework entered into force in 1994 and set limits on greenhouse emissions for countries. However, these standards were non-binding and lacked enforcement mechanisms.

level, provide a strong contextual basis for climate justice social actors to pursue interests and demands more effectively.

3. 6. Morphostatic SAC

The unpacking of SAC interaction (related to climate change and the formation of global social movements) has highlighted that, in terms of enabling factors there exists an increased synchrony between culture and structure, which enables the linking between micro-level changes in reflexivity, meso-level transformations of networks and a potential macro-level re-articulation of the social order (Fig.1).

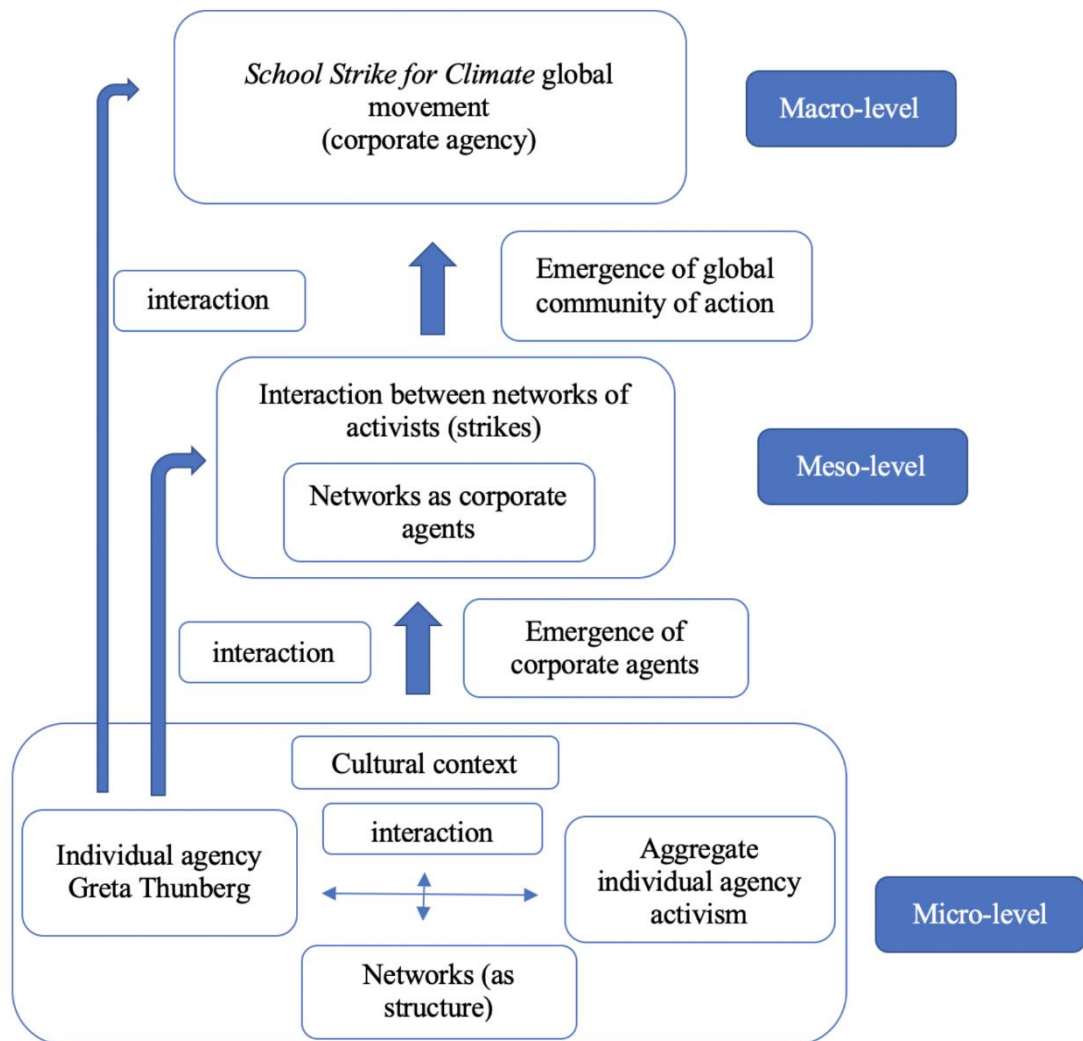


Fig. 1. Levels of agency interaction

These contingent compatibilities, in turn, create a new logic of opportunity with morphogenic consequences (Archer 2013b: 1—21). This explanatory framework is used to

analyse the emergence of a new type of meta-reflexive global community of action centred around climate justice.

