Change and a Changing World? Theorising Morphogenic Society

Jamie Morgan
Leeds Beckett University, UK

Generative Mechanisms: Transforming the Social Order. By Margaret S. Archer, editor. London, Springer, 2015. Pp. 248. ISBN 978 3 319 13772 8 (hbk) £90

Abstract: In the following review essay I provide some background in order to place Archer's edited Volume 3 text *Generative Mechanisms* in the context of the series from which it derives - From Morphostasis to Morphogenesis. In doing so I provide some sense of the significance of the series. Thereafter, I provide an overview of the key substantive claims of the essays, with some comment on how they may be linked together in terms of the theme of the series.

Keywords Morphogenic Society, morphogenesis, morphostasis, generative mechanism, late modernity

It is always difficult to do justice to an edited text in the few thousand words of a review essay. Despite a common theme the papers will each follow different strands based on the interests and proclivities of the authors. One then often faces the challenge of being even more reductive than usual in attempting to present the material. This problem is compounded when the edited text forms part of a series, since the whole then has its own significant genealogy and chain of reference points internal to that series. Under the circumstances it is difficult to do more than give the reader a sense of why (if at all) she should actually progress from reading the review essay to reading the text(s). However, sometimes, the process is easier than others and this is the case with the work set out here. Archer's *Generative Mechanisms* is Volume 3 of a projected series of 5 volumes arising from the annual 'From Modernity to Morphogenesis' workshops of the Centre for Social Ontology. In the following essay I provide some background in order to place Volume 3 in context, and also to provide some sense of the significance of the series. Thereafter, I provide an overview of the key substantive claims of the essays, with some comment on how they may be linked together in terms of the theme of the series.

By way of background

Each volume in this series is intended to focus on a different aspect of what the contributors consider a key challenge for contemporary theory. Change is inherent to the social world, but this is different to the possibility of a *changing* world. That is, a social world may be one whose varieties, relations and rates of change are such that the social world does not simply include change but is constituted and challenged through change. Change would then have resulted in transformation to a new kind of social formation (defined by change). Many theorists and commentators have in the last twenty years begun to orient on this notion of a changing world through such concepts as liquid modernity.[1] A sense

[1] See, Albrow, 1997; Bauman, 2000; Braidotti, 2013

that everything is in a state of flux has, for example, lent itself at the extreme to claims that the social world has de-structured, that culture has broken free of constraints or points of reference, to become no more than (perhaps liberating) portable internalised and radically variable performances, which in turn shape or call forth an individual as a source of self-validating, fluid, self-constructing identity, constantly shifting through a radically uncertain social terrain. In drawing back from this extreme a changing world is still widely recognized as one creating new and profound issues for who we are, how we live, and whether in fact the way we live is rendering societies unstable and perhaps even unsustainable (due to social cleavage, fragmentation and disintegration, as well as due to the environmental implications of capitalist societies in chains of industrialised and consumer oriented economies).

Here, there is clearly an empirical challenge to be met. Theory has not simply manufactured a problematic.[2] We live in a time of frequent reference to crisis, but also of continual reporting of technological transformations and attendant shifts in social practice, combined with a constant chatter regarding the imminent potentials arising from those new social practices and technologies. Familiar positive themes include social media as a new way to foster and integrate participatory democracy, the sharing-reciprocal potentials of a wired world and of a new kind of economy not rooted in old ownership and control systems, and the potentials for long healthy lives created by imminent breakthroughs in medical technologies.[3] Familiar negative themes include the dark side of the digital world (pervasive access to pornography and its effects on sexuality and expectations), the increasing medicalization of being (a chemical for every condition and problem), the effects of financialisation on the person, society, and economy, the development of disaggregated networks and organizational chains of corporations (creating problems of growing income inequality, and at the extreme forced labour, as well as tax avoidance and other social ills – enhancing the power and the privilege of the few, and oppressing the many, even as societies may be in some senses 'developing'), and, most recently, 'Big Data', as well as the imminent introduction of 'artificial intelligence' (or at least algorithmic learning systems) in tandem with advances in robotics, which seem set to make human labour redundant in yet another swathe of occupations.[4]

Change or continual prominent processes of change are increasingly recognized as our normal. The way in which change is recognized involves contradictions and confusion, but a consistent theme is that the rate of change has, seemingly, increased.[5] However, orienting on change creates immediate problems. Who is this 'we' for whom 'our' new normal is identified (how pervasive and universal are given changes for persons and across geographies)? Concomitantly, what is change? How is it to be differentiated from what does not

---

[2] See Patomaki, 2008

[3] For example, Khondker, 2011

[4] For example, Seabrooke and Wigan, 2014; Morgan 2009; Morgan & Sheehan, 2015

[5] For example, are we living in a digital age, which is increasingly tailored to us, or are we being Taylorized; are we becoming infantilized by technologies to which we delegate more of our existence or are we being augmented (where does power lie in a cyborg society)? Note, drawing attention to differing discursive positions here is not to suggest that the modern world is simply significant in terms of the digital, the technological etc. in these terms – merely that these are terms in which it has been discussed.

change – how is it identified? How is it to be accounted for, including in its relation to what, seemingly, has not changed?

That the social world is in given places and for groups of people in some sense different does not mean that the social world is profoundly changed (or is now defined by change). One may simply be observing new patterns in events, and similar processes may be giving rise to superficial differences. Moreover, our sense of change may be impressionistic – selecting only that which seems new and attributing to it greater significance and generality than might be justified. The difference in difference, the newness beyond superficial novelty, and the pervasiveness of what we consider prominent may all be contingent and may all be contested. There is a potential here to commit a variety of errors – broadly, a form of empiricism (inferring from and theorising at the level of events), and, more narrowly, a form of technological determinism (albeit one curiously future directed and claiming to radically relativise activity). As such, exploring the empirical prominence of 'change' and conceptualising the nature and significance of that change necessarily requires caution. The apparent significance of change, therefore, creates grounds for scepticism. This is not least because in the world of academia prominent change tends to induce a rush to theorise and comment (to stake a claim to the future). This is how careers are made.

