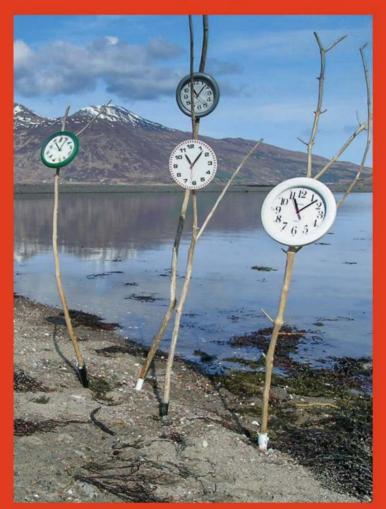# The Time of Anthropology

Studies of Contemporary Chronopolitics

*Edited by Elisabeth Kirtsoglou
and Bob Simpson*

ROUTLEDGE

The Time of Anthropology

The Time of Anthropology provides a series of compelling anthropological case studies that explore the different temporalities at play in the scientific discourses, governmental techniques and policy practices through which modern life is shaped. Together they constitute a novel analysis of contemporary chronopolitics. The contributions focus on state power, citizenship and ecologies of time to reveal the scalar properties of chronopolitics as it shifts between everyday lived realities and the macro-institutional work of nation states. The collection charts important new directions for chronopolitical thinking in the future of anthropological research.

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Preface

Chronocracy and its anthropological alternatives

Laura Bear

As the chapters in this book testify, for anthropologists and their inform-ants, time is an urgent issue. Whether from the perspective of precarious migrants, left-behind urban dwellers, austerity citizens, rural farmers, anti-pollution activists or patients and their carers, time is thick with di-lemmas and problems. Most of all, it seems hard to sustain life over the long term and precarity appears as a shared, if unequally distributed, condition in time (Lazar and Sanchez 2019; Millar 2017; Pettit 2019). Our futures are uncertain, and the potential to create them during and beyond our lifespan is limited. The potential of generations to come is limited by the fragility of the earth itself. Alongside this sense of a crisis in time, expert knowledges such as those of evolutionary science, anthropology and ecology (as analysed in this book too) reject the progressive time of modernity and its associated project of growth. Why is a sense of time as out-of-joint so widely shared by knowledge elites and those excluded, and how do we fix this? How do we create an experience of an abundance of time and more secure futures? To answer these questions, we need to – as all of these excellent chapters do – train our attention on chronocracy and its alternatives.

Chronocracy is ruled by the contractual and legal control of the value of time. Its power is exerted through epistemes (expert knowledges), techne (techniques for ordering time) and ethics (senses of what time is and what it should be for). Deep inequalities are created by chronocracy, as Kirtsoglou and Simpson argue in their introduction. Yet as they explore, inequalities are often depicted in dominant ethical chronotopes as an essentialized failure of populations and places to be coeval with a global modernity. The impos-sibility of realising current forms of capitalist growth without an accompa-nying necro-politics and destruction is denied through these chronotopes of 'falling back,' 'not progressing,' and 'not yet developing.' To build alterna-tives to this chronocracy, we need to identify and change its dominant nodes that direct accumulation and disorient the rhythms of our lives and of the world. As well as such forms of institutional confrontation, we need to im-agine other possibilities from the diversity of orientations to time that exist within our ethnographic sites. As each of the chapters shows, ethics counter to chronocracy already exists from nomadic temporalism, endurance and

waiting to long-termism. Our challenge is to construct a politics and associated techne and epistemes drawn from these alternative ethical framings of the value of time. To help us begin this journey, and to frame the many rich insights of the chapters in this book, in my preface, I will provide a schema of the dominant global form of chronocracy that shapes our, and our informants', lives.

A chronocracy of speculation

Since the 1980s there has been an emergence of a dominant chronocracy of speculation that controls the value of time. Speculation is future-oriented, physical, intellectual and affective labour which has as its goal the accumulation of capital for various ends. It uses technologies of imagination to anticipate the future, stimulate its emergence and control it. Speculation involves the projection of an invisible order to society and the world, and a patterning to the past, present and future is uncovered, drawing our attention. This explains how time works and what it is for. A sense of agency is established through which, it is assumed, the fertility of capital can be released. Crucially, speculation has now become a widely dispersed kind of paid and unpaid labour that creates surplus value (Weiss 2015, 2019). We no longer live in a world in which accumulation occurs primarily from the work of production and social reproduction. Instead speculation is the dominant form of accumulation, and it is this that orients the rhythms of production and social reproduction (Ashraf and Prentice 2019; Bear 2013; Grappi and Neilsen 2019). Speculation occurs through the creation of techne or hierarchical contracts of ownership of capital. At the top of these hierarchies are nodal techne drawn up by institutions such as central banks that orient connections between the market and the state. Partial, temporary as well as full ownership, rights to flows of capital over time are organized by these hierarchies. Control of the means of speculation is governed by the distribution of contracts and credit in society or what is called 'liquidity' (Langley 2017).

   Importantly, the amount of surplus value extracted from the passage of time depends on calculations of risk based on the imagination of social differences. Crucially, therefore, the labour of speculation connects directly to the recreation of inequalities of race, nation, sexuality and gender as well as class. Rates of return in time are calculated by imagining social distinctions of the worth of people and places with colonial roots (as so exemplified in the case of Greece discussed by Kirtsoglou in this volume). At the core of the technical operations of political risk analysis, credit worthiness and country debt ratings, co-evalness is denied and inequality is recalibrated as risk from which the owner of capital and the banking system has to be protected (Gilbert 2019). This institutional and contractual governance of speculation produces timescapes – or interlinked long-term spatio-temporal arrangements of human and non-human forms. The rhythms of these timescapes have highly unequal material consequences for social groups, environments

and resources as all the chapters in this volume demonstrate (Munster 2015; Ofstehage 2018; Purcell 2018; Stout 2019).

This chronocracy of speculation is often described problematically as a process of 'financialization' or 'neo-liberalism' (Venugopal 2015). But since financial speculation has always been a part of capitalism, a more precise understanding of this historical shift would be a devolution of the control of the economy from national political institutions to independent central banks, private banks, financial markets, international organizations and ratings agencies. This has been introduced as 'best practice' first in the global south by the IMF and World Bank, but has also been pushed by European Union and national governments in the global north. The volume and scale of legal titles to capital have hugely increased creating tiered hierarchical networks of extraction from the commons of the state and the labour of production and social reproduction. This has been achieved through the extension of speculation to wider populations through financial products and credit instruments. And the commons of the state – its infrastructures, political relations and institutions – have been redirected towards financial accumulation, and their worth is judged by financial markets. Corporations too have turned into hybrid governmental, financial and productive institutions. Central to these changes have been alterations to nodal legal techne that bind together the market and the state in particular in state debt, which was transformed into sovereign debt bonds tradeable in financial markets (Bear 2015). These ensure the smooth passage of liquidity into the private banking and financial sector with no gaps in time for its flow. The power of the state in general has been directed towards provisioning more constant flows of speculative capital (Gabor and Ban 2016). Also significant are many varieties of public–private partnerships and government legal guarantees of financial and corporate revenues, especially associated with infrastructure, leading to a global boom (Bayliss and Van Waeyenberge 2018).

This chronocracy of speculation is associated with secure flows of capital and accumulation to the private banking sector and capital-owners and rising volatility for everyone else. Even though the 1999 Asian Banking Crisis and 2007–2008 financial crisis emerged from this social form, critical moments have led to further extensions of it (Monaghan and Flynn 2017; Rethel 2018). Current speculation is more invisible because it has expanded outside financial markets into privately placed contracts and shadow banking – especially pension funds, legally sheltered special purpose vehicles and sovereign wealth funds (Fernandez and Wigger 2016). New taxes and regulation of banking and financial transactions have reinforced unequal global hierarchies between countries and have renewed trans-national extraction (Alami 2019).

It is now our responsibility as workers, business-owners, government officials, families, communities and individuals to speculate (Adkins 2017; Ailon 2015; Dolan and Rajak 2018; Weiss 2019). Although our ability to accumulate capital from speculation is unevenly distributed in relation to

inequalities of class, race, ethnicity and gender, microfinance and personal debt are a core site for the contemporary labour of speculation. We organize our lives to pay surplus value or interest, sometimes also juggling informal debts to achieve this (Han 2012; James 2014; Kar 2018; Schuster 2015). Speculative labour is also part of corporate and state debt relations as less powerful institutions such as local authorities, hospitals and small businesses intensify their activities to repay debt. All the ethnographic chapters in this volume speak – sometimes explicitly, sometimes implicitly – of this labour. It is most explicit in Kirtsoglou's article on responses to Greece's debt-disciplining, yet the strategies of African migrants in London; of health practitioners in cash-strapped organizations to give care; of farmers to grow crops according to non-human rhythms rather than those of economic growth models; of people resisting an infrastructure boom in Italy and of citizens to revive their city in Germany are linked to this chronocracy. Yet every chapter in this volume – whether drawing attention to the time of the expert knowledges of anthropology, of ecologies or of evolution or to the views of the world held by informants – is also a testament to our enduring human ability to imagine the worth of ourselves, the value of time and of the non-human world differently. This raises the question of why, and how, anthropology can contribute to new kinds of speculation that end the valorization of capital and create new viable long-term relations to the world and each other (Harraway 2013; Krippner 2017). These would allow us to speculate on the potential for more just social relations, redistribution and care for the world and to create ways to reorganize the labour of speculation alongside that of production and social reproduction.

Anthropological 'micro-visions' and their radical potential

Each of the chapters in this volume offers up a micro-vision, a view from somewhere brought into relation with situated knowledge from other specific places or institutions, as a critical basis for reflection. Students are often frustrated by this quality of anthropology, especially as they wish to combat the dominance on campus and in institutions of the expert knowledge that maintains current forms of chronocracy – orthodox macro and micro-economics. As I have discovered since 2018 when I became involved in an ESRC-funded interdisciplinary project to Rebuild Macroeconomics and re-imagine economic institutions, our micro-view is discounted as 'too partial,' 'too limited' and 'too complex' to form the basis for economic policy decisions. But our micro-visions are profoundly disturbing to the attempts to re-legitimize the post-2008 settlement with the financial sector and the continuation of the chronocracy of speculation. To think through this, let us examine the current attempts by the Bank of England to maintain its legitimacy after 2008, the 2014 Brexit vote and its failures to 'stimulate growth.'

When the Bank of England was made independent in 1997, according to global best practice, it began to enshrine macro-modelling and

macro-economists' technical expertise on the UK economy. The formation of the Monetary Policy Committee was designed to ensure this heuristic technical dominance over the manipulation of the money supply. The Bank too began its practices of sovereign debt issuing, repos and provision of liquidity into the private banking and financial sector. The whole effort of the new technical experts was to not pay attention to regional patters of growth, productivity and inflation, but, instead, to look through these to divine the form of the British economy as a whole. In these reforms, the Bank's networks of Agents located in the regions were given a new role. They had previously run local bank branches distributing credit, which gave them a closer knowledge of business and economic practices in different sections of the country. Back in the 1970s and 1980s, there had even been a section of the Bank that focussed on regional industrial development. But this no longer existed, and agents were instructed to provide intelligence from the regions about the UK as a whole by interviewing businesses in each area in confidential encounters. This information was then fed into a heuristic process that prioritized macro knowledge. This invisibilization of regional differences has contributed to the systematic neglect across all our economic institutions of the question of inequality. This episteme has been profoundly challenged by the 2008 crisis, the effects of Quantitative Easing (QE) and the Brexit vote.

Since 2008, the bank has been puzzled by over ten years of their monetary policy including, quantitative easing, having not led to growth in the UK economy. This is widely described as 'the productivity puzzle.' Why is it that even though cheap credit has been pumped into the economy and firms now have reserves of cash they are not investing in increasing productivity? The second 'puzzle' is that QE has caused asset bubbles – or rising prices in securities – producing problematic distributional effects related to income from wealth. Faced by these troubling failures, Bank of England officials and macro-economists are increasingly concerned as to why their policies have not succeeded but also continue to defend their technocratic knowledge. This failure became even more visible after the outcome of the Brexit vote. Bank officials were prominent in the campaigns to remain – as were macro-economists in general. But as they travelled around the country, they encountered hostile audiences. A widely circulated story among macro-economists that reflects this is of when Professor Anand Menon of King's College London was explaining to an audience in Newcastle that, in the view of most economists, leaving the EU would be bad for their economic health, and GDP was likely to fall. A woman rose from the audience and, with finger pointed, uttered the memorable line: "That's your bloody GDP, not ours!" Since then, macro-economists have become concerned about the white working classes, broader populist sentiments and the 'faulty' understanding of the economy and the bank by the public.

To give a sense of responses to this, we can turn to a speech that Andy Haldane, the Chief Economist and in charge of the SPV that deals in

government debt and repos, gave at Port Talbot in June 2016 in the wake of the Brexit vote (Haldane 2016). He begins:

> I want to discuss the UK's economic fortunes. The past few weeks have been dominated by the run-up to the EU referendum vote and its aftermath. This has generated considerable uncertainty about the economy, about policy and about politics—a heady cocktail. I will come to those uncertainties, and their implications for monetary policy, at the end. But I wanted to start by assessing the UK's economic recovery so far, as this provides important context for what happens next.
>
> Last year I visited Nottingham on one of my regular regional visits. As with today's, these visits are crucial for helping the Bank of England make sense of the economy. My first stop was a lunch for local business people…there was agreement on the recovery.
>
> My next visit was to a community centre in Nottingham with half a dozen local charities and community groups. I began by speaking about the UK's economic recovery. I never got as far as the improvement in the jobs market or surging confidence. I was stopped in my tracks by a forest of furrowed brows and a phalanx of probing questions, not all of them gentle. "What exactly do you mean by *recovery*?" one asked. "My charity is dealing with 50% more homeless people than three years ago." Every other charity in the room had similar stories to tell…The language of "recovery" simply did not fit their facts.
>
> On subsequent regional visits, including this one in Wales, talking to companies, community groups and charities, I have encountered the same conundrum.
>
> How to reconcile the **macro-data with these micro accounts**? Were these stories outliers? Or was I neglecting an important missing ingredient in the UK's economic fortunes? Put differently, *whose* recovery were we actually talking about?

Andy Haldane's speech gains macro authority as it proceeds suggesting that recovery has been patchy, but it is real. It ends with a justification of the third round of Brexit QE by arguing that it is only through restoring confidence via monetary easing that the recovery will continue for everyone. In this episteme, the macro wins out over the 'details' of the micro. This aggregate view allows macro-economists who are public servants to detach from the inequality that they witness.

   The anthropologists' counterargument that we need to track the actually existing timescapes of inequality and focus on micro-data is the only counterpoint to these dominant epistemes that aim to re-legitimize the chronocracy of speculation. It is our micro-data – the single persuasive story, the evidence that does not fit patterns, the disturbing outlier – that can make a profound difference. We are not small and irrelevant; our anthropological view is too radical and powerful to have been given a voice yet. It is vitally

important that we keep trying to be heard with our commitment to the specific. Challenges to chronocracy can only come from such an orientation, as we learn from our informants and the world.

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Introduction

The time of anthropology: studies of contemporary chronopolitics and chronocracy

Elisabeth Kirtsoglou and Bob Simpson

> I do not define time, space, place and motion as being well known to all. But it must be observed that the vulgar conceive those quantities only from the relation they bear to sensible objects. And thence arise certain prejudices, for the removing of which, it is proper to distinguish them into absolute and relative, true and apparent, mathematical and vulgar.
>
> I. Absolute, true and mathematical time, in itself, from its own nature, flows equally, without relation to anything external; and by another name is called Duration. Relative, apparent, and vulgar time is some sensible and external measure of duration by motion, whether accurate or unequable, which is commonly used instead of true time; as an hour, a day, a month, a year.
>
> Isaac Newton *The Mathematical Principles of Natural Philosophy* (*Philosophiae Naturalis, Principia Mathematica*). Cambridge, Trinity College – July 1687. Scholium page 12

The time of anthropology

When we proposed 'time' as the theme of ASA 2016, one of our colleagues commented that 'it had already been done'. It is true that, in terms of ASA conferences, ASA 2002 did consider the 'qualities of time' and produced a stimulating volume using the lens of ethnography to reflect on just what these qualities are (James and Mills 2005). More dauntingly for us, however, the subject of time has been the focus of sustained and critical scrutiny by a long list of anthropological luminaries. Durkheim, Van Gennep, Evans-Pritchard, Leach, Levi-Strauss, Gell, Fabian, Munn and Bear, to name but a few, have all 'done' time, so to speak. If we bring in the philosophical tradition of 'doing' time, to which the anthropological one is often hitched – here think Aristotle, Kant, Heidegger, Bergson, Russell, McTaggart and many more – the field becomes not only wide but very deep. What more is there to say?

Before answering this question, however, a pinch of realism is in order. The 'temporal turn' which this volume joins and hopefully pushes forward is in fact not really a 'turn' at all, but a *re*turn. As with all claims to intellectual shifts, rethinking and novelty, caution is needed if we are not simply to

imbibe old wine in new bottles. The return we have in mind here is to a basic repertoire of themes in our efforts to understand time, society and person-hood and moreover just how these might be brought into an illuminating and productive relationship with one another. The themes that are typically returned to, can be grouped under three broad perspectives which each treat time as the object of enquiry but do so in rather different ways. The first of these we gloss as physical time. This is the time that Newton identified in the quotation above. This time is about duration and it is inexorable. For ex-ample, one only has to think of the temporal and irreversible separation be-tween a cause and its effect to grasp this point. The kind of time that appears in this separation is universal and abstract, outside of culture and eternal. It is the view from nowhere or rather no particular time. We might think of this perspective as anchoring *the* anthropology of time. The second object of enquiry is social time. Here, we encounter the fact that the apprehension of time as duration is always mediated by representations and epistemologies that are systematic and shared. The study of temporality here falls squarely in the realms of society and culture. Accordingly, this kind of time is taken to be relative, multiple and diverse. This is the view from somewhere or some particular time. This perspective gives rise to *anthropologies* of time rather than a single, hegemonic anthropology *of* time. The third perspective places phenomenological time at its centre. Here, the emphasis shifts to individual experiences of time; how these experiences are created and how they feature in each person's sense of being and becoming as it is shaped under this or that set of conditions. This is the view from someone, situated in a particular time. This perspective might be thought of as the anthropology of *times*.

Studies of temporality across the social sciences invariably proceed by a triangulation between these cardinal positions. Yet, much as we try to turn we are apt to return to the interplay of physical, social and phenomenolog-ical time in some form or other. An image that might be helpful in getting us out of the 'nothing new under the sun' dilemma is that of the spiral or more precisely the Archimedes' screw. This beautiful and ubiquitous form combines both circularity and temporality. Following the curve of a spiral around its fixed central axis, it is possible to arrive at the same point on one plane but to have moved forward on another. So, having made clear that there is much in what follows in this introduction that is derivative and in-debted to an important tradition of scholarship on the topic of time, what is it that we are offering by way of another turn of the spiral? What is the incremental move forward that we are trying to demonstrate?

The present collection emerges out of the ASA 2016 conference, "Foot-prints and Futures: The time of Anthropology", held 4–7 July at Durham University. One of our hopes for the conference was that in focussing on the 'time of anthropology' (rather than foregrounding the discipline of anthro-pology as in an 'anthropology of time') we might open a discursive space in which to reflect on the way that we as anthropologists are folded into the temporalities we seek to understand and describe. From within a broad set

of concerns about anthropology and temporality presented at the conference, a particularly strong theme emerged around time and power, that is, the study of temporalities that are not merely multiple and parallel (as in anthropologies of time) but which are imbricated in the contemporary world in ways that are hegemonic and incongruent. The volume expresses the spirit of the Durham conference through a series of anthropological case studies of how this relationship is worked through in a variety of different settings. The thread which connects all these contributions is the concept of chronocracy, a term that draws attention to the ways in which governance is shot through with the power to shape the temporalities in which people live out their everyday lives. The study of chronocracy thus makes differently visible the ways in which inequality and exclusionary practices and the ontological and economic insecurity they engender are not just spatial matters but also have important temporal dimensions. This leads us to define chronocracy as *the discursive and practical ways in which temporal regimes are used in order to deny coevalness and thereby create deeply asymmetrical relationships of exclusion and domination either between humans (in diverse contexts) or between humans and other organisms and our ecologies.*

In the remainder of this introduction we elaborate on this definition in order to situate our argument within the existing field of anthropological studies of temporality, to demonstrate how it represents a modest advance on existing scholarship and, finally to show how the contributors to the volume each in their own way illustrate and take forward the chronocracy thesis.

Analytical traditions – critical genealogies

An important foundation for the anthropological study of time is provided by the *Année Sociologique* and specifically the writing of Hubert and Durkheim (Hubert 1905; Durkheim 1915: 11). In this approach, it is the experience of cycles, rhythms and calendrical events that provides the basis for systems of representation. These systems establish time as an entity which is fundamentally social and relational in character. The study of such systems has been the bedrock of anthropological analyses as well as for the way other social sciences view time and temporality as an object of enquiry (cf. Wallis 1970; Kosseleck 1985; Adam 1990; Klinke 2013). Building on these insights, anthropological interests elaborated on systems of time-reckoning and measurement. For example, although an approach has been characterised as an 'empiricist' one (cf. Rigby 1983; Munn 1992: 96), its emphasis on the importance of agricultural activities like gardening, as opposed to natural lunar cycles, puts Trobriand 'time reckoning' in line with later anthropological emphasis on the social and symbolic properties of indigenous perceptions of time. Similarly, the notion of time-reckoning was used by Evans-Pritchard in his distinction between 'oecological time' and 'structural time' (1939). Whilst both of these registers refer to social time, the former relates more to daily social activities (or what Gell calls the microscopic),

while the latter to the political order of genealogies as institutions on a mac-roscopic scale (cf. Gell 1992: 15, 21).

The subject of time also featured in the works of Levi-Strauss (1963, 1966), Leach (1961) and Geertz (1973) among others. However, as Munn notes, up until the nineties time was "the handmaiden to other anthropological frames and issues" rather than a subject studied for its own sake (1992: 93). This observation did not stop Alfred Gell from devoting several chapters and the conclusion of *The Anthropology of Time* (1992) to a systematic criticism of the ontological legacies of Durkheim and Bergson that had been so influential in anthropological accounts of time up to that point. The main analytical weakness in Durkheim's approach, argued Gell, was a misreading of Kant and his attempts to map a series of sociological arguments onto a philosoph-ical and metaphysical framework (1992: 14). Bergson is also critiqued by Gell for his use of the concept of duration as, by extension, is Ingold (1986). Gell's concern is that in much of what passed for the anthropological study of time, there is a maladaptation of phenomenology which privileges the order of lived-time over the abstract mathematical one (Gell 1992: 314–328).

Gell's 1992 work has undoubtedly been a major source of orientation for anthropological analyses of time since its publication. However, most commentators have tended to focus on his notion of temporal maps rather than the polemical side of his work (e.g. Hodges 2008, 2010; Bear 2014, 2016; Ringel 2016a). Gell's concept of time-maps is indeed inspiring and provides a point of return throughout the discussions of time and temporality found in this volume. For the time-being, however, we would like to examine more closely an aspect of Gell's work that has not received appropriate attention, namely his more polemical pronouncements on time and anthropology.

Since the parallel publications of Gell and Munn in 1992, we can trace two analytical genealogies in the anthropological literature on time. The first, influenced by Gell, emphasises the present, locates diversity at the level of multiple *understandings* and *experiences* of time, and calls attention to the effects of what humans *do* with time. The second can be traced back through Munn to the phenomenological approaches of Bergson and Deleuze. Time here is seen as durée which underpins a recognition of the existence of *multiple and imbricated temporalities*. We will not attach names to each analyt-ical genealogy. It seems rather pointless to create a virtual debate between scholars who have not felt thus far like debating with each other on the basis of the philosophical roots of their respective approaches. Most importantly though, frequently these two traditions seem to co-exist in post-2000 liter-ature that is based on eclectic combinations of ideas and mostly refuses to remain faithful to one analytical perspective at the expense of the other – turns are often returns! But if this is the case, why do we want to revive Gell's polemic? Let us begin with Gell's statements which we cite at length:

> The aim is not, therefore, to transcend the logic of the everyday, famil-iar world… There is no fairyland where people experience time in a way

that is markedly unlike the way in which we do ourselves, where there is no past, present and future, where time stands still, or chases its own tail, or swings back and forth like a pendulum… The whole thrust of this book has been to insist on a distinction between time and the processes which happen in time. I have opposed the trend of thought which distinguishes different species and varieties of time on the basis of different types or processes happening in time… The whole point of an abstract category such as 'time' is precisely that it provides the means for the relative unification of otherwise diverse categories of processes… It is merely patronizing to leave exotic ethnographic models of the world uncriticised, as if their possessors were children who could be left to play forever in an enchanted garden of their own devising… While it is certainly true that rituals dramatize time, and even manipulate it… this does not mean that calendric festivals either create time or modify it, except rhetorically or symbolically… The elusive time which emerges from the analysis of ritual categories… cannot be detached from the ponderous entropic time of real-world events.

(1992: 314, 315, 324, 326)

The legacy that Alfred Gell left in *The Anthropology of Time*, we argue, goes beyond his inspiring analysis of the cultural construction of temporal maps and images. It is apparent between the lines of the entire book, but more so in its conclusion which fiercely attacks 'muddled phenomenology' (1992: 328), yet also alludes to something rather more sinister, namely, the political nature of 'allochronism' and its deeply asymmetrical effects in our ethnographic practice. 'Allochronism' is a term coined by Fabian and refers to kinds of ethnographic analysis and writing that dis-place the 'other' from present time thereby denying them coevalness (1983: 32). Fabian, in drawing attention to 'the time of anthropology', claimed that anthropological discourses can be seen as temporalising, existential, rhetorical and political devices that produce (and not just represent) other worlds as living in different timelines from that of the ethnographer (ibid.). His work illuminated the colonial and imperial sedimentations in the discipline of Anthropology and inspired further critical post-colonial thoughts on the asymmetrical effects of academic uses of time (cf. Agnew 1996). This problematic is one that the present volume returns to as a primary but not yet entirely accounted for concern.

   Through a unifying approach to time as an organising principle of human affairs (1992: 315), Gell sought to banish precisely this allochronism. His polemic challenges an anti-rationalism which he saw as entering through the back door of phenomenology and Durkheimian-inspired accounts of ritualistic time that conflate 'real time' with experiences of time. By refusing to accept the existence of different and exotic kinds of time, Gell refused the existence of different and exotic kinds of people who purportedly confuse objective reality with their symbolic representations of reality. His

distinction between time and the processes that happen in time strives to bring us all (informants and anthropologists) into a common present. One may argue that Gell's common present is heavily inspired by an understanding of the 'real' as underpinned by notions of scientific objectivity (1992: 328) and thus a peculiarly 'Western' rationality. We have already implicitly acknowledged and pre-empted this objection through our opening quote from Newton's *Principia Mathematica*, which we will invite the reader to compare with Gell's ideas about A- and B-series time further on. Whether or not Gell is right or wrong in his vision of what this common present entails is a secondary matter for our discussion here. What remains is his unequivocal antithesis to ontologies that potentially promote non-coevalness, evidenced in his firm insistence to bring the ethnographer and the informants in "one world, i.e., the real world" (1992: 324). Here, we land squarely in the 'time of anthropology' and the entanglements of time in the enactment of power relations in the contemporary world. In this sense, we keep Fabian's (1983) observations firmly in focus combining them with Gell's (1992) polemic on the nature of allochronism. However, we extend the work of both authors beyond the realm of ethnographic practice into the worlds that ethnographies are set to analyse.

This volume sets out to trace different political technologies of allochronism. We argue that what characterises our common time (the time of anthropology and of its diverse sets of informants) is *chronocracy* and the ontological, epistemic, moral, discursive and practical uses of time that deny coevalness. Chronocracy thus underpins diverse social processes, often animated by affective sensibilities, that effect deeply asymmetrical relationships of exclusion and domination. This asymmetry might appear between humans (in diverse contexts) or indeed between humans and other organisms and our ecologies. In our effort to document experiences and practices of chronocracy and to chart its effects, we endorse Bear's call for an understanding of time through human labour (2014) and Das' observation that the "event attaches itself with its tentacles into everyday life and folds itself into the recesses of the ordinary" (2006: 1). Acts (or events) of chronocratic domination are occasions of disruption and structural violence that spread into the everyday lives of human and non-human beings and ecological systems. Chronocracy, we argue, becomes our 'everyday' and structures our ordinary experiences to the point that our common time thickens and becomes saturated with its effects and our labour to mitigate them.

This volume will offer a variety of ethnographic examples that illustrate our approach to time, power and chronocracy. Before we do this however, we would like to reassure the ancestral spirit of Alfred Gell that our thinking on this topic will remain "open-ended", "eclectic" and "empirical" (1992: 328). We read the anthropologists' efforts to understand time with a *flaneur* mindset, and we treat this volume as an act of labour – *another* act of labour – against chronocracy and its ordinary manifestations. In our work, we will use multiple and diverse tools, and it is to those tools that we turn now.

Anthropological perspectives on time and temporality as instances of counter-chronocratic academic labour

Works by Gell and Munn published in 1992 were perhaps the first systematic attempts to discuss 'the abstract production of time and social reproduction' (Bear 2016: 488). Going beyond indigenous perspectives and understandings of time, these works explored the ways in which time is implicated in 'all aspects of social experience and practice' (Munn 1992: 93). As Hodges notes, Munn's approach combined a phenomenological view of time as temporality with inspirations from practice theory in order to draw our attention to embodied experiences of time as the effect of temporalising practices (2008: 405). Rather than focussing on the notion of abstract time as a backdrop of human activity, Munn argues in favour of the notion of temporalisation which suggests that time is continually 'produced' as a 'symbolic process' through everyday practices (1992: 116).

Temporalisation is of course far from a neutral process. Acts of temporalisation, as we have argued, can also be violent enactments of chronocracy in so far as various discursive and practical regimes can produce diverse temporalities and different social and symbolic timelines that deny coevalness to certain subjects. Among the primary fields where discussions of the chronocratic and hegemonic role of temporalising discourses intensified was that of historical anthropology. Hirsch and Stewart stressed the importance of the role of time in structuring human experience as an intersubjective phenomenon (2005: 262). Through the notion of historicity – a concept that goes back to the philosophies of Heidegger and Ricoeur – they examined the relationships we entertain with our pasts and argued against a rigid separation between the past, the present and the future (2005: 271, see also Ringel 2016b).

The Western paradigm of historicism, Stewart notes (namely the idea that the present succeeds the past in a strict and irreversible manner), is inexorably linked to hegemonic conceptualisations of progress and hierarchical distinctions between the past, the present and an ever better future that lies ahead (2016: 83–84). This idea is epitomised in historians' notion of colligation, the 'tying-together' of events into patterns that give rise to defined periods, such as ages or epochs and which are believed to succeed one another (Walsh 1951). In anthropology, for example, Lewis Henry Morgan, in an all-roads-lead-to-us kind of way, talked of an evolution from savagery to barbarism to civilisation. Consistent with the Eurocentrism of the time, such views placed non-Europeans, not just in a place which was outside of modernity but crucially for the arguments we make here, outside the time of modernity. Among others, this was JS Mills' take on global history which, as Dipesh Chakrabarty put it, 'thus consigned Indians, Africans and other "rude" nations to an imaginary waiting room of history' (2000: 8). This was chronocratic rule and a denial of coevalness *par excellence*.

Promoting an anti-historicist ethos of understanding temporal relations, Hirsch and Stewart (2005) draw our attention to how these different

temporal orders are not simply a thing of the past but can actually co-exist simultaneously in the present (cf. also Lambek 2002). The ways in which temporalities fuse together when 'segments of the past' remain 'contemporary, simultaneous and proximate' draws attention to the poly-temporal character of historical experience (Knight 2015; Knight and Stewart 2016: 5). Knight's ethnography of a town in central Greece, for instance, eloquently demonstrates how the past is relevant to everyday life (cf. Sutton 1998) but also how the past is actually re-lived in the present (2015).

The onset of the past into the present that causes temporalities to merge has been also examined through emphasis on affect (cf. Navaro-Yashin 2012), objects and materialities that operate not only as *lieux de memoir*, but literally as embodiments of past lives, of our own and others (cf. Navaro-Yashin 2009, 2012 on Greek-Cypriot homes inhabited by Turkish Cypriots after the 1974 partition of the island; Bryant 2014 on the same topic of appropriation and redistribution of Greek Cypriot property; Pipyrou 2014 on second-hand clothes; Demetriou 2015 on the evaluation of loss, ruination and preservation through time, Sutton 2001 on food and also Hirsch and Spitzer 2010 among others). We view all such anthropological efforts to combat historicism by identifying the 'elastic' properties of time in indigenous discursive, practical and material instantiations of historicity (cf. Knight and Stewart 2016) as explicitly counter-chronocratic acts or else as instances of counter-chronocratic academic labour that seeks to mediate the effects of temporalisation as chronopolitical violence and to reinstate coevalness at different levels of analysis.

The temporalising effects of historical time as differentiated time, a facet of contemporary chronocracy, have been discussed in detail in the work of Koselleck (1985). By examining the period between 1500 and 1800, Koselleck argues that two distinct processes took place: the separation between natural time and historical time and the monopolisation of notions of the future by the state. These processes are intimately connected to the genesis of the concept of progress as a singular, future-oriented order, animated by ideas about direction and improvement (ibid.). From 1500 to 1800, Koselleck notes that there were steady efforts on behalf of states to banish all kinds of astrological and religiously inspired predictions of the future (1985: 16–17). Simultaneously, history became temporalised and detached itself from a naturally formed chronology (ibid.: 33). The result of the former processes was the production of future as an unknown entity that could only be negotiated through 'progress' instigated and engineered by human actors who took control – so to speak – of their timelines (Koselleck 1985: 17–18). The result of the latter process (the temporalisation of history) was the formulation of specific concepts of political and social revolution. Political revolution acquired an 'objective' and a telos: the 'social emancipation of all men' and the 'transformation of social structure' (1985: 48). Social revolution forced the 'writing off' of the past and fed itself singlehandedly from notions of the future (ibid.: 51). Progress emerged as a collective singular order (and

in its singular linguistic form – as opposed to progresses) towards the end of the eighteenth century, a period that heralded the divide between past and present, 'previous experience and coming expectation' (1985: 257).

The singularisation of history that Koselleck describes supported the emergence of a hegemonic, internally differentiated timeline characterised by a specific direction towards future horizons and imbued with expectations of progress as improvement of our existential, ethical, political and social conditions. Western historicism is then one of the building blocks of chronocracy, since this hegemonic timeline functions as a chronotope (cf. Bakhtin 1981): namely, as virtual space that "becomes charged and responsive to movements of time, plot and history" (ibid.: 84). Chronotopes are timescapes filled with tied and untied knots of narrative (Bakhtin 1981: 250), where the dimension of time becomes visible (Bear 2014: 7) and where time becomes spatialised. The hegemonic chronotope of periodised history and future-oriented understandings of progress is a manifestation of chronocracy because it is a timescape from which persons and communities can be *dis-located*. As suggested above, falling out of the place of modernity, progress, development and directional social evolution is of course one of the most salient forms of being denied coevalness. In turn, anthropological works that emphasise the existence of multiple temporalities (cf. Birth 2008; Nielsen 2014; Knight 2014) and manage to disturb the hegemonic ordering of time are examples of counter-chronocratic labour. We view them not as instances of 'obscurantist', 'anti-rational denunciations' of objective time (to remember Alfred Gell again, 1992: 328), but as distinctly decolonising efforts to challenge chronopolitical hegemonies, through epistemic and even scientific disobedience (cf. Mignolo 2009).