Naturally, while this examination has focused primarily on the enabling properties in the agency, culture and structure, this does not mean that these are the only forces at play. Other actors, structures and cultural forms exert simultaneous competing morphostatic pressures and some will be briefly sketched below. At the individual level, people's values and commitments may be articulated differently than on a critical reflection on the human impact on the environment. Knowledge and ignorance play an important role in how people formulate projects. Self-interested concerns may take primacy over moral ones. Moral concerns can be articulated on different grounds than the environment. Last but not least, individuals have different levels of agency.¹⁸ Corporate agents from within the market sphere can also exert strong pressures towards the *status quo*. Extractive industries and their lobbies, in particular, stand to be affected most by any stronger regulatory pressures on fossil fuel exploitation, and on carbon emissions, while other industries more broadly stand to lose from a more sustainable approach to consumerist issues. Finally, governments as actors in the international arena can be vectors of morphostasis, as they need to aggregate the lower, national level, the interests of citizens, of businesses and of the third sector. Strong commitments to climate justice require significant expenditure that needs to be convincingly justified from an electoral perspective; thus, radical measures are unlikely. From the ideational register, a culture of individualism and consumerism characteristic of the neoliberal capitalist paradigm is undermining collective, social justice actions that threaten the status quo. Finally, the global power structures are still governed largely by the interplay between states and inter-governmental organisations on the one hand, and multi- and trans-national corporations, on the other. While the third sector has – as it has been argued here – increasingly opened avenues for the expression of values by those disenchanted with both the state and the market (Archer 2012: 44-45; 2014b: 111). Circumscribing all these aspects, the liberal capitalist system predicated on relations that 'pit capitalist firms against each other in an ever-intensifying competition', and perpetual consumer-driven growth exerts the strongest morphostatic properties. A comprehensive approach to understanding social changes taking place at a particular moment in time would require the examination of all such of competing forces and their dynamic interactions over time.

By way of conclusion

This chapter has attempted to show how new global communities emerge and challenge existing structures. The *School Strike for Climate* case illustrates the increasing role meta-reflexivity plays in coalescing social movements and actions aiming at social change. This, in turn, hints at need to engage more determinedly with the question concerning the advent of a morphogenetic society. However, this is not in any sense an argument that a tendency towards a morphogenic society is visible, nor is it a suggestion that such a tendency (if demonstrable) is likely to be, or ought to be activated. In fact, a quick look at the climate emergency movement's struggle to generate fundamental changes in how we – as humanity – operate in the world, so that to avoid climate calamity or extinction has so far failed. Despite the 'noise' generated, extraction-based industries remain powerful agents that shape governmental agendas. By and large, individual choices are still driven by consumption. If anything, Trump's announcement in 2017 regarding the US withdrawal from the Paris Agreement¹⁹, and the

18 Moral choices in one's lifestyle are often determined by factors such as class, income, etc. For instance, it is likely that many people would be willing to consume ethically grown or organic food, but they are 'priced-out' and need to resort to food that is produced in more questionable ways.

19 According to the terms of the Agreement, withdrawal is only possible three-year notice after the deal entered into force and another year notice for completion. This means that the US is officially projected to exit the Agreement on the 4th of November, one day after the elections (Farand 2019)

looming post-Covid-19 pandemic economic recovery needs, indicate regress in terms of the attention that is likely to be given to climate protection measures. All these suggest that, so far, the movement has not been able to dislodge existing structures, and in this respect, morphostasis is the word of the day.

That being said, an important achievement lies first and foremost in the constitution of the movement itself. It indicates the increased influence meta-reflexivity has in generating a capacity for individual agents to coordinate alongside collective goals and engage in global action on that basis. As suggested earlier, this is not a unique occurrence in late modernity – with *Occupy* or *Black Lives Matter* movements operating on similar drivers. The proliferation of such types of actions is also telling of the increasingly morphogenic dimension of social interaction. Finally, and importantly, the *Strike for Climate* case shows an increase of the meta-reflexive mode through the fact that it prompted into action a demographic constituency that so far has not been particularly active in engaging in a struggle for social change. For once, some important changes are noticeable. First, the tone was given by young people under eighteen who managed to act as catalyst for a movement that drew into action a wide range of individuals and agents across the world. Second, they escalated the level of the public debate about climate change to one about climate emergency and – in the process – have raised important challenges to the *status quo*. They have done so by articulating demands in the name of the rights of the future generations, and by claiming political participation rights (e.g. lowering of the voting age to sixteen) on grounds of responsibility for the future. Enduring morphostatic factors (corporations, lobby groups, neoliberal capitalist consumerist culture and the capitalist system itself) notwithstanding, this research opens up a further hypothesis that is worth exploring: that some of the new social movements that we are witnessing have the capacity to be more salient and to live longer (thus strengthening their causal properties) because of the influence of meta-reflexivity has increased and because younger people are more engaged with these movements. To put it differently, participants in these movements are being socialised in a more reflexive manner and in a context in which agency is interacting with culture and structure differently²⁰.