A key underlying motivation of the 'From Modernity to Morphogenesis' series is precisely to introduce a note of caution based on the observation of this induced academic response. In general, the increasing recognition of change has not just created a key challenge for contemporary theory, but has resulted in forms of theory that must be challenged – the Network society, the Information Society, the Risk Society etc. For the contributors to the series, there has been a tendency to pass quickly from the observation of apparently increasing change to the claim that there has been a transition to a state of change, and of a new social formation based on this state of change. This is a potential empirical and theoretical error. It is the academic analogue of the policy practice of claiming the old rules no longer apply, that *this time is different* – often just before reality bites back. In economic context consider, for example, the hubris of the dot.com boom or the Great Moderation.[6]

It is from the point of view of an ontological realism that a further note of scepticism is introduced. Orienting on change can quickly descend to the claim that everything is change, and this in turn can lead quickly to conceptualisations freed from the bounds of ontological plausibility. The consequence is that theoretical novelty replaces the more guarded claim that even change is rooted in the possibilities and potentials of social reality. One can transform society but one cannot exceed reality, despite that transformation may have emergent properties.[7] Change is a process. It may well be one that is shifting towards a social

[6] See Morgan, 2013.

[7] If one accepts the concept of emergence then it becomes the case that a new power or characteristic within a new relational form may arise. As such, one might superficially argue that the non-reducibility and non-predictability of the new means that this given new x *could* be of a kind that exceeds reality as known. However, the counter-argument is that to exceed reality as known requires the new form, which creates the conditions that exceed the prior reality, do so *relationally*, and so the new form remains subject to possibility based on the generalised characteristics of relationality for the given form. Therefore, in so far as it is adequately expressed in social ontology then social reality has not been exceeded but rather elaborated (requiring for example, the powers of particulars and the analytical distinctions in social activity and interaction

formation of a qualitatively different type, but this cannot be taken for granted merely because 'more' change is being observed. One needs to adequately conceptualise the nature of change, and this includes the possible generative mechanisms that may make sense of any possible qualitatively different social formation. If one cannot provide a causal account of what is and has changed, then one cannot discount that it is no more than a contingent and transient set of patterns in events. That is, unless there is no longer any such thing as cause, and transience is what society has become – which would be a circular validation based on a set of conditions that if one gives them serious consideration violate the very possibility of human and social existence.

It is with such considerations in mind that the series based on the workshops 'From Modernity to Morphogenesis' can be said to have a clear purpose and unifying theme, as well as considerable significance or importance. The contributors (working in collaboration at the workshops though then authoring the essays singly or in pairs) begin from the acknowledgement that the growing recognition of change (caveats notwithstanding) and the concerns of many social theorists (errors of inference not withstanding) are indicative that change is in some sense more rapid and significant within modernity. Modernity is perhaps now late modernity, and (since *late* rather than latest), may be approaching some form of transition→transformation. The series then is rooted in two guarded questions:

1. Does the observation of change warrant the claim that we live in a period where change is leading to a changing social world, which in turn constitutes a new social form?
2. How can this changing social world (including the issues of transition its realisation may involve) be theorised; what are the specifics of its social ontology?

The opening paragraph of Volume 1 of the series clearly articulates the group's position:

> In itself, rapid social change does not necessarily signal, much less constitute, a new type of social formation. What intrigues us is whether or not this increasingly important process could be responsible for generating a different kind of social formation – Morphogenic Society – albeit one with the potential for assuming a multiplicity of specific forms. None of us is committed to announcing the advent of the Morphogenic Society, but regard it as worth exploring. All of us are wary about the array of social forms that have hastily been advanced as superseding modernity. Thus, we do not precipitously announce a new 'Beyond'.[8]

To be clear, the purpose of the series, and thus also Volume 3, is *not* to announce a qualitatively new social formation and to define precisely what this is. Rather it is to consider what it *may* be, based on onto-analytical and empirical explorations of the contemporary world. The chosen term for the possible arising social

– see later). The argument, of course, is circular and heavily dependent on the adequacy of the social ontology as a generalised expression of the potentials of reality.

[8] Archer, 2013: p. 1 in Archer, editor, 2013

formation is the Morphogenic Society. The term immediately invokes a given general meaning, if only for semantic coherence: morph and genic – change that is produced. As such, the Morphogenic Society's coherent and anticipated general point of reference is as a social form (or range of forms) in which it is processes of morphogenesis rather than morphostasis that significantly dominate the totality of that social formation, as well as many of its component parts. In Volume 1, Archer also adds as possibilities:

> [A] social order governed increasingly by positive feedback, where change accelerates exponentially and whose distinctive process is for 'variety to stimulate more variety'… [A social order which may involve] heterogeneity at all levels in all domains… [and some degree of] stabilization-without-stasis [since otherwise it would be disordered, and detrimentally disintegrated in a way prone to chaotic dissolution].[9]

Thereafter, given the claimed socio-historical conjuncture from within which the exploration takes place, the series as a project is necessarily situated as speculative. It is a focus on tendencies and potentials within what has not yet and may not ever become. To a large degree it deals with the same observed phenomena as many of the theories it contests (new social practices, organizations, technologies etc), but does so in the context of ontology and of their role in generative mechanisms (as incomplete processes). Speculative is, therefore, positioned more in the form of tentativeness regarding inferences and claims. The whole point of the project is to avoid claiming too much on the basis of generalising from observed changes in and through theorisations that simultaneously place change at their centre. To do so would be to *presuppose* what it is that is *supposed* to be under investigation. The contributors are formally collectively committed to avoiding reading too much into observed events and practices at the level of those events and practices. Again, the claim set out in Volume 1 is that:

> No one has yet advanced or is married to a theory of the coming Morphogenic Society. Instead… we try to anticipate the criteria such a theory would have to meet; the objections and alternatives it would have to overcome. At most, explicit speculations are ventured about the possibility of this social formation. However, we still live in the crisis of later modernity, a formation that appears to be gasping without any guarantee that this is its last gasp. Rather, we focus on the process of 'social morphogenesis' because only if we can articulate a generative mechanism of social change is there any convincing basis for beginning to theorise about radical social transformation.[10]

This last sentence indicates a further motivating aspect of the project. If the social world involves significant generative mechanisms, and humans are central to the potentials of the social world, then the future is neither deterministically condemned to dystopian outcomes nor simply a matter of senseless events in flux.