Of similar character to the efforts of historical anthropologists, mentioned thus far (only indicatively, since there are many–many others who cannot be meaningfully discussed in the space of an introduction), is the work of scholars who have tried to problematise notions of hope and future. Hope as a faculty of the imagination and as a process indexical to potentially realisable futures has been inspirationally explored by Ernst Bloch (1986). Based on concepts defined by Aristotle in Poetics, Bloch proclaimed that the "real is a process" of "mediation between present, unfinished past and above all possible future" (ibid.: 196). Aristotle argues in favour of a certain unity between reality and potentiality, *existing* matter and the *possibility of materialisation* of concrete forms (evident his concept of *dynamei on*, or what Bloch translates as *what-is-in-possibility*, 1986: 207). What is 'possible' for Aristotle (*dynaton*) is also real (*alithes*), and therefore it could be argued that the reality of the present is on a par with the realisability of the future.[1] It follows that actions completed (or actualised) and actions that remain yet unfinished in the realm of potentiality form a continuum filled with contingency. The continuity between potential and actual, also known as Aristotelian *entelechy*, allows us to claim that there can be no hard division between factual reality and the 'not yet' (cf. Bloch 1986: 201). The 'not

yet' is a characteristic of a vision of the real that incorporates both actuality and potentiality and destabilises hard distinctions between present and future temporalities (cf. also Crapanzano 2004: 14). Entelechy renders hope a kind of method that informs people's actions in the present (actuality) as these are underpinned by visions of an indeterminate future (potentiality) (cf. Munn 1992: 115; Miyazaki 2004, 2006; Simpson 2013).

The connections between hope and the indeterminacy of potentiality are carefully examined by Bryant and Knight who argue that hope can be seen as a dynamic process of becoming and of positive movement (2019: 157). Hope as a means of gazing at the present through the future is way of orienting the self within time (ibid.: 19, Hodges 2010: 125). The open-ended, indeterminate character of the future fills our present with a 'plethora of orientations' (Bryant and Knight 2019: 192) and affords us a certain temporal agency through 'tricking time' (Ringel 2016a). This kind of temporal agency springs from the contingencies of the everyday; it indicates that subjectification is an open-ended, unfinished, social, temporal and relational project (cf. Kirtsoglou 2004). We are constantly becoming within time, within unbounded temporalities where pasts, presents and futures bleed into each other. Our present is inhabited with many possible futures, that may or may not become our 'life projects', but always remain indexical of the immensity of life as an adventure (cf. Rapport 2017). Our futures are saturated with present projections, hopes and desires, while our pasts are constantly subjected to recursive and retro-causal readings. As Veena Das argues, our efforts to 'put together a life', often in the face of previous suffering and devastation, take place as "events are being carried forward and backward in time on the register of the everyday" (2006: 218, also 211, 215). Indeed, our temporal agency, so intimately connected with the potentiality of future becomings, is primarily exercised through ordinary, everyday actions.

However, the manner of this backward and forward movement is not merely a matter of agency. It is also governed by what we have begun to sketch out as contemporary chronocracies. In other words, entelechy (the continuity between actuality and potentiality) should not be mistaken for a soteriological exercise in volitionality. It is precisely in the confusion between the registers of the actual and the potential that we become locked in structures of waiting, delay and suspension (cf. Crapanzano 2004: 115; Baraitser 2017, Hage 2009). As Guyer has it, we become subjected to "the disciplines of a punctuated time that fills the gap between an instantaneous present and an altogether different, distant future" (cf. Guyer 2007). Through examples from other analyses of the temporality of lived economies (most notably: Ferguson's 1999 work on despair, Williams' 2004 work on debt and Roitman's 2005 observations on fiscal disobedience), Guyer has persuasively argued in favour of the connection between the religious time of fundamentalist Evangelical Christianity and the capitalist time of monetarist projection and prophesy (2007: 411). The future is being structured, Guyer argues, through "formal calendrics of financial debt and benefit, self-renewal as a citizen,

or insistent work schedules" (ibid.). Punctuated time, enacted mercilessly in audit cultures (Strathern 2000), structures of indebtedness (Han 2012), or liberal notions of self-governance (Lester 2017), empties futures (Dzenovska 2018) and produces feelings of nostalgia (Narotzky 2016) and exhaustion (Knight 2016). Under these conditions, hope should not be mistaken for a manifestation of potentiality. It becomes a coping mechanism (Berlant 2011; Narotzky and Besnier 2014; Bryant and Knight 2019: 154), a kind of deferral of the present into the future that dis-locates and dis-places social actors. It does not only deny them their coevalness but also the very sense of existing in some realistic and meaningful timeframe. This specific facet of chronocracy renders hope not a positive experience of immanence and potentiality but a timescape that functions as an appendix of reality. What cannot exist in real time (people, relations, aspirations) is forced to inhabit the chronotope of hope, that is, the hope that somewhere down the line there is a future capable of accommodating it. Hope as refuge from chronocracy is a bordered time-space inhabited by postponed dreams and palliative thoughts of populations configured as superfluous (such as migrants cf. Agier 2011, or the urban poor cf. Palomera 2014) or as predestined failures (Evans 2007).

The openness of future possibilities is further entangled with the violence of chronocracy in ways closely related to speed and movement. As Koselleck notes, 'delay' has become a 'key historical principle', employed both by conservative forces that wish to hold back movement and by progressive ones who want to accelerate it (1985: 257). The notion of speed as the organising temporal norm of modernity has been extensively discussed by Virilio who argued that geopolitical relations have been substituted by chronopolitical ones, which increasingly favour systems of 'instantaneous transmission' (1989, 1991: 16). The compression of time-space through cultures of speed and acceleration (cf. Dalsgaard and Nielsen 2013; Bear 2014: 3, 2016: 488; Ringel 2016a: 28; Baraitser 2017), in combination with technologies of communication, forces us to think of chronocracy in terms of a post-humanism as "a distributed property of the relations between people and things" (Ingold 2010; Bear 2014: 7; Yarrow 2015: 32). Rather than time-space compression, we may be seeing its distension.

Chronocracy, as effected (paradoxically) through 'real-time' connectedness, is radically re-ordering the politics of allochronism. Virilio notes the emergence of global 'metacities' (2000: 11) 'hyper connected' between each other through points of communication but also through terminals of control and surveillance that exchange data and information in real time (2005: 95). These global metacities have changed the rules of non-coevalness from historical/spatial (developed versus developing countries) to virtual (Virilio 2005). As James notes, at the same time that some people "labour in the fields, factories, sweatshops and mines of the former colonial centres… the elites of those same countries work in digitally connected and Western-style urban districts… often situated in close proximity to makeshift slums or shanty towns" (2007: 100).

Virilio's observations regarding the tyranny of real time (1993: 283) offer significant insights to our understanding of time, chronocracy and lack of coevalness. The present afforded by post-industrial modernity is not an order that can be conceptualised in terms of abstract, mathematical (or 'natural') time. Any physicist located in Dhaka, Bangladesh, on April 24, 2013, just before the collapse of a sweatshop that cost the lives of more than one thousand people, would have assured us that all workers there lived in the same timeline with high-end traders at the Dhaka stock-exchange building (for example). The same is of course true for the case of London on the day of the Grenfell tower fire, and Lesbos, Greece, in 2015, when Syrian refugees were losing their lives just off the shores where European tourists were enjoying their all-inclusive holidays. Yet we know that this kind of 'contemporaneity' is very much meaningless. Living in the same clock-time, or even in the same broad space in terms of physical geography, means very little in terms of inhabiting a common, coeval present. We live in a fragmented world composed of timescapes of modern versus backward, and primitive versus advanced, underpinned by historical concepts of progress, growth and development (Agnew 1996: 31–32). This is a new kind of orientalism (cf. Kirtsoglou 2010a; Kirtsoglou and Tsimouris 2016) and one that sustains non-congruent worlds and produces neo-colonial subjects. The neo- and crypto-colonised are forced to live in the timelines of others (cf. Herzfeld 2002). Their own timelines are being rendered meaningless as they are caught in webs of capital circulation and accumulation and in the speed cultures of growth, excellence, debt and structural adjustment at the height of post-industrialised modernity.

Chronocracy – all those economic, political, historical forces that keep people in different timescapes – makes even more sense through the Aristotelian distinction between *zoe* (unqualified bare life) and *bios* (social life embedded in the body politic) as exemplified through the writings of Arendt (1958) and later Agamben (1998). Our *zoe* (or *zoes* in plural) may be unfolding in the same mathematical time but our *bios* (or *bioi* in plural) is not. Temporality, as an order, allows us to grasp the distinction between where we live our *zoe* and where we experience (or become stripped of) our *bios*. Past, present and future need to be understood therefore not as social elaborations of the before and after of mathematical time but as timescapes of the political, produced by different chronocratic regimes.

Another look at conceptualisations of time and their consequences for the concept of chronocracy

Our efforts to explicate and contextualise the notion of chronocracy is in line with the considerable academic labour that has gone into recording the global manifestations of what Bear calls the heterochrony of our time (2014: 6). Our fundamental contention is that the workings of chronocracy force certain people to live in different timelines *from* others, or obliges them to

live in the timelines *of* others, or ostracises them from all meaningful time-lines confining them to the chronotope of hope as a coping mechanism and a refuge from the present.

We would now like to invite the reader to take another look at our opening quotation from Newton's Principia Mathematica while trying to mentally 'zoom in' to the world in 1687, the time of Principia's publication. Native Americans had already been decimated, the transatlantic slave-trade was well established, and in Stuart Britain (1603–1714), the majority of people lived in extreme poverty, many relying on charity to survive (cf. Zuvich 2016). The 1666 great fire of London had already happened and we are only a year away from the Glorious Revolution which transformed Britain into a commercial society with the foundation of the Bank of England in 1694 (cf. Wennerlind 2011).

Isaac Newton was living in the timescape of Trinity College, Cambridge, and it is from there, sometime between 1665 and 1667, that he wrote the scholium in question. In just a few words, Newton draws a hard line between absolute, true time and vulgar time, proclaiming that *the vulgar conceive [the quantities of time, space, place and motion] only from the relation they bear to sensible objects.* In Newton's scholium, vulgar people (i.e. ordinary, common people) acquire their own separate timeline, that is, the 'vulgar time', which (as opposed to true time) is relative and measured by motion. On that summer day when Isaac Newton signed the Principia, he sealed the distinction between mathematical 'objective' time and the time of subjective experience. He also, willingly or unwillingly, constructed a specific chronotope out of the combination of 'vulgar time' and 'vulgar people' who were thus produced as a class distinct from scientists but not just in social, economic, or historical terms. Because the vulgar could *only conceive* time *relationally*, their difference from the likes of Isaac Newton is seen as being primarily a *cognitive* one. The vulgar were not only traded as slaves, killed, annihilated by wars and disease, or destined to live in poverty. They were also constituted as *cognitively different* to certain other classes of their contemporaries, and they were denied coevalness with them precisely on the basis of a cognitive difference read as a legitimated inferiority. Nothing less than the foundation stones of the waiting room of history were laid in Newton's Principia.

We now invite the reader to fast-forward 304 years later, when (presumably at his office on the third floor of Connaught House at the LSE) Alfred Gell is writing *The Anthropology of Time*. Drawing on the late nineteenth-century British philosopher of time, John McTaggart (1927), Gell distinguishes B-series time from A-series time. B-series time corresponds to the 'real' nature of scientific time, it lacks tenses and is characterised only by a binary distinction between 'before' versus 'after'. For example, ASA 2015 happened before ASA 2016. A-series on the other hand, reflects subjective time-consciousness and is organised in past, present and future (1992: 157). The ASA conference we organised which was experienced as in the present in 2016 is now in the past. The absolute, objective time of the B-series, exists

independently from the subjective personal or collective experience of time of the A-series. Our perceptions of time do not change in any way as we flip between these two ways of apprehending time, Gell argues (ibid.: 158). Yet, as Hodges notes, Gell's B-series is a 'metaphysical statement' about real time, the order that provides "an objective ground for, and structure to, the world and its history" (2008: 406).

The model of A- versus B-series of time which Gell drew up is in many ways reminiscent of the Newtonian distinction between subjective and objective time presented in the Principia. Unlike Newton however, Gell was an anthropologist, which means that he probably shared most anthropologists' allergic reaction to vulgar allochronism. Thus, his distinction between objective and subjective time is complemented with an analytically robust case in favour of the idea that all human beings, all people, have the capacity to conceptualise time in *both* its objective and subjective manifestations. This is because, as a matter of logical principle Gell argues, all actions carry opportunity costs that are understood by all agents who are forced to perform one action at the expense of another (1992: 216–218, 322). We all inhabit the 'real world', Gell concludes, because we all understand that we cannot both perform and at the same time not perform the same action (1992: 323).

Apart from arguing a persuasive case against allochronism and cognitive difference as inferiority, Gell goes on to explain *how* we conceptualise these two different series of time. A-series subjective time is understood, he states, as a flux of images (1992: 236), through which we "interact with 'real' time via the mediation of temporal maps (ibid.: 239). This is because the temporal territory of objective, B-series time, is inaccessible to us since "physically speaking, each one of us is only another smear of events" that belong to the same category as the B-series events that we want to grasp (1992: 239). In this sense, 'time is us' (ibid.). The temporal maps we construct in order to navigate B-time are only representations, surrogates and reconstructions of a real, and otherwise, *noumenal* time (1992: 235–240).

Gell's assertion that 'time is us' goes a step beyond counter-allochronism to turning cognitive hierarchical categorisations between communities, societies and individuals on their head. Our (hopefully fresh) reading of his work suggests that his A- and B-series time and his notion of temporal maps do not just categorically preclude the existence of a class of people who only live in 'vulgar' chronotopes where objective time is confused with our representations of it. More importantly, the accessibility of B-series time only through temporal maps persuasively demonstrates that there exists no cognitively superior class of people who can step outside objective time (or spacetime after Einsteinian physics) in order to have unmediated access to the phenomenon as a fundamental quantity. It transpires that *we all* access (space)time through temporal maps and other representational techniques such as mathematical models and two-dimensional diagrams, which employ shading in order to create the illusion of a four-dimensional continuum in visual representations. The notion of temporal maps is therefore exegetic

but also indexical to our common cognitive capacities and limitations, and as such, it is a deeply revolutionary anti-chronocratic concept.

Bear (2014, 2016) builds on the concept of time-maps in order to draw our attention to their economic, bureaucratic, social and political uses. She pinpoints the existence of diverse representations and rhythms of human and non-human time (2014: 6) and the hierarchical ordering of time-maps within society (ibid.: 17). Echoing Althusser, she observes that there is a 'dislocation' of different temporalities produced at different structural levels (2014: 19) and proposes that we begin to understand time as 'labour' (ibid.: 6). We have fully endorsed this proposition here as we appreciate the fact that in its conceptual and practical qualities, labour manages to assemble together temporal agency, but also our creativity in striving to mediate and reconcile temporal disparities (1992: 20).

Elaborating further on the concept of time-maps and based on the Aristotelian distinction between techne (technique), episteme (knowledge) and phroneses (ethics), Bear claims that our actions, techniques, knowledges and ethics of time have poetic qualities, as they skilfully produce social worlds and connect them with 'nonhuman processes' (2016: 489–490). What we find particularly useful here for putting together the puzzle of chronocracy is Bear's observation that in capitalist modernity, the techniques, knowledge and ethics of time form into assemblages of dominant and less dominant time-maps in technologies of imagination (ibid.: 496). We use this insight to argue that chronocracy depends on hierarchically ordered assemblages to produce disparate affordances of the social and the political. Chronocracy, as we have identified it here, maps closely onto Bear's varieties of temporal representation. Chronocracy as a technology produces 'spatiotemporal inequality' through the accumulation of different orders of capital (2016: 496). As a 'hierarchy of expertise' (ibid.), chronocracy creates allochronisms, while as an ethic it can produce asymmetrical moral economies inspired by neoliberal visions of progress as a historical and moral telos.

Studies in contemporary chronopolitics: documenting and mediating chronocracy

Our exploration in contemporary chronocracy opens with Michael Jackson's essay on *existential mobility and multiple selves*. Jackson bases his analysis on life stories of African migrants collected during several years of fieldwork in London, Amsterdam and Copenhagen. Accessing worlds through the window afforded by a single life is an established method in anthropology and specifically in relation to the anthropology of time. Irving, for example, offers the notion of 'life journeys' in which he combines physical movement in space, maps and narrative. He eloquently exemplifies not only the indeterminacy of the future but also the thickness and complexity of our temporalities as these are subject to constant reinterpretations and recursive readings (2017: 27–28 also see 2016).

Jackson's method here does not involve physical movement or time-maps but produces equally rich evidence of our poly-spatio-temporal existence; the self appears as 'several rather than singular'. Thus, we are allowed a glimpse into the life story of Ibrahim from Burkina Faso. Ibrahim moved from West Africa to Holland and consequently from a patrimonial regime where his destiny was determined by face to face relationships to a bureaucratic regime of governance through impersonal structures. Jackson tells how Ibrahim had a photo of his father prominently hanging on a wall of his room, but every time he was consuming alcohol he felt like running out of the room, not being able to stand his father's gaze. The point is a powerful one. Ibrahim may have moved places and thereby become 'dis-membered' from his familiar community, but he still inhabited the temporality of his homeland, immanent in his father's gaze. As Jackson notes, Ibrahim oscillated between a concern for his father's expectations, his wife and daughter in Holland and his personal ambition to become educated. Ibrahim's story illustrates a kind of poly-spatio-temporality. It is filled with past, intimate, religious and kinship time (cf. Cannell and McKinnon 2013; Bear 2014), present, kinship and social time and future orientations of hope and ambition. Ibrahim's experience attests to Gell's claim that 'each one of us is only another smear of events' (1992: 239).

Jackson's contribution demonstrates how the poly-spatio-temporality as an existential condition produces multiple selves, full of discontinuities stemming from the imperative to navigate opportunity costs (cf. Gell 1992) and the ethical dilemmas of becoming (cf. Das 2006: 76–77).

Jackson's essay also offers an empirical and analytical substantiation of chronocracy and what it means for people to try to bridge incongruent temporalities. At the empirical level, we can see how the migrant is being dis-located from the timeline of the full citizen and forced to inhabit an 'inscrutable and Kafkaesque world' of bureaucratic indifference, locked into structures of waiting that he attempts to mediate though hope and anticipation. 'The migrant is obliged to re-member himself like a bricoleur', Jackson notes, and through acts of skilful labour he morphs into a new assemblage 'from the various aspects of his past and present selves' (cf. Bear 2016: 489–490).

Jackson also speaks directly to chronocracy in its epistemic form. He draws a parallel between the culturalist reduction of reality to 'preconceived ontological categories' (cf. Gell 1992), and the racist reduction of a whole person to the colour of his skin, religion, nationality or history. By stressing the human capacity for 'strategic shape-shifting' and the 'existential imperative to discover and create one's own ground', Jackson reminds us of the humanistic anthropology of Rapport (2012, 2017 indicatively).

The epistemic face of chronocracy is also taken up in the second contribution offered by Peter Wade who addresses the spatio-temporal narratives of human population genomics. What Wade gives us is a powerful example of how chronocracy is productive of new concepts and 'superior

truths' in the form of expert of knowledges that temporalise human history and action (cf. Koselleck 1985: 257). Human evolution, Wade explains, is chiefly represented by two kinds of scientific narratives: the spatiotemporal genealogical tree that supports the 'out of Africa' theory and the net/rhizome model adopted by multiregional theory. Through an arborial metaphor of branches that shoot out from each other, the tree metaphor presents a vision of 'human unity in diversity'. The idea of genetic unity, Wade observes, entails a certain anti-racist orientation in its emphasis on our common origins (from the trunk of the tree), and yet it also recognises and geneticises racial difference between continental populations (represented as separate branches). Through the image of the tree, population genomic science constructs a theory of evolution 'in which human populations developed in specific, continent-sized environmental niches, through natural selection and endogamy'. Apart from reducing reality to representation (cf. also Jackson this volume), the way that the tree image spatialises and temporalises human difference is associated, Wade argues, with 'linearity, hierarchy, racism and rigidity'.

The net/rhizome model is heavily influenced by the work of Deleuze and Guattari (1987). This image affords a temporal and political representation that traces unity in 'constant flows across space and time' (Wade this volume; cf. Hodges 2008, 2010). Multiregional theory, Wade notes, allows for the 're-imaging of evolution in post-Darwinian terms as a rhizome of life' and offers a much 'less reified concept of the population'. The tree image, on the other hand, constitutes an epistemic chronocracy, effected through the temporalisation of human movement across time. Similarly, the academic labour invested to compose an alternative, rhizomic representation of evolution as a 'heterogenous mass of connections' (Wade this volume) is an obvious counter-chronocratic act. Apart from speaking so closely to the concept of chronocracy, Wade's chapter also offers an example of how scientists too are forced to work with B-series-type *representations* of 'real' time (cf. Gell 1992). Both the tree and the rhizome are effectively temporal maps, constructions of the passage of time and of movement across space. In this sense, Wade's contribution can be also read as an explicit attack on scientific/epistemic allochronism and its effects on debates about race and genetics.

Moving on from epistemic chronocracy into chronocracy as an institutional technology, Laszczkowski provides us with a view of the role of affect, indeterminacy and entelechy in the conflict between incongruent timescapes. The ethnography is situated in La Maddalena, west of Turin, where potentially lethal, carcinogenic asbestos was released during a tunnel construction. Laszczkowski demonstrates the institutional way of dealing with the risk of disease and death by reformulating it through the use of statistics and legal regulations regarding 'concentration limits'. Just as the author establishes the biopolitical (and potentially thanatopolitical) effects of governmentality on the body, he also traces contradictions

inherent in the workings of the state. Through documenting the work of activists in transforming risk from a 'numerical value into a virtual, yet concrete, embodied reality', Laszczkowski elaborates on the continuities between the virtual and the actual (cf. Hodges 2008: 410). Following the works of Mitchell (1999) and Harvey (2005), the chapter articulates an argument about the state as 'a network of overlapping apparatuses' and 'a volatile and contingent effect of loosely coordinated practices and discourses'.

This chapter resonates with works on the contested temporalities of urban planning (cf. Abram and Weszkalnys 2013), environmental politics (Mathews and Barnes 2016), anthropologies of affect (cf. Navaro-Yashin 2012; Laszczkowski and Reeves 2017) and on the relationship between materiality and temporality (cf. Bryant 2014). In terms of the concept of chronocracy, Laszczkowski's contribution evidences the chronocratic character of governmentality, as this transpires through its biopolitical and thanatopolitical authority. The 'loosely coordinated practices and discourses' and the affective tensions through which the state materialises are saturated with chronocratic capacities. Manifestations of the state fill futures with fantasies of development, but also with the possibility of destruction and death (cf. Pink and Salazar 2017: 18). The case of La Maddalena reminds us of Das' observation on how "cosmologies of the powerless hold… the sheer contingency of events responsible for the disorder of their lives" (1995: 139). Although the potentially lethal effects of asbestos will be experienced at the level of individual bodies, "those bodies bear the stamp of the authority of society upon the docile bodies of its members" (ibid.: 138). Laszczkowski's contribution showcases how chronocracy is sometimes located in "decision events" (Humphrey 2008: 374 in Knight and Stewart 2016: 10) that create asymmetrical timelines between decision-makers and those who are forced to bear the consequences of other people's decisions (see also Kirtsoglou, Widger and Wickramasinghe in this volume). In carefully pointing out ruptures, tensions and moments of indeterminacy where the state is 'both materialised and undone', Laszczkowski too engages in counter-chronocratic academic labour that charts the conditions and effects of institutional ways of producing non-coeval timescapes.

The theme of contested temporalities of urban planning is further explored in Ringel's paper on the relationship between expectations and politics in the urban settings of the post-industrial era (cf. Abram 2014, 2017). The ethnography tells us about the German city of Bremerhaven, which after a period of industrial development fell into economic decline, high unemployment and increasing poverty. Following the reception of investment funding from the Federal level, officials and citizens opted for economic diversification and invested into turning the harbour city into a tourist space. The 'catchword' of the city's strategies was 'sustainability', and, as Ringel astutely points out, in the context of the post-industrial era, 'sustainability has itself to be sustained'.

Ringel's paper demonstrates that infrastructures 'establish temporal sensitivities and common rhythms through which life should be lived and understood' (Widger & Wickramasinghe this volume; cf. also Dalakoglou 2010; Reeves 2016). His chapter discusses the relationship between politics and expectations as these literally materialise in urban infrastructural transformations as future-oriented events that have the capacity to structure everyday lives (cf. Guyer 2007). Elaborating on the recent work of Dzenovska and De Genova (2018), Ringel notes how political action enacts visions of the future as 'progress' which is, in turn, evidenced by change. However, the work of maintenance and continuity, he argues, is a 'radical political act'. Ringel contrasts local German efforts to maintain, to sustain and to repair with 'anthropology's urge for change'. His observations on the connection between 'change' and hierarchical ideas of progress as telos remind us of Navaro-Yashin's argument on the politics of knowledge production (2009). Echoing Kuhn's (1970) work on how scientific revolutions and 'paradigm shifts' are characterised by a tendency to "associate progress in knowledge with the defeat of previous frameworks", Navaro-Yashin notes that innovation in knowledge is related to "the ruination of past approaches" (2009: 7).

Anthropological analyses of chronopolitics, Ringel rightly argues, need to keep a firm focus on the question of 'whose times and whose politics are we talking about'. He further draws our attention to state-led and institutional ways of addressing incongruent temporalities through investment: a chronocratic notion expectant with ideas of change as progress. As Kirtsoglou (this volume) also demonstrates, a city, a country or a community is chronocratically deemed (or shall we say 'diagnosed') as existing in a different timescape at the very moment that financial support is provided to it in order for it to overcome its purported economic and structural lag. Investing (and lending) is thus a form of financial chronocracy that forces communities to accept their heterochronic existence and imposes on them all sorts of political and ethical dilemmas of how they are supposed to remedy their condition. In the ethnographic case of Germany examined in Ringel's chapter, officials and citizens struggle with chronocracy through the potentially anti-chronocratic vision of sustainability and maintenance and a 'certain stubborn clinging to and investment in old forms' (Ringel in this volume). The connection of academic narratives of excellence and innovation with chronocratic acts of ruination of older forms of knowledge is the second important insight into the political and epistemic facets of chronocracy that this chapter offers. Speaking to emerging literatures on 'slowing down' (cf. Pink and Lewis 2014; Bowles 2016), Ringel's contribution is a direct call for political and academic labour against the effects of chronocracy as speed, progress and change.

Slowing-down, waiting and enduring as explicit forms of counter-chronocracy are examined in the work of Salisbury and Baraitser's chapter on psychoanalytic care. The authors examine the implications of a particular strand of phenomenological psychiatry in the formulation of

psychoanalytic chronic time that attempts to mediate modern speed-cultures (cf. Virilio 2005). In a pointed and theoretically nuanced analysis, Salisbury and Baraitser demonstrate how melancholia and depression have come to be understood through particular imaginaries of modernity as stagnation and suspension. The chapter offers extremely useful insights to our discussion of chronocracy and waiting, as it illuminates the affirmative dimensions of waiting that our approach has thus far sorely missed. The arguments presented here remind us of Koselleck's observation (discussed earlier, 1985: 10–11, 16–17) that the abandonment of predictive and eschatological narratives (between 1500 and 1800) led to state-controlled concepts of the future and the emergence of the notion of unidirectional progress. Medieval messianic waiting, Salisbury and Baraitser note, was a form of 'protracted immanence' that structured waiting 'leading to its implicit value in eschatological time'. The gradual retreat of messianic waiting in modernity, and the radically different conceptualisations of future as progress and accelerated time that emerged, "abbreviated the space of experiences [and] robbed them of their constancy" (Koselleck 1985: 17). As Salisbury and Baraitser pointedly observe, chronocratic historical processes associated with the era of modernity foster an idiom of 'waiting *for*, rather than waiting *with* time'. The chronicity of psychic life and the timelessness of the unconscious were thus seen by Freud as a kind of 'absence of time'. The psychoanalytic approach that the authors explicate however nurtures a notion of chronic time that renders prolonged waiting a healing, restorative and indeed counter-chronocratic experience. In this sense, the chapter not only speaks directly to the main concept of the volume but also adjusts, improves and enriches our understandings of waiting and delay.

Moving from the timelessness and the chronicity of psychic life onto 'timeliness', agricultural constraints, management strategies and climatic forces, we will now examine Widger and Wickramasinghe's paper. Significantly, this chapter offers insights on the workings of chronocracy in development contexts and a much-welcome ethnographic move from European settings to Sri Lanka. Their focus is the Mahaweli Development and Irrigation Project (MDIP), a non-urban, non-industrial kind of infrastructure which exposes the limited applicability of theoretical engagements with (post)modern time (itself a restricted ecology) for our understandings of 'anthropogenic climate change' and 'expansive ecologies of time'. The MDIP project, 'rooted in a modernist concept of industrial time' did not manage to map successfully onto local agricultural rhythms and their specific irrigation needs. Its attempts to 'discipline peasant farmers to work within the demands of intensified agricultural production' by controlling the tempo of irrigational infrastructures were only partly successful. But while MDIP schedulers saw Mahaweli farmers as 'quite literally *falling out of time*' (original emphasis), the authors suggest that "the *part-time* modernity of the Mahaweli is not indicative of a failed attempt to impose a *full-time* modernity", but a 'physico-temporal representation' of how water

and fertilisers coincided. Widger and Wickramasinghe view chemical fertilisers as 'hyper-objects', namely entities with temporal dimensions that protrude into human consciousness. The assemblage of agricultural temporalities and environments, local habits, rhythms and hyper-objects such as chemical fertilisers, produces an 'expansive ecological time', which, the authors argue, cannot be captured by the restricted ecology of modern and post-modern time fostered by the MDIP project.

Based on a discussion of Gell (1992), Bear (2014), Elias (1994) and Morton (2013) among others, the chapter offers novel perspectives on ecological processes, agricultural (non-urban) infrastructures and the temporality of ecological time. Alongside the chapter by Irvine which follows, Widger and Wickramasinghe enrich our understandings of chronocracy as a process that involves human and non-human beings, objects (hyper- and otherwise), materialities and ecologies. The manner in which the MDIP project constitutes local farmers and their environments as being in need of modernisation is reminiscent of the kind of denial of coevalness inherent in discourses and practices of urban development, investment and lending (see also Ringel's and Kirtsoglou's contributions). As these narratives (and the structural adjustment projects within which they materialise) supposedly seek to reconcile incongruent temporalities, they actually *impose* a certain modern, industrial and post-industrial vision of synchronicity that effectively denies coevalness at the most fundamental level.

The ways in which chronocracy produces asymmetrical relationships between humans and other organisms become even more profound in Irvine's paper on the life-cycle of peats. In this contribution, the eco-cidal effects of denying coevalness to non-human organisms and ecological systems are laid bare. Irvine's ethnography explains how peats are assemblages of living and decomposed matter that occupy a state in-between wet and dry, living and dying, growing and ancient. Peats have their own physical and biological rhythms and life-cycles that become connected to the social rhythms and labour of people who use peat matter to produce heating bricks. As land gets drained for cultivation, however, its water is lost leading to the exposure of the formerly waterlogged peat to the air. "As water is withdrawn from a body of peat and air fills the spaces in it…chemical oxidations…bacterial and fungal attacks" kill the organic parts of the peat, effecting the loss of a form of natural habitat and the interruption of ecological time (Godwin 1978: 126 in Irvine this volume).

Irvine's ethnography contributes greatly to our understanding of multi-temporality as a distributed property of the relations between human and non-human organisms and between ecologies and materialities. His contribution exposes chronocratic transformations of our ecosystems that establish temporal incongruence between human and non-human temporal rhythms. In a sense, Irvine gives us a bite-size insight into the enormity of the destructive workings of chronocracy in the Anthropocene. The view of ecological temporalities as fundamentally different and inferior to human

ones allows us to see chronocracy as a form of environmental colonialism. Attempts to dominate ecological time afford sedimentations of colonial practices (cf. Stoller 2016) and comprise a type of chronocracy that effects the ruination, destruction and necrosis of our environments and of non-human organisms. Irvine's ethnographic engagement with this issue is a piece of significant academic counter-chronocratic labour that exposes the deleterious effects of the chronopolitics of non-coevalness for environmental systems and ultimately for the humans that live in them.

Returning to the theme of post-industrial, hegemonic visions of synchronicity underpinned by notions of modernity as progress, the penultimate ethnographic contribution to the volume explores modernity as a historical product that encompasses multiple and seemingly contradictory fragments of European history, namely the protestant ethic, Aristotelian logic and an eschatological trust in progress as unavoidable telos. Through an ethnographic exploration of austerity in Greece, Kirtsoglou identifies crisis as a chronocratic technique that serves to produce and normalise temporal incongruence. Notions of crisis and emergency underpin austerity measures and structural adjustments that citizens have to endure in order to overcome the financial crisis through modernisation. Synchronicity as modernisation becomes a moral imperative which produces 'anticipatory nostalgia' (cf. Herzfeld 1997; Berliner 2015; Theodossopoulos 2016b and this volume). Anticipatory nostalgia in Greece highlights the nation's glorious classical past and simultaneously takes the form of a longing for a comparably outstanding future that is yet to come. This view of the nation as the cradle of the principles of modernity (through its heritage) and at once as lagging in modernisation constitutes the present as a ruinated timescape, a sad and parochial, collectively mourned parenthesis.

This contribution demonstrates how chronocracy is implicated in structures and formal calendrics of debt (cf. Williams 2004; Guyer 2007; Han 2012) and how it produces the phenomena of ruination (Navaro-Yashin 2102), loss (Demetriou 2018) and exhaustion (Knight 2016; Bryant and Knight 2019). In the specific case of Greece, chronocratic narratives of temporal incongruence accentuate the politics of nostalgia through the circulation of aetiologies that emphasised the degenerate character of modern Greeks. The painful austerity measures imposed on the country became the vehicle that would transport the Greek people simultaneously back (in the glory of their classical heritage) *and* forward (in the much desired state of being modern). Austerity left the country in a normalised state of emergency. In this liminal chronotope, modern Greeks continue to stand – as if in the antechambers of history or possibly a newly fashioned 'waiting room' – while their future progress (and their future as progress) is politically engineered by international institutional actors making critical decisions at the margins of the state (cf. Das 1995; Knight and Stewart 2016: 10 and our earlier discussion of Laszczkowski's contribution). Apart from evidencing the role of chronocracy in fostering relations of inequality and exploitation,

Kirtsoglou also documents grassroots counter-chronocratic acts of fiscal disobedience (cf. Roitman 2005) and the role of affect in the chronopolitics of (lack of) coevalness.

The theme of nostalgia and its relations to allochronism is also elucidated in the contribution offered by Theodossopoulos, which brings our discussion full circle. Through an astute critique of ethnographic practice, the author explains the workings of 'ethnographic nostalgia' and contributes to long-standing methodological debates on allochronism in the social sciences (cf. Agnew 1996; Klinke 2013; Pandian 2012; Stewart 2016 indicatively). Theodossopoulos defines ethnographic nostalgia as an analytical concept that 'structures the effect of previous ethnographic knowledge on ethnographic production in the present' (cf. Theodossopoulos 2016a, 2016b). He attests to the multi-temporal, intertextual character of ethnography, but he also demonstrates how ethnographies become temporalised and turn into 'informative' and 'authoritative' records that pre-empt ethnographic futures and fill them with all sorts of distortions and allochronic biases. This contribution facilitates further our understanding of epistemic chronocracy, both through a fresh reading of allochronism as an effect of ethnographic nostalgia and through a careful deconstruction of what constitutes progress in anthropological writing – turns which are in fact returns (cf. Navaro-Yashin 2009: 7 and our earlier discussion of Ringel's contribution). The crisis of representation, Theodossopoulos argues, created – against our better judgement – an allochronic trap: 'it has temporalized its critical age', relocating the problem of representation in past timelines supposedly closed hermetically from our own. The assumption that methodological problems, once identified, can be fixed and become a thing of the past leaves the back door wide open to allochronism as epistemic chronocracy. In combination with Jackson's paper, our introduction and the insights that Ringel offers on change, this contribution speaks to wider debates on the structuring effects of regimes of expert knowledge (cf. Koselleck 1985; Klinke 2013; Bear 2016; Yarrow 2017) and comprises the methodological contribution of this volume to current literatures on the anthropology of time.