References

- Archer, M. S. 1988. *Culture and Agency. The Place of Culture in Social Theory*. Cambridge: Cambridge University Press.
- Archer, M. S. 1995. *Realist Social Theory: the Morphogenetic Approach*. Cambridge: Cambridge University Press.
- Archer, M. S. 2000. *Being Human: the Problem of Agency*. Cambridge: Cambridge University Press.
- Archer, M. S. 2007. *Making Our Way through the World: Human Reflexivity and Social Mobility*. Cambridge: Cambridge University Press.
- Archer, M. S. 2012. *The Reflexive Imperative in Late Modernity*. Cambridge: Cambridge University Press.
- Archer, M.S. (Ed.) 2013a. *Social Morphogenesis and the Prospects of a Morphogenic Society*. Dordrecht: Springer.

20 I would like to thank my colleague, Dr Atsuko Ichijo, for drawing my attention to this particular direction for further research.

Archer, M. S. 2013b. 'Social Morphogenesis and the Prospects of Morphogenic Society', in Archer, M. S. (Ed.) 2013. *Social Morphogenesis and the Prospects of a Morphogenic Society*. Dordrecht: Springer, pp.1—22).

Archer, M. S. (Ed.). 2014a. *Late modernity: Trajectories towards Morphogenic Society*. Dordrecht: Springer

Archer, M. S. 2014b. 'The Generative Mechanism Re-configuring Late Modernity', in Archer, M. S. (Ed.). 2014. *Late modernity: Trajectories towards Morphogenic Society*. Dordrecht: Springer, pp. 93—117.

Archer, M. S. (Ed.) 2015. *Generative Mechanisms Transforming the Social Order*. Dordrecht: Springer.

Archer, M. S. (Ed.). 2016. *Morphogenesis and the Crisis of Normativity*. Dordrecht: Springer.

Archer, M. S. (Ed.). 2017. *Morphogenesis and Human Flourishing*. Dordrecht: Springer.

Carter, N. 2007. *The Politics of the Environment. Ideas, Activism, Policy*. 2nd ed. Cambridge: Cambridge University Press.

Castells, M. 2008. 'Materials for an Exploratory Theory of the Network Society', *British Journal of Sociology*, 51 (1), pp. 5—24.

Castell, M. 2009. *The Power of Identity. The Information Age: Economy, Society, and Culture* Volume II. 2nd ed. Hoboken: Wiley-Blackwell.

Castells, M. 2010. *The Rise of the Network Society*. Vol I, 2nd ed. Hoboken: Wiley-Blackwell.

Castells, M. 2015. *Networks of Outrage and Hope: Social Movements in the Internet Age*. 2nd ed. Cambridge: Polity.

Chernilo, D. 2017. *Debating Humanity. Towards a Philosophical Society*. Cambridge: Cambridge University Press.

Crouch, D. 2018. 'The Swedish 15-Year-Old Who's Cutting Class to Fight the Climate Crisis', *The Guardian*, 1 September. Available online:

<https://www.theguardian.com/science/2018/sep/01/swedish-15-year-old-cutting-class-to-fight-the-climate-crisis>. Last viewed: 15 July 2020.

Davidson, D. J. and Stedman, R. C. 2018. 'Calling Forth the Change-makers: Reflexivity Theory and Climate Change Attitudes and Behaviours', *Acta Sociologica*, 61(1), pp.79—94.

Dodd, V. and Grierson, J. 2020. 'Terrorism Police List Extinction Rebellion as Extremist Ideology', *The Guardian*, 10 January 2020. Available at: <https://www.theguardian.com/uk-news/2020/jan/10/xr-extinction-rebellion-listed-extremist-ideology-police-prevent-scheme-guidance>. Last viewed: 15 July 2020.

Dolsak, N. and Prakash, A. 2019. 'Does Great Thunberg's Lifestyle Equal Climate Denial? One Climate Scientist Seems to Suggest So', *Forbes*, 14 November. Available at: <https://www.forbes.com/sites/prakashdolsak/2019/11/14/does-greta-thunbergs-lifestyle-equal-climate-denial-one-climate-scientist-seems-to-suggest-so/#7c0a07ce67dc>. Last viewed: 16 July 2020.

European Commission. 2020. 'New Eurobarometer Survey: Protecting the Environment and Climate Is Important for over 90% of European Citizens', *Press Release*, 3 March. Available at: https://ec.europa.eu/commission/presscorner/detail/en/IP_20_331. Last viewed: 16 July 2020.

Farand, C. 2019. 'Trump Begins Formal US withdrawal from Paris Agreement', *Climate Home News*, 4 November. Available at: <https://www.climatechangenews.com/2019/11/04/trump-begins-formal-us-withdrawal-paris-agreement/>. Last viewed: 16 July 2020.