---

[9] Archer, 2013: pp. 12, 14, 18
[10] Archer, 2013: p. 2 in Archer, editor, 2013

One choice is not as good as another as though in the end no choice matters. What we do matters, but a constructive approach to the future begins from an adequate account of where we are (which acknowledges and contributes to our reflexive potential). There is, therefore, a normative dynamic to an interest in the Morphogenic Society, and then also an additional normative qua emancipatory commitment in terms of theorising possible forms of a Morphogenic Society. This is clearly summarised in Archer's introduction to Volume 3:

> The aim is to answer the transcendental question: What needs to be the case to make a Morphogenic society – *as a wholly new global social formation* [emphasis added] – possible? One response we have rejected in the three volumes published to date is the mere presence of plentiful morphogenetic change representing more variety and (in principle) more opportunity. There are three main reasons for rejecting this formula [as sufficient - note the previous quotation from Volume 1 regarding the minima for a Morphogenic Society]:
>
> Variety and opportunity can be concentrated in very few hands, leaving most hands empty on a new but steeper gradient of inequality, which is fundamentally unstable.
> At least as many variants of Morphogenic societies are conceivable as there are multiple forms of late modernity.
> Many of these variants would fare very badly if assessed as providing the conditions for a good life for all. However, such outcomes are not inevitable and neither are we ethically neutral about them. (Archer, 2015: p. 21)

So, one might note that though cautious and formally sceptical regarding the rush to proclaim an already realised new social formation, the project is also one that is considerably bolder in terms of its commitment to articulating or working towards a particular quality for any future Morphogenic Society. Specifically the normative form of the transcendental question posed is, 'What needs to be the case to make a eudemonic Morphogenic society possible?' (Archer, 2015: p. 21). Since, the future is yet to be written there is nothing intrinsically contradictory about this combination of the bold and cautious. One might argue the reverse, it is entirely consistent to attempt to theorise the characteristics one would prefer in the society that may arise (in so far as these are within the possibilities and potentials of social reality). Concomitantly one might argue that it is on the basis of characteristics that have eudemonistic qualities that a society could be varying without being disintegrated, changing without becoming dysfunctional to the point of disorder, and stable without stasis.[11] This, however, is not the main subject of Volume 3 and is intended to be the subject of the final Volume 5.

The main point to make here is that the series as a whole has a unifying theme, a set of orienting questions, a genuine observed empirical set of phenomena to consider, and a further significance as an intervention, in so far as the whole is

[11] For these reasons a eudemonistic Morphogenic Society is also referred to as a 'concrete utopia' or 'win-win' situation for its participants. See Archer, editor, 2013: p. 12.

differentiated from an identified contemporary tendency to overstate the degree to which we are already living in radically new times.

Morphogenesis, morphostasis, structure, agency and culture (SAC)

Though the concept of a Morphogenic Society is an open question to be explored in the series, in so far as the contributors are committed to seeking generative mechanisms that may give rise to that society, they are committed to a general approach to social ontology. The language of that social ontology pervades and informs much of the work. This is not to suggest the contributors lack diversity in terms of their specific positions, emphases and interests, nor that they approach a general position without critique.[12] But it is to note that the point of departure is first a commitment to the significance and value of social ontology as a means of inquiry, and second of a particular social ontological approach as the initial medium, at least as the initial language or terminology, of that inquiry (subject then to critical scrutiny and development). Much of the language of this derives from the work of Archer.[13]

Though Archer is a social theorist, and her work in general can be described as social theory, she also differentiates it in terms of its level of generality and purpose. She refers to critical realism as social ontology meta-theory, and her own general ontological schema as a complementary methodological approach in the social domain, which more substantive and focused work can then translate into particular explanatory endeavours and developments of more specific theorizations. Her approach breaks the social world down into possible morphostatic and morphogenetic cycles, working on and through different yet variously connected, related and interacting, components and aspects of social reality, each with its own powers and potentials. Following from a critical realist ontology she maintains a distinction between agency and structure, and based on her own work argues for a distinction between culture and structure. The three constitute what she refers to as SAC. She conceives structure to have its own variety of causation. Structure relationally positions humans as agents who take on roles in terms of a variety of organizations. Humans have particular powers that make possible the structures of relations in which they are positioned. However, the human cannot simply be reduced to the existence of any given set of positions (as a multiply socialised agent). The particular powers of the human that make possible such agency also mean that the human is more than the sum of such agency – she is an always potentially reflexive and deliberative source of personal projects (which may often operate on and through formally recognized organizationally positioned agency – her sum is more than the parts in terms of which she may be active). Culture provides a concomitant domain to structure and consists in an accumulated stock of ideas and artefacts.[14] SAC then provides the initial

[12] For example, Porpora, 2016 (forthcoming); Donati, 2011; Lawson, 2003; Wight, 2006; Hofkirchner, 2013

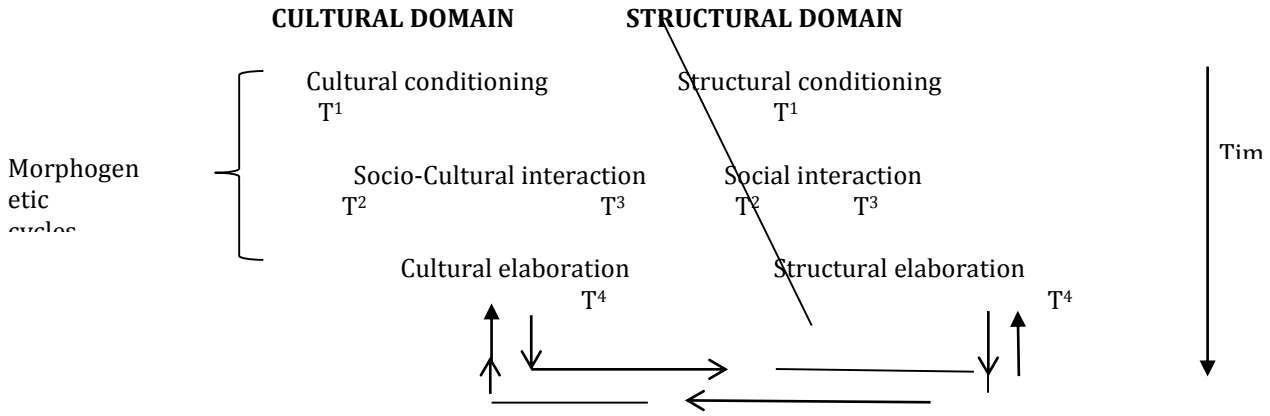
[13] Notably Archer, 1995, 2000, 2003, 2012

[14] More specifically it is the 'intelligibilia' of society that requires hermeneutic interpretation – the cumulative product of human 'mentation': books, theories, ideologies and also the interpretive dynamic of use of concept-dependent artefacts. It can be sought in our actions, 'our heads', but also as stocks that can be accessed for interpretation –libraries, museums etc.

terminology for the domains and components of morphostatic and morphogenetic cycles (Archer's M/M approach).