Just before we pass the torch…

Endorsing Bear's (2016) useful categorisation of the varieties of temporal representations, we have demonstrated that chronocracy manifests itself in economico-political technologies of instituting inequality around the world, in epistemic hierarchies of knowledge that have allochronic effects, and as a counter-ethic that creates asymmetrical moral economies. We have argued that chronocracy can be animated by affect; it is built into practices and materialities; it is productive not only of new concepts and superior truths but also of biopolitical, thanatopolitical and eco-cidal processes of governance. We proposed that we can view chronocracy as a temporal adaptation of the distinction between *zoe* as bare life, collectively lived in the same 'real'

time, and *bios* as social and political existence that has been subjected to hierarchical temporalisation. The world, we have claimed, has become a fragmented place; not only in historical, economic, political and geopolitical ways but also, perhaps more crucially, in a temporal sense. Temporal incongruence is a central problem of our time as it creates multiple tensions and asynchronicities between open-ended and circumscribed views of the world. In all of its political, epistemic and moral manifestations and in its discursive, practical, affective and material facets, chronocracy produces and underpins the diverse non-coeval timescapes we inhabit. Spatiotemporal asymmetries between these timescapes force people to live in the timelines of others, or worse, to inhabit various appendices of time, locked in structures of waiting *for*, and in postponed presents.

Inspired by Veena Das' (2006) work, we have observed that chronocracy has scalar properties, and as anthropologists, we are best equipped to study it through a descent into the everyday and the ordinary. This is because, as all other forms of violence, chronocracy saturates our everyday existence, and from there, it is capable of fleshing out the sinister side of our most positive faculties like imagination, creativity, potentiality, immanence and agency. When chronocracy becomes imaginative it finds all sorts of new and creative ways of planting itself in our worlds. It turns potentiality and immanence into insecurity, it converts endurance and maintenance into stagnation, it adjusts development and growth into tyrannical structures of accumulation, exploitation and ecologic destruction, it makes hope feel like a waiting room. Hijacked by chronocracy, hope becomes a timescape composed of the ruins of our present, of our dead dreams and of closed-off possibilities that may one day re-open. Who knows when and how? We must be wary of chronocracy we claim; not only because we so often stumble on it and fall flat on our faces but also because of its intimate connection to our own agency. Time is us (to remember Gell) and chronocracy is our affective, historical, political and epistemic counter-morality. It is an example of the dark side of our radical imagination (cf. Kirtsoglou 2010b, 2011, 2018); of our immense potential to transform but also to dis-locate, to corrupt and to colonise our own existence and the existence of other species and of our ecologies in all kinds of ways (as human beings we individually and collectively come up with all sorts of ethical and affirmative, but also violent and damaging customs!).

In some ways, this volume is about temporal dis-locations and the re-location of human and non-human beings in coeval spatiotemporal ecologies. What would a decolonising ethical orientation to this denial of coevalness look like? We have tried to show that the synchronicity of modernity is not the place to begin but rather a more fundamental belief in the temporal and political equality of diverse ontologies. This is, of course, no easy matter. It is not even a matter of writing an academic piece of work but a problem that requires continuous and hard labour at all levels of life. The present collection is an exercise in multi-temporal inter-textuality. As

such, it is filled with ancestral guiding spirits, the echoes of a conference past, the hard work of other anthropologists and that of its contributors, anticipations of a less chronocratic future and hopes that it does not itself become somehow part of chronocracy. Ultimately, it is just another act of academic labour, another turn of Archimedes' screw and another bead on the string which is the time of anthropology. We offer it in good heart and in full knowledge that, despite our best intentions, it will not solve the fundamental problem it identifies. If we don't have better answers we hope that at least we have come up with better questions.

Note

1 See Aristotle, *Περί Ψυχής*, Athens: Fexis, 1911 edition.

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1 Migrant imaginaries, multiple selves, and the varieties of temporal experience[1]

Michael D. Jackson

Just as we reinvent ourselves many times over the course of our lives, sometimes becoming strangers to the people we once were, so (one might say) anthropology has undergone so many changes over the course of its life that our intellectual forebears would hardly recognize the subject as it stands today and would undoubtedly be astonished by the range of lifeworlds our discipline now encompasses. Given such changes in individual biographies, theoretical fashions, professional jargons, and empirical subject matter, it would be foolish for anyone to predict the future of our field, let alone claim that his or her particular endeavors might shape it. This does not, however, inhibit us from hoping that the future will take one course rather than another.

My hope is that anthropology will take more seriously what Theodor Adorno called the critique of identity thinking (Adorno 1973; Jackson 2018). Identity thinking assumes an isomorphic relationship between our lived experience and our worldviews – a conflation of experience and episteme. For Adorno, there is always more to life than is covered or contained by the concepts and words with which we represent it. In the same way, our experience of time can never be wholly captured by the ways in which we measure it, whether by circadian rhythms, phases of the moon, the rising and setting of stars, the cycle of the seasons, the swing of a pendulum, the rate of radioactive decay of 14C, or cesium seconds. Yet academe continues to be organized around determinate categories, such as gender, ethnicity, class, culture, and religious identity, that play down the differences between individuals in order to magnify the differences between groups. In treating such collective differences as objective or immutable, we blind ourselves to the fact that variations *within* a population are as great as variations *between* populations and persist in defining cultures in terms of a single prevailing modality of time consciousness – hot/cold, stationary/cumulative, and cyclical/linear. For Henri Bergson, however, human consciousness is continually oscillating between multiple perspectives, despite our tendency to reify these as present, past, and future (Bergson 2002: 63). Long ago events come so vividly to mind that they seem to have happened moments ago; time hangs fire in a moment of danger and speeds up in the face of an approaching

deadline; an aroma or passage of music instantly transports us to another time; spellbound by a story, we lose all track of time; the future fills us with such dread that we hesitate to bring children into the world. At the same time, historical events – the Holocaust, the crucifixion of Christ, the killing of Imam Hussein, the Atlantic Slave Trade, and the devastation of a traditional way of life – come to figure more compellingly in our experience than events that occurred yesterday.

Abstraction and generalization are magical means of getting a sense of having some purchase on reality, but in forgetting the multiplicity and complexity of reality, we do violence to life as it is actually lived. As Johannes Fabian has reminded us, the social construction of time inevitably reflects political interests, and both historians and anthropologists have been guilty of invoking *time past* as a stratagem for denying coevalness to our prehistorical forebears and our distant contemporaries alike. In so far as *their* time and *our* time are allegedly not one, their humanity and ours are assumed to be essentially different (Fabian 1983).

An equally fundamental issue was raised by Edmund Leach over 50 years ago, when he asked how we come to have a verbal category of *time* at all and how that category links up with our everyday experience (Leach 1961: 124–125). Henri Bergson might have responded to this question by noting that time and space are metaphors of relative social distance (Bergson 1988: 128) and are interchangeable.

> Homogenous space and homogenous time are … neither properties of things nor essential conditions of our faculty of knowing them: they express, in an abstract form, the double work of solidification and division which we effect on the moving continuity of the real *in order to obtain there a fulcrum for our actions.*
>
> (Bergson 1988: 211, emphasis added)

Thus, in Northern Luzon, the Ilongot map mythological events onto the landscape rather than the calendar (Rosaldo 1980: 48). Though Bergson argues against the spatialization of temporality, arguing that duration is our most prescient sense of being-in-time, our consciousness of time passing is inexorably connected to our physical awareness of the *places* in which we dwell, between which we travel, and wherein we are actively and bodily engaged. Thus, 'space' and 'time' continually morph into each other. Nostalgia fuses a longing for another place *and* another time. Here and there readily become metaphors for now and then, and vice versa.

These observations have special relevance to the research I have been doing for several years now with African migrants in London, Amsterdam, and Copenhagen, exploring the dynamic interplay between external circumstances and inner lives – how a person negotiates and responds to the new world into which he is thrown, how he reimagines and relates to the places and people he has left behind, and how he sees his future. This complex

consciousness of competing demands, conflicting allegiances, and incommensurable values often engenders deep uncertainty and dissociation, and I have found parallels between a migrant's struggle to achieve a sense of security and stability and my own anthropological struggles to render coherent accounts of migrant lives.

I have also been struck by the ways in which a migrant's experience of uncertainty and insecurity – of being out-of-place and somehow illegitimate even when he has found work and acquired a work permit – bears an interesting relationship to the anthropologist's uncertainty over the relationship between life as lived and the explanatory models or narratives that he or she constructs in making that lived reality intelligible.

There is, in other words, an uncanny connection between a migrant struggling to negotiate the legal labyrinths and bureaucratic protocols of a European nation state and an anthropologist struggling to negotiate the academic jargons, conceptual frameworks, and intellectual fashions that dominate his or her profession.

Multiple self states

When anthropologists and social theorists write about migration, they often invoke binaries, speaking of divided selves and double-binds, of halfies, hybrids, and being in-between. Subjective conflicts are said to mirror social crises, also described in binary terms, suggesting radical breaks between autocratic and democratic regimes, and political and occult economies, and an orientation toward the past and the future (Piot 2010). But to describe the self "as torn between self-interest and collective good, struggling over desire and responsibility, negotiating contradictory emotions" (Kleinman et al. 2011: 5) may give the impression that human beings find little satisfaction in their mutability and prefer the illusion of a unitary and stable sense of self. Rather than imply that people necessarily find fulfillment in being settled in one place or possessing a single core identity persisting over time, I consider it imperative that we complement this view of a stable self with descriptions of human improvisation, experimentation, opportunism, and existential mobility, showing that individuals often struggle not to align their lives with given moral or legal norms but to find ways of negotiating *the ethical space* between external constraints and personal imperatives. This capacity for strategic shape-shifting, both imaginative and actual, defines our very humanity.

I find it ironic, therefore, that most of the writers who invoke images of psychological division and historical discontinuity would *not* wish to make a case either for static, one-dimensional personalities or mono-cultural *societies* in which nothing and no one changed. Why, then, should we not embrace the view that "a pluralistic universe" (James 1977) applies equally to both polis and persons to states and to selves?

Recent psychoanalytical work on selfhood challenges the concept of the person as a seamless, stable, skin-encapsulated monad (Mitchell 1993: 186).

Rather than being constant, we constantly change, like chameleons, according to our surroundings, and we possess an extraordinary "capacity to feel like one self while being many" (Bromberg 1983: 186). Indeed, our ability to shift and adjust our self-state in response to who we are with, to what circumstance demands, and to what our well-being seems to require, is not only adaptive; our lives would be impossible without it.

This conception of the self as several rather than singular has a long history.

In 1580, Michel Montaigne observed that, "Anyone who turns his prime attention on to himself will hardly find himself in the same state twice." "Every sort of contradiction can be found in me," he wrote:

> depending on some twist or attribute … There is nothing I can say about myself as a whole simply and completely, without intermingling and admixture … We are fashioned out of oddments put together … We are entirely made up of bits and pieces, woven together so diversely and so shapelessly that each one of them pulls its own way at every moment. And there is as much difference between us and ourselves as there is between us and other people.
>
> (Montaigne 1993: 128–129, 131)

In 1928, Virginia Woolf touched on the same theme, observing that the selves

> of which we are built up, one on top of another, as plates are piled on a waiter's hand, have … little constitutions and rights of their own … One will only come if it is raining, another [will emerge only] in a room with green curtains, another when Mrs. Jones is not there, another if you can promise it a glass of wine – and so on … [E]verybody can multiply from his own experience the different terms which his different selves have made with him – and some are too wildly ridiculous to be mentioned in print at all.
>
> (Woolf 1928: 308–309)

It is not impossible that at the same time Virginia Woolf wrote these lines, Fernando Pessoa was writing that, "Each of us is several, is many, is a profusion of selves … In the vast colony of our being there are many species of people who think and feel in different ways" (Pessoa 2003: 327–328).

All these writers touch on what I have elsewhere called 'the migrant imagination' (Jackson 2007: 102) – our human capacity for calling forth or bringing to the forefront of consciousness hitherto back-grounded aspects of ourselves in dealing with changing situations. Psychological multiplicity and dissociation is not, therefore, a problem that requires therapy, returning us to a one-dimensional, stable state that is continuous and consistent over time and in all situations; it is the creative and adaptive expression of sociality itself.

Let us consider three closely related aspects of this adaptability – adapting to other people, adapting to other societies or forms of life, and adapting to changes in our life course. While the first aspect involves being affectively moved in relation to other selves, the second involves movement from place to place, while the third aspect covers the critical transitions that mark our passage through life.

Our capacity for becoming other in relation to other selves is the basis for mutual recognition and empathy. It is the suppressed aspects of ourselves, seldom fully acknowledged and often actively abhorred, that enable us to find common ground with people who initially appear so radically different from us that we sometimes hesitate to call them human. Indeed, this capacity to see others in the light of normally occluded aspects of ourselves may, under certain circumstances, help us recognize animals and objects as sharing in the being we ordinarily attribute solely to ourselves.

The psychoanalytic anthropologist, George Devereux, has argued for the psychic unity of humankind in just these terms – that every individual contains the potential of Everyman, creative as well as destructive – and that what is foregrounded in one person or made normative in one society will exist in a subdominant, repressed, or potential form in another person or another society (Devereux 1978: 74–77).

Our capacity for becoming other in relation to other selves also explains the persistence with which human beings, from time immemorial, have moved, migrated, and mutated, adjusting to radically new circumstances *despite the risks involved, the losses incurred, and the suffering undergone*.

One of the commonest experiences of encountering a complete stranger, or moving from a familiar to an unfamiliar environment, or in passing from one phase of one's life to another, is disorientation. This cognitive bewilderment is variously and viscerally experienced as vertigo, nausea, nostalgia, and exhaustion. "I'm the empty stage where various actors act out various plays, living the lives of various people – both on the outside, seeing them, and on the inside, feeling them," writes Fernando Pessoa, who appears to have lost all sense of any core self (Pessoa 2003: 254).

In this dissociated state, selves that were previously foregrounded are no longer affirmed by others as normal or even as natural or they no longer serve one's immediate interests. The person you once reviled may now be the person on whom you depend for recognition and succor. You may have become an adult, but the child in you cries out for comfort. You have arrived in Rome and are trying to do as the Romans do, but you crave, if only for a moment, to be able to eat your own food, in your own home, with your own kith and kin. No shift in self-states is straightforward. To be in transition is to be in doubt and adrift and to experience dissociation – to suddenly discover that one has become a stranger to oneself. In this regard, there are uncanny parallels between the ethnographic experience of initial fieldwork and the migrant experience. As Ibrahim Ouedraego – a friend from Burkina Faso – puts it, reflecting on his first few days in Amsterdam:

> You cannot do everything you want to do. There are always rules that will stop you crossing borders, stop you going where you want to go, stop you finding an easier path. It's papers that count, not words. No one trusts anything you say. You can't talk to people directly. You've got to have papers. Even if the papers are false, they will count more than your words. There is no more truth in words.

Sierra Leonean friends in London confessed similar consternation as they struggled to negotiate the labyrinth of a bureaucratic state. In West Africa, one's destiny was determined by a network of face-to-face relationships with people to whom you were obliged or who were under obligation to you, people whom in local parlance you could 'beg' or from whom you could borrow money, expect a meal, or a roof over your head. But, in Europe, one quickly discovers that one has passed from a patrimonial to a bureaucratic regime in which power resides less in people to whom one can appeal than in an impersonal force-field that finds expression in a stranger's stare, a policeman's orders, a supervisor's demands, or the letter of the law. In this inscrutable and Kafkaesque world of bureaucratic protocols, indecipherable documents, abstract rules, and official forms of validation, one comes up against what Michael Herzfeld has called 'the social production of indifference' (Herzfeld 1992). The 'living spirit' of community has given ground to the 'dead letter' of a system that recognizes no one because it is nobody (Arendt 1958: 95, 169).

This is not a matter of being between two worlds, but of being dismembered – of no longer being fully integrated into a familiar community. And so the migrant is obliged to re-member himself, to assemble, like a bricoleur, from the various aspects of his past and present selves, a new *assemblage.*[2] Thus, Ibrahim oscillates between his preoccupation with his father's expectations, his mother's wishes, his wife and daughter in Holland, and his personal ambition to become better educated – moving continually between these self-states, each of which is associated with a different country, a different period in his life, a different kind of loyalty, and a different person. In London, my friend Sewa Magba Koroma found alcohol-use problematic. As a Muslim and out of respect for his beloved father, Sewa preferred not to drink, even though this seriously compromised his English social life. How could he drink beer with friends in his apartment when his father's photograph on the wall was a stern reminder of his lack of filial respect?

> There's one thing [my father] never wants any of his kids to do, and that is drink alcohol. When I go out and drink alcohol, as soon as I come home and step into my room and see that picture, I have to run out of the room again. I want to go and take the picture and put it away, like in my cupboard or box, but I know I have alcohol in my system so I cannot touch the picture. I have to wait for days, days, to take that picture and

put it somewhere, so I can walk into my room and not see it straight away. I know it's just a picture, but it's like it's him seeing me, what I'm doing, you know. You see, I've got all these beliefs. And when I stop drinking, pray to him, ask him for forgiveness, I know that's the only thing I'm doing that my dad's unhappy about.

Sewa's English girlfriend suggested that he hang the photo of his father in the living room, now bare except for a small lacquered plywood map of Sierra Leone in which different seeds – sesame, millet, mustard, chili, and several species of rice – had been glued to mark the different provinces.

But I can't put pictures in the sitting room. I can't imagine myself sitting here, holding a beer, drinking, when my dad's picture is looking at me. So that's what's stopping me putting the picture up. I can't live in a house where friends will come and want to drink, and my dad is seeing me, I just can't do that. I feel I'm doing the wrong thing, that he doesn't want me to do, even though he's not alive in the real world, I just don't want to do that.

"But you have made so many changes in your life, since coming to England," I said. "Big changes."

"It's true, Mr. Michael. Sometimes I can't believe myself."

Despite the anguish Sewa often felt as he tried to work out new configurations and compromises in his lifestyle, he did not 'fall apart'. This is because, as Philip Bromberg points out, a multiple self is not incompatible with normal mental functioning because

a person can access simultaneously a range of discrete self-states that, despite their contrasting and even opposing perspectives on personal reality, are able to engage in internal dialogue. It is this capacity that permits oppositional aspects of self to coexist in consciousness as potentially resolvable intrapsychic conflict.

(Bromberg 2006: 68)

It would, however, be more accurate to speak of multi-tasking rather than multiple selves, since the possession of a repertoire of potential social or practical *skills* does not necessarily mean that we are composed of several discrete *identities*. In other words, the limit is not simply where things disintegrate and the perennial possibility arises of being born again; it is where we are driven to intense experimentation, searching for a strategy or coping skill, an object or ally, that will help us overcome an obstacle, regain a sense of agency, or perform a seemingly impossible task.

The migrant exemplifies, therefore, a vital aspect of every person's passage through life – an ability to change with changing situations, conjuring multiple mindsets, and calling upon multiple means for addressing multiple

challenges. "This view of self as multiple and discontinuous," writes Stephen Mitchell, "is grounded in a temporal rather than spatial metaphor: Selves are what people do and experience over time rather than something that exists someplace" (Mitchell 1993: 101). Thus, despite his encounters with racism in Denmark, a Ugandan friend, Emmanuel Mulamila, made a conscious choice not to see *himself* as African, but to redouble his efforts to apply for work on the strength of his academic qualifications and personal qualities (Jackson 2013: 60–62). My fieldwork among migrants also brought me into contact with a Mexican student at Harvard who had 'converted' to Pentecostalism as he crossed the border into the US only to be picked up and deported, before attempting the crossing again. But as Roberto shared his story with me, I noticed that his recourse to religion occurred at those *moments* when he found himself at the limits of what he could endure – thrown into a prison cell among drunks and derelicts or facing another day of thankless labor in the fields. Though the police or field bosses treated him like dirt because he was 'Mexican,' Roberto negotiated his situation *in his own terms*, as a Christian, though at other times without any reference to God at all (Jackson 2018: 128–131).

A contrast may be drawn here between agonistic and submissive attitudes. The agonistic attitude involves active resistance. We seize the initiative, determined to contest and change our situation. The submissive mode suggests passive resistance. We withdraw to lick our wounds to figure out some way of enduring the situation, suffering and surviving it rather than willfully confronting it. In the modern West, we tend to extol the agonistic mode, deeming it heroic or noble. When someone dies of cancer, we speak of him or her as having lost a battle with the disease, as if fighting were ethically superior to submission. At the same time, we disparage the submissive mode by calling it defeatist or fatalist, and this has long been one of the ways in which men distinguish themselves from women or the West has contrasted itself with the East; while we supposedly take active responsibility for ourselves, people east of the Bosphorus and south of the Sahara allegedly blame others for their misfortunes before they blame themselves and shift personal responsibility to God or fate, resigned to their lot rather than determining their own destinies. An empirically more accurate view of life in the global north and the global south reveals a constant shifting between these modes of activity and passivity. Except in extreme cases, no individual and no culture, Western or otherwise, is permanently stuck in one mode to the exclusion of the other. Human beings move constantly between activity and passivity,[3] engagement and retreat, ego-centered and other-centered modes of being-in-the-world, depending on circumstance. Even when a person abstains from action and appears to have relinquished agency, doing nothing – as we say – or placing his or her hope, trust or faith in others, or in higher powers – he or she may be actively imagining or thinking a great deal. Accordingly, behavioral passivity does not mean that the mind has ceased to seek out ways of coming to grips with the problem

that has brought the body to a standstill. Indeed, it may be more useful to speak of an oscillation between being physically still and imaginatively engaged rather than an oscillation between passivity and activity for in all but exceptional cases – such as when a person attains a mystical state of absolute physical and mental calmness – we are constantly moving between very different modes of consciousness and engaging in very different kinds of action. Human existence implies continual readjustment and revision in our memories and imaginations as well as in our lived relationships with others and our environments. Roberto suppresses his Mexican past the better to focus on the exigencies of his present American situation. Emmanuel represses the anger that still boils up in him when he thinks of the abuse he suffered as a child, the better to meet the needs of his daughter in the here and now. In many ways, this mobility and mutability of self-awareness is both phylogenetically and ontogenetically crucial to what we call adapt-ability. "To live is to be other," wrote Fernando Pessoa. "What moves lives" (Pessoa 2003: 30, 91). No wonder, then, that I found in the experiences of the migrants I met in Europe and America dramatic analogues of my expe-rience as an ethnographer where an ability to improvise and play with new possibilities of action and thought, experimenting with alternative modes of consciousness, not only defines the condition of the possibility of knowing others, but perhaps more pertinently, offers a key to achieving viable coex-istence in a pluralistic world.

It is, however, important to note the chronopolitical impediments to at-taining this utopian goal. While E. E. Evans-Pritchard famously observed that the Nuer pastoralists have no word in their language equivalent to our word 'time' as something that can be squandered or saved (Evans-Pritchard 1940: 102–103), Pierre Bourdieu explores the repercussions time as symbolic capital in the global north. Not only has time become a fetishized commod-ity; it is as unequally distributed as any other social good. As with the Nuer, for whom a sense of duration is tied to activities that 'take time,' we asso-ciate inactivity with tedium (when time weighs heavily on our hands and nothing is forthcoming). But being in control of time is synonymous with power, and therefore a means whereby those in power can put underlings in their place by making them wait (Bourdieu 2000: 228). By contrast with the impotence of the underling, the power holder makes hyperactivity a sign of vitality like the businessman in Antoine Saint-Exupery's *Little Prince* who is so busily engaged with "matters of consequence" (counting the stars) that he feels himself to be someone of much greater importance than a curious child or star-gazing dreamer.

The oedipal project

The search for well-being involves a constant shifting of self-states and an unflagging process of trial and error. But this search entails more than a desire for material improvement or adaptive advantage. It is informed by an

existential imperative to live life on one's own terms rather than on terms imposed from without. Though we are bound by the rules and roles visited upon us by being born in a particular place, at a particular time, and into a particular family, we also seek to reconfigure our lives within and sometimes without these circumscriptions and constraints, *particularly at times of crisis and transition.* There is a profound connection between the unsettling experiences of limitation that marked the early life of the migrants I worked with and their yearning to escape and begin a wholly different life for themselves elsewhere.

Norman O. Brown calls this the oedipal project (Brown 1985) – the existential imperative to discover and create one's own ground, objectifying oneself in a form other than the form first defined for one by parents, tradition, or circumstance. This process of becoming a person in one's own right is, however, characterized by a tension that is never fully resolved, for the desire to become autonomous is countermanded by a yearning to be dependent, the desire to do what one wants is no less urgent than the desire for limits, and the dream of a more fulfilling life for oneself comes up against one's sense of responsibility for and indebtedness to others. This was vividly shown in Ibrahim's remarks about the difficulty of respecting his parents' wishes when his heart was set on a life beyond the horizons of his natal village. Every independent step away from their world increased the burden of guilt, the feeling that he was betraying his father and mother, and that this betrayal would bring ill-fortune upon him. The same dilemma sometimes oppressed Roberto, who once confided, "Our stories are not success stories. They are overshadowed by guilt. Survivor guilt." And I was reminded of those passages in Primo Levi's *Drowned and the Saved* where he repudiates the idea of providence, and speaking of the blind luck that determines the difference between drowning and being saved, reminds us of the terrible burden every survivor bears, that he "might be alive in the place of another, at the expense of another," and "that he must for as long as he lives atone for this injustice" (Levi 1989: 82).

For more than 40 years, my fieldwork among the Kuranko of northeast Sierra Leone has provided me with culturally specific examples of how this dialectic between home and away plays out in everyday life. While one's social identity is determined patrilineally (and one's physiological essence stems solely from one's father's semen), one's destiny may depend as much upon one's mother and mother's brothers as on one's father and his brothers. This counterpoint between a space dominated by rules and a space of greater informality, affection, and playfulness finds expression in the contrast between one's father's place (*fa ware*) – the place where one was born and raised – and one's mother's place (*na ware*) – the home of one's mother's brothers.[4] This tension between the patriarchal law of the father and the loving care of the mother not only informs the intersubjective life of the family but also finds expression in images of the polis, since rulers, whether local or national, are expected to embody the power to administer the law

of the land as well as the power to protect and care for their subjects.[5] When Kuranko says that they are "in the hands of" a chief or power holder, the metaphor is double-edged, since they are at once subject to his whims, under his thumb, at his mercy, and in his debt.

Among the Kuranko, the dialectic of obligation and choice is evident in the interplay between village and bush, for while the village is often associated – particularly by the youth of today – with oppressive limitations – 'the bush' signifies an encompassing, dangerous, yet potentially liberating space in which social norms are placed in abeyance, social boundaries are transgressed, and miraculous transformations undergone. The bush is an imagined elsewhere, a transitional space, in which the socio-moral ties of the town can be loosened and a person experience his relations with others in transcendental terms, mediated by music, palm wine, money, friendship, spirit possession, laughter, love, magical mobility, and even the promise of eternity. But just as the achievement of independence carries the responsibility to provide for those who brought one into the world, any gains won in the wilderness must be shared with the community from which one originally set forth.

The corollary of the Oedipal project is that it is, paradoxically, by suffering the actions of others, one realizes one's own capacity for action. Only the dutiful and subservient son can hope to receive his father's blessings and eventually take his place. And in traditional initiation, it is the neophyte's unflinching response to the ordeals visited upon him by his elders that proves his right to be given the power to act in kind, as an autonomous subject. In this sense, migration and initiation are comparable, for in both cases, suffering is the price paid for the privilege of fully realizing one's own right to possess a life worth living. However, a crucial difference between the initiatory 'migration' from childhood to adulthood and the migration from one's natal village to the world beyond is that the former implies a cyclical repetition of ancestral time while the latter involves a one-way trajectory movement toward an uncertain future.

But does the meaning of life in a traditional society reside solely in respecting and repeating the protocols of the past – coalescing one's own time with the time of the ancestors? Contrary to the structural–functional orthodoxy promoted by my Cambridge teachers, my fieldwork among the Kuranko suggested that people constantly seek a compromise between lip service to the order of things and negotiating a personally viable relationship with that order. The symbolic contrast between town and bush captures this existential tension between assimilating one's life to the established nomos and achieving a sense of living life on one's own terms. To be subdued by circumstances one cannot change, acted upon yet powerless to act, may be bearable if there is the hope or promise of some reward for one's pains, a return on one's suffering. If, despite one's patience, no amelioration of one's situation is forthcoming, it is all too easy to believe that one's life has been unfairly taken away and that one is therefore owed a new lease of life in lieu

of the life one has lost. This is true of people whose social circumstances condemn them to passivity and degradation, their voices unheard, and their agency denied. It is even more painfully evident when historical events such as war, famine, poverty, dispossession, and epidemic illness strip people of the wherewithal of life, leaving them with little option but to search for well-being elsewhere.

In migrating, one effectively places one's life in parentheses. One suspends one's ties to one world in order to open oneself up to another – to move from routines imposed by tradition or traditional authorities, to a place where *one can do things in one's own time*.

A logic of sacrifice is entailed here, for without the sacrifice of what one has, one cannot hope to be filled with what one does not yet have, though this 'something missing' (Bloch and Adorno 1988) often remains an 'abstract utopia' of which one can only dream. It is this sense of hope as possibility or potentiality, this sense that more lies in store for us than less, that is central to human existence and defines the field of ethical struggle. Ethics explores the strategies, both real and imaginary, whereby we seek to augment our sense of life as forthcoming, promising and renewable. It is vital that our ethnographies of migrant lives do justice to the complex mix of motives and imperatives that influence the decision – which is not always a conscious decision at all – to migrate. One can agree with Ernst Bloch that 'something is missing' in a person's life, making him or her feel empty, dissatisfied, unfulfilled, and incomplete; but exactly *what* will satisfy this inchoate need is seldom clear to the person who experiences it. At once inchoate, amorphous and volatile, one's will-to-exist fastens or focuses opportunistically on various objects, some actually at hand, some absent, some wholly fantastic, in a search to objectify or consummate oneself in the world. But unlike reality testing, the imagination always goes beyond what the world actually is, or any person can actually be, variously craving more time, more space, more money, more love. When a migrant speaks of a quest for a better life, we cannot presume to know what this 'life' may be. My informants' narratives disclose the ever-changing variety of things that have been lost, or gone missing, or not yet been found, without which life is felt to be profoundly impaired – an absent parent, a village made uninhabitable by drought, a lack of money, mobility, or recognition – while at the same time suggesting that dreams are seldom realized. All this was vividly borne home to me one morning, as Roberto Franca and I talked about our childhood longings to go beyond the physical and social horizons that circumscribed our lives. "For as long as I can remember," Roberto said, "the world presented itself to me as a question."

One unusually clear morning in Mexico, when he was a small child, Roberto saw a volcano on the distant horizon. By the time he shared his vision with his family, the volcano could no longer be seen, and he was told that he must have seen something else or made a mistake. "What makes some of us so fascinated with what lies beyond us?" I asked. When Roberto described how his mother had always yearned for a better life, I realized that my own

yearnings were, in many ways, born of my own mother's thwarted dreams to receive an education, to travel, and to enlarge her horizons, and that the same continuity of a vision of elsewhere informed Emmanuel's story and were summed up in Ibrahim's comment, "From age 7, I wanted to go elsewhere. You feel it inside. You can't give words to it, but it's a strong feeling, to go to a big town, to move elsewhere." This view that the world as given is not enough, or is too confining, and its corollary – that one must choose another world for oneself, cultivating one's own garden rather than working on one's father's farm – entails a double bind that every migrant experiences in some measure yet speaks to us all, caught as we inevitably are between the circumstances that shape our lives and the lives we project and hope to create for ourselves.

Notes

1 This paper is different from the keynote address I delivered at the 2016 ASA conference in Durham, which was published in my book *The Varieties of Temporal Experience: Travels in Philosophical, Historical, and Ethnographic Time* (2018).
2 I am riffing here on Barbara Myerhoff's theme of 're-membering' as a strategic means whereby a person re-aggregates and reorders the self by summoning prior and prospective selves and collaborating with significant others in generating new forms of selfhood (Myerhoff 1982: 99–117). More recently, Michael White has used Myerhoff's work on re-membering in the context of narrative therapy, mediating a client's creative construction of alternative 'multi-voiced' modes of self-identity (White 2007: 136–139).
3 This kind of opportunistic switching between direct action and strategic inaction brings to mind Aristotle's distinction between 'active' and 'passive' agency (*Metaphysics* (Book V, Chapter 12)), the first referring to a subject's action on the world that changes it in some way, the second referring to a subject's being subject to the actions of others – suffering, receiving, being moved, or transformed by external forces. Hannah Arendt speaks of this contrast between being an actor and being acted upon as a difference between being a 'who' and a 'what' (Arendt 1958: 181–186).
4 A similar contrast may be drawn between the formality of relations within one's own generation and relations with grandparents with whom, as with the mother's brother, a playful or 'joking' relationship obtains.
5 George Lakoff argues that this same tension between patriarchal control and maternal care finds expression in American political ideologies. While liberals emphasize the responsibility of the state to care for its citizens, conservatives emphasize the state's responsibility to protect the country and its constitution (Lakoff 1996: 62–63).

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2 The tree and the net

Spatio-temporal narratives of human population genomics

Peter Wade

Introduction

In this chapter, I examine two major spatio-temporal narratives embedded within human population genomic science. I explore what these narratives say about the evolution and history of humanity as a whole, and what their political implications are. One major narrative is embedded in a theory of evolution which explains how human populations developed in specific – often continent-sized – environmental niches, shaped by the classic evolutionary mechanisms of natural and sexual selection, endogamic mating, genetic drift, founder effects, and population bottlenecks.[1] These processes are based on the concept of "population" as an entity that is located in a geographical niche and relatively isolated for long periods of time. The key metaphor here is the tree, formed of a parental trunk and multiple branches and twigs. This metaphor underlies the DNA ancestry testing that makes genetic links between individuals and "ancestral populations", often parsed as continental populations (Africans, Amerindians, Europeans, Asians), although smaller scales of resolution are given by some ancestry tests (e.g. specific regions or even ethnic groups within the continents). This kind of information is used in genomic medicine, forensic genomics, and recreational genomics.[2] A second narrative gives a greater role to long-term inter-regional movements, mixtures, and flows of people and genes, which relativize the concept of population, blur its boundaries, and make it much more evidently a contingent construct. The key metaphor here is the net, with multiple interconnections and circulations across space and time.

In what follows, I explore these different narratives or metaphors for describing evolution and human pre-history, looking at their temporal and spatial dimensions. I then discuss the implications and affordances of the narratives in terms of the claims that can be made about human unity and diversity. Finally, I look at the more directly political and policy-relevant – what Kirtsoglou and Simpson (this volume) would call chonocratic – dimensions of the human futures that derive from these claims about unity and diversity, taking as an example the problem of racial disparities in health outcomes, which some people believe genetics can help to resolve.