Fridays for Future. 2020a. 'List of Countries', updated on 16 July. Available at: <https://fridaysforfuture.org/what-we-do/strike-statistics/list-of-countries/>. Last viewed: 17 July 2020.

Fridays for Future. 2020b. 'Our Demands'. Available at: <https://fridaysforfuture.org/what-we-do/our-demands/>. Last viewed: 16 July 2020.

- Giddens, A. 1990. *The Consequences of Modernity*. Cambridge: Polity Press.
- Gould, L. 2019. 'How Greta Thunberg's Climate Strikes Became a Global Movement in a Year', *Reuters*, 20 August. Available at: <https://www.reuters.com/article/us-global-climate-thunberg/how-greta-thunbergs-climate-strikes-became-a-global-movement-in-a-year-idUSKCN1VA001>. Last viewed: 16 July 2020.
- Han, H. and Ahn, S. W. 2020. 'Youth Mobilization to Stop Global Climate Change: Narratives and Impact', *Sustainability*, 12 (10), pp.1—23.
- Harvey, D. 1991. *The Condition of Postmodernity. An Enquiry into the Origins of Cultural Change*, Cambridge Massachusetts: Blackwell.
- Held, D., A. McGrew, D. Goldblatt, and J. Perraton. 1999. *Global Transformations: Politics, Economics and Culture*. Polity and Stanford University Press.
- Holm, H.H. and Sørensen, G. (eds.). *Whose World Order? Uneven Globalization and the End of the Cold War*. Boulder: Westview Press.
- Larsson, T. 2001. *The Race to the Top: The Real Story of Globalization*, (US: Cato Institute, 2001), Cato Institute.
- Lawson, T. 'A Speeding Up of the Rate of Social Change? Power, Technology, Resistance, Globalisation and the Good Society', in Archer, M. S. (Ed.). 2014a. *Late modernity: Trajectories towards Morphogenic Society*. Dordrecht: Springer, pp.21—47.
- Maccarini, A. (2014). 'The Emergent Social Qualities of a "Morphogenic" Society: Cultures, Structures, and Forms of Reflexivity', in Archer, M. S. (Ed.). 2014a. *Late modernity: Trajectories towards Morphogenic Society*. Dordrecht: Springer, pp.49—76.
- Porpora, D. V. 2015. 'Why Don't Things Change? The Matter of Morphostasis', in Archer, M. S. (Ed.) 2015. *Generative Mechanisms Transforming the Social Order*. Dordrecht: Springer, pp.183—203.
- Ritchie, E. J. 2016. 'Fact Checking the Claim of 97% Consensus on Anthropogenic Climate Change', *Forbes*, 14 December. Available at: <https://www.forbes.com/sites/uhenergy/2016/12/14/fact-checking-the-97-consensus-on-anthropogenic-climate-change/#49d0a5d71157>. Last viewed: 16 July 2020.
- Robertson, R. 1992. *Globalization: Social Theory and Global Culture*, London: Sage.
- Rowlatt, J. 2020. 'Greta Thunberg, the Climate Campaigner Who Doesn't Like Campaigning', *BBC News*, 4 July. Available at: https://www.bbc.co.uk/news/stories-53255535?intlink_from_url=https://www.bbc.co.uk/news/topics/cwmrxq94v1jt/greta-thunberg&link_location=live-reporting-correspondent. Last viewed: 15 July 2020.
- Thunberg, G. 2019. *No One Is Too Small*. Penguin Books.
- Thunberg, G., Thunberg, S., Ernman, M and Ernman, B. 2020. *Our House Is on Fire. Scenes of a Family and Planet in Crisis*. Penguin Books.
- Tol, R. S. J. 2016. 'Comment on "Quantifying the Consensus on Anthropogenic Global Warming in the Scientific Literature"', *Environmental Research Letters*, 11(4), pp.1—6.
- United Nations [No date]. 'Sustainable Development', Department of Economic and Social Affairs. Available at: <https://sdgs.un.org/goals>. Last viewed: 16 July 2020.
- United Nations Framework Convention on Climate Change [No date]. 'UNFCCC Process and Meetings'. Available at: <https://unfccc.int/process-and-meetings>. Last viewed: 16 July 2020.
- Waters, M. 1995. *Globalization*. London: Routledge.
- Wright, C. 2014. 'Morphogenesis and Cooperation in the International Political System', in Archer, M. S. (Ed.). 2014. *Late modernity: Trajectories towards Morphogenic Society*. Dordrecht: Springer, pp.221—240.
- Wright, C. 2015. 'Mechanisms and Models: Some Examples from International Relations', in Archer, M.S. (Ed.) 2015. *Generative Mechanisms Transforming the Social Order*. Dordrecht: Springer, pp.49—64.