Time, or rather processes engaged in time, is central to Archer's work. A morphostatic cycle is one that tends through its constituent parts to preserve or maintain the form (the relational whole) that is undergoing the cycle.[15] A morphogenetic cycle is one that in some significant sense elaborates, and thus to potentially differing degrees qualitatively and quantitatively changes, through its constituent parts, the form that is undergoing the cycle. 'Through its constituent parts' implies only that the form is operated on by the interactions of its parts. Relevant parts (aspects of structures, agents qua agency, culture etc) are also reproduced or changed in the processes in which they engage (there is a 'double' effect). A cycle in general consists in a temporal sequence of conditioning, interaction and set of consequences (the relative morphostasis or morphogenesis).[16] For example, Figure 1 sets out a morphogenetic cycle:

Figure 1: Morphogenetic cycles



Cycles are not hermetic. New cycles constantly follow from prior ones, and multiple cycles involving different foci may be occurring simultaneously and non-synchronically. The M/M approach is then no more or less than a generalised methodological way to map out or temporally sequence for investigation the different possible components in social interaction. Quite how one goes on to conceive the components, the domains, the cut–off points and interactions between periods in a cycle, and how one differentiates within and between cycles, and what judgement one comes to regarding the consequences of said cycles, can be contested. It is this contestation that, through the three volumes so far available, forms the basis of argument in regard of the possibility of a Morphogenic Society.

[15] The original language of morphogenesis in the social sciences derives from Buckley, 1967

[16] Morphostasis will tend to involve negative feedback loops and morphogenesis positive feedback loops.

For Archer in particular, it is in terms of exploring developments at three levels of emergence that the possibility of a Morphogenic Society can be most appropriately pursued through the M/M approach:[17]

1. A focus on the internal dynamics of a given M/M cycle. That is, a focus on tracing the initial cultural and structural features from a given prior cycle for some substantive area of inquiry, and how these features act as grounds which form the basis of a new cycle from which morphostasis or morphogenesis may arise.
2. A focus on the relation of relations between M/M cycles in different substantive areas of inquiry. That is, between institutional forms, such as the family, economy, polity etc. Such meso-institutional relations may exhibit complementarities or incompatibilities that are significant for the ongoing co-existence of those substantive areas, and may then influence the M/M cycles of those areas.
3. A focus on the degree of congruity and incongruity between structure and culture, particularly in terms of the more general features of culture and structure writ-large. That is, a focus on whether culture and structure are in some sense acting to mutually reinforce tendencies in each, creating further M/M effects.

In pursuing these foci Archer also explores different 'situational logics of action' that arise and shape agency, and she distinguishes between primary agents (the individual) and corporate agents (those collectively organized in pursuit of given aims). She places significant emphasis on the particular powers of the human as central to social reality. Unlike a natural or biological system, every significant element of social reality is subject to the subject – it cannot always and everywhere be assumed to be reproduced automatically or mechanistically. Even morphostasis requires work. Moreover, in terms of the potential for a Morphogenic Society, as particular changes occur then the scope for reflexivity and deliberation, in ways that foster further variety, *may* also increase. If there is less scope in particular, and then as a general situation because of the particulars, for key elements of life to become subject to routines, then variety may well foster *more* variety, as agency becomes conditioned to elaboration rather than reproduction as its way of engaging with the world. This does not render activity free floating or absent power and interests, but rather may operate through the power of given groups, and may do so in ways that influence and are influenced

[17] Since relations, connections, causations, processes etc. are part of a multi-form social reality one should emphasise that the distinctions made are analytic (regarding aspects which can be distinguished and are in various ways different, though related and mutually referenced). The distinctions are to facilitate clarity in investigation and explanation. One should not read into Archer's methodology an attempt to foster a reification of parts of a whole, but rather view it as a series of foci where other aspects are kept in mind. Reification, overly schematic distinctions etc would be an error of inference by the critic or an error of application by the user, rather than an error reducible to the formulation of the whole, based on the intent of Archer (see Archer, editor, 2015: p. 10 fn. 12). Archer also emphasises – in response to possible misinterpretation – that morphostatic and morphogenetic cycles are not 'pure' in then sense of each is defined by the absence of characteristics of the other (see Archer, editor, 2013, and also Archer, 2015: p. 137 in Archer, editor, 2015).

by the degree to which society is integrated (is cohesive in its structural and cultural aspects), and the system at large is also similarly integrated.

Hence, a Morphogenic Society *may* be incipient in the way in which agency is changing (including the degree and types of reflexivity deployed), and in the way corporate agents are organizing and technology and social practices are being developed in ways significant in and between given institutions.[18] Other contributors to the series take up this language and approach to differing degrees, and take the whole in different directions. They do so in Volume 3 based on the specific problematic posed for the workshop on which it is based. Porpora's work in particular is most closely aligned with Archer's, though the work of all of the others resonates to differing degrees (she has for example, also worked closely with Donati on relational sociology, Tony Lawson is a founding member of the Centre for Social Ontology, John Latsis and Ismael Al-Amoudi are members along with Lawson of the Cambridge Social Ontology Group, and Philip Gorski has done much to promulgate critical realism within US sociology).[19]

Volume 3: the nature of a generative mechanism and the potentials of current multiple causation in the social world

Volume 3 is split into three parts. Part 1 provides an under-labouring or clarification function for the concept of generative mechanism and hence of causation. This is deemed important because the concept of generative mechanism has recently been revived across the social sciences, and this may create some confusion in terms of the use and meaning of the term. The possibility of confusion is considered significant because the point of departure of the project is the possible generative mechanisms for a Morphogenic Society (and, as I have set out, it is on this basis the whole was originally justified and differentiated from prior theory in Volume 1). Part 2 is focused on exploring *some* possible generative mechanisms with an emphasis on what is seemingly new (and with an emphasis on *some* – so, not the only or not exclusively significant generative mechanisms). Archer, in particular, makes the point that in the context of the temporal dynamics of M/M cycles current processes might most appropriately be construed as within $T^2 \rightarrow T^3$ (see previous figure).[20] Processes are incomplete. Part 3 provides some nuance to argument regarding the nature of change. Specifically, contributors consider in different ways how change may be situated to what has not changed, within and for M/M cycles.