My account raises the question of the relations between the particular theories scientists use to address specific problems, the narratives, and metaphors that may underlie or overarch the theories – which may be deployed by the scientists themselves or inferred by cultural analysts – and the political implications of these narratives. Specific theories tend to hide that they deal with biocultural facts, which are "natural facts [that] have cultural information (values, ideologies, meanings) integrated into them, not layered on them" (Marks 2013: 247). In the overarching narratives and metaphors, this biocultural fusion is made more evident. If scientists themselves deploy such metaphors – as they sometimes do with the tree and the net – they may be conscious of their metaphorical character and do not take literally all their possible implications. They may well not have systematically thought through all these implications, instead used the metaphor as a convenient shorthand. This latter possibility is amplified when the metaphors are inferred by other commentators. Nevertheless, to the extent that the metaphor acts as an organizing frame for analysis, it will become reified and, as such, can have important effects. For example, socio-biological theories imply narratives of competitive individualism that underwrite the capitalist socio-economic order (Sahlins 2008); or again, some scientific ideas about human diversity – even when not explicitly racist or sexist – can legitimate hierarchies of race and gender (Fausto-Sterling 2000; Haraway 1989; Martin 1991; Wade 2002). However, talking in terms of scientific narratives as simple reflections or legitimations of dominant social orders is theoretically too crude. Instead, we need to see the narratives as being in a complex relationship of mutual constitution and co-production with social orders, such that "science" and "society" are both heterogeneous collections of elements in a shifting assemblage of relations and semiotic-material components (Jasanoff 2004; Latour 2005).

Evolutionary narratives: tree and net

Two key metaphors for talking about evolution are the "tree of life" and the "reticulated net" (also sometimes called the "braided stream"). These have rather different implications in terms of the role they give to spatial movement and stability and to the relative isolation of "populations" and exchanges between them, over the long reaches of evolutionary time.

The image of the tree is very common in depicting human evolution as well as the evolution of language and the history of families (Bouquet 1996; Doolittle 1999; Sommer 2015; Templeton 2005). Although the language of roots is closely associated with the idea of a tree, the visual depiction of the "tree of life" rarely shows the roots of the tree, only the trunk and its branches and twigs.[3] The idea of origins is thus always singular and change is by definition upwards and outwards, implying a certain teleology. The tree image is necessarily spatio-temporal: it represents the passage of time in spatialized way – a common tendency, according to philosopher

Elizabeth Grosz, when seeking to convey an idea as elusive as time, which is "almost impossible to *think* or conceptualize" despite the fact that "we *live* time continuously" (Grosz 2004: 6, 250).

The tree metaphor has been used for a very long time for genealogical purposes and, since the late nineteenth century, to represent human evolution. Despite some critiques in the 1930s, it became dominant during the twentieth century (Sommer 2015) and arguably remains so today, albeit in modified form. Its strongest version is found in the out-of-Africa theories of human evolution that became dominant in the 1990s.

The out-of-Africa tree

In the 1970s and 1980s, the dominant idea about human evolution was the so-called multiregionalist model, which held that *Homo sapiens* or "anatomically modern" man had evolved in each Old World continental region from local archaic *Homo* ancestors. This was a tree model because the trunk of the *Homo* genus was located in Africa, with branches into Europe and Asia, but it was displaced in the 1990s by a version known as the out-of-Africa recent replacement theory, which proposed that anatomically modern humans, had evolved in east Africa and had – relatively recently in terms of the evolutionary history of the *Homo* genus – migrated out of Africa and displaced existing archaic *Homo* species, without mixing with them or only to an insignificant extent. As in previous versions, the trunk of the tree was located in Africa, where it had already produced the *Homo sapiens* species which then migrated to all the major continental regions, where populations evolved in relative isolation from other continents, with the separate branches becoming differentiated genetically and morphologically.

A key plank in this theory was the analysis of mitochondrial DNA (mtDNA), a type of genetic material that is passed down the maternal line alone, more or less unchanged (i.e. without the recombination or "shuffling" that affects most DNA during sexual reproduction). Successive small mutations that accumulate in different lineages of mtDNA act as lineage signatures, which can be used to distinguish between maternal lineages; this makes it possible to trace population migrations across space (by mapping the geographical distribution of mutations) and time (in relative terms, by assuming that more widespread mutations are older; and in absolute terms, by calibration against a "molecular clock", which defines how often mutations typically occur). This kind of spatio-temporal analysis typically – indeed necessarily in the case of non-recombinant DNA – results in a phylogenetic tree, showing a common older trunk, with diverging branches and sub-branches, associated with geographically located populations (Cann, Stoneking and Wilson 1987).[4]

These trees are very common currency in population and evolutionary genetics, and they have a common spatio-temporal narrative underlying their structure. The evolutionary story of the out-of-Africa theory says that

continental-scale human diversity emerged at some notional time between the migrations out of Africa, dated about 85,000–100,000 years BP, which eventually led to all the world's regions being populated by about 15,000 years BP, and a threshold at which the continental populations started to mix more intensively. This threshold varies according to the region in question, but for, say, the Americas, it is not until about 1500 AD. In the intervening period, continental populations formed and became genetically differentiated by the classic evolutionary mechanisms of natural and sexual selection, endogamic mating shaped by geographic and cultural barriers, founder effects, and genetic drift. Some scientists argue that major population differentiation occurred after tight population bottlenecks occurred worldwide following the volcanic winter caused by the massive Toba eruption around 71,000 years BP (Ambrose 1998). In an account directed at the general reader, which is arguably somewhat simplified, Oppenheimer (2003: 113) says that the "general rule" is that, as the Old World and Antipodes became settled, there was "little if any further inter-regional gene flow" until about 15,000–25,000 years ago when humans spread across the Bering Straits and into the Americas, where they formed a further continental isolate.

This view creates an image of relatively pure continental populations, which then mixed in historical times. Migration is necessarily part of this model, as humans populated the continents, but either it is seen as having lulled for tens of thousands of years, during which time continental genetic and phenotypical differentiation occurred; or it is seen in terms of "replacement", as one human population displaced another, with little mixture taking place. This is the assumption underlying DNA ancestry testing of "admixed" populations, which estimate the proportional contribution of ancestral populations to the genetic profile of a given sample population.[5] "Admixture approaches … take as an assumption the reality of parental populations; that is, it is assumed that are, or were, such 'pure' human populations" (Weiss and Lambert 2014: 17). The temporal narrative invokes a tree-like structure in which the branches of the tree are continental populations, seen as more or less isolated; the narrative is underwritten by the sampling of specific reference or parental populations from particular locations, each of which represents a continental ancestry. For example, a sample of Yoruba people from Ibadan, Nigeria, is commonly used to represent "African ancestry" (Bolnick et al. 2007; International HapMap Consortium 2003). Some geneticists protest at the "selective de facto typological sampling and the assumption of statistically homogeneous source populations" involved in measurement of admixed ancestries (Weiss and Lambert 2014: 24). Another prominent scientist states:

> Yes, there are differences in genetic variation at the continental level and one may refer to them as races. But why are continents the arbiter? … If humans have had this single continuous journey disobeying

continental residence – and as evidence we have the continuous distri-
bution of genetic variation across the globe, not discrete boundaries like
political borders – where do we divide humanity and why?

(Chakravarti 2014: 9)

Such "typological sampling" techniques are part and parcel of a larger
debate about how to sample when measuring human genetic diversity.
Typically, samples are selected by named population (defined by criteria
of language, ethnicity, or geographical locality), whether quite specific
(Yoruba from Ibadan) or more general (Cambodians, French).[6] This inev-
itably creates a basic symmetry between social identity, locality, and ge-
netics, and presents "populations" as separate entities, despite geneticists'
simultaneous recognition that human genetic variation is mostly "clinal"
in form (i.e. specific genetic traits often follow gradient-like increases and
decreases in frequency across geographical distance, with no clear borders).
Also, samples taken for these kinds of studies usually include only people
whose grandparents were members of the population under study or were
born in the locality. The idea is to avoid the statistical "noise" created by re-
cent migrations: the technique selects people who are genealogically rooted
and thus works to "purify" the sample genetically. Overall, this creates what
Pálsson (2007: 179) describes as the "island model" of human biological var-
iation: the metaphor is spatial, but it entails a temporal narrative too, as the
"islands" were formed in an evolutionary process.

Underlying this island model is the very concept of population itself,
which, as philosopher Naomi Zack puts it, is "not epistemologically tidy":

There are no generally accepted answers to the following questions:
How many generations of isolation are necessary to form a population?
How large must a population be? What proportion of population mem-
bers must reproduce in a given generation for it to qualify as a breeding
unit? How much gene flow into or out of a population can take place
before the population is a different population?

(Zack 2002: 69)

Geneticists might respond that no "generally accepted answers" exist to
these questions, because it all depends on the context and on the problem
being addressed; they have also long agreed that a population can only be
defined in statistical terms. On the other hand

merely to offer a genetic description of a population in terms of frequen-
cies of various alleles [genetic variants], perhaps to make predictions
about future evolutionary changes or hypothesize about past evolution-
ary history, assumes the existence of an entity with discernible bounda-
ries and determinate parts.

(Gannett 2003: 998)

There is an underlying tension between the critical recognition (shared by many geneticists) that "population" is a conventional construct creating order from an indeterminate complex of processes and relationships and a tendency to reify that construct as a bounded entity.

The sampling strategy based on what Pálsson calls the island model is not uncontested among geneticists. Other approaches envisage a grid or net which would sample random individuals across geographical space, without prior assignment to a socially defined group (Martínez-Cruzado et al. 2005; Pálsson 2007: 180; Reardon 2005: 77; Sommer 2015: 132). As the prominent geneticist cited above has put it:

> Human evolution has always been studied with respect to such populations defined by language, geography, or cultural and physical features. Consider instead what we could decipher if we could sample a million humans (say), without regard to who they were, across a virtual grid across the world …These types of global surveys of diversity have been performed for other species and may provide the first objective description of ours, bereft of race and other labels.
>
> (Chakravarti 2014: 11)

Sommer notes that geneticist Luigi Cavalli-Sforza, who pioneered the construction of phylogenetic trees based on DNA, was aware of the problem in the 1970s: he "suggested that it [tree-building] might work only for populations that are geographically far apart, because otherwise 'instead of a "tree" one may have to estimate a "network"; such methods do not yet exist'" (Sommer 2015: 121, citing Cavalli-Sforza). Sommer concludes:

> discursively and visually foregrounding the treeness of human diversity constitutes a choice to focus on a particular kind of variation rather than another. It constitutes a choice for dichotomous visualization and narration of human evolutionary history along the lines of a root-and-branching structure.
>
> (2015: 138)

Reticulate evolution, nets, and rhizomes

An alternative to the tree model is a reticulated net model, which highlights long-standing movements and particularly mixtures and gene flows between regions and populations.[7] This metaphor was proposed as early as the 1930s by some theorists who criticised the tree model. Huxley and Haddon, in *We Europeans* (1935), a book challenging Nazi racial theories, said: "the conventional ancestral tree may have some advantages for representing the descent of animal types; it is wholly unsuitable and misleading for man" because in humans "the branches constantly meet and unite and produce new types of shoots" (Huxley and Haddon 1935: 266, cited in Sommer 2015: 113).

Sommer shows a map from Huxley and Haddon's book with multiple lines of migration and evolution criss-crossing a map of Europe and the Middle East. As another alternative to the tree, Sommer also reproduces an abstract reticular diagram representing "the pedigree of *Hominidae*" by the German physical anthropologist, Franz Weidenreich, in his book *Apes, Giants, and Man* (1946), which shows multiple exchanges between lineages over time. Not surprisingly, Weidenreich also rejected contemporary ideas about races as sub-species (Sommer 2015: 114). But Sommer argues that these early critiques of the tree model did not stick and that the tree image and narrative persisted and got stronger as genetics developed; she focusses her discussion on Cavalli-Sforza and his use of trees to represent human population histories, despite his parallel recognition of the essentially random and non-teleological dynamics of evolution, which sit ill at ease with the tree metaphor.

Later, during the 1990s, as the replacement out-of-Africa theory gained dominance, another small set of theorists placed much more emphasis on processes of movements and genetic exchange between archaic and modern populations and between modern regional populations.[8] Although by the 2000s no one was seriously disputing a crucial out-of-Africa migration of *Homo sapiens*, at about 100,000 years ago, which had spread across the globe, these theorists (rather misleadingly nicknamed multiregionalists, despite their divergence from the 1970s–1980s multiregionalist theories, referred to above) argued strongly that there had been a number of out-of-Africa migrations (Stringer 2014). Above all, they contended that there had been significant gene flow between older and more recent types of hominids and also between regional populations. These theorists argued that it was misleading to focus on the phylogenetic trees that were constructed by looking at very specific parts of non-recombinant DNA, such as mtDNA:

> If a species has extensive gene flow throughout all parts of its geographic range, the species would evolve as a single evolutionary lineage, with no intraspecific population-tree whatsoever. Instead, local populations in such a species would be genetically interrelated by a trellis or lattice-like structure, not distinct branches on a tree. Nevertheless, such a species would still have haplotype trees for all its DNA regions with no to little recombination.
>
> (Templeton 2005: 40)[9]

That is, a tree-like structure could accurately characterise spatio-temporal relationships for those specific parts of the DNA that underwent little or no recombination during hereditary transmission, while being far from accurate for the species as a whole.

This reticulated net approach was strengthened by recent discoveries of Neanderthal DNA in anatomically modern human fossils and in present-day humans, indicating mixture between different lineages of "archaic" and

"modern" humans. As one biological anthropologist, John Hawks, put it, "It's mixing all the way back": "Ancient DNA has begun to show the process of genetic exchange was not a minor player in our evolution. All human populations today evidence some mixture of ancient populations that existed well before the 'origin of modern humans'" (Hawks 2015). Hawks and others talk of a "braided stream", criss-crossed by intersecting rivulets and intersections, and of "an interwoven plexus of genetic lineages that branch out and fuse once again with the passage of time", in which "the terms 'archaic' and 'modern' [humans] lose all meaning" (Finlayson 2013).[10]

In this context, it is relevant that some people have been re-thinking evolution more generally in the light of biological phenomena such as polygenomic organisms, chimerism, lateral gene transfers, and hybrid species, which all fit poorly with a tree model and sit better with a network model: when looked at broadly, "the history of life cannot properly be represented as a tree" (Doolittle 1999). All humans are polygenomic organisms insofar as they host multiple microbial genomes in their bodies as well as their own DNA; indeed, the human body contains at least as many microbial cells as human cells (Campbell 2016).[11] These microbes can also affect the way human genes are expressed (Dupré 2015). Chimeras are a special case of polygenomic mosaics: they are individuals who carry two or more genetically distinct cell lines in different parts of their body, caused originally by the fusion of two zygotes (fertilized eggs) (Dupré 2015). Lateral gene transfer is a common process in which genetic variants are transferred horizontally between genealogically distinct lineages, giving rise to single organisms with genomes from multiple sources which are not phylogenetically related (Doolittle 1999). The anthropologist Stefan Helmreich, looking at microbes in deep-sea contexts and the biochemical commodities extracted from them, says they reveal that "The tree of life was always a net" and sees the advent of "a new, agenealogical, watery bare life" (Helmreich 2003: 352).

It is important to recognise that most of these examples relate to individual organisms or non-human species. The relationship of these phenomena to the evolution of human populations is a little distant: processes of gene exchange across the space between human social units or "populations", even if they follow network reticulations, are not the same as chimerism, lateral gene transfer, or polygenomic organisms. But the underlying conceptual tendencies are parallel because they highlight the role of complex trellis-like networks of biological interconnections between organisms and between populations, thus undermining a simple one-to-one correspondence between the individual physical organism and the underlying genotype, and, further, challenging the idea of a unity between the genome of the individual and that of the species (i.e. the idea that every individual of species has a characteristic species genome and only that genome); this, in turn, makes it harder than ever to think in terms of a simple correspondence between human social units and biological (genetic) units.

These processes relate to the concept of "reticulate evolution" as a way to adapt, rather than replace, phylogenetic tree-like models. Lateral gene transfer is one key process creating reticulation; another is hybridization between "species" to produce new fertile species, a process that goes against the conventional biological idea that most inter-specific hybrids are infertile, but which is commonly found among plants, fish, frogs, and many lineages of invertebrates (Arnold 2008). Some computational biologists add reticulation to phylogenetic trees to show genetic links between apparently separate branches, "relationships that cannot be represented by a dendrogram or a phylogenetic tree" (Legendre and Makarenkov 2002). Indeed, some people are re-imagining evolution in post-Darwinian terms as a "rhizome of life" (Mikulak 2007; Raoult 2010).

This contrasts markedly with tree metaphors that, by presenting populations as terminal points of trunk-and-branch structures, inexorably background the exchange of genes across space and "between populations;" indeed, the rhizome metaphor casts the concept of "population" in a less reified light. Trees have a scalar structure in which, at the smallest scale, all the twigs (local populations) belong only to one small branch (regional populations), and each small branch belongs only to one major branch (continental populations); thus, each local population belongs to one continent only. The tree metaphor underlies the common technique of using a single sample from a present-day Yoruba population to estimate the "African" genetic ancestry in an admixed New World population, inherited from Africans taken to the Americas centuries ago (Wade et al. 2014).[12] Reticular networks have a very different, flatter scalar structure, which envisages individual nodes with multiple connections, or even just a heterogeneous mass of connections, without nodes.

At the more general level of how we can know the world, Deleuze and Guattari famously distinguish, in *A Thousand Plateaus,* between arborescent and rhizomic modes of knowledge. Organizing knowledge in tree-like structures invokes origins and endpoints, connected by one-way genealogical ties in a predictable scalar hierarchy. Rhizomic ways of knowing, in contrast, involve multiplicity, non-linearity, and nomadic movements in spaces without a predictable scalar relationship. Thus, "the arboreal is associated with linearity, hierarchy, origins, racism, rigidity, and carnophallogocentrism, while the rhizome embodies flexibility, openness, movement, and potentiality" (Mikulak 2007). The kind of reticulate network approaches to evolution that I have been outlining chime well with this view of rhizomatic knowledge.

Unity and diversity in tree and net

The tree metaphor produces a certain image of "unity in diversity", a phrase often said to capture the subject matter of anthropology itself. In the tree image, unity is based on common roots or ancestry, at varying scales of temporal and spatial resolution, ordered in a nested hierarchy. Unity is a

product of original similarity, derived from evolution in a particular space (ultimately the east African savannah); this involves a form of original immobility, as *Homo sapiens* evolved in a specific niche. Correspondingly, diversity is figured as a product of "natural" branching processes, resulting from an initial movement across space (into continents), followed by evolution over time (adaptation, genetic drift, sexual selection, etc.) in a relatively stable and isolated location. In this picture, unity and diversity are constituted relationally, but the relation is zero-sum: more of one means less of the other. This leads to a perspectival issue: seen in one way, from the trunk upwards, it is possible to emphasize common humanity (genetically we are all "99.9% the same"); seen another way, from the twigs down, the differences can be highlighted (e.g. in terms of genetic variation in humans, at least ten million SNPs have been located; CNVs account for about 12% of the human genome; and we now know from epigenetics that environmental variation can cause the same DNA material to be expressed phenotypically in different ways in different people).[13]

Seen in one direction, we all share a common human nature (genetics, ontology), but have different physical manifestations (phenotypes and cultures); seen in another direction, we are of different natural types (phenotypically, culturally, genetically, ontologically). This perspectival effect is clearly subject to politicized readings, with genetics supporting both an anti-racist, "we are all the same" position, and a stance that highlights genetic difference and can produce a (disavowed) racialism that, in turn, is feared by many critics to authorize an idea of racial difference that provides grist to the mill of racism (Duster 2015; Roberts 2011).

The unity/diversity pairing characteristic of the tree image has temporal dimensions too. First, the image of diversity produced draws on samples taken from present-day populations, but in genetic ancestry testing, the diversity invoked is for a period pre-1500. Genetic ancestry testing uses present-day populations as proxies for pre-diaspora continental populations; and modern diasporic "admixed" populations are usually parsed in terms of the proportions they have of the "original" components (African, Amerindian, and European). This emphasizes genetic diversity and aligns it with familiar large-scale phenotypical and cultural differences (Duster 2011). Second, in the tree image, the further back one goes in time, the less diverse humans were; unity is thus calling on the deepest ancestral roots, located not just "under the skin", but in the far distant past. It is invisible and thus has less affective traction than the visible phenotypical and cultural differences associated with the branches of the tree ("we are all Afro-descendants" is a counter-intuitive proposition: it is technically true, but has little affective traction, because the term is generally used to designate "black" people).

Third, because in the tree image unity is rooted in the past, movement forward through time (and space) equals more diversity; thus, rhetorical claims that "we are all the same" actually contradict the temporal drive of the tree model towards difference. Post-1500 diaspora movements produce

connections between the twigs and branches of the tree structure, but this is predicated on their prior separation. This is the model of official multiculturalism: interaction occurs but between distinct entities, only related through distant past ancestry and common human origins. In short, when allied to the tree image, the slogan "unity in diversity" becomes oxymoronic as it is not easy to see how the two concepts of "unity" and "diversity" can be anything other than inherently opposed. In this view, unity is at species level; it is what makes anyone a human; common humanity is privileged as the significant and sovereign subject in the world. In contrast, diversity is defined in terms of boundaries, divisions, and the identification of difference: it is unity's subordinated "other".

The net metaphor offers different political affordances. Unity is derived not only from ancient evolutionary processes in Africa creating common ancestry, but also from evolutionary processes operating through long-established and, crucially, on-going exchanges and flows across space and time. The exchanges that produce unity simultaneously produce diversity because the interactions are not homogeneous over space and time and lead to more heterogeneity. Diversity is produced by *the same set of processes* that create unity, rather than emerging from a series of pendulum swings from stability (that produced sameness in Africa), to movement (manifested in the peopling of the world, which initiated diversity), to stability again (population adaptation to continental and sub-continental niches, producing sameness in each niche and consolidating diversity world-wide).

Temporally speaking, the reticulated net means that unity is not located only in the distant past, but as an on-going process; it means that post-1500 diasporic movements are not seen as a major rupture but rather as an intensification of processes already in place. This is the model of an alternative, more diasporic version of multiculturalism, in which interaction constitutes the relational entities that may sometimes be freeze-framed and reified as "cultures". Thus, unity and diversity are immanent in each other rather than being related in a zero-sum balance. They co-exist in such a way that one can have more (or less) unity and more (or less) diversity *at the same time*. More unity can be constituted through more intensive and pervasive exchanges, which can simultaneously lead to more diversity, as exchanges do not necessarily lead to homogeneity – indeed, they only do so under quite specific conditions (e.g. of monopoly capitalism); by the same token, less unity through fewer exchanges can lead to less diversity. Unity and diversity are not related as sovereign subject to dominated object but as processes in a relation of mutual constitution.

Genomic futures: deracialization and health for all

What are the practical implications of the different political affordances of the tree and net images? One example comes from the area of race and racial disparities in health. On the one hand, focussing on the trunk of the tree,

genomics has often been seen as helping to usher in a better future for humanity by hammering home the final scientific nail in the coffin of racism: "we are all the same". On the other hand, genomics has been seen to usher in a brighter future in which doctors will be able to combat common disorders by understanding their genetic basis and even offer personalized medicine based on individuals' genetic profiles. Crucially, however, it does this in part by using knowledge of how genetic variants vary according to continental biogeographical ancestry (BGA) (Bliss 2012): that is, it focusses now on the branches of the tree. This in itself supplies medically relevant information, but the implications of this mapping deserve attention. The tree model appears anti-racist, but it implies a temporality that reinforces continental differences, which conform to established lines of racialized difference; it also gives these differences a genetic and evolutionary basis. It is therefore deeply contradictory and ambivalent.

These contradictions emerge in approaches to racial health disparities, approaches that are by definition future-oriented, as they envisage a reduction in disparities over time. Most scientists and doctors – at least in the United States and UK – agree that racial categories should be used in health research and clinical practice as part of a social justice mission of racial inclusion: the idea is that it is necessary to recognize and measure difference in order to correct disparities that follow lines of racial difference understood as a social artefact (Bliss 2012; Epstein 2007; Smart et al. 2008). However, alongside this consensus on the ethical imperative of using racial categories in health research and clinics, there is an important gulf separating those who believe that genetic differences actually follow racial category differences in ways significant for addressing health and those who do not.

Some geneticists say that genetic difference has some correspondence with "racial" difference; that is, the differences popularly called racial have real genetic dimensions. The terminology used here is sometimes that of "continental BGA", in order to avoid the awkward language of race (Bliss 2012: Chapter 4; Burchard et al. 2003; Mountain and Risch 2004; Risch et al. 2002). If there are medically relevant genetic differences between populations glossed in terms of race – albeit some geneticists admit that common-sense racial categories may not be the best proxy for such differences (Reich 2018: 247–273) – it is naïve, so the argument goes, to deny such differences for the sake of a misguided political correctness. Thus, the focus is on the genetic differences corresponding to the branches of the tree (Fullwiley 2008). In practical terms, this means channeling funding for health research in that direction. There may still be an anti-racist and social justice agenda operating here in the promise that genomics can produce therapies tailored to specific racial categories and thus help solve health disparities – the heart drug, Bidil, targeted at African-American men, is one example (Kahn 2013). But the reintroduction of racism is also a possibility, as shown by recent genetic research in Mexico that focusses on indigenous genetic ancestry as a predisposing factor in the very high rates of diabetes and obesity that are affecting the national population (Saldaña-Tejeda and Wade 2018).

Other geneticists say that social categories of race and ethnicity are irrelevant for understanding the genetics of ill-health because there is no meaningful correspondence between these social categories and genetic variation (Bliss 2012: Chapter 4; Cooper, Kaufman and Ward 2003; Pena 2005). For these scientists, genetic factors may be important, but they cannot be adequately assessed using collective categories; instead individual genetic ancestry is important. This stance involves anti-racism as disavowal of the genetic reality of race. Health disparities between social groups are mainly due to social factors, although these may have important biological (including epigenetic) consequences, as life experiences in a given environment – for example, living in poverty, suffering racism – can shape the body in deep-set and durable ways (Kuzawa and Sweet 2009; Kuzawa and Thayer 2013). Environmental racism, racial inequality, and the experience of racism are all known to contribute strongly to racial health disparities (Gravlee 2013; Shostak and Moinester 2015: 201). From this perspective, the approach that locates a significant component of health disparities in racialized genetic difference diverts the attention of doctors and health policy-makers away from these vital social factors shaping health outcomes. The failure of medical genomics so far to produce significant or even any practical genetic therapies for common but complex disorders (diabetes, heart disease, cancer, etc.) has added grist to the mill of those who argue for greater attention to social factors (Richardson and Stevens 2015). However, the diversion of scientific attention away from such factors is already reflected in research funding, if not yet public health policy (Bliss 2015; Montoya 2011).

Those who think that race is not a useful tool for understanding the genetic basis of ill-health are cautious about continental-level genetic population difference, as represented by the branches of the tree of human life; their stance resonates with the long-term exchanges and interactions contained in the net image, which figure genetic variability as less geographically structured and more radically clinal. For them, no significant aspect of human health can be grasped by focussing on collective genetic differences of a continental population nature, which formed over long stretches of evolutionary time (differences commonly known as racial, whether or not the word "racial" is used). That is, such differences may be perceptible in the genetic data, but they explain nothing of importance, at least in relation to health. Genetic differences in general may be important, but they operate at an individual level because, in population terms, genetic exchanges over long periods have created a good deal of genetic continuity across geographic space. They emphasize social factors in creating health disparities (an aspect of diversity); implicitly they invoke the shallower time-frame of the net model, which affords an emphasis on social interventions. Health policies and research should target social factors, such as racial inequality and the neighbourhood effects produced by environmental racism and segregation. The deeper time-frame of the trunk-and-branch model is not relevant for understanding health and illness.

However, images of deep-time lineages can still have the power to colonize these shallower time-frame approaches. The increasingly influential science of epigenetics emphasizes the way the social and physical environment acts on the individual body to influence gene regulation and expression biochemically in ways that may be durable but not necessarily permanent. Durable changes to an individual's genetic material caused by epigenetic processes can be passed on through genetic inheritance. Richardson (2015) argues that a good deal of epigenetics focusses on the mother-foetus-child relation, as maternal experiences and behaviour especially during pregnancy can shape the foetus genetically (or rather shape the range of ways in which a foetus may develop); these changes then affect the way the female foetus develops into a reproducing adult. The end result is to produce a kind of genetic/epigenetic matriline. She shows how some geneticists talk about maternal "somatic capital", which can be transmitted in maternal line, and how this can lead to "metabolic ghettos" of poor health. This is an indication of how lineage and genealogical thinking (related to tree thinking), with their associated temporality (in which time is a cumulative fixing agent, working on spatially located populations), can seep back into models that seem to emphasize plasticity over time (Saldaña-Tejeda and Wade 2019).

Conclusion

Overall, the potential of the tree model to underwrite deep-rooted diversity and geneticize (racial) difference – despite its potential to highlight unity – should be borne in mind. Attention to the various spatio-temporal models underlying different approaches to understanding genetic variation helps us to be mindful of their political and ethical – and potentially chronocratic – implications. The tree and the net are metaphors underlying different theories about (human) evolution. Scientists may be self-conscious about the implications of these metaphors or they may not; if they are aware, they may use them anyway, perhaps as a useful shorthand.

There is also a very important sense in which scientists continuously try to improve their theories, and this changes the metaphors they use and their political implications. For example, while I have focussed on the tree and the net as substantially different metaphors, recent approaches see the expansion of *Homo sapiens* as having been shaped by serial founder effects, which occurred as small groups of humans migrated into new niches and expanded there. According to this theory, the series of founder effects have left a tree-like structure of nested genetic differentiation, detected as underlying signatures of ancient processes of genetic drift, which remain despite inter-regional gene flow. This model posits a tree metaphor but does not require an assumption of persistent relative isolation between regions or "branches" (Deshpande et al. 2009; Henn, Cavalli-Sforza and Feldman 2012). Nevertheless, the tree and net metaphors I have focussed on still operate in science – the tree image in particular has a good deal of traction outside the specialized realm of biological theory. So, it is necessary to be

attentive to the political and ethical implications of these metaphors and, in particular, the way the tree metaphor can underwrite racialized thinking, while seeming to dissolve it, and thus produce chronocratic effects.

This analysis of metaphors may seem distant from medical genomic research and further still from clinical practice and health policy. But it is important to trace the connections between different areas of the assemblage in which various domains of scientific research practice (evolutionary theory, medical genomics) are linked directly or indirectly with each other and with other realms of practice (clinical medicine, health policy-making, recreational genomics). It is important to see that debates about race, genetics, and health, or the meaning of DNA ancestry testing, are related to debates about human evolution and the peopling of the world through underlying metaphors, such as the tree of life or the rhizome of life, that provide particular narratives about humans in time and space.

Notes

1 Sexual selection is a form of natural selection that occurs when individuals of one sex preferentially choose members of the opposite sex, based on certain characteristics, which then become more frequent in the "breeding population" and more accentuated. Mating is endogamic when it happens more frequently within a breeding population, whether by cultural preference or geographic barriers. Genetic drift refers to the process by which certain individuals, by accident, leave fewer copies of their genes in the next generation than others; over time, this can lead to some genetic variants in a breeding population disappearing or becoming very scarce. Founder effects occur when a small number of individuals found a new colony or breeding population: their genetic variants will be common in successive generations. Population bottlenecks occur when a population is severely reduced, by accidental demographic forces (famine, disease), for at least one generation. This will reduce genetic variability and accentuate genetic drift and founder effects. All these effects depend on the notion of (breeding) population, which is not easy to delimit – see below for a discussion.

2 Data on ancestry are used in genomic medicine to help localize disease-related genetic variants; in forensic genomics, they are used to help predict the physical appearance of a suspect and to support claims to identity-related resources, such as compensation for damages (e.g. death of a relative), return of bodily remains, or lucrative membership in a Native American tribe; and in recreational genomics, they are deployed in narratives of identity and belonging which can satisfy or pique the curiosity of roots seekers.

3 See, for example, the image from Louis Leakey's 1934 book *Adam's Ancestors* reproduced at http://www.talkorigins.org/faqs/homs/leakeydiag.html; and the image of Old World language evolution by Minna Sundberg at http://www.ssss-comic.com/comic.php?page=196.

4 For examples, see the paper by Cann, Stoneking and Wilson (1987) and also https://courses.lumenlearning.com/wm-nmbiology1/chapter/reading-phylogenetic-trees-2/.

5 Strictly speaking, all humans are "admixed", but in genetics, the term usually refers to populations such as African-Americans and Latin Americans who have been formed by the recent mixture of populations previously assumed to have been more or less genetically isolated from each other.

6 See International HapMap Consortium (2003); and the Population Panel of the Human Genome Diversity Genotype Database of The Centre d'Etude du Polymorphisme Humain (CEPH) http://www.cephb.fr/hgdp/main.php.

7 For an example, see Templeton (2012), available online: http://dx.doi.org/10.1002/9780470015902.a0020795.pub2.

8 The same tension between accounts that emphasize replacement and ones that highlight mixture can be seen in debates about the pre-history of Vanuatu, in the Pacific. One theory proposed that original migrants who came from East Asia about 5,000 years ago had been replaced by more recent ones from Melanesia, with little mixture having taken place; a counter-theory held that these two populations had mixed together over a period of some 500 years (Bedford et al. 2018; Lewis-Kraus 2019). Both theories allowed for sweeping processes of migration, but saw the human interactions deriving from those processes in quite different ways.

9 A haplotype is a set of genetic variants that tend to be inherited together across generations; thus, a haplotype tree is a phylogenetic tree of the type I have already referred to.

10 For an image of a braided stream, see the photo of the Stikine River delta by Sam Beebe (Ecotrust), available online: https://www.flickr.com/photos/sbeebe/2851877268/in/photostream/.

11 Previous estimates gave the ratio of microbial to human cells as 10:1, a figure that is still widely repeated (American Society for Microbiology 2008; Dupré 2015).

12 Geneticists may be aware of the short-hand approximations underlying this technique, but they use it nevertheless, as do commercial DNA ancestry testing companies (Bolnick et al. 2007).

13 SNPs (single nucleotide polymorphisms) are single "letter" locations on the DNA sequence where a difference occurs between individuals in a species, with some regularity (usually more than 1% of the total population). CNVs (copy number variants) occur when the number of copies of a particular letter sequence varies from one individual to the next (Clancy 2008; Redon et al. 2006).

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3 The pulverous state

Chronocracy and affect in the politics of environmental risk in Italy

Mateusz Laszczkowski

The modern state, one might argue, is an effort to control and organize time. This is one salient aspect of what the Editors of this volume, in the Introduction, call 'chronocracy': governance through temporal regimes and rhythms. States streamline history to cement their legitimacy. They also project teleological narratives of the future, from economic development plans to broader, vaguer, utopian visions (Buck-Morss 2000). Most importantly, however, modern states are preoccupied with minutely ordering and organizing the present and near future. Following Foucault (1990, 2007), the modern state is a dense and extensive network of overlapping apparatuses of security. These are charged with the task of anticipation and prevention of risk – including risks generated by the very technologies deployed to enact the desired futures (Beck 1992). To be precise, risk exists as a virtuality – a 'could-be', a *possible* future, but one that is not inevitable. When risk becomes actualized – when the feared course of events actually takes place – it is no longer risk. It is catastrophe (Beck 2006: 332). The state must be able to – or, at least, persuade citizens that it is able to – forestall such actualization, to ensure the dreaded future never thickens to become a present. However, risk is – in part at least – a matter of perspective (Douglas and Wildavsky 1983). The definition of what constitutes risks – and who decides – is a power game (Beck 2006: 333). What counts as risks, its impacts, and who the affected subjects are are often objects of contention (e.g. Barry 2013).

In this chapter, I engage these issues through ethnographic focus on the politics of environmental risk in large-scale infrastructural projects. Specifically, I examine the case of carcinogenic materials such as asbestos released into the atmosphere during the construction of a tunnel in Val di Susa – a valley in the Italian Alps that stretches west from Turin towards the French border. The tunnel was cut into the forest-covered mountain slope at a site called La Maddalena, just outside the picturesque tiny town of Chiomonte. It was built from 2012 to 2017 by the Italo-French company LTF/TELT.[1] It was a seven-kilometre geological test tunnel, built in preparation for the planned construction of a much larger base tunnel for a projected new transalpine high-speed railway that would link Turin and Lyon.