The concept of a generative mechanism begins from Bhaskar's disarmingly minimal claim that it is 'the way of acting of a thing'. A 'way of acting' is however, a focus on how rather than simply that something occurs. It requires a specific account of operation, which places the roots of explanation at the level of causation created by the powers of the identified real 'things'. It is these that give rise to events. So, a focus on generative mechanisms is understood as a focus on the causal operation of relevant significant 'things'. It resists a default to a description of events only. Moreover, in so far as powers of 'things' can have

[18] See Archer, 2013: pp. 12-13 in Archer, editor, 2013, for elaboration on degrees and types of reflexivity see Archer, 2012

[19] See also Donati & Archer, 2015; Gorski, 2013

[20] And the same for morphostatic cycles.

particular characteristics or qualities that are different in different domains of reality (physical and chemical processes, biological processes, human social processes etc) then one's concept of a generative mechanism must be sensitive to the error of mapping or conflating from one domain to another. This includes via the metaphors one deploys in constructing theory.

It is here that Gorski positions his Chapter 2 contribution to Volume 3. Gorski argues that none of the ways in which the term generative mechanism is currently used in its revival in American sociology are 'fully realist'. For example, the 'generic approach' simply uses the term to mean the connections between a causal chain. However, the causal chain that is connected remains one of Humean constant conjunctions. According to Gorski, the underlying problem is that uses of the concept remain restricted by a 'physicalist imaginery' rooted in connotations of the mechanical. Despite advances in physics and in philosophy – the mechanistic reading of mechanism remains subliminally influential, and is expressed in a kind of 'smallism' or preference for explanation of higher levels in terms of lower ones, and a concomitant tendency to focus on the micro (for generative mechanisms). Though critical realism formally opposes both, according to Gorski it does sometimes lead to the latter. Gorski considers whether one might then argue for dispensing with the term generative mechanism in order to avoid conflations and confusions within sociology based on its alternative uses. However:

> [P]roponents of CR and MM should think twice before letting go of the mechanisms concept. It has become an important focus of intellectual debate, with contending schools attempting to impose their preferred definitions on it. There are also important theoretical and political reasons not to let it go just yet: the mechanisms concept reminds us that there are fairly regular but non-observable processes in the social world, even today. For example, however much the technological means of modern capitalism have been transformed the inner logic of capital accumulation is not really as different as some observers suggest. Nor should the rapidity with which capital – and information – now circulate around the globe lead us to imagine that these mechanisms and structures have dissolved into 'contingencies' and 'flows' whose only properties are 'risk' and 'acceleration'. Social life is not that fleeting.(Gorski, 2015: p. 43, in Archer 2015, editor)

It is, therefore, precisely by focusing on what is particular to the social realm that the concept of a generative mechanism is justified in that social realm. One must be aware of and resist a simple appropriation of meanings based on the mechanical or biological. A social order based on human activity cannot be merely mechanical in its operation or impersonally automatically selective in the biological sense.

In Chapter 3, Wight also takes up the problem of meaning and notes that there is a problem of connotation and inference when using the concept of generative mechanism, since 'the concept of mechanisms was largely developed in the context of the physical, not the social sciences. Thus when the term was transferred into the social realm it brought with it its implicit and associated concepts.' (Wight, 2015: p. 50, in Archer, editor, 2015). However, when resituated

in terms of given relationalities, powers and emergence it becomes defendable and meaningful in the social realm. Thereafter:

> What specific mechanisms govern a particular system is a matter for research, not theory, even if theory plays a necessary role in their identification and discovery. The only ontological limit on what might be a mechanism is that it possesses the powers and liabilities able to produce outcomes. (Wight, 2015: p. 54 in Archer, editor, 2015)

Wight then illustrates this point (that generative mechanisms vary by domain and that the specific form of them is an empirical issue) based on two 'interacting' social mechanisms he deems 'significant in global politics today', and those are, cyber communication and political trust (presumably as instances of Bhaskar's 'hows'). Each can operate on and through given events via technology (and so the technology becomes a medium not the mechanism). For Wight, the Occupy Movement and Arab Spring are events (in time) significantly affected by and then affecting the use and significance of cyber communication and political trust. The feedback loops involved have accelerated the use of cyber communication but exacerbated the problems of trust. There is, for Wight, a tension here, since the form of technology enables communication that does not require prior or embedded forms of leadership and representation for protest to be articulated and become widespread. At the same time, the disaggregation of the process allows protest to proceed rapidly without an alternative programme and without any observable cohesion (a different way of considering variety). However, since the process is one undertaken reflexively, the limits and tensions are also a learning process that may motivate constructive critique, which may call forth new democratic forms required to overcome the tensions (as morphogenetic elaborations). This, however, is also conditional on wider issues of power, often referred to in terms of neo-liberalism, and which also involve the geo-politics of the post-Arab Spring (which so far are not propitious for positive fundamental change).

In Chapter 4, Donati, adds various conceptual caveats regarding the potentials of generative mechanisms for morphogenesis based on his groundbreaking work on relationality. For example, he makes the point that the internal relational configuration of a mechanism confronts profound issues of stability if it involves variety based on self-organization (consider Wight's point regarding cohesion and the Arab Spring). However, it does not follow that more variety within relations renders the relations impossible (the family does not simply collapse as an institution because there is now more variability in its relations). It can equally be that conformity fails to conserve a relational form (since this depends on how conformity is achieved and how it is situated to the arising perspectives &c of those within the relations). There is, therefore, great scope for many different configurations of relational feedback. An emergent relational form may, for example, assimilate, manage and positively support variety rather than perpetuate tensions and dichotomies (so there can be quite different kinds of 'regular' features to different relational forms qua mechanisms expressed in M/M cycles).

Donati's contribution brings Part 1 to a close and does so by essentially making the point that there is nothing intrinsically problematic in a social form

built on variety, heterogeneity and lack of stasis. This is important, if one returns to Archer's introduction because there is a tendency for the use of such phrases as 'variety breeding variety' to invoke (in a supportive sense) the social theory types the contributors are keen to differentiate their work from, and/or to invoke a counter-scepticism where *any* talk of change in these terms simply means chaos and so is a non-starter as a way to explore social potential.

Part 2 begins with Hofkirchner's Chapter 5. Hofkirchner's focus is on self-organization as a form of system somewhere between determinate order and indeterminate disorder. That is, the form that Donati considers potentially problematic. His interest is in contemporary information and communication technologies. He makes the important point that reflexivity and the dynamics of systems allow not only feedback loops but also feed-forward effects. A 'logic of the third' is, therefore, possible. That is, current antagonisms within a system can become agonisms, where mutuality constructively deescalates the problems of difference, as well as the existence of contradictions that arise from different interests. There can then be the possibility of synergistic social relations. For Hofkirchner, following the theme set out by Wight's illustration, it is precisely because one cannot defend techno-determinism that a range of new possibilities arise that may transcend what seem to be disenabling contexts making a Morphogenic Society possible). However, for this to be so requires appropriate reflexive activity in the feed-forward. In Chapter 6, Lazega takes up this theme with a focus on issues of social control that can impede constructive change within M/M cycles arising from new technologies in late modernity (enhancing social control to some purpose and suppressing positive Morphogenic potentials):

> The huge databases that global private actors build today mix network profiles, biological data and much more information about individuals and collectives. The spread of captors, whether seen as simply amusing or as sinister, is part of the increasingly close and efficient standardisation of life and current creation of a new social order/control that will separate those who conform to dozens of new everyday rules from those who do not. It will make access to healthcare and welfare conditional with lifelong consequences for individuals and their families, and prove consequential for the restructuring of societies… Social digitization – defined here as articulation of numerical identity, industrialization/commodification of the body and the creation of socio-organizational networks – indeed calls for a reaction from public authorities but, in fact, raises key political issues of their credibility as enduring counter-powers. (Lazega, 2015: p. 130 in Archer, editor, 2015)

Given the particular focus and development of each of these previous chapters the reader may begin to experience a cumulative sense that contributors are working in different directions. Moreover, one might reasonably infer that some of the work seems to reinforce Gorski's concern that there can be a tendency to focus on the 'micro' or the particular within the general in realist applications, despite reference to systems, and the acknowledgement that broader contexts matter (notably a common reference to technology and the digital). However, it is important here not to lose sight of the position of each contribution within the whole. The illustrations provided are intended to explore particular generative

mechanisms based on the expertise and interests of the contributor. As examples they are not intended to be exhaustive. They illustrate the incompleteness of processes and the partiality or differencing within processes. This is one of the points Archer attempts to emphasize when referring to M/M cycles located within $T^2 \rightarrow T^3$.

In Chapter 7 Archer brings some greater sense of overall perspective to the applications. She reprises the overall position she sets out in Volume 1 and 2, but does so with an emphasis on agency and 'double morphogenesis', defined as 'how groups themselves and group relations are transformed in important respects in the course of pursuing and introducing social transformations.' (Archer, 2015: p. 138 in Archer editor, 2015). According to Archer, after World War II the developed democracies achieved mutual effective regulation between their institutional orders and social orders (social democracy, the economy and welfare state with attendant effects on the family etc). Though initially morphostatic in its consequences, the social form was not one of recognized solidarity where each saw the need to shape its interests to the others, but rather remained one of managed divergent interests within continued relational contests (to change the whole in self-serving ways). Historically two morphogenetic processes then arose out of this unstable stasis. First, corporate agency (in the social theory sense) was exercised to develop the scope and activity of multinational corporations in their productive dimension (reorganization of the use of labour, of legal aspects of employment relations, supply chains etc). Concomitantly, corporate agency was also exercised to create and extend financialisation of economies (creating a further significant context for corporations and the populous). The relative success of both has reinforced and extended the influence of the corporate agency of both.

Second, the development of specific technologies and the diffusion of them (computerisation, digital applications etc) has tended to contribute to the potentials of the first process, but involves two other sets of corporate agents. One set, termed digital collaborators are those that work within and on the basis of the corporate agency concerns of the first process. The second set, termed digital diffusionists tend to set themselves against those concerns – in so far as they identify as problematic key aspects of the intrinsic logic of capitalism (the assertion of property rights, of a profit motive, of market competition, commodification and alienation of and through technology, rather than free expression via the same etc.). On the basis that, so far, the digital collaborators have dominated, then a cycle characterised by a generative mechanism of digital science tied to the logic of capitalism qua the reality of market competition (*not* the idealised abstract ideological form of mainstream economic theory of the same) has been unfolding. Its further context (if we refer to Archer's 3 levels of emergence) has been one of declining social integration and of reduced system integration.

For Archer, and with reference to double morphogenesis, the Open Source Movement, commons-based peer production, and virtual communities all involve corporate agency where diffusionists are contesting the dominance of the other corporate agents and reforming their own collective agency as they do so. However, the current situation is also one where primary agency for many is being increasingly socialised towards passivity. As such, though one may be able to speculate regarding some capacities that may facilitate transformation

(communicative connectivity, the ability to bypass the owned media and to organize around social issues and provide political commentary and pressure etc) the reasonable conclusion remains that Late Modernity is proving protracted (despite its mal-integrations and problems)

In Chapter 8 Maccarini expresses this incompleteness based on a slightly different emphasis:

> The morphogenic logic [variety breeding variety etc] tends to spread, yet global society still remains highly differentiated in terms of structural and cultural conditions characterizing organizational systems, industrial sectors, geographical regions and communities. The same goes for agents and groups. As a result there is no social synchrony among the areas of global society, not even in the West, despite the ongoing partial synchronization of expert systems. Moreover, no homogeneous outcomes can be predicted as to the forms the Morphogenic Society will foster or hinder. Therefore, the march toward a societal formation we could call 'morphogenic' can be conceived of as a stepwise process, whereby mechanisms produce emergent properties and entities, and these gradually coalesce to generate new 'environments', i.e. 'parts' or 'islands' of society (organizational sectors, inter-institutional complexes, regions etc.) (Maccarini, 2015: p. 165 in Archer, editor, 2015).