The project was (and continues to be) fiercely opposed by a social movement known as No TAV (from the Italian acronym for 'high-speed train', *treno alta velocità*). The struggle has gone on for nearly three decades – since the project was first proposed around 1990 (Cavargna 2016) – making No TAV Europe's longest-standing, largest, and most renowned movement of resistance against locally destructive mega-infrastructure. In this chapter, I do not have space to explore the movement's history, composition, organization or the complexity of its arguments (see, however, Aime 2016; Caruso 2010; Chiroli 2017; Della Porta and Piazza 2008; Laszczkowski n.d.). In a nutshell, No TAV activists contend that the project is economically unviable, its enormous costs unlikely ever to be offset by future profits. They point out that the project would double an already existing Turin–Lyon railway. Built in the nineteenth century but recently modernized and perfectly up-to-date (Mercalli and Giunti 2015: 10), the existing railway is utilized to only a fraction of its capacity, while demand for passenger as well as freight traffic across the Alps has been steadily diminishing for decades, making the new project unnecessary (Rizzi 2015; Tartaglia 2015). The activists also highlight environmental threats the project creates, especially during construction (Mercalli and Giunti 2015; Rizzi and Tartaglia 2015). Moreover, the activists stress that the insistence with which all of Italy's consecutive governments since the early 1990s have pushed forward with the project despite widespread popular opposition and critical expert advice expresses a profound crisis of democracy (Pepino and Revelli 2012). Expanding from these concerns, they articulate a complex critique of contemporary capitalist 'development' and neoliberal governance (Armano, Pittavino and Sciortino 2013).

Through this chapter's much narrower focus on the controversies surrounding the potentially lethal impacts of aerial pollution during tunnel-building at La Maddalena, I highlight the chronocratic character of bio- and thanatopolitical governmentality. I analyse forms of power that rely on bureaucratic techniques and expert knowledge to displace health risks generated in the present into a remote, undefined, virtual future. I also describe the No TAV activists' efforts to subvert that chronocratic power. This leads me to highlight affect as a resource for counter-chronocratic resistance – responding to the Editors' call on the contributors to the present volume to add to 'counter-chronocratic academic labour' by conceptualizing diverse ways to oppose chronopolitical domination.

In the first part of the chapter, I draw on my conversations with activists and experts involved in the No TAV movement about the techniques that government institutions deployed to manage the risk of carcinogenic pollution. This perspective, while obviously partisan, is analytically productive, I reckon, as it helps cast light on contradictions and power relations that might otherwise remain unseen. My analysis reveals how techniques for 'making live and letting die' (Foucault 2003: 241) available to contemporary government rely on what Laura Bear (2016) calls techniques and epistemes

of time: forms of bureaucratic action and expert knowledge that serve to manipulate the temporal experience of others. Specifically, I argue that institutional ways of dealing with dangerous materials normalize risk through the use of statistics and legal regulations. Constructing risk as a statistical abstraction, institutions seek to render risk 'tolerable' through the double move of deferral and diffusion, relying on the long latency and statistical dispersion of pollution-induced cancer. In other words, the techniques and epistemes deployed by government institutions seek to displace risk across *space* as well as *time*.

The analysis of the government of risk offers insights on 'the state'. In an anthropological perspective informed by Foucault's (1990) concept of governmentality, 'the state' is not an entity endowed with unity, coherence, and agency. It is rather a volatile, contingent effect of – at the end of the day – only loosely coordinated discourses and techniques of governing human populations and material environments. Maintaining the image of the singular 'state', however, is crucial in sustaining the established order of power relations to the advantage of the dominant groups in society, such as political and financial elites (Mitchell 1999). 'The state' can be claimed to exist as a subject in social life only to the extent that 'its' power over time and space can be manifested through specific material processes and structures (e.g. Ferguson and Gupta 2002; Gupta 1995; Harvey 2005). In contemporary Italy, as elsewhere, 'the state' manifests itself through spectacular infrastructural projects (cf. Larkin 2013). The new Lyon–Turin railway, for instance, is presented by its promoters as a technology for moulding and controlling time-space: connecting Italy to 'Europe' and bringing French and Italian cities, in particular, closer together, reducing travel times (Bobbio and Dansero 2008: 9–24). The railway is also presented as evidence of 'the state's' capacity to control the future, promising profits to be earned in the 2070s and beyond (Rizzi 2015: 41).

Yet, operating in a world filled with unruly materials (Harvey and Knox 2012) like asbestos, building infrastructures for the future creates problems in the present. 'The state' claims to control these unruly materials through its various techniques and forms of expertise (Harvey and Knox 2015). But, as I discuss, a closer inspection of these techniques reveals ambivalent relations and contradictions among a multiplicity of actors where the image of a cohesive 'state' would otherwise loom. Following Penny Harvey's (2005) 'tangential approach' to the ethnography of the state – recognizing that 'the state' is a peculiar object that 'affords the ethnographer no tangible vantage point' (2005: 126) and therefore must be studied by way of some other, more concrete material 'traces' – I explore the uniquely unstable perspective on 'the state' afforded by the elusive materiality of airborne pollutants. What I am trying to get at in this chapter, then, is 'the state' not as an objectively describable positive reality, but rather 'the state' as it takes a variety of shapes from bureaucratic techniques and forms of expertise, and flickers in and out of virtuality in the midst of conversations about asbestos and cancer.

In the second part of the chapter, I turn to affectively charge the conversations between No TAV activists and police officers guarding the La Maddalena tunnel construction site.[2] I analyse how in the course of these conversations the activists evoked affects that transformed risk from a numerical abstraction into a compelling sense of threat to living bodies, viscerally registered in the here and now. 'The state's' claim to control risks was thus challenged, and its chronocratic power was subverted. The Editors' call to 'counter-chronocratic academic labour' draws on Bear's (2017) discussion of how contemporary forms of globalized domination (capitalist, colonial, and state) are underpinned with the conception of abstract, universal, 'empty' linear time. She urges anthropologists to help counter-chronocratic power by ethnographically amplifying other 'timescapes' more conducive to social and politico-economic justice. I suggest that a focus on affect may be helpful in articulating such subversive timescapes. Following Brian Massumi (1995), 'affect' refers to embodied 'intensities' that can momentarily bring a visceral prescience of remote possibilities into the immediate present. Affect abolishes the distance between what is and what could be – the actual and the virtual, to use Massumi's terms. Therefore, affect potentially challenges any political project of anticipating, controlling, or pre-empting the future. In particular, affect may destabilize the 'state's' claimed hold on temporality and risk.

Cancer and chronocracy

One March morning in 2014, Gabriella and Paolo – a couple of No TAV activists, both in their seventies – took me to a café run by another activist. They said they wanted me to see something. We sat around a small table by a window facing the street and ordered coffee. Ten minutes into the conversation, Paolo took several sheets of paper out from a folder. 'Look, these are the measurements made at the construction site', he said. 'Up to last September', added Gabriella. As we leaned over the papers, Paolo started to explain: 'These are PM-10 measurements … The law says they mustn't exceed 50 micrograms per cubic metre of air …'

At first, I was overwhelmed by the unfamiliar acronyms, technical terms, and long columns of numbers. Little by little, thanks to Gabriella and Paolo's patient explaining, I began to understand I was being presented with data from air-quality monitoring carried out at the tunnel construction site at La Maddalena. Following the prescriptions of the Interministerial Committee for Economic Programming (CIPE) that had approved the project, the general contractor (LTF) was obliged to regularly monitor the impact of construction works upon the environment. This included measuring the concentration of airborne pollutants at and around the construction site, including neighbouring towns within a radius of several kilometres. LTF had subcontracted this work to a specialist company. The Regional Agency for the Protection of the Environment (ARPA) was in charge of supervising

the general contractor's activities. However, contrary to legal regulations, the monitoring data had been withheld from the public. A team of expert-activists of the No TAV movement had recently unveiled the data and published them on the movement's website, with expert commentary (Spinta dal Bass 2014a). The data showed that between March and September 2013, the legally allowed daily concentration limit for so-called PM-10 particles (50 μg per cubic metre of air) had been exceeded on 88 out of the 189 days covered – while the law permitted the limit to be overreached for a maximum of 35 days per year. Moreover, the legally allowed maximum yearly average concentration was 40 μg/m^3, while in the period covered by the data the average value was more than 53 μg/m^3. On some days, the overshoots exceeded 300% of the norm. The No TAV movement had repeatedly highlighted gaps in the environmental protection measures at La Maddalena (e.g. Spinta dal Bass 2014c, 2015). Now there was evidence, and it was coming from the institutions in charge of the project themselves. Paolo and Gabriella were very agitated. 'Look at the numbers in red …' they almost shouted: 'This stuff kills! … It's not like they're just above the line … No! The numbers are *very* high! … These people are killing their own workers!'

In this section, I focus on the techniques applied by the biopolitical institutions of 'the state' to manage the health risks generated by aerial pollution from tunnel building. I intend to show these techniques' chronocratic character. The management of risk relies, I argue, on the statistical dispersal and long latency periods of pollution-induced cancers. Moreover, a look into the workings of environmental risk management in this case reveals collusions and contradictions among, as well as within, the institutional and corporate actors involved, behind the signifier 'state'.

PM stands for particulate matter. This is liquid or solid organic or inorganic material suspended in the atmosphere. Its sources can be natural or related to human activity – for instance, any process of combustion or grinding. Activists in my research commonly referred to particulate matter as 'fine dusts' or 'micro-dusts' (*polveri sottili*, *micro-polveri*). Different kinds of particulate matter are classed by average particle diameter. The largest particles, PM-10, have the diameter of 10 micrometres. These can be inhaled, while PM-2.5 enters lung alveoli, and the finest PM-0.1 particles can be replaced for oxygen in the alveoli and then carried by blood into capillaries and tissues throughout the body. Particulate matter causes cancer and a range of respiratory and cardiovascular diseases including infarct and stroke (WHO 2003). In addition, Paolo and Gabriella told me, it was feared that the dust released during tunnel-building might contain asbestos. Asbestos-bearing serpentinite rocks are common in the mountains surrounding Val di Susa (Compagnoni and Groppo 2006; Zucchetti, Cancelli, Chiocchia and Scavia 2011).[3] Asbestos forms randomly distributed veins, making it impossible to predict where exactly it will be found or in what quantity – until a vein is struck during excavation. Importantly, even a minor quantity of asbestos may cause deaths among the exposed population.

Asbestos minerals are characterized by an extreme tendency to fibrillate. As soon as a vein is exposed, fibrils are released into the atmosphere. A visible asbestos fibre is as thick as a human hair, but it is composed of a bundle of 2,000,000 fibrils that can only be detected with an electron microscope (Gee and Greenberg 2001: 56–57). Fibrils less than 3 micrometres in diameter and less than 200 micrometres in length can penetrate the alveoli and cause inflammation (Tomalino 2015: 127). A fibril that settles deep in lung tissue may lead to asbestosis or cancer (OSHA 2014).

The approach the biopolitical institutions of 'the state' take to the health risks posed by these airborne pollutants focusses, I argue, on their *normalization* by means of statistics and legal regulations. The logic of this approach hinges on the fact that pollution-induced cancer is highly aleatory – cancer cases are randomly dispersed across the population – and can remain latent for very long periods. Particulate matter is ubiquitous, and asbestos fibres are present inside human bodies. The mechanisms through which in some bodies these pathogens set off cancer remain unclear (Marco Tomalino, 2015, personal communication). It is known, however, that the probability grows in proportion to rising concentration of pathogenic particles in the air people breathe. Moreover, there is a prolonged period of latency between exposure and the time when any symptoms of disease appear. Some types of asbestos-induced cancer may remain latent for as long as 60 years (Mesothelioma Center 2016).

In their ethnography of road-building in Peru, Penny Harvey and Hannah Knox refer to numbers used in official descriptions of infrastructural projects as 'useful fictions' providing legitimacy (2015: 89). Numbers describing the projected infrastructure and its various 'impacts' create the ground for further actions, such as contractual agreements between the state, banks, and construction companies, Harvey and Knox show. Similarly, numbers referring to environmental norms allowed the Lyon–Turin rail project to move forward while normalizing some of the risks the project created. For instance, the Environmental Impact Assessment forming a part of the preliminary project of the railway explicitly states that the level of particulate matter emissions due to the construction works is likely to cause a 10% increase in cardiovascular and respiratory diseases (LTF 2010: 87). It remains unspecified to what population, area or time span this forecast refers. As an outraged environmental expert involved in the No TAV movement denounced during my research, the government's Environmental Impact Assessment committee evaluating the preliminary project had first declared this impact unacceptable, only to schizophrenically approve the project nonetheless.[4]

The key instruments applied in governing airborne pollutants are legally established concentration limits. These are numerical norms defining the maximum quantity of a given type of pollutant per volume of air that is deemed admissible. Since particulate matter, as well as asbestos fibres, is naturally present in the atmosphere, it would not be possible to entirely

eliminate it. In that sense, concentration limits are a reasonable legal measure to diminish health risks. However, as concerned expert-activists explained to me, the problem with this is that no level of concentration of carcinogenic pollutants in the air can be regarded as truly 'safe'. Legally established concentration norms obscure the fact that any increase in the concentration of these materials translates into a greater number of cancer cases in the exposed population over time. Moreover, norms may have the effect of concealing relative hikes in the concentration of pollutants, caused, for instance, by major civil engineering projects.

This can be illustrated by the monthly reports on air quality at the La Maddalena construction site that were published from 2014 onwards on the website of the Regional Agency for Environmental Protection (ARPA).[5] The data were structured into color-coded ranges. For any given type of pollutant over a given period, as long as its concentration stayed within the legally admissible limit (e.g. 50 μg/m^3 for PM-10), this was represented as a green stripe in the appropriate cell of the monthly table. Only in case of overshoots would yellow, red, and purple appear in those documents, corresponding to how high the given value exceeded the legal threshold. As Marco – a physician, local general practitioner, No TAV activist, and member of an expert advisory committee by the Unione Montana Val di Susa (an organization grouping the municipalities located in the valley) – explained to me, this form of presentation was very uninformative. The results were virtually always green. The problem was, Marco pointed out, that *any* increase in the concentration of particulate matter or asbestos in the air translates into greater risk and ultimately can cause a greater number of cancer cases. 'If you start low', Marco said,

> from five or ten [micrograms per cubic metre], and arrive at fifteen or twenty, you're still well within the legal limit. So you get your green mark. But in fact – you generate pathologies. Yet this system for representing the data tells you nothing about that.

In other words, while the application of the legal threshold maintained the impression that 'the state' kept the carcinogenic pollutants at bay, it effectively obscured potentially growing risk. As a risk-management technique, the legal thresholds and colour-coded tables relied on temporal displacement and statistical dispersion of risk: assuring citizens that the carcinogenic material was under control in the present, while obviating the lethal entelechy of cancer in unknowable future.[6]

Project promoters and ARPA joined forces in denying the fact that the legally allowed PM-10 concentration limit had been repeatedly and significantly exceeded. ARPA's director declared to press that all data regarding air quality at and around the construction site were 'below legal limits', except for what he called few and insignificant 'episodes' ('L'Arpa' 2014). The government's Extraordinary Commissioner for the Lyon–Turin railway – and,

simultaneously, head of the supposedly impartial Observatory for the project, established by the Prime Minister – Mario Virano, concurrently asserted:

> The data are extremely comforting with regard to all the environmental variables. This is so not because we have been lucky, but because… we are prepared to confront any situation by intervening in a timely manner. We did not bet on luck but on preparation.
>
> ('L'Arpa' 2014)

In other words, Virano claimed that a 'technology of preparedness' (Lakoff and Collier 2010) was in place and operated efficiently.

At the same time, however, a technical report by ARPA in December 2013 criticized LTF for failing to submit the results of PM-10 monitoring in due course and to upload the data on PM-10 to AriaWeb – an integrated air-quality monitoring system created by the Region of Piedmont and publicly accessible online (ARPA 2013: 5).[7] Similarly, in 2014 and 2015, ARPA pointed out failures in the implementation of the environmental monitoring plan by the general contractor, repeatedly denouncing delays and significant gaps in the data submitted to the Agency (e.g. ARPA 2015; Spinta dal Bass 2014c). As No TAV activists noted, sometimes, data of potentially crucial importance were missing from the records. For instance, data on subterranean water quality from two points located on the axis of the exploratory tunnel had been recorded consistently until late 2012, but as soon as the tunnel-boring commenced, the data were no longer reported (Spinta dal Bass 2014c).

These details challenge the notion of 'the state' as a coherent subject able – or even willing – to control risks in a transparent manner. No TAV activists were sceptical about ARPA's mission as 'the state's' supervisory institution. They saw the Agency's role more as that of rubber-stamping data passed on by LTF. Moreover, there were contradictions between ARPA's technical documents and the public declarations of the Agency's director, signalling a discrepancy between the technical expertise of ARPA's staff and political demands on their work from individuals in positions of superior power.[8] As my expert informant Marco observed:

> What we are dealing with is a case of collusion between the controller and the controlled…. If ARPA was truly independent, we would be better protected. Alas, ARPA… is under strict political control by the Region, so… Everyone can draw their conclusions!

What Marco implied was that the regional government of Piedmont, which staunchly supported the Lyon–Turin rail project, apparently exerted pressure on ARPA not to present findings that might delay construction works or perhaps even put the entire project in question. 'For goodness' sake',

Marco added, 'they [ARPA staff] are professionals and they do their jobs! But at the end of the day it's up to the politicians to decide what to do with the findings'.

The government's partisan involvement in favour of the Lyon–Turin rail project is not simply an expression of 'the will of the state'. The boundaries between 'state' and 'non-state', public policy and private interest are particularly blurred here (Gupta 1995). The webs of interest linking political parties, particular politicians, and potent corporate stakeholders in the Lyon–Turin project have been well-documented (see e.g. Cedolin 2006; Cicconi 2004, 2011; Imposimato, Pisauro and Provvisionato 1999; Junius 2015). In the No TAV activists' view, the chronocratic politics of obviating health risks, drawing on their temporal latency and statistical dispersion, served to protect these interests. Let us now look at what happened to 'the state' and its chronopolitics when activists visited the La Maddalena construction site to talk to 'the state's' representatives about pollution and health.

The pulverous state

From 2011, Gabriella and Paolo visited the La Maddalena construction site every day. They would drive nearly 40 kilometres from Villar Dora, where they live, to Giaglione, where they would leave the car and walk the remaining 2 kilometres along a forest trail to the site. 'The state' had powerfully asserted its presence at La Maddalena. At the time of my fieldwork (2014–2015), the site was a dusty grey pit wedged into the steep green forest-covered mountain slope. It was heavily guarded. Its 3-metre-tall triple perimeter fence had massive concrete slabs at the base – covered with graffiti left by protesters – and was crowned with razor wire. Behind the fence, soldiers in camouflage carrying submachine rifles strolled. There were police and army garrisons stationed on site, and armoured vehicles could be seen.

Gabriella and Paolo – on their own or accompanied by others – would sit in a small picnic area on an adjacent unfenced plot of forest land, collectively owned by over a thousand No TAV activists. From there, they would carefully observe the progress of the works, keen to take note of anything that looked like a possible infringement of environmental, sanitary or work safety regulations. They were particularly upset about the nebulas of dust that wind would sometimes raise from near the mouth of the tunnel or above the pewter heaps of crushed rock deposited nearby. The pictures Gabriella took of these clouds would later be used to illustrate the data analyses published on the movement's websites. The activists also tried talking to the workers and police.

The first time when Gabriella and Paolo took me along to La Maddalena, not long after the café conversation described above, we came close to the fence to look at the various construction materials, tunnel elements, scaffoldings, pipes, transmission belts, drilling machines, internal railway tracks, and so forth. Very soon, we were approached by a woman in plain

clothes and two policemen in dark blue uniforms. They stayed on the other side of the fence. I understood the woman had to be a DIGOS officer – member of the General Investigations and Special Operations Division, a branch of the Italian police used for politically sensitive operations. Tall, thin, fit, fiftyish, she had curly blond hair, was dressed in brown and wore mirror shades, as did the two male officers. She stepped close to the fence, while her two sidekicks remained a step behind. She demanded to know who we were. Instead of an answer, Paolo opened his backpack and pulled out his printouts of the air-quality monitoring data – a handful of papers with graphs, tables and long columns of numbers. 'We're here to protect you' he said to the police. 'Do you even have a clue what risks you take by working here?' He held the papers up to the police-woman's eyes and pointed his finger at the numbers. In a calm but strong voice, Paolo explained the health risks the 'dust' incurred for anyone staying in the area. 'You don't know what they are exposing you to! You don't know at what risks they put you!' he exclaimed. 'Why are you here?' Paolo asked the officers. The DIGOS woman seemed perplexed – presumably, she had expected she would be the one asking questions here. 'I'm asking this question to lead you to a point', Paolo insisted politely. 'I am here to …' – the officer did not quite know what to say. 'You are here because they're wrong, they can make no rational argument, and therefore they use force!' stated Paolo triumphantly. 'That's why they put these up [nodding at the barbed-wire fence] and put you here to guard the site.' The 'they' evoked an unspecified host of actors, powerful, unscrupulous, and obscure, but actors who could orchestrate public works and command the police.

Paolo continued his tirade, speaking about asbestos potentially present in the rocks and being spread with the dusts, and how these pollutants caused cancer. When he finally paused for breath, the DIGOS officer sensed her chance. 'So you are No TAV?' she asked. 'So, tell me, what's so special about this place, why all this protest?' 'Because this project is killing the valley' Paolo replied dramatically, 'it is killing us!' 'It is against the Italian constitution which guarantees the protection of health!' he pointed out. 'Everyone in the valley is getting sick from the dust. Our children are getting sick and dying!' Gabriella joined in and invoked the horrible image of children suffering from leukaemia, cancer, and other diseases as a direct result of pollution caused by the tunnel-drilling. 'But it's killing you too', she told the three officers matter-of-factly, pointing at the barracks inside the fence, where the police and army personnel stayed: 'That's a gas chamber!'

The police woman took her sunglasses off, confounded. 'We're representing the state …' one of her male colleagues offered, hesitatingly. Gabriella interrupted him sharply: 'You're representing certain powers …. You say you represent "the state". But that "state" is killing you too, right now!' She and Paolo went on to enumerate the various diseases caused by PM-10 and asbestos. Gabriella emphasized the pollution had a terrible impact on women's health and was particularly dangerous in pregnancy. 'I have

already given birth to my children …' Gabriella started, and the police woman interjected: 'So have I, *signora*', suggesting a mutual comprehension between two women and mothers. But Gabriella smiled:

> So have you. So we have both given birth and I am past my fertile age anyway – but what about all those young women who are in their fertile age and are yet to become mothers? What about the young men?

Meanwhile, one of the two male policemen, who had initially stood silently a step behind with their arms crossed in front of their chests and solid indifference on their faces, protected by their sunglasses, began fidgeting and tinkering with his mobile phone. The other took his shades off and leaned slightly to the fore. He was now listening to Gabriella attentively, though he'd probably rather no one had noticed. Gabriella continued: 'These dusts affect all parts of the body – including the testicles – and cause hereditary diseases. What about young men like him?' she asked, pointing at the young policeman, 'What about him and his children?' By this point, the female officer was looking for ways to retreat from the conversation, and soon it was over.

During the months that followed, I witnessed many similar scenes in which No TAV activists tried talking to the police at La Maddalena. Usually, Gabriella and Paolo did most of the talking, while others (if present on the given day) hovered in the background. I focus on this particular conversation here because of the amount of detail – timbre of voice, body language, and facial expression – I was able to record that day. Much of what was significant about the scene, I argue, took place at this implicit level of slight bodily gestures, gaze, and almost imperceptible changes of tone. As Annabel Pinker and Penny Harvey (2017: 18) argue, this is the level where it become possible to ethnographically register affects – 'those intensities that pass body to body … that circulate about, between, and sometimes stick to bodies' (Seigworth and Gregg 2010: 1) and can shape human perceptions of the world more compellingly than explicit discourse, and stimulate or suspend people's actions (see also Stewart 2007). Perhaps too often unacknowledged, Pinker and Harvey suggest (2017: 18), the task of tracking such implicit dimensions of social interaction has always lain at the heart of ethnography.

The three police officers had entered the scene confident of their roles as representatives of 'the state'. 'The state' had orchestrated this ongoing construction project, guided by a rationality that was not to be called into question. But the terms of the relationship between the officers, the elderly protesters, and that implied presence – 'the state' – rapidly shifted. 'We're here to protect you', said the activists, reversing the quasi-axiomatic relationship between police and citizens. Moreover, they wielded scientific data, this powerful token of rationality and technological prowess on which the modern state's legitimacy so much depends. The data had been retrieved from 'the state', although it had been reluctant to release them. When its duplicity was revealed, the integrity of 'the state' was suddenly challenged.

The unitary 'state' was replaced by an obscure array of 'certain powers' – a 'they' – who cynically manipulated not only scientific knowledge but also their human subordinates, exposing them to the risk of disease and death.

What I think was crucial to the exchange, however, occurred not – or not only – on the level of normative discourse about citizenship and 'the state' or scientific discourse about pollution, but on the level of bodily affect. Gabriella and Paolo sought to disaggregate the three officers from 'the state' by addressing them as vulnerable bodies. The slight gesture when the officers took off their glasses seemed to signal a fleeting success of that move. No longer shielded by their mirror shades, the officers were open to sympathy, 'co-feeling' – they were open to affect. Affect collapsed the distance between the virtuality and actuality of disease. Gabriella and Paolo's words aimed to evoke a visceral sense of threat. By this, they challenged the chronocratic displacement of risk. Cancer was no longer an abstract statistical probability but a direct threat to the officers' and activists' bodies alike. The state's claimed control over time itself burst. In a sudden temporal contraction that could be felt as a shiver on the skin or a cramp in the stomach – I like, in fact, to imagine the sting the male officer likely felt upon Gabriella's mention of his testicles – the feared future that 'the state' had claimed to guarantee would never come crashed into the immediate present.

Of course, 'the state' did not quite disappear. Momentarily deprived of its presumed coherence and its legitimacy based on the claimed power to control time and matter through expert knowledge and technique, it was nonetheless still there. The three officers – the three vulnerable, nervous bodies – were at the same time agents of state violence (cf. Taussig 1992). Their presence, the presence of the entire police station inside the construction site, the uniforms of the two male officers, and especially the plain clothes of the DIGOS woman, implied a different kind of threat – which, perhaps, I sensed more strongly than Gabriella and Paolo, with the courage they had built up through many years of defying dominant powers. Nebulous like the deadly dust, the pulverous 'state' filled space, engulfed us as we talked and permeated the surfaces of our bodies. Like asbestos, it was already there, settled deep within the viscera of our selves.

Conclusion: affect and (counter-)chronocracy

Uli Linke (2006) argues that in addition to theorizing the state in terms of structural effects of government practices or discursive construction – a strategy so productively pursued by Foucauldian anthropologists (e.g. Ferguson and Gupta 2002; Gupta 1995) – we need also to recognize the embodied forms in which 'the state' acquires reality in social life. 'Political worlds have a visual, tactile, sensory and emotional dimension', she writes, 'Modern governmentalities act on and inhabit the body' (Linke 2006: 206). What I have offered above resonates with that statement. We have watched 'the state' variously consolidate and disaggregate through civil engineering

and the management of environmental risk, and we have seen it materialize and dematerialize in multiple ways at once when the abstractions on which its authority rested were punctured by the evocation of the threat that pollution might pose for living, sensing bodies.

This perspective complicates our understanding of the relationship between 'the state', risk, and time. Critical social scholars have distinguished several kinds of approaches available to modern state institutions for dealing with risk. As French philosopher and historian François Ewald (2002) describes, institutions may choose to invest in prevention through precaution. In such an approach, emphasis is placed on trying to prevent the dangerous event from occurring, and the focus is not necessarily on what is statistically probable but on what is most feared. An alternative approach starts with the assumption that catastrophes will happen, despite all precautions. What anthropologists Andrew Lakoff and Stephen J. Collier (2010) call the 'political technologies of preparedness' are then deployed to identify and minimize areas of vulnerability. Both of these analytic perspectives share indebtedness to Foucault's work on governmentality. They rest on two interrelated presuppositions: that modern state apparatuses are essentially coherent and that state power relies on knowledge and aims for transparency and legibility (cf. Scott 1998).

None of these assumptions is necessarily correct. I would not only argue – following Ulrich Beck (2006) – that contemporary state institutions responsible for managing technological and environmental risks must operate under conditions of extreme uncertainty, but also that 'the state's' claim to control risk in some cases depends on a degree of obscurity. As we have seen, for instance, the impossibility of knowing just when and where cancer will strike as a result of environmental pollution is what enables 'the state' to advance risk-generating civil engineering projects, framing the risk of disease as statistical abstraction and remote virtuality. As my analysis suggests, somewhere between or besides the two paradigms of prevention and preparedness, there is a space of official practice where risks are normalized through the use of statistically derived legal norms.

This is a fundamentally chronocratic approach, I argue. That is, in the sense proposed by this volume's Editors in the Introduction – a strategy of structural violence (Farmer 1996) perpetrated through a denial of coevalness (Fabian 1983). The powerful actors – I no longer wish to call them 'state' – in charge of large-scale engineering projects and managing the risks generated by those projects rest their claim to legitimacy on selective visions of the future (such as the hypothetical profits the railway would bring in 50 years' time). By the same token, they pre-emptively refuse to recognize the future suffering of cancer victims as a result of present-day building work. They refuse to recognize the damage done *now* to as yet unknown bodies – as if those bodies belonged to a different timeline, irrelevant to the statistically described timescape where everything is fine as long as pollution remains 'within admissible limits'.

But the living sensuous body that Linke invokes resists this sort of anaesthetizing abstraction. The collective endeavour of the present volume is – among other things – a search for conceptual resources for anti-chronocratic resistance. Affect, I suggest, is potentially one such resource. The affects of the vulnerable body equip it with the ability to bridge the remove between virtuality and actualization (Massumi 1995). The visceral prescience of the virtual defies the hegemony of timelines imposed by expert epistemes and bureaucratic power.

The chronocratic obviation of the present that I have discussed has much broader resonances that far exceed the scope of this chapter but strike me as worth pointing out by way of conclusion. Namely, the analysis is a reminder that in the 'modern' industrial 'risk society' (Beck 1992), dystopia is always already here with us – not somewhere down the line – for it is the techniques and epistemes of our societal *modus vivendi* that produce it. At this time of anthropogenic overheating of the Earth, it is vital to realize that planetary catastrophe is a present condition, not a virtual scenario. Statistically derived models calculating the probability of abstracted impacts in 30, 50, or 100 years are useful for realizing the scale of possible – and increasingly actual – destruction. In themselves, however, they may be counterproductive if they serve to sanitize death itself – the premature deaths of individuals and the extinction of entire ecosystems – by capturing it in neat colour-coded tables instead of taking concrete action *now*, urgently.

Acknowledgements

Notes

1 LTF (Lyon Turin Ferroviaire) was founded in 2001. In 2015, the company was transformed into TELT (Tunnel Euralpin Lyon Turin). The French and Italian state railway companies each own 50% of shares in LTF/TELT.

2 I have used parts of the same ethnographic material to make a related but different argument elsewhere – see Laszczkowski 2019.

3 Large quantities of asbestos are unlikely to be found at La Maddalena. However, the area near Susa, where the projected railway tunnel is planned to emerge from inside the Rocciamelone massif, is known to contain very large quantities of asbestos-bearing rock (Spinta dal Bass 2015).

4 Environmental Impact Assessment (EIA) was introduced by the European Community in the mid-1980s and has since then spread to become an obligatory procedure in infrastructural development in most countries around the world. Its aim is to anticipate the impacts of a project upon the environment and establish whether these impacts can cause irreversible harm or introduce undesirable changes to natural processes. The analysis is also meant to eliminate those impacts that can be avoided, minimize those that cannot, and enable compensation (EEC 1985). However, ethnographic research in diverse locations (Georgia, Peru) has shown how EIA circumscribes the very definition of risk and impact (Barry 2013; Li 2009). In effect, what is identified as risk often depends on the technical solutions the companies and state institutions in charge of a project are able and willing to offer. Other risks – those more visible from other perspectives, especially from the point of view of local inhabitants and non-co-opted environmental groups – are obscured. The definition of affected publics in EIA is likewise frequently contested (Barry 2013). As the just cited point from the EIA for the Lyon–Turin railway indicates, this definition may sometimes be left strategically vague.

5 See http://www.arpa.piemonte.gov.it/approfondimenti/grandi-opere/torino-lione/nltl/dati-ltf-1/dati-ltf (accessed 23 January 2017).

6 The interpretation of the available data was further complicated by the lack of reliable baseline data on air quality before the start of the works. Although a total of 63 days of PM-10 measurements had been conducted in 2012, this was done while works were already in progress. The actual tunnel-boring would not begin until December that year, but preparatory works, such as the removal of trees and vegetation, earthworks, ground levelling, and installation of construction-site infrastructure, had begun in summer 2011. In addition, LTF (2013: 3) reported that it had not been possible to carry out measurements at the construction site itself because of 'disturbances to public order' – an allusion to the frequent protests by the No TAV movement. In effect, since no genuine *ante operam* measurements had been carried out, subsequent changes in the concentration of PM-10 could not be adequately assessed. Still, even comparison to LTF's data from 2012 makes evident that by 2013, the average concentration of PM-10 in the air at La Maddalena had increased from 39 to 53 µg/m^3 (Spinta dal Bass 2014b). Promoters of the project claimed that this had been caused by factors unrelated to the progress of the works, such as traffic on the freeway flyover directly above the construction site (Tanzilli 2014). Although other available data practically excluded the freeway factor (Spinta dal Bass 2014b), it was not possible to prove quite beyond any doubt that the hikes in PM-10 had been caused specifically by the building work. This margin of uncertainty, feeble as it was, was created by the flaws in *ante operam* data collection. As my expert informant Marco commented, 'If they don't do the controls well … no one will be able to say they did anything wrong'.

7 See http://www.regione.piemonte.it/ambiente/aria/rilev/ariaday/ariaweb-new/ (accessed 26 January 2018).

8 *Pace* those scholars who highlight how in contemporary industrial society the technical is always already political (e.g. Barry 2001).

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4 Contextualising expectations
Reconfiguring progressive politics in the post-industrial era

Felix Ringel

Introduction

Like the rest of this volume, this paper emerges out of the 2016 annual meeting of the Association of Social Anthropologists of the United Kingdom and the Commonwealth (ASA). The conference took place just ten days after the UK referendum on EU membership, and most of its delegates were still in shock: the UK had voted for 'Brexit', a British exit from the EU. Everyone was talking about the result: at the drinks reception, during the breaks, whilst roaming the corridors. Laura Bear delivered a fiery Firth Lecture (published as Bear 2017), in which she demanded that anthropologists take a more critical political-economic stance. Many presenters prefixed their talks with more or less detailed allusions to Brexit's potentially dire consequences. The 2016 meeting of the American Anthropological Association (AAA), I presume, must have featured similar allusions. As a result of the election of Trump and the vote for Brexit, delegates at both conferences had witnessed highly politicised moments in time. Arguably, both of these events were major turning points in recent political history. They had caught the profession "off-guard" (Bessire and Bond 2017) and, in the eyes of many colleagues, cemented a crisis of liberalism (see e.g. Boyer 2016; Dzenovska and Kurtović 2018). At the ASA meeting, there was a tangible sense of urgency, despair, and hopelessness: a feeling that we had lost our grip on the world we claim to represent.