Though for Maccarini morphogenesis has a logic that tends to 'seed' and spread – for example, through a growing reliance on reflexivity in social interaction, there is clearly some tension here with the recognized passivity of the primary agent. Moreover, there is a tension in so far as some kinds of change may qualitatively not be changes, or rather may be construed as consequences of mechanism that follow established rationales, and so it is questionable as to whether they are change to the way things occur or are done. Change may simply be the continuation of a tendency that is already inscribed, or it may be a change in the internal constituents of a mechanism that still fosters a particular tendency in events (so there may be some significant change at a fundamental level that is not fundamental in its consequences as change but is fundamental in its consequences for lack of significant change). These possibilities bring us to Part 3 of the Volume.

In Chapter 9, Porpora considers several cases of morphostasis where one might have anticipated change to a tendency, but where change was (or still is) significantly delayed. For example, how human societies have continued to be a source of global warming based on carbon emissions, despite decades of evidence and argument regarding the need for some decisive change in order to prevent a worst-case scenario of eco-social disaster. For Porpora all the cases he selects share common features – they are extensive across society (or societies), and they require collective solutions that involve, for many parties, long-term contextual (real?) interests, rather than recognized immediate and close concerns. He argues that morphostasis involves mechanisms operative within structure, agency and culture. According to Porpora, stasis is facilitated in situations where culture produces moral indifference, and this in turn is situated to particular forms of social relations. For example, within capitalism, which creates individualised interest foci (immediate concerns with wages, households, material goods rather than *the* good etc), which are combined with a sense of disempowerment and a

'bystander effect' (someone else will do x, this is not my responsibility, I am incapable of effecting real change to x – a form of 'learned helplessness') as well as ignorance. Significantly, both structure and culture affect the sense of scope of agency and the values that can inform that agency; individualisation, the shrinking of our horizon of ultimate concerns to family and household etc. (subject to other emotional pulls that are not sustained). On the basis of the cases Porpora states that though for:

> Critical Realists, structure, culture and agency are all analytically distinct, it is nevertheless possible to observe a kind of empirical fusion, in which the structure, both directly, and perhaps via the culture, molds the actors into certain kinds of agents who come to resonate better with the structure. (Porpora, 2015: p. 200 in Archer, editor, 2015)

Morphostasis, therefore, can involve degrees of socialisation of the scope of agency, which foster the kinds of passivity of primary agents and interest conformity of corporate agents explored by Archer. These can result in changes that are changes to stay the same – morphogenesis along trajectories of morphostasis. In Chapter 10, Lawson considers similar issues of change to enhance an adverse tendency, but does so with a focus on the modern corporation. He notes that many critiques of the modern corporation focus on the specific socio-economic problems they produce, such as tax avoidance. From the point of view of social ontology Lawson takes a step backwards from these manifestations to ask: how is a corporation socially positioned and what powers, rights and duties (including tensions in the same) follow from this positioning? He then traces the contingent historical development of the corporation to establish how it has achieved its current capabilities as a 'legal person'. According to Lawson the corporation is not appropriately constrained in its conduct and has become increasingly predatory in its behaviour:

> In short, from a shareholder point of view, all doings, including harmful ones, are the responsibility of the directors, and in any case the shareholders are not liable. From the directors' point of view, moral concerns cannot come into it, because their only (or primary) responsibilities are to seek profits to the advantage of the shareholders. This is the prevailing ideology. And under its influence the corporate juggernaut rolls on. (Lawson, 2015: p. 228 in Archer, editor, 2015)

Lawson's focus on the corporation illustrates the intensification of a process. In the final Chapter 11, Al-Amoudi and Latsis ask how and in what sense do social forms die as transformations occur? They introduce the term Morphonecrosis for the death process of a social form and make the case that this can be 'agonistic' – a drawn out struggle. They explore this in terms of different possible constituents over which struggle may occur (economic capital, prestige/status of roles etc, relational goods, and moral goods) and different methods within which contestation may be pursued (the value/meaning/desirability attributed to the constituent; the persistence of attendant supportive social institutions etc). For Al-Amoudi and Latsis, social forms do not simply definitely die off but rather can be reformulated as well as persist as vestiges.

Clearly, by Chapter 11 the substance of argument has deviated somewhat from a close focus on whether in fact it is possible to claim or identify key components for a potential Morphogenic Society. However, the work is not irrelevant to that focus. Struggle over what forms the future will take is a core aspect of reflexive activity and is redescribable in terms of M/M processes. It is not incompatible and adds nuance and range to how one understands the concepts and concerns inhering in the temporal sequencing of social interaction (recalling M/M is an approach to be applied and to be modified by theory and application).

Conclusion

As I have noted, the series based on the 'From Modernity to Morphogenesis' workshops has a unifying theme, a set of orienting questions, a genuine observed empirical set of phenomena to consider, and a further significance as an intervention, in so far as the whole is differentiated from an identified contemporary tendency to overstate the degree to which we are already living in radically new times. Volume 3 (*Generative Mechanisms*) is a noteworthy set of essays within that series. It too has a clear theme and, if read in context, a degree of continuity and consistency. Like all edited texts, however, some of the essays will be more to the liking of some readers than others, since each is also written based on given interests and concerns, and these will resonate with those of readers. Personally, I found Archer's essay useful because it provided context for the others (and might better be read first after the introduction to allow the reader to see how the others connect). Thereafter, I found Porpora, Lawson and then Al-Amoudi and Latsis' essays most interesting: Porpora's for its clarity in regard of distinguishable macro mechanisms, but integrated (or messy) approach to empirical matters, explored through the centrality of agency effects in a series of well-chosen cases; Lawson's for its focus on underlying explanatory approaches to a significant contemporary problem I have an interest in (tax avoidance), and Al-Amoudi and Latsis's for the concept of morphonecrosis, which made me think about a recognized issue in a different way.

As a final comment, I would note that the series so far has provided many reasons why one would be sceptical regarding the emergence of a Morphogenic Society, and also many reasons why one cannot easily conceptualise such a society (though one can make normative claims regarding the qualities one would desire in such a society). In a certain sense, the series so far, including Volume 3, is doing exactly what it set out to do. For a reader, however, used to more determinate claims (even when the form of claim is about the indeterminacy of the contemporary world), this can be an unsettling experience. Again, this is a matter of expectation.

It is also important to bear in mind that this series is not alone in seeking a more nuanced and sceptical approach to the nature and status of change within the contemporary world. For example, Jamie Peck and his various collaborators have developed a version of the theory of neoliberalism that has many of the same goals and caveats.[21] Their work is written from within urban geography and also political economy, and the language used is not as sharply focused via ontology,

[21] See Peck, 2013; Brenner et al, 2010

but there is still a family resemblance in terms of motivating concerns and findings. Work by Peck and others might productively be read in conjunction with Archer et al, not least because doing so addresses some of the concerns regarding the macro political economy aspects of sociology, social theory and social ontology (Lawson's involvement not withstanding) that have been raised by Jonathan Joseph.[22] Concomitantly, Joseph notes that new forms of reflexivity are products of neoliberal governance (they are its normal), and the concept of Morphogenic Society is highly generalised, and so may lack traction in terms of particular meaning.

Though Joseph's points are not mendacious, and make sense in terms of his own work on governmentality, it is not entirely clear they are actually criticisms.[23] One might equally state that part of the point of using the M/M approach is to highlight the emergence and proliferation of reflexivity qua change etc (so what else could this be than, if translated into historical narrative, a product of the contemporary social forms - whatever appellation we then choose to attach to that form)? At the same time, the purpose of the project is to explore *potential* based on characteristics that are not necessarily reducible to, or then restricted within, the historical form in which they are instantiated. (Meta) reflexivity is not tied to neoliberalism only and the contestations within neoliberalism, including through meta-reflexivity, may ultimately change the nature of that social form. Relatedly, Morphogenic Society is by intent a generic that may take more specific forms, in so far as the contemporary world experiences changes (a possible transformation). From Archer's point of view traction is provided by specification based on what occurs and not by the mere existence of the general concept. According to Archer and the other contributors, there is as yet no identifiable Morphogenic Society, merely incomplete M/M cycles of particular kinds. So in a quite different sense to that intended by Joseph Morphogenic Society could mean many things or ultimately nothing at all. This is yet to be decided. At the moment the best one can do is read the work and consider the potentials. Perhaps at some later date this series will be seen as a landmark in early discussion of that Society.

References

Albrow, M. 1997. *The Global Age: State and Society Beyond Modernity* Cambridge: Polity

Archer, M. 1995. *Realist Social Theory: The Morphogenetic Approach* Cambridge: Cambridge University Press

Archer, M. 2000. *Being Human: The Problem of Agency* Cambridge: Cambridge University Press

Archer, M. 2003. *Structure, Agency and the internal Conversation* Cambridge: Cambridge University Press

Archer, M. 2012. *The reflexive imperative in late modernity* Cambridge: Cambridge University Press

Archer, M. 2013. 'Social Morphogenesis and the Prospects of Morphogenic Society,' 1-22 in Archer, M. 2013. *Social Morphogenesis* Dordrecht: Springer

[22] See Joseph, 2014

[23] See Joseph, 2012

Archer, M. 2015. 'Introduction: Other conceptions of generative mechanisms and ours,' in M. Archer 2015. *Generative Mechanisms: Transforming the Social Order* Dordrecht: Springer
Aristotle (1996) *The Nicomachean Ethics* Ware: Wordsworth Classics
Bauman, Z. 2000. *Liquid Modernity* Cambridge: Polity
Bickley, W. 1967. *Sociology and Modern Systems Theory* Englewood-Cliffs: Prentice Hall
Braidotti, R. 2013. *The Posthuman* Cambridge: Polity
Brenner, N., Peck, J. and Theodore, N. 2010. 'After Neoliberalization,' *Globalizations* 7(3): 327-345
Donati, P. 2011. *Relational Sociology* London: Routledge
Donati, P. and Archer, M. 2015. *The Relational Subject* Cambridge: Cambridge University Press
Gorski, P. 2015. 'Causal Mechanisms: Lessons from the Life Sciences,' in M. Archer 2015. *Generative Mechanisms: Transforming the Social Order* Dordrecht: Springer
Gorski, P. 2013. 'What is critical realism? and why should you care?' *Contemporary Sociology* 42(5): 658-670
Hofkirchner, W. 2013. *Emergent Information* London: World Scientific
Joseph, J. 2012. *The Social in the Global: Social Theory, Governmentality and Global Politics* Cambridge: Cambridge University Press
Joseph, J. 2014. 'Review: *The Reflexive Imperative in Late Modernity*,' *Journal of Critical Realism* 13(1): 98-102
Khondker, H. 2011. 'The role of new media in the Arab Spring,' *Globalizations* 8(5): 675-679
Lawson, T. 2003. *Reorienting Economics* London: Routledge
Lawson, T. 2015. 'The Modern Corporation: The Site of a Mechanism (of global social change) that is out-of-control?' in M. Archer 2015. *Generative Mechanisms: Transforming the Social Order* Dordrecht: Springer
Lazega, E. 2015. 'Body Captors and Network Profiles: A Neo-Structural Note on Digitilized Social Control and Morphogenesis,' in M. Archer 2015. *Generative Mechanisms: Transforming the Social Order* Dordrecht: Springer
Maccarini, A. 2015. 'Turbulence and Relational Conjunctures: The Emergence of Morphogenic Environments,' in M. Archer 2015. *Generative Mechanisms: Transforming the Social Order* Dordrecht: Springer
Morgan, J. 2009. *Private Equity Finance: Rise and Repercussions* Basingstoke: Palgrave Macmillan
Morgan, J. 2013. 'Forward looking contrast explanation, illustrated using the Great Moderation,' *Cambridge Journal of Economics* 37(4): 737-758
Morgan, J. and Sheehan, B. 2015. 'Has reform of global finance been misconceived? Policy documents and the Volcker Rule,' *Globalizations* 12(5): 695-709
Patomaki, H. 2008. *The Political Economy of Global Futures* London: Routledge
Peck, J. 2013. 'Explaining (with) neoliberalism,' *Territory, Politics, Governance* 1(2): 132-157
Porpora, D. 2015. 'Why Don't Things Change? The Matter of Morphostasis,' in M. Archer 2015. *Generative Mechanisms: Transforming the Social Order* Dordrecht: Springer

Porpora, D. 2016. *Reconstructing Sociology: The critical realist approach* Cambridge: Cambridge University Press

Seabrooke, L. and Wigan, D. (2014) 'Global wealth chains in the international political economy', *Review of International Political Economy* 21(1): 257-263

Wight, C. 2015. 'Mechanisms and models: Some examples from International Relations,' in M. Archer 2015. *Generative Mechanisms: Transforming the Social Order* Dordrecht: Springer

Wight, C. 2006. *Agents, Structures and International Relations: Politics as ontology* Cambridge: Cambridge University Press