At the ASA meeting, discussions of the referendum result were dominated by two notions. First, anthropologists expressed surprise. Their own hopes and expectations had been unexpectedly disappointed. Second, many asked how the discipline should 'politically' respond to the situation. Both notions demand further scrutiny. In what follows, I conceive the notion of 'surprise' as marking a moment in which prior expectations of the future have been shattered (see Ringel 2018a). Surprise demands a readjustment of expectations and a reconfigured striving for the future which is often articulated through political demands. The urge to have a say on the future, to enact one's agency on it, in turn, is what politics is all about: the will and power to shape and realise collective futures.

The anxieties about Brexit at the ASA conference point to a profound disjuncture between past and present expectations. At such points politics becomes a demand of the day. It shifts from a passive to an active mode. Examination of this shift in expectations and towards new politics throws light on the way that futures are glimpsed and enacted at moments of surprise. I explore this relationship between politics and expectations by comparing the discipline's immediate response to Brexit in the UK with episodes from long-term fieldwork in Germany's poorest city, the North German city of Bremerhaven. More than a decade ago, my informants in Bremerhaven, too, experienced a sense of surprise, of being shifted 'out of time'. They felt excluded from the post-industrial present by the 'chronocracy' of contemporary forms of global capitalism, whose flows of finances, investments, people and commodities seemed to – at large – pass the city by. Their response was a readjustment of expectations. For that, they embraced and applied one particular idea of the future, urban sustainability, in their urban redevelopment efforts. This resulted in the establishment of a more cautious, attentive, and committed relation to the future. At first sight, this relation seems apolitical: most of my informants do not argue for radical change, but develop expectations of a better future that looks like more of the same. They aspire to maintenance and stability in striving for a sustainable future. However, as I argue throughout this paper, it is precisely the temporal logic of sustainability that the post-industrial era requires – and that anthropologists should consider to adopt, too.

As Michael Herzfeld has shown (1987), a comparison between our discipline's and our informants' politics and expectations serves further reflection, including upon their differences. Both sets of expectations, for example, are embedded in particular historical contexts: post-industrial urban revitalization in Bremerhaven on one hand; and post-truth science in a populist, neo-nationalist Global North on the other. Both sets of expectations exhibit their own epistemic and political characteristics. Arguably, the current anthropological *zeitgeist* is one of progressive change, as are its politics. In contrast, the expectations I scrutinize in Bremerhaven are not directed at change but at sustainability, maintenance, and repair. However, in the context of this post-industrial city, I argue that we should understand these efforts towards sustainability as radical political interventions. Initially, these sets of practices might sound conservative, the very opposite of progressive change. However, depending on the expectations we might discover at their core, these practices permit alternative evaluations. Some people might aspire to, or even realise, a somewhat *alternative* future that looks surprisingly like the present. Anthropologists, in turn, might also demand more of the same – academic freedom, for example, or humane working conditions – rather than follow each new university reform, even if unwillingly. By reading these actual and potential expectations alongside one another, I aim to contribute to our discipline's understanding of contemporary temporal politics, or what Kirtsoglou and Simpson in the

introduction to this volume describe as "chronopolitics" (cf. also Kaneff 2003). To do so, I investigate the changing, adaptive and conflicting ways my informants contextualise their present and adjust their expectations. I will keep two simple ethnographic questions in mind: Whose times? And whose politics?

The answers to these questions invite an empirical comparison between the chronopolitics operating in my fieldsite and those advanced in the discipline of anthropology. It involves a scrutiny of anthropologists' own expectations, political and otherwise, as exemplified, if only in passing, in the opening vignette about the ASA conference as a moment in our discipline's history that prompted the question of what anthropology should do professionally and politically in times of radical change. The response could include a radical redirection of our discipline, or even more of what we already think our profession is all about. Incidentally, this was also what the ASA conference organisers had already asked delegates to do: to elaborate on the time of anthropology by considering its footprints and futures, its continuities, and potential pathways into the future.

As my informants from Bremerhaven could attest, given their efforts to stabilize the fate of their radically changing hometown, doing something different does not guarantee a brighter future. In certain circumstances, the work of maintenance and continuity – a stubborn clinging to and investment in old forms – is the more radical political act. As the reader will see, there is a second lesson to be learned from my informants' recent experiences. Even when the new is introduced – whether it be urban sustainability in Bremerhaven; or a wholesale politicisation of anthropology – it must still be maintained in the future. In times when it is hard to determine what is progressive and what is conservative, this distinction needs ever more inspection.[1] Must challenging the new hegemony spring from a radically different idea of the future? Do not, in both cases, at least some aspects of the past, in this discouraging present, challenge the many pessimistic expectations of a worse future? The potentially progressive character of such musings depends on the way we as anthropologists contextualise our informants' as much as our own expectations.

This paper has three sections. The first section takes you to Bremerhaven and the context in which my informants reconfigure their expectations. My ethnographic material relates to the city's currently halted, but still continuously maintained, efforts to transform itself into a sustainable city. To understand my informants' temporal agency and politics, it is crucial to fully contextualise the expectations that inform their ideas of Bremerhaven's future. The second section reviews some recent contributions to the literatures on maintenance, repair, and the crisis of liberalism. With their help, I extrapolate some characteristics of the context of our discipline's contemporary stances to the future. The third section returns to Bremerhaven and its post-industrial revitalization programmes. Through three short ethnographic vignettes, I ask what a city, or anybody living in it, should or could

expect of the city's future. Even if the seemingly cure-all remedy of urban sustainability has been installed with the promise of a final turn to something better, its maintenance should catch anthropologists' analytical attention. To endure, maintenance itself must be maintained. This involves continuous work on one's expectations. In conclusion, I contend that if anthropology wants to feel the pulse of time, and to intervene in contemporary politics, it has to expand its repertoire for accounting for diverse temporal logics and features. This includes, as Nikolai Ssorin-Chaikov recently underlined (2017) and the editors outline in this volume's Introduction, the oft-politicised relations between different temporal regimes.

One way then to account for chronopolitics, and to counter dominant forms of chronocracy, is by extrapolating the different expectations as well as the manifold ways in which they are constantly renegotiated in particular social contexts. Contextualisations of expectations focus less on critical events and more on the readjustment and revaluation of the expectations that precede and succeed them. They include the more mundane, uneventful practices – not just dramatic revolutionary impulses. This helps to underline our discipline's own politico-temporal logics (cf. Theodossopoulos, this volume) and expectations (e.g. in relation to the European "refugee crisis", cf. Ringel 2018b), and how these derive from analyses of people's different relations to time and the future. In fact, the more we account for the various ways people imagine futures, the better. Happily, anthropology has continuously refined its techniques to produce exactly this kind of specific, contextualizing and detailed knowledge. As Laura Bear (2017: 154) argued in her Firth lecture at the 2016 ASA, in that sense, anthropologists should agree with Firth, citing Marx: the aim is to follow our "own bent, and let people say what they will".

Expectations of sustainability

Bremerhaven is a prototypical post-industrial city. Its recent history follows a well-known trajectory, from rapid industrialization to chronic deindustrialization and urban decline. Bremerhaven's narrative starts with Germany's post-World War II 'economic miracle' (*Wirtschaftswunder*). As the US army's port of embarkation, the home of many shipyards and the nation's high-sea fishing fleet, Bremerhaven quickly became the country's richest city – despite its near-destruction during World War II. However, only a few decades later, it had become a place of economic and demographic demise. Following German reunification in 1990, the city further struggled economically to find a way forward. Although this downward spiral has recently been halted, Bremerhaven was still named Germany's poorest city in 2014.

Local demographics capture the phases of Bremerhaven's past. After the war, the city's population grew to almost 150,000 inhabitants. Following the demise of the high-sea fishing fleet and several local shipyards in the 1970s, the population declined to around 125,000 inhabitants by the late 1980s.

After reunification in 1990 and the subsequent closure of further shipyards, the population decreased to below 110,000 inhabitants. By 2013, Bremerhaven had become West Germany's fastest shrinking city. Now, 14 years after the implementation of the city's main post-industrial re-vitalization strategies in 2004 (more on these below), its population stagnates at around 115,000 inhabitants. "At least it does not go any lower", many of my informants said. However, following a slight recent increase in population numbers, several politicians, including the Lord Mayor, prematurely predicted a new era of growth. Although nobody expected the city to return to its industrial peak of 150,000 inhabitants, hope was suddenly given to such proclamations. For planners and citizens alike, these predictions matter. However, as citizens of Bremerhaven are all too aware, there is no way of knowing which expectations will actually be realized.

For example, in the industrial fervour of the 1970s, the city planners predicted that Bremerhaven could reach a population of 250,000. Nobody then questioned the idea that the city would enjoy a future of growth and prosperity, and consequently, investments in the city's infrastructure were made on the basis of these predictions. This optimism is typified by the city's main north-south connection, the *Columbusstrasse*, a six-lane street cutting through the centre (see Ringel 2018a for a detailed account). This leviathan legacy of the industrial era now sits somewhat uncomfortably in the city's post-industrial present. Despite earlier predications, the city stumbled into economic decline, high unemployment, increasing poverty, and substantial outmigration. The city is now less than half the size it was expected to be, and consequently, *Columbusstrasse* is – arguably – at least twice as large as it needs to be.

However, Bremerhaven was fortunate to implement a scheme that other cities in crisis can only dream of. In 2004, Bremerhaven was provided with a substantial lump-sum payment at the Federal level, to overcome its structural crisis. In post-industrial times, there are two main strategies to pursue with such unexpected sources of investment: re-industrialization and economic restructuring. Whereas re-industrialization is still based on the idea of growth, restructuring often attempts to establish an alternative economic foundation for a city, one that would sidestep further crises for good. Bremerhaven pursued both strategies and heavily invested in renewable energy and tourism. Both domains were thought to be future-proofed. Officials and citizens hoped for at least two effects: economic resilience through economic diversification and a stabilization of the local economy by shifting the terms of its operation towards a new economic logic. This logic of sustainability would shift economic and civic planning from a *telos* of growth to one of stability. The ambition was to ground the city's economy anew, making it viable and enduring. But what kind of expectations, and political claims, does the logic of sustainability afford?

I arrived in the city in 2013, when these urban re-vitalization strategies had already been implemented. The 'change' had occurred ten years before

my arrival. I studied its aftermath: the maintenance of the new social, economic, and ecological urban forms. I explored how the work of maintaining the (changed) present was itself maintained. In a context of potential further decline, this work expressed a form of progressive political agency often neglected in anthropological analyses. It also produced its own hopes, fears, and expectations. Indeed, my friends struggled to find the right context from which to judge their still somewhat problematic present (cf. e.g. Nafus 2006; Ringel 2018c, Chapter 1). The catchword for the strategies implemented in Bremerhaven was 'sustainability', a notion that confronted my informants with a novel temporal and political logic. However, instead of being a cure-all that continuously secures a better future, sustainability, too, it turned out, had to be sustained. By the time of my arrival my informants had learned exactly that – against their initial hopeful expectations.

The next section discusses the conceptual implications of sustainability and related topics, such as maintenance and repair. I do so in conversation with some recent social science literature on these topics, also to sketch the context of anthropology's own current epistemic and political crisis. Like my informants from Bremerhaven, I and many of my anthropological colleagues still and continuously try to readjust our expectations of the future.

The politics of maintenance

What kind of ethnographic object are expectations? One of the first anthropologists to investigate this question was James Ferguson in his influential book *Expectations of Modernity* (1999). In his analysis of the post-industrial crisis in the Zambian copperbelt, Ferguson depicts his informants' manifold responses to the failure of industrial modernity's promises, and the readjustment of their expectations that this evoked. He also critically assesses the expectations involved in academic and professional uses of modern developmentalist narratives. Ferguson thereby problematised anthropology's involvement in metanarratives of growth and progress, that is, the often implicit expectations we bring to bear in our work and scholarship.[2]

Ferguson follows a tradition of scholarship in anthropology that links the discipline's temporal operations to its political and epistemic worth (e.g. Wolf 1982; Fabian 1983; Chakrabarty 2000). This self-reflective move is prominent in several subdisciplines, such as the anthropology of development (e.g. Escobar 1995; Yarrow 2017) and post-socialism (e.g. Hann 2002; Buyandelgeriyn 2008; Boyer and Yurchak 2010). However, anthropology, like other social science disciplines, continues to struggle with its own often implicit metaphysical conceptualisations of time and related politics. These metaphysics, in turn, are influenced by factors that transcend our specific disciplinary practices. These factors include political ones. For example, Jane Guyer (2007) could presumably include anthropologists in her analysis of contemporary forms of temporal reasoning. They, too, fall prey to evacuating what she refers to as 'the near future' in times of accelerated

change, thereby giving up some of their political agency. As I showed elsewhere (Ringel 2014), the political hopes (and expectations) invested by many contemporary scholars in fashionable tropes such as 'emergence' and 'becoming' invoke politics of change that themselves are embedded in a linear, progressive understanding of time. On this understanding, only change provides a solution for a present in crisis. In fact, *only* change entails hope for betterment. Through these dominant – though not uncontested – metaphysics, the political potentials of maintenance, endurance and repair are lost to sight. An analysis of the social reality of alternative ideas such as 'shrinkage' or 'de-growth' might be hindered by it. Anthropology would have to expand its metaphysics to fully account for 'change' and 'progressive politics' in the post-industrial era.

Geographers Steve Graham and Nigel Thrift (2007) have countered common conceptualisations of progress and growth by drawing attention to these essential, but much neglected practices. They attest that "social theory still struggles to take maintenance and repair into account" (Graham and Thrift 2007: 7). Against such expectations, they show how maintenance often leads to progress and innovation, as it is one of the pivotal ways of understanding and engaging with the world (ibid.: 5). It is a "vital source of variation, improvisation and innovation" (ibid. 6; cf. also Castán Broto and Bulkeley 2013). Seen from this perspective, maintenance quickly becomes a progressive act despite its mundane, conservative character. Focussing on the social and material life of commodities in the context of recycling, David Graeber, too, draws attention to the "largely invisible forms of labour" that go into practices of maintenance, repair and recycling and which entail a "radical political challenge" (2012: 289). In contrast, Graham and Thrift are largely concerned with the maintenance of infrastructures. Their perspectives join with an influential anthropological body of literature on infrastructure (e.g. Larkin 2013; Anand et al. 2018). I mention these perspectives here to illustrate the kind of politics anthropologists enter into when reassessing their expectations.

Anthropologists have paid attention to the recent failure of essential social and technical infrastructures, in the context of political austerity and economic decline (e.g. Mains 2012; Larkin 2013; von Schnitzler 2013; Appel et al. 2015; Anand et al. 2018). From the outset, there was an interest in two issues concerning infrastructure. First, like Graham, Thrift, and Graeber, there was a need to make infrastructure visible again and to problematise its existence, underlining infrastructure's dependence on maintenance and repair. Howe et al. (2016: 550) observe that in these current moments of crisis many scholars came to realise that they, too, had taken infrastructure for granted, that is, they had expected infrastructures to continue working, and even to expand. Like my informants in Bremerhaven, when they realized this was not the case, they also had to readjust their expectations. Second, most authors within this literature also pay serious attention to the politics of infrastructures. For example, Steven Jackson (2015) is clear that

the maintenance and repair of infrastructure matters. The politics of infrastructure "are rarely frozen at the moment of design", hence there are "good ethical and political reasons to attend not only the birth of infrastructures but also to their care and feeding over time" (both ibid.). In other words, it is not just change that demands explanation.

One very recent contribution to the study of infrastructure, Anand et al.'s 2018 collection *The Promise of Infrastructure*, provides an even starker link to politics. In the context of their take on the expectations of infrastructure, the editors note that infrastructures are always "a terrain of power and contestation" (Anand et al. 2018: 2). Based on their opening vignettes from infrastructural breakdown in post-industrial Michigan, they pose a set of questions which specify what they have in mind:

> To whom will resources be distributed and from whom will they be withdrawn? What will be public goods and what will be private commodities? Which communities will be provisioned with resources for social and physical reproduction and which will not?
>
> (ibid.)

The politics of infrastructure they unearth are also a central part of infrastructure's promises. As the authors rightfully claim, infrastructures are "dense social, material, aesthetic, and political formations that are critical both to differentiated experiences of everyday life and to expectations of the future" (ibid.: 3).

Around the world, infrastructures often entail the promise of a better future; they have the ability to trigger hopes and expectations. For the contributors to *Promises of Infrastructure*, infrastructure is a "productive location to examine the constitution, maintenance, and reproduction of political and economic life" (ibid.: 3–4). The idea of promise further links these practices to the central topic: infrastructure "is the after effect of expectations; it cannot be theorised or understood outside of the political orders that predate it and bring it into existence" (ibid.: 29), or, as I would add, the ones that succeed their instalment. The editors also support one more crucial step in my argument by underlining the depoliticized character of infrastructure as a "technology of liberal rule" (ibid.: 4).

This brings me back to my introductory vignette from the ASA meeting. By many contemporaries, including anthropologists, liberalism – like infrastructure – has also been taken for granted until its breakdown. Dominic Boyer's contribution to *The Promise of Infrastructure* captures this nicely: "It is striking that the conceptual rise to intuitiveness of infrastructure roughly parallels the crisis and stasis of neoliberal governance since 2008" (Boyer 2018a: 223). The problematization on of both contemporary infrastructures and politics happened in response to current crises and events. The Brexit vote or the election of Trump were unexpected (even by their own supporters) and quickly demanded a reconfiguration of our expectations. Boyer voices

his own reconfigured expectations when he argues for a truly sustainable *revolutionary* infrastructure (ibid.: 239–240) that takes humanity beyond what he calls petromodern capitalism into a post-post-truth era (Boyer 2018b).[3]

Indeed, Dace Dzenovska and Nicola De Genova even detect a "desire for the political" (Dzenovska and De Genova 2018: 3) in the contemporary era. This desire translates into a rather vague set of political forms of critique. It stems from a desire to overcome the present that is seen to be in crisis; it, however, lacks "a clear vision" (ibid.: 3). Like my informants from Bremerhaven, the interlocutors appearing in Dzenovska and De Genova's special issue are not sure what to expect, and how to react in political terms. The same holds true for many anthropologists. As the editors claim in a discussion of Reinhart Koselleck's work, political action is seen to be "the kind of action that brings about the future *as* progress". In a strong Enlightenment tradition, this follows the same teleological conception of progress as pointed out above. However, in the context of current crises, this critique seems to have lost its valence. There is now a need for new, detailed expectations.

Temporal disorientation is at the core of this current dissatisfaction with politics. As Dzenovska and De Genova (2018: 9) state:

> In such conditions, it is not surprising to observe among critical scholars and their interlocutors a variety of affective attachments to… futures promised by previous hegemonic modes of power, such as the Fordist model of capitalism, which have been thoroughly eroded or gutted in the neoliberal present.

However, in contexts of decline, such as that of Bremerhaven, ensuring a future "means preventing further decline, sustaining rather than overcoming the present… The future appears not as something that can deliver people from the present but rather as something from which the present itself needs to be saved" (ibid.: 10). Given these common experiences of the present, post-industrial times might afford a different kind of expectation, one based on more of the same of the recent past (cf. Jansen 2013).

As I claim throughout this chapter, anthropology should continue even more consciously than before to partake in the search for such alternative expectations. It should even more passionately join, assess and reflect on the anticipatory work many activists and citizens struggle with around the world (Ringel 2018b). To give this claim more ethnographic substance, I return to my fieldsite Bremerhaven and its attempts at sustainable urban regeneration.

Maintaining expectations

The practices of sustainability I observed in Bremerhaven over the last five years seem rather mundane: they are undertaken at local museums; the Climate City Office; and social clubs for migrants, refugees and the urban poor. My informants – all sustainability activists in one way or another – are

usually former or current natural scientists; retired teachers; and retrained, formerly unemployed professionals currently changing careers. Although entangled with, and dependent upon, local politics and resources in their respective posts and activist groups, their work for the city does not obviously entail radical political claims. Yet they radically aspire to a future that requires regulation, management, and investment in order *not* to change. Indeed, their work is simply geared towards producing, establishing, or maintaining what is already there. Their common aims are best captured by the term 'sustainability', despite the different forms of sustainability they aspire to. Although some of the problems that the actors deal with affect them and their city existentially, they are often dealt with in a fairly nonchalant manner. How can our analytics account for such attempts to stabilise the present? Before answering this question, I will point to a few problems arising from the logic of 'sustainability'.

Sustainability is a powerful idea. Embedded in global discourses around better futures, sustainability continues to incite at the local level new practices, hopes, and ideas of the future. In Bremerhaven, for example, it dominates local urban regeneration strategies and the city's ecological transformation into a 'climate city'. I see those implementing these strategies as agents of a better future; their agentive force is revolutionary, given that, for instance, the local and national *Energiewende* (Germany's once ambitious transition to renewable energies) is still understood as a 'green revolution'. However, their projects are often small-scale and practical, tiring and disappointingly long term. They seem to imply different ideas of politics and change and afford their own set of expectations and forms of agency.

The temporal logic of sustainability that this form of agency entails is somewhat awkward. Once the urban infrastructure and circulations of goods, finances, and resources "become sustainable", my informants predict that Bremerhaven's existence will be secure and further decline prevented. In economic, social, and ecological terms, the city will remain attractive and worth living in. Sustainability promises future stability, a promise seemingly triggered by the wish for stability in the present. Yet, having experienced the aftermath of their city's turn to sustainability, my informants have seen that this promise does not hold true: sustainability is *not* sustainable in and of itself. Like any other social reality, it requires maintenance. As an ideal, however, sustainability still serves my informants well. In the context of this city's post-industrial crisis, it has helped people to regain a sense of the future in their everyday lives. It simply needs stripping of its cure-all promises and expectations that linger on from the preceding industrial phase. I address sustainability's problem with its own maintenance, endurance, and, indeed, sustainability to underline how the expectations it fosters can be contradictory. I would suggest that sustainability affords new kinds of claims on the near future in a particularly productive way – as long as it is understood to maintain both the present and the future. To illustrate this point I will present three short ethnographic vignettes.

Economic sustainability I: re-industrialisation

For many years Germany has promoted itself as the forerunner of the global green revolution. As the transition to a post-carbon economy seemed inevitable, Bremerhaven's economic sustainability strategies focussed on what seemed to be the safest option: renewable energy in form of the off-shore windfarm industry. For over a decade, Bremerhaven aspired to establish itself as the national centre of this industry. Using the substantial Federal payment, it linked plans for a straightforward re-industrialization on to the security promised by the undeniable necessity for renewable energy. The hope was that with the implementation of this economic strategy and because of its ecological appeal, the windfarm industry would thrive, thereby securing economic growth and stability in the city.

At first, the strategy seemed to be successful. Several thousand jobs were created in multiple new factories, for which a whole new infrastructure was constructed on the city's large brownfields in the Southern part of the harbour. Many inhabitants saw the beginning of a new era tentatively materialise in this industry's impressive products. Gigantic tripods, rotor blades, and engine cases were stored throughout the Southern harbour before being transported to one of the newly emerging North Sea offshore windfarms in the German Bay. The city's Economic Development Agency was proud of its success. Its employees tried to attract new investors, offering industrial real estate and access to public funding. Their offices were filled with maps of Bremerhaven's industrial areas and shiny brochures about the potential the city has for future investors.

Contrary to these hopes and expectations, changes in national discourse and policy dramatically affected the German offshore industry. The federal government put a halt on the *Energiewende* and Bremerhaven's re-industrialisation stopped. Windfarm companies fired their workers and introduced long periods of reduced working hours; the tripod building company *Weserwind* went bankrupt and closed. At the time of my fieldwork, the city's Economic Development Agency and its investors were generally insecure about the future of the whole industry. They had not foreseen that the inevitability of the energy transition could be questioned.

Additionally, the Agency itself faced existential problems following the windfarm crisis. During the implementation of the economic sustainability programme, they had expanded massively. The Federal funding paid their salaries. However, the recent economic decline also jeopardized the Agency's future prospects. In my interviews with employees there was no sense of lethargy or disillusionment. Rather, the organization was trying to secure its future and maintain the infrastructure it had helped to establish. They tried to attract new businesses by more forcefully pursuing economic diversification, targeting the city's potentials for creative industries and the green economy. Agency employees retrained and developed new strategies. Although the promise of sustainability had failed them in the

case of re-industrialisation, they were still continuing their work, not by radically throwing their previous visions and instruments overboard, but by adjusting them. However, the economic diversification strategy also had its difficulties.

Economic sustainability II: diversification

Economic diversification is based on a simple idea: investing in a whole variety of new and diverse economic areas in the present prevents a crisis of the local economy in the future. For example, if the offshore industry struggles, another branch, such as tourism, would still thrive and guarantee the city's overall well-being and ultimately its survival. The official plan, however, was even more ambitious. These new economic pillars were to be sustainable in their own terms, too. Tourism was seen as such a pillar, so the city used part of the 2004 Federal funds to develop itself as a 'prime tourist destination'. It capitalized on its North Sea location; and, conscious of the often stormy weather, built new museums in which tourists might spend their time, whatever the weather.

Since 2004, a whole new city centre has emerged on the post-industrial wastelands of the oldest parts of the harbour. In the 1970s, the National Maritime Museum opened in this area. Now, the same area houses two further museums, the German Emigration Centre and the Climate Centre; a Dubai-esque hotel and convention centre; and a shopping mall named "Mediterraneo" – a name which, although maritime, is somewhat misleading in the North German coastal context. The whole marina was refurbished, with many high-end apartment houses built alongside it. More than five years after the opening of the Climate Museum in 2009, one would think that the new infrastructure could run successfully – if it was not for yet another crisis.

Like the offshore wind industry, tourism also appeared to be more fragile than expected and tourists have not been as sustainable a resource as predicted. For a city of approximately 115,000 inhabitants, the museums (five in the city centre alone!) cannot be sustained by the local population. If these cultural institutions are to survive economically, they must attract external visitors. Yet, in 2015, visitor numbers began to decline. It turns out that to make tourism sustainable, one has to continuously invest in it; the one-off erection of touristic infrastructure is not enough. Tourism, too, proved not to be sustainable in the long run.

The three major museums felt the decline most strongly. All of them are now concerned for their futures. To illustrate, at least 200,000 visitors per year are needed to make the two new privately-owned museums profitable. The marketing costs towards meeting this figure are considerable. On top of that, I was repeatedly told that the "novelty-effect" of a newly opened museum quickly wears off. A record 700,000 people came to visit the Climate Centre in its first year but the numbers have fallen dramatically since.

Even temporary new attractions, such as an overblown show on dinosaurs, could not prevent this decline. The two other large museums, the National Maritime Museum and the Emigration Centre, face similar problems. They too have introduced strategies to secure their survival. The Emigration Centre has added an extension building thematizing immigration and even opened its own hotel. It also tried out new event-based formats to attract more visitors and intensified its cooperation with local activist groups on the issue of the "refugee crisis". The National Maritime Museum has also tried out new formats and further collaborated with local actors. All the museums particularly seek collaborations with schools – to which they look for new generations of visitors.

The necessity for such strategies shows that tourism has not produced a constant, sustained cycle of income. Instead, these struggles have once again shaken Bremerhaven's expectations of a secure future. Initially, inhabitants had been proud of these new developments. Now, they realise that these new museums – as well as the very notion of the city as a touristic destination – are not self-sustaining. Despite initial claims and expectations, the city must continuously invest in remaining a touristic 'hotspot', as much as an economically sustainable city more generally. The new infrastructure has to be maintained, not just created. Given these sobering developments, has the actors' agency failed – or rather has it been failed by the notion of sustainability? This depends on how we approach the context of our informants' and our own expectations of a sustainable future.

For example, the museum personnel of all three big museums have already readjusted their expectations of growth to expectations of maintenance. They focus precisely on maintaining the present state by carefully reconsidering their own resources and by opening up new ones. Since 'change' (the founding and opening of the museums) had already happened, their visions of the future did not necessarily entertain further changes, rather the prevention of them. They continue to secure the outcomes previous changes yielded, against still realistic expectations of, for instance, a further decline of visitor numbers. This prediction of potential decline provides a new temporal context for their practices of maintenance – one in which these practices produce change by maintaining the present situation.

Ecological sustainability: mitigation

The last vignette concerns the Climate City Office. In 2009, the local government agreed to transform Bremerhaven into a Climate City (*Klimastadt*), which entailed serious and binding commitments to the actual reduction of CO_2 both in official urban institutions and the city as a whole. Newly opened in 2014, in an empty shop in the city's central shopping alley, the Office works towards this aim by developing specific projects and more general strategies with a diverse set of local actors. However, the office had hardly any funding. The city redirected already existing funding to foster

the Office's projects and often the Office functioned more as a communicator, catalyst, and initiator rather than a fully equipped official institution. The transition towards a Climate City therefore often appeared to be a project in advertising sustainability throughout the city instead of straightforwardly implementing it.

The Office was headed by Till Scherzinger, a former marine biologist. Till knew that the transition would not function via quick fixes and radical solutions. Along with his colleagues', his undertaking was gradualist and long term with a series of small steps moving the city and its inhabitants in a particular direction. He explained to me on many occasions that change does not happen overnight. For example, the city could not change all of its vehicles quickly. Rather, political will should be directed towards encouraging the exchange of conventional vehicles for electronic vehicles step by step, as they reach the end of their lives. For example, next time the local department of garbage collection buys a new truck, as Till explained, they should invest slightly more money in an electronic version, which will pay off in the long run.

With the same logic, the Office also created new forms of social practice, including the world's first Youth Climate Council (*Jugendklimarat*). Although this Council was revolutionary, Till resisted national TV stations' expressed wish to report on it. He said the Council must work properly first and establish ways of sustaining itself beyond its doubtlessly successful inception. The way Till approached his task was not just through changing the present and celebrating that change. Rather, he holds the change responsible for its own endurance. In a context of decline, this is not to be mistaken as a vision of stagnation; rather, it is a progressive intervention beyond ideas of growth and decline. However, as in previous examples, the existence of both the Climate City Office and the Youth Climate Council are continuously threatened. Although climate change remains a huge problem, local politics shifted after the Green Party suffered a defeat in the 2015 elections. As a result, funding for the project was reduced, its office almost closed. Under the new Labour-Conservative government, it was moved to a different, less-frequented part of the city. Its prospects did not look rosy for a while. Recently, however, the office secured EU funding and was able to expand its activities again.

For Till and his colleagues, what counts is that the projects they incite can endure in the future, not that they are radically new. Their task is to guarantee that the correct decisions and investments are made in the present, with an eye on the future. Perhaps, they aspire to sustainability because they know the Office can close at any point, and the forms of ecological sustainability, which they have created, will have to live on by themselves. For that, they have to be sustainable. But both the creation and the maintenance of sustainable forms are subject to agency in the present, including future presents. So, to go full circle, what can the discipline of anthropology learn from these sustainability experts in its own moment of crisis?

Conclusion: on the pulse of time

The endurance of local forms of sustainability depends on constantly re-newed efforts for, and investments in, their futures. In the context of drastic change, practices that try to maintain the state of the present can be under-stood as radically progressive, indeed, political acts. They are not conserv-ative with regards to the presents they purportedly reproduce, but they are progressive with regards to predictably worse futures they try to prevent. As Saba Mahmood (2004) showed in the case of a women's piety move-ment in Egypt, we would usually account for such practices as expressions of a conservative, fearful attitude to change. As the vignettes underline, in Bremerhaven, as in Mahmood's ethnographic context, this is not the case.

Thinking through the agency involved in 'merely' accomplishing main-tenance demands a proper contextualization of the expectations that feed into this agency. When defining change as being different with regards to the present, we cling to a framework of progress: only change is expected to aspire to something better; making a difference then means changing the present. In a context of decline and crisis, however, this framework needs to be readjusted. For many of my informants, progress lay in maintaining the present rather than changing it. Their task was to secure the changes they had previously introduced – by making them sustainable. They saw themselves in charge of the fabrication of sustainability, or that is what they expected of themselves.

In this chapter I have scrutinized these different kinds of expectations. I have tried to see my informants' attempts at maintaining their sustainability efforts as progressive in relation to them. The temporal logic they employed in their maintenance work turned out to be progressive but only if I take their fears of decline and expectations of further crises seriously. This shows why, through the analytical lens of expectations, it is in some contexts more important to explain – and hope for – endurance rather than change. What drives my informants to continuously maintain their hopes of sustainability might at first sight entail yet another "fantasy futurism" in Jane Guyer's (2007) definition. Still, their enduring implementations of sustainability strategies against all odds is progressive because it maintains a certain sense of future, that is, as an endurance or continuation of the present, in times that have put what we can expect from the future in serious doubt.

With this focus on the contemporary, anthropology prides itself in work-ing close to people's everyday and continuous negotiations of the presents they find themselves in. Our work, to some extent, aspires to feel the pulse of time. If time had a pulse, currently, this pulse would be best described as accelerated, hectic or out of tune, mostly for political reasons: continu-ously, people around the world have to adjust their expectations, and recent political events have, as I described in the opening of this chapter, required new rounds of readjustments. Political futures in particular are currently 'in crisis', 'at stake', and 'a serious problem', both uncertain and unpredictable.

These apocalyptic pronouncements from the present mirror the amount of agency people feel they or their politically elected representatives momentarily have over the future. My own expectations, as well as those from most of my colleagues at the 2016 ASA meeting seemed to reproduce this pessimism. One way to respond to these concerns, of course, is to argue for political change. This might also entail the vision of a new role for anthropology, as Laura Bear (2017) argued in her Firth lecture at the conference. Another way, however, is to commit even more passionately to what we might each consider to be our discipline's strengths. These two strategies do not necessarily contradict each other. However, as my explorations of expectations of sustainability in Bremerhaven have shown, we have to expand our register of what we define as radical political acts in order to carefully navigate between these different strategies.

Ethnographic explorations of specific expectations (or their failure), I have argued, constitute important avenues into the analysis of contemporary politics. Practices of maintenance, for example, suggest different pathways into the post-industrial future. Our attention to expectations and the practices they engender helps us to explore and critically assess contemporary chronopolitics. For that, we must discern in detail *whose* times and *whose* politics we are talking about. The implicit problematization of people's expectations is not just a preoccupation of those working in politics. Assessing different pathways into the future is always a political act because it problematizes repercussions of contemporary decisions for a collective at large.

For many communities suffering from the economic, social, and ecological problems of the post-industrial era, sustainability is seen as a universal remedy that offers a new relationship to the future and prevents further decline. In Bremerhaven, the hopes and expectations connected to sustainability, however, were shaken in the wake of new crises that my informants thought should have been prevented by their sustainability efforts. Sustainability itself turned out to be unsustainable and needed constant reinvestment. In that context, the maintenance of sustainability began to gain a new political and progressive character: Till continues to fight for the continuation of his Climate City office, the museums continue with their efforts to attract more visitors, and Bremerhaven's Economic Development Agency continues to maintain its sustainability strategies. Anthropology could take inspirations from these local efforts when reflecting on its own chronopolitics and expectations of a better future in the post-truth era. Contextualizing and scrutinizing our expectations also invite clarification about what we really want from that future. More truth would be my first contender. This might simply entail more of the same: a reinvigoration of the methods, values, and political ideals that have for so long underpinned anthropological practice and critique, and which have been so profoundly challenged by recent political developments. This conscious reinvigoration would prepare the discipline to fully immerse itself in a future that aspires to sustainability; de-growth; and other, at least partially, more promising futures.

Notes

1 The panel Dace Dzenovska and I had organised for the ASA meeting sprang from exactly such an irritation: I had increasingly found myself feeling nostalgic about the further decline of the welfare state in a context of a seemingly uncontested takeover by neoliberal and/or neonationalist elites and ideas. I felt terribly conservative for using the welfare state past to criticise the austerity present.
2 It is no coincidence then that the same author ten years later asks us to scrutinize our expectations of neoliberalism, too. In his article on "The Uses of Neoliberalism", Ferguson (2009) observes that most studies of neoliberalism always end at the same, unfortunately mostly true, conclusion: that neoliberalism inevitably leads to more inequality and poverty (see ibid.: 166). However, these insights were so predictable, he claims, that they prevented any valuable critique of neoliberalism. Instead, he argues, we should keep our expectations open and study in detail the – potentially sometimes even positive – outcomes of those policies we describe as neoliberal.
3 STS scholar Kregg Hetherington (2017) helps us to understand in which context these crises can hit anthropologists with such force. He does so by providing a very insightful analysis of what preceded liberalism's post-truth moment. For him, the post-Cold War era was "a period of ideological complacency" and "liberals have become the undisputed masters of forgetting their own particularity" (ibid.). Indeed, "the declaration of post-truth… retroactively reveals the epistemological stakes of a politics that had forgotten it was political" (ibid.). He cites Emmett Ressin saying that the "most significant development in the past 30 years of liberal self-conception was the replacement of politics understood as an ideological conflict with politics understood as a struggle against idiots unwilling to recognize liberalism's monopoly on empirical reason" (ibid.).

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5 Depressing time

Waiting, melancholia, and the psychoanalytic practice of care

Laura Salisbury and Lisa Baraitser

Introduction

'Nothing to be done' (Beckett 2012: 11). Samuel Beckett's play *Waiting for Godot* is not about healthcare, but its first line seems to hover between prognosis and diagnosis, suggesting that some kind of existential 'doctoring' is afoot, even as it is clear that no prescriptions are going to be dispensed. For the play's two central characters, Vladimir and Estragon, 'nothing to be done' empties out the urgency of curative political action from Vladimir Lenin's famous question: 'What is to be done?' Every possibility of change on the horizon of the play is derailed by the inertia of the fixing refrain: 'we're waiting for Godot'. Waiting is the nothing that famously happened twice (Mercier 1956: 6), and came to be figured, in many early critical receptions of Beckett, as a representation of the existential human condition (Graver and Federman 1979). In the early 1950s, when the play was first performed, perhaps abstractions were more available for critical absorption than the possibility that postwar Europe was still in a present denuded of an inhabitable future (Kenner 1973: 133; Gibson 2010: 108) – an endless time of living on without any real hope of change in the wake of an unspecified disaster. Beckett's play materializes a waiting that becomes a form of endurance through the promise of what might come to change the present for there is always some orientation towards the future in such practices. But the clear unavailability of Godot decouples the *for* (Schweizer 2008: 11), the most obvious preposition or relation, from the action of waiting. Neither weak enough to cease and desist nor strong enough to leave, Vladimir and Estragon endure and persist, not, in the end, waiting for Godot but waiting with and sometimes even on one another. Although in this chapter we will pay close attention to existential claims about the place of waiting in human experience, we will suggest that waiting is significantly shaped by the promises and narratives of particular historical moments and lifeworlds, and their distinct ways of understanding time. Indeed, if tarrying in Godot's waiting room seems to speak to the existential human condition, we would argue that it is because the audiences the play found and continues to find persist in a time when the promises of the future feel increasingly

unavailable. *Godot*'s characters, alongside their audiences, wait with their diagnosis, which is also their prognosis: 'nothing to be done'.

Perhaps one reason the slow modernism of *Godot* found and made its mark so sharply was its insistence on attending to the disavowed underside of the dominant timescapes of modernity. In 1931, Aldous Huxley was able to state that '[s]peed […] provides the one genuinely modern pleasure' (Huxley 2001: 263), and it has been a critical commonplace to read aesthetic modernism as a reflection of the shock of the new and a pacing, racing present. Planes, trains, and automobiles; ragtime and jazz; epiphanies and revolutions; telegraphs and telephones; production lines and new mass media: humanities scholarship has thoroughly mined how the modernity of the early and mid-twentieth century produced, for better and worse, accelerated lives and shaped technologies capable of both registering and increasing sensations of speed (Duffy 2009). Engaged with a more contemporary moment and less concerned with aesthetic practices, Paul Virilio (2006) has described how a logic of acceleration that has compressed, foreshortened, and fractured time still sits at the heart of modernity and its drives towards destruction; while Jonathan Crary (2013) has critiqued a culture of 24/7 availability fuelled by unsleeping technologies that has turned even the slowing of rest into an act of embodied resistance.

But there were always other times folded into the modern, as Elisabeth Kirtsoglou and Bob Simpson's idea of 'chronocracy' suggests (this volume). For example, the managed and mechanized time of the working classes in a newly industrialized Europe was consistently used to service a version of a progressive future that was not shaped in their interests (Thompson 1967). Craig Jeffery has also identified 'chronic, fruitless waiting' (Jeffery 2010: 3) as a particular temporal experience of those colonized populations who provided much of the material resources for acceleration of Empire and modernity, noting it as a prominent feature of the experience of subaltern peoples globally since the 1960s. Bendixsen and Eriksen indeed point out that for certain groups waiting can be an expression of power and domination, generating vulnerability and humiliation (2018: 92). And while a 'new chronic' temporal imaginary has become more generally palpable in the late liberalism of the contemporary global north (Cazdyn 2012), many of the most acute experiences of 'chronic, fruitless waiting' remain 'zoned' in specifically gendered, raced, and classed ways.[1] As Lisa Baraitser has argued in *Enduring Time* (2017), despite an ever-increasing sense of acceleration, because the spooling of time towards a possible future seems to have come unravelled in the contemporary moment, experiences of interruption, suspension, delay, and slowness strongly insist in affective life in highly differential ways.

Here, however, we track this sense of time enduring rather than passing back to an earlier moment in the twentieth century, noting the ways in which waiting uncoupled from a future into which one might step came to be understood as a key feature of the affective condition termed 'melancholia', or,

in its more contemporary configuration, 'depression'.[2] This is not to claim that either condition is simply a response to modern times or, more strongly still, a social construction; nor is it to seek to medicalize distress that may be the result of other social relations of inequality or injustice (Thomas et al. 2018). Rather, we are interested in exploring how understandings of melancholia in twentieth-century Europe came to be focalized through particular ideas and sensations of stuck, suspended, impeded, or ungraspable time that shaped and continue to mould the contours of the temporal landscapes and psychological imaginaries of (late) modernity. Furthermore, we argue that care in the context of depression, which we understand as imbricated with psychosocial relations and experiences and therefore 'more than biomedical' or psychological in constitution (Hinchliffe et al. 2018), may turn out to hinge around the offer and use of extended periods of time and the capacity to stay with those whose experience is that of a temporality that no longer flows.

Although the disciplinary perspective here is not anthropological, our concern with examining melancholia and depression through experiences and practices of waiting brings our chapter into contact with an important body of anthropological literature. In his interdisciplinary volume, Ghassen Hage describes waiting as an experience that is always both existential and historically articulated or situational (Hage 2009: 4, 6). Manpreet Janeja and Andreas Bandak similarly suggest that analysing waiting requires a capacity to shuttle between existential and more clearly social or institutional perspectives, as they demonstrate how focussed ethnographic work can illuminate both waiting's poetics and its politics (Janeja and Bandak 2018: 3).[3] But this chapter uses a more dispersed, eclectic, and textual archive of experience to open up a theoretical account of melancholia/depression as a condition fundamentally entangled with existential, cultural, and sociohistorical experiences and theorisations of European (late) modernity. Remaining broadly within the climate of these anthropological approaches to waiting, however, we propose that the remarkable tradition of phenomenological psychiatry from the late nineteenth and early twentieth century provides a significant opportunity to trace the relationship between accounts of lived experience of mental distress that emerged explicitly alongside existential philosophies, and more broadly socio-historical accounts of time.

As time became a topic of intense debate across the sciences and arts and humanities in early twentieth century Europe and North America, multiple disciplines explored the tension between accounts of intuitive/subjective time and understandings of mathematical/objective time (Fryxell 2019: 5–6). Phenomenological psychiatry established its distinctive approach in this context by refusing the dominant third-person approach to psychopathology exemplified by Emil Kraepelin (Broome et al. 2012: 90) in favour of paying careful attention to the first person, subjective experience of disruptions of well-being. The discipline was profoundly influenced by the new philosophies of temporality of Henri Bergson and Martin Heidegger in the

first three decades of the twentieth century and one of its key insights was that chronic mental distress can be understood as a disturbance of a sense of lived time. However, phenomenological psychiatry paid scant explicit attention to the temporal demands of treatment (Fryxell 2019: 23) – the time bound up in the intersubjectivity of the clinical encounter or simply the time that treatment takes.[4] But psychoanalysis, which emerged alongside phenomenological psychiatry in historical terms, insisted on reflecting, with particular self-consciousness, on the complex, often seemingly interminable temporality of treatment (Freud 1937).

   Both phenomenological psychiatry and psychoanalysis developed in explicit dialogue with the conditions of modernity and alongside the devastating experiences of industrialized warfare, but while phenomenology negatively articulated a temporal attitude of normalcy that recedes in experiences of mental illness, psychoanalysis used the rhythms of psychopathology and the inevitability of falling ill as a way of illuminating the structures of all mental life and of a psychic life of time that can never be simply linear, teleological, or smoothly flowing. Instead of suggesting that sensations of waiting without a *for* break apart what is proper to lived time, psychoanalysis comes to understand such experiences to be part of the inevitable conditions of psychic life. Psychoanalysis thus offers up a specifically chronic cure – the offer of time and care, and of remembering, repeating and working through (Freud 2014) – to contain, understand, and ameliorate the chronic condition of mental distress. By highlighting this link between the chronicity of the mind and the broader psychosocial contexts in which endurance plays out, this paper aims to open up a historically nuanced sense of the value of psychoanalytic temporal practices of waiting not *for* but *with*. We also suggest that by attending specifically to the relationships between depression, temporality, and historical and psychosocial experience, the urgent debates about uses of time in contemporary mental healthcare delivered by the UK's National Health Service might tentatively be reframed.

Waiting in modern times

In his illuminating short book *On Waiting*, Harold Schweizer (2008) suggests that although waiting is always essentially structured by its *for*, there is a value in decoupling this relation to get at the experience of waiting in itself that is all too easily passed over – where time is thick and slow, suspended, or extended. But we might infer from many of Schweizer's examples that an attention to waiting in itself extrudes into visibility in a historical period where there has been a fraying of the possibility of arrival. Where waiting for God (the final backstop for all human experiences of endurance and unfulfillment) becomes less culturally available, at least in many Western cultures of modernity, the possibility of messianic waiting also recedes and there is a waning of that sense of a final reckoning that structured, for example, medieval accounts of waiting. As Giorgio Agamben has shown,

medieval waiting might be understood as an experience of protracted imminence between the full presence of the Messiah and the messianic event of the resurrection (Agamben 2003: 63–64). The time that remained in medieval accounts – the time that it takes for time to come to an end – was both short and weighed heavily (67). Still, the notion of that final reckoning at the end of the 'end times' gave the *for* of waiting a structuring quality, leading to its implicit value in eschatological time. Indeed, this became explicitly the case in the invention of the idea of tariffed penance in Purgatory in the twelfth century (Le Goff 1981). In much pre- or para industrial life, waiting could also be gathered up into a more general sense of cyclical rhythms and the practices of activity they necessarily produced, as waiting had its part to play in contingent but imaginable returns. Reinhart Koselleck (2004) describes how in Western Christian cultures a particular linear time of expectation orientated towards the Second Coming of Christ persisted into the sixteenth century; but the timescapes of Western modernity decisively shifted with increasing secularization and an emphasis on human political and economic activity as shaping the conditions of the future. In the philosophical conceptualizations of waiting that emerge in later modernity, however, it is the pointed banality of the object of waiting that comes to the fore as positivist accounts of time and progression begin to unravel: sugar dissolving in water for Bergson in 1907 (1922); the train at a boring country station for Heidegger in 1929/1930 (1995); Beckett's Godot in 1953 as a white-bearded fancy-dress version of a deity. This banalization of the object enables it to be bracketed off – a bracketing that permits an expansion of, and attention to, the phenomenological experience of waiting itself.

In the etymological history of the verb 'to wait' one can note the development of a more passive relation to the contingency of the future and events that may or may not take place. The oldest occurrences of the term link it to the Old North French *waitier*, meaning to 'to watch, lie in wait for', the Old High German *wahten*, 'to watch', and the Germanic *wak*, to be wakeful. Both early transitive and intransitive forms connect waiting to the activity of lying in wait, often with hostile intent – to watch out or watch for, wakefully. According to the *Oxford English Dictionary*, from the 1400s onwards, to wait (used either transitively or intransitively) becomes linked to 'looking forward (with desire or apprehension) to (some future event or contingency); to continue in expectation of', and then, somewhat later, to 'remain[ing] for a time without something expected or promised'. This waiting in more passive expectation also develops into 'remain[ing] in a place, defer[ing] one's departure until something happens', which becomes one of the dominant usages from the nineteenth century onwards. Significantly, this waiting in expectation or staying in place in the hope of something happening, falls out of transitive use in the nineteenth century, to be superseded by 'awaiting', or, more commonly now, by 'waiting for'; but it is also still possible simply to wait, intransitively. One can find this usage as far back as the medieval period, the *OED* tells us, but it becomes

notably more common in modernity. Here, the unarticulated *for*, though it never completely disappears, may gesture towards nothing more specific than time passing. As 'waiting' develops in relation to historical circumstances, it becomes increasingly prone to spooling back from its object, to losing its preposition, either carelessly or purposefully, and to shedding its wakeful projections and the promise of its future. It seems that the temporal, embodied experience of waiting itself becomes a distinct object of attention only in the face of the growing uncertainty that it will ever be fulfilled, or that one will ever do one's time.

Philosophies that concentrate on the experience of waiting that resist being subordinated to their *for* indeed emerge in the twentieth century as part a critique of the increasing quantification and rationalization of time. As is well known, the advent of both the railway and telegraph wire towards the end of the nineteenth century required and therefore enabled the development of national time regimes, as timetables demanded synchronized clocks across geographical regions (Kern 1983). Waiting, in turn, became more clearly associated with the redundancies built into standardized or industrialized time in which human duration could be rendered expendable in relation to the time tabled according to the needs of modernity. Yet as time became standardized, more easily quantifiable, and more susceptible to being cut up into blocks and exchanged as units,[5] there was a coterminous sense that temporality might more authentically be found within experiences in which time's felt pace of passing, and its relativity, became the essential mode of measure. Henri Bergson's famous 1907 account of waiting for sugar to dissolve in water thus starts to pay attention to the experience of *just* waiting. This is waiting that enables a perception of subjective time precisely because the subject is thrown out of sync with something that passes smoothly:

> If I want to mix a glass of sugar and water, I must, willy nilly, wait until the sugar melts […] For here the time I have to wait is not that mathematical time which would apply equally well to the entire history of the material world […] It coincides with my impatience, that is to say, with a certain portion of my own durations, which I cannot protract or contract as I like. It is no longer something *thought*, it is something *lived*.
> (Bergson 1922: 9–10)

Bergson shows here that time, which for him is famously the qualitative experience of duration, obtrudes for philosophical reflection precisely as it resists being seized by it. We perceive time as it refuses to align itself with our intentions and instead we feel seized by it, as if from the outside. As 'something *lived*', the experience of time that finds us in waiting is one that endures in neither complete passivity – for we may choose to wait, or not – nor in a position where time can simply be subordinated to the subject's projects.

Bergson uses a phenomenology of waiting to illuminate the nature of be-ing in time precisely because the time that flows, and in which we might ourselves be absorbed, is not easily available to conscious reflection. It is so transparent to us that we tend to see through it, in fleeting spontaneity. Waiting, however, disturbs the putatively 'natural' experience of being at one with time's passage; it therefore acts as a form of phenomenological *epoché*, a suspension of assumptions and ideas about the experience of the world – in this case the experience of a time that flows – to concentrate instead on how things might appear to consciousness (Husserl 2014). For phenomenologists, there is a similar disruption of normative conceptions of temporality that come to consciousness in and as pathology. Maurice Merleau-Ponty was to argue in 1945 that the threads that invisibly bind our sense of a compliant body (one that expresses a subject coherently posi-tioned and unified in relation to temporal intentions) are crucially loosened in the experience of illness:

> the life of consciousness – cognitive life, the life of desire or perceptual life – is subtended by an 'intentional arc' which projects round about us our past, our future, our human setting, our physical, ideological and moral situation […] It is this intentional arc which brings about the unity of the senses, of intelligence, of sensibility and motility. And it is this which 'goes limp' in illness.
>
> (Merleau-Ponty 1962: 136)

In both waiting and in illness,[6] the sense of a body and mind functioning as a smooth expression of the intentional subject, in sync with a temporality that flows according to an intentional arc, is rendered out of phase.

Time out of mind

Writing in 1933 on the subject of *Lived Time*, the phenomenological psy-chiatrist Eugène Minkowski suggested that mental illness, as part of its de-fining feature, detaches human beings from the kind of temporality that he sees as common and comfortable to human life: a 'lived synchronism that we expect to find in the general feeling of moving with time and in step with it' (Minkowski 1970: 69). Drawing on Bergson's account of duration, Minkowski argues that the mind that is subject to psychopathology cannot properly orientate itself towards lived time. Phenomenological texts such as Martin Heidegger's *Being and Time* (1927) and his lectures on *The Funda-mental Concepts of Metaphysics* (1929–1930) had suggested how temporality was the basis of anxiety and a sense of the immanence of death. But whereas Heidegger imagines that anxiety and an awareness of 'being-towards-death' produce the conditions for *Dasein* (the kind of being that humans have) to have an authentic engagement with the present and the future as 'its

ownmost possibility' (Heidegger 1967), Minkowski describes how waiting can be entwined with the nameless dread of what cannot be seized. Writing positively of 'activity', Minkowski notes that 'far from feeling imprisoned in the sphere of my activity and feeling that I bang up against its walls, I feel, on the contrary, at ease and take pleasure in moving without hindrance' (Minkowski 1970: 85). But what Minkowski calls 'expectation' is different:

> Expectation […] englobes the whole living being, suspends his activity, and fixes him anguished, in expectation. It contains a factor of brutal arrest and renders the individual breathless. One might say that the whole of becoming concentrated outside of the individual swoops down in a powerful and hostile mass, attempting to annihilate him; it is like an iceberg surging abruptly in front of the prow of a ship, which in an instant will smash fatally against it. Expectation penetrates the individual to his core, fills him with terror before this unknown and unexpected mass, which will engulf him in an instant.
>
> (Minkowski 1970: 87–88)

First drafted just after the Armistice in 1918, this chapter was later called, simply, 'The Future' – a title that ontologizes but also dehistoricizes and depoliticizes the waiting it invokes. Nevertheless, the chapter mobilizes historically specific metaphors such as the sinking of *Titanic* in 1912 and experiences that read like a 'phenomenology of life in the trenches' (Kern 1983: 90) in its attention to waiting as a temporally extended, anguished expectation of imminent destruction. In this account of 'expectation', it is as if socio-historical experiences of waiting have 'englobed' both the ontological account and the seeming ontological propriety of a present and future through and in which time should flow.

Literary critic Kate McLoughlin has suggested that a disruption of duration is a particular precipitate of industrialized warfare for combatants (McLoughlin 2012: 107–134). Paul Saint-Amour similarly figures anxious waiting, and the distortions of temporality experienced in the face of a future towards which the self cannot be orientated, as a specific response to the global conflicts of the twentieth century (Saint-Amour 2015). Saint-Amour indeed uses Minkowski to take aim at psychoanalytically inflected accounts of trauma, arguing that the violence of war is not just extended through a traumatic return of the past; rather, in an era characterized by the imminent threat of 'total war' via aerial bombardment, 'violence anticipated is already violence unleashed' (2015: 13). The threat of a total war that impinges on both civilian and military populations might be understood as producing 'a proleptic mass traumatization', the symptoms of which exist 'not in the wake of a past event, but in the shadow of a future one' (2015: 7–8), even though, we would argue, this trauma must be activated and charged by at least a proximity to events in the past. But Minkowski's more ontological attempt to anatomize the disturbance of

lived time in mental illness seems to intuit something that Saint-Amour allows to slip from view: the way in which the propulsive pump of anxiety about an expected yet indeterminate disaster shifts into something more like depressed affect as the relationship towards the future is suspended, time cannot pass, and the present and past swell.

Minkowski's own traumatic experience of war and the social repression of its effects slowed the writing of his book to a stand-still (1970: 7), and perhaps he only moved his work forward by turning to endogenous depression rather than 'reactive depressions' that could be the long-term effect of combat experience. For Minkowksi was able to claim phenomenological, ontological insights about the human capacity to march in step or fall out of phase with the flow of lived time. Indeed, he showed how such depressions reveal something essential about the shaping of human temporal experiences; they 'express a profound modification of the structure of time, a modification that reduces to a more or less broad contrast between immanent time and transitive time' (Minkowski 1970: 299), or the distinction between what he calls, following the phenomenological psychiatrist Erwin Straus, 'ego time' (a subjective sense of lived time), and 'world time' (a shared external experience of time) (Minkowski 1970: 297). Time is, instead, 'englobed' in and by forms that are detached from progression. To use Minkowski's patient's own words: 'I feel displaced in relation to life. I feel time flee, but I don't have the sensation of following the movement; I have the feeling of turning in the opposite direction than the earth' (Minkowski 1970: 332).

The observation that in melancholia 'immanent time seems to slow down remarkably, even to stop' (Minkowski 1970: 297–298) is not new to the twentieth century. Thomas Burton famously noted in his 1621 *Anatomy of Melancholy* that when ruminating on 'what I have ill done', 'methinks time does move very slow' (Democritus 1806: 12). In 1928, Straus picks up on a temporality which does not and cannot flow or unfold:

> When depression brings internal time to a standstill, there is no longer the possibility of resolving experiences […] by stepping on into the future. Inner experience has reached an impasse […] The demands for conclusion that emanate from things cannot be fulfilled in the future-less experience of the depressive.
>
> (Straus 2012: 211)

Straus goes on to note that

> [s]ick people report that time runs dry, seems in their anxiety to have come to a stop. Or again, that the passage of time in general has slowed down, or that time only moves forward when a steady mechanical activity is taking place.
>
> (Straus 2012: 214)

In 1928, Viktor von Gebsattel also reported one of his patient's experiences of temporal disruption in melancholia, though here time is not brought to a standstill; instead the future is cancelled because time cannot be contained:

> I am constantly thinking that time is flying past. As I am speaking with you, with every word I'm thinking 'past', 'past', 'past'. […]
> Every single movement makes me think: now I am doing this, now that […] It is terrible thinking like this, it's a type of killing (?), that's why it's related to thinking about suicide.
>
> (Von Gebsattel 2012: 215)[7]

Quoting Von Gebsattel's case study, Minkowski notes the terror such a future invokes through its hostile force (Minkowski 1970: 302–303). He adds that what someone might try to do in the face of such depression is attempt to reinstate 'mechanical progression' through obsessive symptoms that give rise to an illusion of forward movement, but in fact only fill the present by filling in for the weakening dynamism of time (Minkowski 1970: 299).

Whether it is a sluggish over-abundance of time that does not pass, then, or an excess of time that cannot be contained but speeds by like a freight train mowing down the person standing helplessly in its path, depression here tracks modernity's anxious relation to a temporality repeatedly imagined as having fallen out of phase with the proper rhythms of human life – a time that is either too slow or too fast to be absorbed, used, and then passed through the subject.[8] If, as Hage puts it, '[w]aiting indicates that we are engaged in, and have expectations from, life' (Hage 2009: 1), then it is precisely this idea of waiting, in which a present might be used productively as it flows into a future of achievement, that begins to slip away. Instead, there is an obsessive repetition of the same:

> No action, no desire emerged which, emanating from the present, could go toward the future across this succession of dull and similar days. Because of this, each day had an unusual independence. They did not vanish into the sensation of the continuity of life. Each one emerged as a separate island in the dark sea of becoming.
>
> (Minkowski 1970: 186)

As Minkwoski puts it later, 'When the flow of life is barred, immanent death is also arrested. Transitive death then becomes mistress of the mind' (Minkowski 1970: 304). Dependent relationships, both on the future and, crucially, by implication, on others, dwindle defensively into islands of diminished, brutally self-contained insufficiency in which it feels impossible either to live or to die.

Time as care

In *Being and Time*, Heidegger argued that *Dasein* is significantly 'temporised' by its involvements, its inclination, its leaning towards a world and ability to make use of it as part of its own projects – its '*Being-ahead-of-itself*' (Heidegger 1967: 236). But although Heidegger uses the words care [*Sorge*] and concern [*Besorgen*] to describe his understanding of these ontological possibilities of being-in-the-world and involved with it (83–84), they are not freighted with the strong connotations of intersubjectivity, interdependence, and ethics that undergird more social conceptions of care. Instead, Heidegger's accounts of care and 'being-with' are more concerned with involvements that are pragmatically useful to *Dasein*'s projects. As Gallagher and Jacobson (2012) have argued, Heidegger has a significantly underdeveloped account of the social that lacks any strong sense that humans might discover the world through relations with others that have already been established both psychologically and ontologically through primary intersubjectivity.[9] The ethical lacunae in Heidegger's thinking were also implicitly taken up by Emmanuel Levinas in his series of lectures delivered in 1946/1947, *Time and the Other*. There, Levinas argued that relationships with others and alterity are in fact ontologically primordial, preceding and producing the very possibility of selfhood rather than emerging from it, as Heidegger had argued (Levinas 1987). For Levinas, others are also not simply met in time in ways that 'temporise' the subject's experience; rather, time is a primordial condition that enables any meeting between self and other or any possibility of sociality. 'The dialectic of time is the very dialectic of the relationship with the other' (Levinas 1987: 93), he insists. If this is so, when the sense of a time that passes and can be stepped into or inhabited is relinquished in favour of those 'separate island[s] in the dark sea of becoming' that characterize depression, it is perhaps the fundamental awareness of the ontological possibilities of being-in-the-world and being-with-others (in both Heideggerian and Levinasian senses) that shears away.

The question that remains for phenomenological psychiatry, however, is how might these experiences of temporal disruptions, so deeply entangled with the disturbance of the possibility of relationships with others, be cared for or treated? If we move towards more social conceptions in which care can be described as 'everything that we do to maintain, continue, and repair our "world" so that we can live in it as well as possible' (Tronto 2013: 19), then a disturbance of the ability to encounter others and to move outwards from the solitary self in existential crisis into a 'world' made possible in and through time, seem significantly entangled with a sense that the basic temporal conditions that enable caring and being cared for have radically slipped from view. And one response, one offer of care, might therefore be an insistence on a form of treatment that takes time and the relationship with an other as its primary materials.

In 'The Scandal of the Timeless', Julia Kristeva situates Heidegger's account of time and care alongside those of Bergson and his contemporary,

Sigmund Freud (Kristeva 2003). She sees each philosophical position as subverting the Western philosophical elision of temporality with consciousness, giving way, she argues, to articulations of extra-subjective temporality. As we have seen, Heidegger 'ontologises' time as care so that time can never be simply thought of as 'subjective':

> Understood as the ontological meaning of care (Sorge), this temporality […] conditions the categories of our existence in time (past, present, future) without being reduced to it. The human being is a being-there, a Dasein, a thrown being, always 'ahead-of-itself' and, for this reason, care-ridden: a 'being-towards-death.
>
> (Kristeva 2003: 29)

Bergson's duration, on the other hand, while having a psychical dynamic, is anterior to the sphere of the psyche. Duration is not a product of consciousness, but an embodied memory of matter that is in constant vibration. Duration therefore dematerializes matter, with matter itself becoming a form of 'an indefinitely dilated past', and duration emerges as 'the most contracted degree of matter' (Kristeva 2003: 29).

It is Freud, however, whom Kristeva identifies as offering a linear conception of the time of consciousness within which he inscribes a fundamental heterogeneity that nevertheless frustrates linear time. *Zeitlos*, Freud's term for the timelessness or the lost time of the unconscious, becomes, for Kristeva, a form of impossible temporalizing that suspends or frustrates the everyday meaningful modes of existence in the world which are reliant on time that is bound into sequence. *Los* – to come off, to come loose – is not connected to the ordinary or everyday. The timelessness of the unconscious signifies something closer to that which is un-timed, unleashed, or unbound. Rather than thinking of Freud's unconscious as an absence of time, she argues that Zeitlos signals a timelessness beyond time that 'encroaches on a pre-psychical time and approaches the somatic' (Kristeva 2003: 31). Zeitlos gestures towards a time that is prior to the psychical binding of time, which she situates as the rhythm or pulse of the soma.

This tension between bound and unbound time, between the linear conception of the time of consciousness and the timelessness of unconscious processes, plays out in psychoanalytic treatment, which could itself be understood as a treatment *of* or *with* time. Kristeva draws out three modalities of timelessness that articulate analytic experience. These are the memory trace; the cyclical process in psychoanalytic treatment of 'working through'; and the time it takes for the dissolution of the transference. Memory, as Freud saw it, is a lasting trace of excitation remaining in unconscious life, which he asserted was indestructible and yet displaceable through the production of symptoms that 'remember' differently. Working through is the struggle we have with resistance – we don't want to know in conscious or historical time what we do know in unconscious timelessness, so we need to

constantly deflect that knowledge. The practice of analytic treatment entails approaching resistance not once but again and again in such a way as the analyst must remain unconcerned with the outcome of the approach, allowing the analysand to come to care about their particular truth. Finally the dissolution of the transference is the temporality of the end of the analysis itself. It signals the time of separation that confronts the patient with the possibility of the analyst's death and their own susceptibility to dissolution. In order to come to care enough about one's own death and the death of the analyst, some working through has to have occurred in which an experience of suffering or psychic pain has been marked by temporal difference – by the waiting, delay, or lost time of both analyst and analysand. The paradox then of treatment is that facing one's own potential dissolution and being able to bear living on beyond the end of the analysis requires the retroactive scene of having waited together. Psychoanalytic care, in this account, functions through a form of prolonged waiting *with*.

Despite the psychoanalytic emphasis on the timelessness of the unconscious, it is important to note the ways in which psychoanalysis and its theory of melancholia/depression emerge, in both theoretical and practical terms, from the conditions of twentieth-century modernity and particularly those experiences of violence and hate manifested through war. Freud's 'Mourning and Melancholia' was first published in 1915 and offers an account of melancholia in which the otherness of the lost love object and, by implication, the ungraspable temporal relationship with the past and the future that the other symbolizes and enables, collapses (Freud 2017). As the ego incorporates the object into itself by aggressively devouring it, it turns its hate towards the lost other inwards, implying a temporal structure that no longer moves, even minimally, outwards from the self through an inclination towards the other. Such melancholia therefore becomes the obverse of care, at least as we have been defining it here.[10]

British psychoanalysts working in the middle of the twentieth century under the influence of Melanie Klein also brought the external experience of two world wars into charged contact with the time of psychic life and the psychic life of time. As Michal Shapira has shown, these analysts were concerned to anatomize the idea of a '"war inside", that is, what they saw as the aggression, sadism, and anxiety that in part constitute every subjectivity' (Shapira 2013: 49). For Klein, writing in 1946, the child's loss of complete identification with the primary object, usually the mother, is an inevitable part of development; but in order to preserve the idea of the good lost object that can be held inside, the child splits it spatially, keeping the good object at some distance from a bad object that attacks both from within and from the external world, and is felt to be responsible for painful but inevitable experiences of frustration and loss. The movement from this spatializing 'paranoid schizoid' position to a 'depressive position' that recognizes the aggression of the attack on the loved object and looks, remorsefully, to repair the damage done – to put it back together over and through time – signals an

emergent capacity to understand the object in reality as separate and neither wholly good nor fully bad, but both good and bad (Klein 1946).

As Hage astutely notes of psychoanalytic theory:

> waiting has always been seen as foundational in the formation of the affective self, particularly at the moment of separation from the mother or the breast. It is not far from the truth to say that in psychoanalytic theory the self takes shape the very moment it starts waiting.
>
> (Hage 2009: 9)

In terms of melancholia, the psychoanalyst David Bell suggests that Klein's model articulates how serious depressive illness can emerge in the temporal extension of schizoid processes driven by an 'incapacity to manage the psychic pain characteristic of the depressive position' (Bell 2000: 25) – the reality of loss and separation and the dependence upon others that demands an inclination, a relationship, with an other and an unknown future in which time cannot simply be controlled or 'filled in'. In their account of waiting, Janeja and Bandak make the central claim that 'waiting must be scrutinized in relation to the central figures of hope, doubt and uncertainty' (2018: 1). Certainly the capacity of the analyst to bear repeated 'paranoid schizoid' attacks, and offer, time and again, a form of understanding that interprets the aggression rather than defensively throws it back or denies it, marks out the work of psychoanalysis in the face of depression. This practice, however, entails a mode of waiting that deliberately suspends hope, and offers instead a commitment to work under the conditions of permanent doubt and uncertainty. Only through staying with a time that is experienced by both analyst and analysand as phenomenologically 'not flowing' can depression have the chance of being understood. This staying with, this waiting *with*, nevertheless gestures towards at least the possibility of a future that might not merely be a repetition of a stuck past or a swelling, obsessively revolving present.

One major problem for developing an evidence base for the efficacy and therefore potential efficiency of psychoanalytic treatment is the need for long-term studies that can capture this slow process of endurance when time, for the patient, might have effectively stopped unfolding in the ways we have described above. In 2015, the first findings were published of a ten-year long randomized controlled trial on treatment-resistant depression and long-term psychoanalytic psychotherapy (Fonagy et al. 2015). The Tavistock Adult Depression Study suggests that previous research had been poor in assessing the efficacy of psychoanalytic psychotherapy precisely because it had struggled to take into account the chronic qualities of treatment-resistant depression, or the effects of a very long and slow treatment process. In the study, 44% of the patients who were given 18 months of weekly psychoanalytic psychotherapy no longer had a major depressive disorder when followed up two years after therapy had ended; for those receiving the current NHS treatments of choice (anti-depressants and short-term Cognitive

Behavioural Therapy) the figure was 10%. While only 14% of those receiving the psychoanalytic psychotherapy recovered fully, for those receiving current NHS treatments of choice full recovery occurred in just 4% of patients. In every six-month period in which participants were tracked (over a total of 3.5 years), the chances of a remission from depressive symptoms for those receiving psychoanalytic psychotherapy were 40% higher than for those receiving the current treatments. After two years of follow-up, 30% of those receiving the psychoanalytic therapy had remission from their depressive symptoms; in the control condition this figure was only 4%.

Between 1998 and 2012, England saw a 165% increase in the prescription of anti-depressants (Spence et al. 2014: 4), and in 2016, 64.7 million antidepressant items were dispensed and 33.7 million (108.5%) more than in 2006 (Thomas et al. 2018: 2). A recent systematic review and meta-analysis of available data on treatment for major depressive disorders has suggested that antidepressants are demonstrably effective (Cipriani et al. 2019). Nevertheless, as noted above, relapse rates remain high (Kirsch et al. 2008), particularly when tracked across the decades over which chronic conditions often play out, and side effects can be significant (Gøtzsche 2015). Recent work on prescribing practices in NHS has also revealed a tendency for GPs to medicalize distress in low-income communities facing chronic conditions of material poverty and experiencing the effects of the pervasive sense of shame produced by political and broader social discourses surrounding 'benefits' or 'welfare' (Thomas et al. 2018).

The neurobiological understandings of mental illness that underpin current prescription regimes, alongside the Improving Access to Psychological Therapies initiative for anxiety and depression that has prioritized relatively low-cost digitally enabled therapies and cognitive behavioural therapy, have meant that psychoanalysis has lost most of its traction in the National Health Service in England.[11] To suggest a reconsideration of psychoanalysis in relation to the treatment of depression in the NHS in this climate is not to deny the difficult realities of straitened finances, the particular ways in which clinicians are acutely time-starved, and clinicians' pragmatic attempts to ameliorate distress in the face of what are felt to be intractable problems caused by government policies (Thomas et al. 2018) and significant constraints on prescribing practices. In particular, we are not suggesting that we return to psychoanalysis in a way that resonates with the current veneration of 'the slow'. We note that a certain resurgence of psychoanalysis in public discourse in the last few years saw Stephen Grosz's *The Examined Life* become a bestseller serialized in 2013 on BBC Radio 4. This kind of work implicitly connects psychoanalytic practice to an elegiac mode in which the equation of time and money is not addressed and there is no scarcity of resources to pay for treatment. We want to suggest, however, that we might do psychoanalysis a disservice in terms of its ability to speak to our present moment if we hold it to the romance of the slow and to fantasies of plenitude – to a world where there is no gap between need and fulfilment. Our point is rather

that our current times are shot through with a more resistant, more chronic relation to time, and that in this context psychoanalysis provides a rare discourse that enables us to articulate the link between chronic time and practices of care that inhabit and use time's complex chronicity.

We finish by returning to Beckett. One of the things that much of his drama makes clear, through his strange 'pseudo-couples' who remain bound to one another, is that, in the absence of a future towards which one can orientate oneself, one might wait not *for*, in solitary existential crisis, but *with*. In Beckett's *Endgame*, which has been interpreted as both a displaced account of the Second World War and an anxious anticipation of a nuclear holocaust, Hamm cannot stand, and Clov cannot sit. Clov tells Hamm there is no more painkiller; indeed, all the things they may have once been waiting for have been exhausted. Even the alarm clock does not work anymore, yet the time that time takes to come to an end remains. They endure in an extenuated yet nevertheless clearly finite state. They remain, dependent, waiting; in their terms they are 'obliged to each other' (Beckett 2012: 90). Though Beckett is always prone to undercutting his awareness and acceptance of interdependency with cruelty, we could at least say that Hamm and Clov care for one another through persistence, through an insistence on waiting *with*. Where depression collapses experience back into subjectivity, waiting, which is not to be completely subsumed under anxious anticipation, active expectation, or the stuckness of depressed time, invokes intersubjectivity; it fashions a minimal openness to a future in care and dependence. To be dependent is, after all, literally to understand oneself to be hanging – like a pendulum, suspended – from an other and from a future towards which one might find oneself at least minimally inclined.

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Data availability statement

Data sharing not applicable as no datasets generated and/or analysed for this study.

Notes

1 See Schwartz 1975; Sharma 2014; Bendixsen and Eriksen 2018.
2 To address melancholia and depression together is not to claim that they are simply different words for a transhistorical condition with stable features – in other words, a 'natural kind'. We note that there might be some significant differences between the ways in which melancholia and depression are defined and represented. Nevertheless, if we take the position that psychological objects necessarily have an 'ambiguous' status (Hayward 2011: 526) – held between 'natural

kinds', disciplinary constructions, and ideological formations and subject to feedback as individuals are thrown into a complex confluence of biological and social causes and effects – early twentieth-century melancholia and depression have significant similarities in the ways in which they figure the importance of temporal disturbance.

3 Further recent examples include Liene Ozolina's ethnography of waiting in post-soviet Latvian workfare programmes; Bruce O'Neill's ethnographic study which tracks boredom in urban homeless populations in Bucharest; and Javier Auyero's (2012) study, *Patients of the State*, which focusses on welfare offices in Argentina, and the indefinite waiting imposed on those who need social assistance.

4 This is particularly remarkable in the case of the phenomenological psychiatrist, Eugène Minkowski, whose 1923 paper, 'Findings in a Case of Schizophrenic Depression', drew from his experience of living day and night over a period of two months with a patient as his personal physician (Minkowski 1958).

5 This idea of time is most fully articulated in Frederick Winslow Taylor's theories and practices of scientific management between the 1890s and 1910s.

6 See also Havi Carel (2016).

7 For a more contemporary account, see the philosopher Matthew Ratcliffe (2014) on how people with depression frequently report an alteration in their phenomenological experience of time.

8 See Goodstein on boredom, and Duffy on speed.

9 In 1943, one of the first phenomenological psychiatrists, Ludwig Binswanger (1964), made a similar criticism of Heidegger.

10 'Care' is, of course, also a synonym for woe.

11 Significantly, psychoanalysis was in fact key in the emergence of models of care in the development of General Practice in the NHS in the 1940s and 1950s (see Balint 1957).

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6 Monsoon uncertainties, hydro-chemical infrastructures, and ecological time in Sri Lanka

Tom Widger and Upul Wickramasinghe

Introduction

In the first week of April 2016, the Sri Lankan president Maithripala Sirisena warned paddy farmers not to wait until after the ritually auspicious Sinhala and Tamil *Alut Avurudu* (New Year) at the end of the month to begin cultivation for the new season but instead to begin immediately. A combination of lower than average rainfall and higher than average temperatures throughout February and March had meant the loss of 300 million litres of water each day from the country's network of irrigation reservoirs (Perera 2016), which make up the Mahaweli Irrigation and Development Project (MDIP), the main rice-growing area of the island. Until recently, and certainly within living memory, the monsoon could have been expected to bring around 4.5 million metric tons of rain each year; over the past decade, however, seasonal rains had become unreliable, with rainfall over the Indian subcontinent decreasing between 20% and 30% (ibid.). Speaking to Reuters news agency, Namal Karunaratne, national organiser of the All Ceylon Peasants' Federation, argued that Sri Lankan farmers were not equipped to respond to the effects of global warming. He explained, 'Our farmers are yet to get used to these changes. They are still used to the government providing water on time…They are not used to water management' (ibid.). According to Karunaratne, a clash of two forces was producing the problems experienced by farmers: the first, the pull of what he called 'tradition,' which locked farmers into a cultivation schedule premised on centrally mandated water release; the second, the push of climate change, requiring farmers to adjust their practices to an increasingly uncertain monsoon.

Despite the warnings, most farmers did decide to wait for a few weeks until after *Avurudu* to commence farming – by which time water levels in the tanks had fallen to 60% below their usual level. And just as Sirisena had cautioned, when farmers started preparing their lands the authorities announced water rationing across the irrigation system, with some parts receiving no issues at all. This included Kajugama, a village in 'System H' of the MDIP where we had been conducting ethnographic research into the use of chemical pesticides and fertilisers. Villagers expressed anger and

frustration about the failure of irrigation authorities to provide them with water for the Yala season. Some complained that the government had orchestrated the water shortage, because they wanted to compel farmers in System H to grow riskier cash crops soya and millet, which required drier conditions, instead of rice, their staple. Others pointed out that the government had only imposed drought on System H because of the need to provide water for the tens of thousands of pilgrims expected to visit the nearby city of Anuradhapura over the next few months, to observe the Buddhist holy days of Vesak Poya and Poson Poya. As one informant explained:

> As farmers we live according to the timetable of the Mahaweli. We can only start farming at the time decided by them, and only stop at the time decided by them. We depend for everything according to when water is released from the tank and when water is shut off again.

Others suggested the drought was an example of climate change and an increasingly erratic pattern of rainfall. 'These days we don't know when the monsoon will come. Sometimes we have drought for long periods and after that heavy rains that cause flooding,' one farmer explained. To cultivate effectively within this context, Kajugama farmers told us that they had to be 'mindful of time' (*kaalaya pilibandawa salakilimath weema*) if they were to beat the constraints of both the irrigation infrastructure and monsoon uncertainties – a particularly Buddhist framing that linked mental reflection with social and environmental action.

In this chapter, we contribute towards debates in the anthropology of time by highlighting the importance of what we term climate-driven *ecological time* in local understandings of time. If, as Kirtsoglou and Simpson note in their introductory chapter to this volume, social scientific studies of time have typically sat somewhere between three cardinal points – an objective and universal physical time, a representational and variable cultural time, and a subjective phenomenological time – we wish to argue for a fourth: a materialist time generated through the shifting relations of objects in spatial terms (Harman 2005). We argue that recent theoretical developments that have highlighted time's social and political 'thickness' (Bear 2014b) remain restricted in their capacity to understand the experience of time within more-than-human chronoscapes that inevitably impinge upon representational and phenomenological time. What we call ecological time should not be conflated with the universal, objective time of the 'natural' world. Taking our cue from 'new materialist' approaches, we consider time's metaphysics less in terms of the distinction between human and non-human time (the representational and phenomenological versus the objective universal), than we do time *as* the relations between objects in space (Harman 2002, 2005; Bennett 2004; Shaviro 2011).

We develop our approach through a close study of 'timeliness' as an agricultural constraint, management strategy, and climatic force in and of

the MDIP. From an infrastructural perspective, the success or failure of the irrigation project has always pivoted on the precise alignment of two key agricultural inputs, water and fertilisers, *in time*. That is to say, on specific dates for water release set by the MDIP, to which the tens of thousands of farmers poised to receive water across the irrigation system should respond by applying top dressings of fertilisers. As a 'chronocratic' (Kirtsoglou & Simpson, this volume) project whose objective was to discipline farmers into a common Mahaweli time, the MDIP has long invited discussion of the nature of time among irrigation planners and cultivators alike. We use these speculations to describe the modes of representational, phenomenological, and ecological time that exist within the MDIP's socio-techno-eco complex, at three interrelating levels – of practical farming experience; of irrigation policies and procedures; of molecular and massive material objects and processes – agrochemicals and monsoons – colliding. By one reading, the story we tell is of a historical parable of change – of how narratives of development reflect the wider contexts of their creation. In Sri Lanka, this has been in a context shaped by post-colonial politics, structural adjustment, and now looming environmental threats. By another reading, we tell a story of an infrastructure project and its multiple temporalities – from the overarching 40-year life of the MDIP itself, to the everyday practicalities of trying to ensure water and fertilisers converge in the right place at the right time. These two stories offer a view of repeated attempts to generate time-discipline among Mahaweli farmers, in a context fundamentally shaped by ecological pressures that make this practicably impossible. We propose that the concept of modern time as embodied in the MDIP describes what we call a *restricted sociology of time*, but that by paying attention to an *expansive ecology of time*, as embodied in farmers' attempts to become mindful of 'water time' and 'fertiliser time,' can help to illuminate the impacts of climate change on local temporal understandings.

Ethnographic research was conducted in a village we call Kajugama, in System H of the MDIP, between November 2015 and August 2016. We lodged with a local family and conducted household surveys across the community, during which we recorded, *inter alia*, views on agricultural challenges and problems. This produced detailed records on 59 farmers, which we then fleshed out by conducting in-depth follow-up interviews with around ten farmers, and two focus group discussions on recurring themes, including water management and the problem of timeliness, containing 12 farmers each. Finally, our long-term participation in social life in Kajugama facilitated the development of a more quotidian and textured set of understandings of how farmers went about agricultural activities within the Mahaweli, including how they planned farming during times of water shortage and monsoon uncertainties. We also spent several months working through the holdings of the Mahaweli Library and the Hector Kobbekaduwa Agrarian Research and Training Institute, both in Colombo, which store technical, evaluation, and policy reports on the MDIP including System H. Those

sources helped us to historicise the ethnographic insights we had gained, showing how farmers' concerns with timeliness had emerged in the context of wider policy efforts to effect exactly such change.

The anthropology of time: from culture to cognition to ecology

Anthropologists have long been interested in how human experiences of time are shaped by, and shape, socioeconomic, cultural, and ritual contexts (Goody 1968; Gell 1992; Munn 1992; Hughes and Trautmann 1995; Bear 2014a). Across the course of the twentieth century, anthropological interest in the ethnographic variance of human understandings of time led to a growth of models that Alfred Gell (1992) criticised for engaging in 'unwarranted metaphysical speculation' (ibid.: 149). By this, Gell meant that the cultural-symbolic approach to time that anthropologists had generally employed lacked a clear epistemology and a 'generalized sense of puzzlement that the ghostly notion of *time* evokes' (ibid.). Writing against this trend, Gell argued that time existed not only in a universal and objective sense but also for the purpose of anthropological analysis; it was only necessary to consider actor-oriented experiences of time and socio-cultural representations of time – what Gell, after McTaggart, called 'A-series' and 'B-series' models of time, respectively (ibid.: 149–174). The A-series equated with *subjective* time, which is to say something that passes from the future, through the present, to the past, as a series of relative moments, and the B-series with the *structural mechanism* of time, external to the individual, which places things 'before' and 'after' in an absolute sense, unconnected to the temporal location of the actor. For Gell, the subjective A-series and structural B-series both manifest on the level of cognitive 'time-maps' that produced temporal representations which aided human beings to navigate the social world.

Extending Gell's ideas, Laura Bear (2014b) has argued that what Gell had proposed as cognitive tools could also be understood as cultural phenomena linked to economic, social, and political institutions, characterised by 'affect and deep temporal depth' (ibid.: 17). In global capitalism, Bear suggested that the dominant model of time is an abstract time-reckoning model used to measure value structurally – what amounts to a B-series time-map in Gell's parlance. But, argues Bear, this model also exists alongside a plurality of A-series time-maps from which modern institutions (banks, corporations, and so on) all pull to produce a diverse array of 'representations, techniques, and rhythms of human and non-human time.' For Bear, this very diversity of time-maps in the making of capitalist time suggests that 'modern time is characterized by unprecedented doubt about, and conflict in, representations of time' (ibid.). As institutions seek to manage diverse temporalities, time 'thickens with ethical problems, impossible dilemmas, and difficult orchestrations…[as]…the irreconcilable social rhythms produced by the use of abstract time are laid bare' (ibid.: 7, 17).

Importantly, Bear's concern to describe 'modern' time produced by and productive of political economic processes involved a rejection of Latour's (1993) contention that 'we have never been modern.' Bear argued that a concept of modernity was crucial to retain if anthropologists were to make sense of global capitalist timespace. In so doing, Bear was also rejecting the potential for thinking beyond anthropocentric terms, explaining away what we have termed ecological time as an 'attempt to project and combine human and non-human forms of time' (Bear 2014b). Yet we argue that a concern with modernity as such limits anthropologists to considering only the economic, political, and bureaucratic representations and techniques of time – what we have called the restricted sociology of time. As we describe below, the functional limits of the MDIP as a hydro-chemical infrastructure straining to adjust to monsoon uncertainties highlights the environmental context of human temporalisation within a social-techno-eco complex of non-human objects pulling together and falling apart in a process that exceeds political economic and political ecological forces – *necessitating* a 'post-modern' approach to time. This view requires a deeper theorisation of the potentialities of what is usually fenced off from the time of anthropology – the functioning of the natural world that obeys Newtonian rules.

Perhaps for many anthropologists, the knowledge that *real* time exists as a constant has offered a feeling of ontological security in the face of what Gell dismissed as descriptions of time in ethnographic 'fairyland' (1992: 314). To deny those 'others' who seemingly experienced time differently from 'us' was moreover to deny them 'coevalness' (ibid.), which is to say to relegate them to some pre-modern or a-modern time. As Kirtsoglou and Simpson (this volume) also suggest, such denials also lay at the core of the chronocratic workings of political and economic systems, with various forms of time-othering producing 'deeply asymmetrical relationships of exclusion and domination' between those who control time and those who are subject to time. In what follows, we extend these debates by showing how a concern with chronocracy does not preclude an interest in time of the non-human but in fact is essential if anthropology is to say anything meaningful about the workings of political and economic systems in the context of climate crisis. The objective of our critique, then, is both to unsettle the ontological security that may derive from the notion of universal time and to enter willingly the 'fairyland' of non-human time that new materialist approaches can offer. Before developing these ideas, however, we will describe time as it is lived and managed in the Mahaweli.

Waiting for water in Kajugama: systemic and climatic constraints on farming

Throughout our research in Kajugama, it became increasingly clear how local farmers have long struggled with the water release schedules maintained by the MDIP. The problem was not that the MDIP had always provided

water *on* time but, to the contrary, that it always *had not*. Farmers viewed this not just as an administrative failing of the Mahaweli authorities but also as an issue spanning multiple domains of social and cultural structure, practice, and action. These included the constraints inherent in the irrigation infrastructure itself, through farmers' agrarian knowledge and skills, to the effects of climate change. The coming of the rains was also associated with the actions of deities. Our Kajugama informants saw a close approximation between the righteousness of people – in the village, in System H, in the world as a whole – and the chance of rain falling or not (c.f. Weeratunge 2000: 254). More widely, farmers' imbued water with significant historical, social, and religious meaning. Their occupational status as *govi* (farmers), caste status as *goyigama* (people who work the soil), and identities as Sinhala Buddhists residing in the cultural heartland of Anuradhapura all depended on the availability of water to grow paddy. Discussing the impact of the MDIP's decision to halt water to System H, one farmer explained, 'we *have* to grow rice as that is who we are. If we can't grow rice then there is no use in farming any longer. We don't want to grow maize or those other things.'

For Kajugama farmers, this 'cultural' account of water's potential abundance conflicted with the experience of water as a scarce resource that only flowed according to MDIP schedules. In Kajugama, farmers grew rice using the seed broadcast method. To kill weeds and to soften the ground, the field would be flooded and then ploughed prior to seeding. Water was again needed at two further dates in the growing season, when top dressings of fertiliser would be applied – for the *samba* rice variety, which was most extensively grown in Kajugama, this would be after 14 and 28 days. To meet these demands, each section of System H would receive three water issues at different times, with each water issue lasting 14 days (i.e. water would flow through each section's canals and down to individual fields for 14 days at a time). The problem that farmers faced was first ensuring they were ready to receive water issues to flood, weed, and plough their field, and then ensuring their paddy had developed sufficiently for the effective application of fertiliser to coincide with later water issues. Kajugama farmers explained that the date on which they typically received the first water issue and the length of time for which they received water issues were both unsuited to their needs.

Moreover, the different climate conditions characterising the two growing seasons of the year affected the nature of the challenge that farmers faced. The Maha season, which corresponds with the northeast monsoon from September to March, is typically wetter than the Yala season, which corresponds with the southwest monsoon from May to the end of August. During Maha, the MDIP usually released water in November, once the rains have begun to replenish the storage tanks that had been depleted during the previous season. During Yala, water would only be released once the inter-monsoonal rains that fell after Maha had replenished the tanks, usually sometime by early May. Even though one of the original aims of

the Mahaweli project had been to alleviate precisely this dependence upon rainfall, the storage and distribution system had never adequately met the ever increasing demands for water – and in recent years the increasing unpredictability of rains.

A related problem involved the cycling of water between subsystems, resulting in farmers receiving water issues only for a maximum of 14 days at a time. This meant that farmers had to condense land preparation for both seasons into a shorter period than they felt was required. Consequently, windows of opportunity for applying fertiliser often did not correspond with the optimal stage of plant growth. The result was often that water arrived later in the growing season than it was needed, at a time when rice plants were under- or over-developed for optimal fertiliser application. To try to mitigate this, farmers explained how they 'rushed' land preparation and often began seeding before they had managed to kill all the weeds. As it happens, the 2015 Maha season also coincided with the Sri Lankan government's ban of the herbicide glyphosate, which farmers said they depended upon as the quickest and most cost effective way of clearing their fields of weeds that had grown since the end of the Yala season earlier that year. Describing the situation one farmer explained:

> We get water in November and within fifteen days we have to finish the land preparation and seeding. Otherwise, we will have water shortage issues [later in the growing season]. [But] a period of fifteen days is not enough to finish land preparation and seeding. It means the mud is not fit to grow paddy. And when we do it in a hurry, we get more diseases as well. To finish land preparation and seeding within fifteen days, then farmers need to use glyphosate to speed up weed control. Without glyphosate…there is not enough time to kill weeds, hence weeds are also growing along with paddy.

While Kajugama farmers blamed most of their troubles on the MDIP and its inability to put into practice a water release schedule, they were also aware that changing weather patterns and other environmental factors played a role. Farmers we spoke to explained how the development of the irrigation system itself had had a profound impact on ecological conditions. Extensive jungles had once covered the land around Kajugama, which the MDIP had removed to make way for the irrigation infrastructure and settlements. The trees had once had a cooling effect on the local environment, and their loss had resulted in the elevated heat and frequent droughts of present times. As one farmer described:

> Deforestation is the main reason for climate changes in this country and it was significantly increased with the Mahaweli project. During the rainy season, water was retained in forest areas for several months. But now the soil becomes dry again just after the rain.

Another explained how this led to the silting up of tanks, reducing their capacity: 'Due to deforestation, the tanks are getting filled with soil, because soil erosion has increased with the heat and then washes into the tanks.' Along with the risks of heat and drought was also an increased risk of violent rains and flash flooding. When, in May of 2016, the long period of hot and dry weather broke with torrential rains, many parts of System H were flooded when village tanks broke and floodwaters washed away homes and crops. Kajugama itself escaped devastation, but the wet conditions affected plant growth and turned an already bad Yala season into a failed one for many in the village.

Taken together, extreme heat and flash flooding compressed the window of hydro-chemical opportunity for successful farming still further. Reflecting on these issues, farmers explained how they had little choice but to accept such problems and get on with cultivation as best they could. One strategy, which was also promoted by the MDIP itself, was to make offerings to deities to counter the effect of evils in the world. Another strategy was to focus one's mind and conduct on farming – to become 'mindful' of time. In fact, the mark of a successful farmer in Kajugama was precisely one who could manage all of the uncertainties and constraints that the monsoon and the MDIP represented – a skill referred to as requiring a certain 'discipline.' Farmers spoke of the importance of 'being well aware' (*honda awabodhayakin inna oni*) of the need to act in unison with what they called 'water time' (*watura muraya*) – predicting when the MDIP was most likely to release water – and 'fertiliser time' (*pohora muraya*) – when would be the optimum time to dress the field. Farmers so disciplined were respected precisely because of their ability to farm during the tightest of hydro-chemical windows by exploiting to maximum effect whatever temporal advantage they had.

Chandana, aged 34, was well known in Kajugama for his farming abilities. He attracted the praise of his fellows precisely because he had mastered the uncertainties of Mahaweli time and for many represented a new generation of paddy farmers who were resisting the pull of tradition and learning to adapt to the push of global warming. Despite the drought and the failure of the MDIP to release water, in the 2016 Yala season, Chandana had heeded President Sirisena's advice and commenced cultivation before *Avurudu*. He manually cleared weeds and softened the soil using a little rainwater he had stored in the field by building up a bund to prevent run off. He planted early enough in the season to mean the rice had sufficient growth to be ready to receive fertiliser after 14 and 28 days, respectively, when some rains fell just after *Avurudu*. Meanwhile, other farmers in the village had only just begun weeding and ploughing by that point and hence had fallen far behind schedule. The result was that Chandana's was the only successful rice harvest in Kajugama that Yala season.

In the MDIP, temporal discipline played a crucial role in farmers' individual seasonal successes and failures as well as their longer term economic and

social security. Off-farm actors like the MDIP may have controlled water time, but individual cultivators also had the ability to exercise agency by 'being well aware' of time. Disciplinary practices associated with becoming a 'good farmer' meant engaging with ecological processes alongside failing hydro-chemical infrastructure – an effort that required mastery over the geophysical constraints of irrigation systems themselves. As systems that depend upon gravity to pull water from tank to field, farmers at the top of distribution channels usually receive larger water issues than those at the tail end, leading to inequalities and squabbles between farmers and farmers and irrigation officials (Pfaffenberger 1990). Monsoon uncertainties have inevitably exacerbated such problems, and this combination of 'social' and 'natural' hazards can produce inequalities among farmers as some do better than others in coping with these challenges (Galt 2014). When read at this level, the meaning of time as understood by Kajugama farmers provided both a systems context *to* farming, a subjective discipline *of* farming, and a source of socioeconomic (in)security *from* farming. As one farmer simply put it, 'If we want to be successful in farming, then we need to do it properly. We need to apply fertilisers on time.'

Sri Lankan chronocracies: a brief history of Mahaweli time

In this section, we trace the historical development of Kajugama farmers' focus on the importance of acting according to key dates in the hydro-chemical cycle as a metric of agrarian success. We show how the concern to harmonise water time with fertiliser time through disciplined agricultural practice was cultivated over decades of policy intervention, both within the irrigation zone and without, from the earliest days of the Mahaweli itself. As an expression of post-colonial chronocracy, the MDIP had seen time 'like a state' (Scott 1998) in two senses – first, by envisioning a 'tempo' for the progression of the MDIP itself; and second, by envisioning the end goal of the MDIP in either a past recreated or a future obtained. MDIP planners considered both outcomes to be achievable only through the instilling of work-time among farmers.

When work began on the MDIP in the late 1960s, the initiative held the honour of being the world's largest irrigation development project. Thirteen irrigation systems labelled 'A' to 'M' would be colonised by settler-farmers drawn from the island's south-west, as well as those displaced by Mahaweli dam and irrigation development itself. By significantly enhancing local food production, the MDIP would reduce Sri Lanka's dependence on food imports and create employment for millions of people. Indicating its scale and ambition, some 40% of the island's landmass would fall under development, with 700,000 people – more than 5% of the country's population – targeted for migration (Muggah 2008). The Mahaweli Master Plan (MMP) originally envisaged a 30-year timetable to complete building works and population relocation. In 1978, the incoming president, J.R. Jayawardene,

keen to maximise the economic and social returns of the project, acceler-
ated the MMP to complete building works and relocations within just *six*
years.

The decision to accelerate the project proved calamitous in several ways,
including leading to huge budgetary overruns and failure to provide social
infrastructure and support for settled communities (Muggah 2008: 115). Ac-
celeration of the MMP at project implementation level also had knock-on
temporal effects at community and field level, with geospatial and hydro-
logic planning rushed. As one Kajugama farmer explained:

> There was a basic plan [for water release] before the accelerated
> Mahaweli programme. It was carefully planned to establish a system
> to release water in a required manner. The current issues [with water
> release schedules] are the result of the acceleration.

But if Kajugama farmers understood today's water problems to reside in
the acceleration, the MDIP itself accused farmers of temporal failings of a
different kind.

Just as in Kajugama today, policy discussions across the decades focussed
on the barriers to fostering 'timeliness' among farmers (Mahaweli Author-
ity of Sri Lanka 1978; Agrarian Research and Training Institute 1979). The
question of *why* farmers struggled with timeliness and *how* the problem
should be dealt with was answered differently during the 1980s and 1990s
and after 2000. At the core of the debates were two conflicting approaches
to time that can be usefully understood with reference to Gell's A-series and
B-series time-maps we introduced above and his use of these to illustrate
forms of social change and equilibrium identified with the temporal regimes
of entrepreneurial capitalism on the one hand and agrarian feudalism on
the other hand – what he termed economic A-theories and B-theories, re-
spectively (1992: 175–182). For example, economic A-theories supported a
view of capital accumulation that rested on the image of a lone entrepreneur
acting moment to moment with a subjective relationship to time, such that
each financial success disappeared as quickly as it appeared, generating a
quenchless thirst to accumulate again. In contrast, economic B-theories ex-
plained the motivations through which landowning classes derived wealth
from agricultural and plantation concerns, which depended heavily upon
natural processes and only marginally on human agency. Commenting on
the ideological significance of each, Gell wrote:

> the B-theory generates myths that support the interests of the ruling
> oligarchies in agrarian societies, and equally the ruling oligarchies in
> centralized socialist systems; the A-theory generates myths that support
> the interests of the individualist entrepreneurial class which controls…
> non-centralized capitalist economies.
>
> (Gell 1992: 178)

The MDIP's approach to the problem of timeliness can be read as an attempt to implement first a set of policies inspired by economic B-theories and then, when those failed, economic A-theories. The first response sought to motivate farmers through an appeal to Sri Lanka's own history as a hydrologic civilisation, and hence we characterise it as a turn to the past. MDIP planners drew from theories of social organisation linked with the rule of water (Wittfogel 1957) and Sri Lanka's own often romanticised history as an island of hydrologic civilisations (Leach 1959; Gunawardana 1971; Harriss 1984). Developed during the first decades of post-colonial independence, the MDIP appealed to the historical and cultural sensitivities of Buddhist farmers to encourage their obedience to the Mahaweli authorities by stressing the value of water as a natural but scarce resource and the importance of acting in a timely manner to be ready for water issues. The MDIP would derive its authority in farmers' eyes from its portrayal as the natural successor to the water authorities of the past, re-establishing rice farming at the heart of Sri Lanka's Buddhist 'cultural triangle' and the foundation of the new nation.

As an example of this chronocratic endeavour, in 1979, the Sri Lankan People's Bank, a key financial backer, published *Water rights and irrigation practices*, a report which argued that the success of the MDIP rested upon the recreation of 'traditional' social systems that could generate ties of mutuality and cooperation between farmers. The report argued 'there is a need that farmers be taught the importance of group action and proper water use' (People's Bank 1979: 29). The report further argued that farmers did not value water, because they received it free of charge – for farmers, water was a '"Gift of the Gods"; it is not to be charged for,' the report's authors wrote. 'Farmers need to value water like any input similar to fertilisers, labour, weedicides; rather than considering it as a free item such as air or sunshine' (ibid.: 31) they concluded. Again, the report turned to history to solve this problem, by invoking the example of a system of fines and penalties that ancient rulers had imposed on farmers found guilty of poor timekeeping. To stress this, the authors of the report signed off by quoting a stone inscription from the House of Lambakanna II (691–1017) of the Anuradhapura civilisation, which stated '*The fines to be levied…for ploughing Late, five kalandas.*' The objective set out by the People's Bank report was to instil a new discipline of 'community cooperation' in farmers that would recreate the beliefs and customs of their ancestors. Only by turning to the past would the promised future of the Mahaweli bear fruit.

The turn to the past defined MDIP policies throughout the 1980s. Too extensive to report here, the several archival holdings we reviewed showed how numerous governmental and non-governmental agencies sought to develop irrigation societies at village level through which forms of 'traditional' organisation would work collectively to maintain the irrigation infrastructure to help to ensure the timely release and arrival of water and to ensure that farmers had readied their fields on time. Project evaluations we read also

suggested that these efforts did not have the impact expected, with farmers continuing to struggle to ready their fields to match the Mahaweli timetable, which itself drifted off course almost every season. By the 1990s, however, policy responses to the problem of timeliness shifted away from a concern with the past and were developed within a new climate of donor-driven structural adjustment and agricultural liberalisation – what amounted to a turn to the future.

In 1992, the MDIP announced a Mahaweli Consolidation Project across several systems, including H (Mahaweli Authority of Sri Lanka 1992). The Consolidation Project argued for a 'joint management model' between the MDIP and farmer organisations. By directly involving farmers in the management of the system, the report argued, a 'large amount of money spent on irrigation rehabilitation will be in hands of the beneficiaries themselves… and they may perform higher quality of work [than private contractors] as a responsibility to their society' (ibid.: 2). Under the new arrangements, it would be the profit motive, not obedience to historical authority, which would incentivise farmers.

The clearest example of this turn to the future was the Mahaweli Restructuring and Rehabilitation Project (MRRP), launched in 1998. The MRRP was an outcome of the World Bank's *Report on Structural Adjustment of Management Agencies of Sri Lanka* (Mahaweli Authority of Sri Lanka 2003), a policy document (in)famous among leftist and environmental groups in Sri Lanka for heralding a new era of privatisation and liberalisation. The World Bank's aim was to implement a series of reforms that rationalised agricultural agencies in Sri Lanka as a means of increasing efficiency, productivity, and profitability. Chief within this was the objective of transforming the old Mahaweli Development Authority into a River Basin Agency (ibid.: 1).

Importantly, the MRRP identified the earlier commitment to historical authority as the cause of farmers' failure to adopt an entrepreneurial approach. Commenting on the situation found in 1998, the report warned of the

> …more or less bureaucratic centralised management set up in the H system. The RPM [Resident Project Manager] was the "king"…who ruled the system…All the decisions regarding to key issues such as water, land and agriculture were taken by the key staff in the project and passed on to the farming community for implementation. But none of the decisions were implemented properly as farmers had not contributed in making such decisions with the management.

To rectify this, the MRRP sought to promote an entrepreneurial, future-oriented disposition among farmers that would eradicate what it called 'the dependency syndrome' and promote 'self-confidence' and 'empowerment' (Navaratne 2000). Specifically, the MRRP would 'challenge farmers' attitude that "[Mahaweli] officers should assist them continuously."

It was not only within the agricultural sector, however, that attempts to instil a new future-oriented work-time discipline were to be found. In the early 1990s, Jayawardene's successor, Ranasinghe Premadasa, coined the phrase '*Lankave velaava*' ('Sri Lanka time') to describe the limits placed on national development by what he perceived as Sri Lankans' relaxed attitude towards punctuality more generally. 'Sri Lanka time' became a key policy concern of Premadasa's presidency, finding its clearest expression in his flagship '200 Garment Factory' programme. Launched in 1992, the programme aimed to build 200 garment factories in export-oriented free trade zones and create 100,000 jobs across the island. For each garment factory built, a clock tower would also be constructed, located at the main junction closest to the factory gates, which workers would pass on their way to work and home each day. As Lynch (2007) argues, Premadasa's clock towers played a dual role – the first, helping to discipline workers to the demands of the production line and the second, to symbolize the development of Sri Lanka's rural areas as they joined 'modernity' (ibid.: 72–74).

When set within this wider policy landscape, the MDIP's turns to past and future emerge as forms of time-discipline that formed part of a more general national story – attuning the population to the functioning of infrastructure deemed crucial for Sri Lanka's entry into global markets. In 1990, Premadasa argued that:

> [n]o country can make progress unless its people are dedicated and disciplined. These qualities must be built up in the home and in the school before one goes out into the world. A high standard of discipline will be enforced by imposing rules and regulations.
> (Department of Government Printing, 1990: 8, cited in Lynch 2007: 76)

The post-colonial Sri Lankan state was thus a chronocratic state, foregrounding time-discipline as the pathway to social and economic modernisation – a politics of the temporal that decades later also came to characterise the immediate post-war years (Amarasuriya and Spencer 2015).

The motivations behind the Sri Lankan government's various attempts to instil a modern work-time are strongly reminiscent of Norbert Elias' sociology of time. Writing in the 1930s, Elias (1994) argued that the process through which European peoples came to view themselves as 'civilised' depended, in part, on their participation in the broad infrastructural processes of capitalist temporality. In the context of ever-expanding areas of market expansion and activity, Elias suggested, was 'the necessity for an attunement of human conduct over wider areas and foresight over longer chains of actions than ever before' (ibid.: 379). The development of capitalist infrastructures thus demanded the 'strength of self-control and the permanence of compulsion…what we call the "tempo" of our time' (ibid.). For Elias, the 'tempo' of modern life was the rhythm to which we

must all move to engage successfully with the demands of the modern world. More recently, May and Thrift (2001) have argued that the tempo of capitalism has never been a universalising but divergent process, both contested and incomplete across local contexts. Offering an analysis of temporalisation within industrial contexts, May and Thrift suggested that 'the picture that emerges is less that of a singular or uniform social time stretching over a uniform space, than of various (and uneven) networks of time stretching in different and divergent directions across an uneven social field' (ibid.: 10).

At planning level, infrastructure relies on the imposition of strict temporal uniformity among its constituent human and non-human parts to function 'properly' (that is, in correspondence with how designers' had envisaged such functioning). Through their attempts to control time (Graham and Marvin 1996: 42), hydraulic infrastructures establish temporal sensitivities of historical and spatial belonging (Mosse 2003), political citizenship and participation (Anand 2011, 2012), and moralities and practices of water sharing, conservation, and wastage (Von Schnitzler 2013) – establishing common rhythms through which life should be lived and understood (Elias 1994; Dalakoglou 2010; Larkin 2013; Hetherington 2014; Reeves 2016). By the same token, 'malfunctioning' infrastructure still affects and requires temporalisation, though with effects and affects different to those that may have been anticipated. Infrastructures' interplay with ecological processes also means that infrastructural timescapes always exceed the social conditions and effects of their operation.

The MDIP's attempts to discipline farmers to Mahaweli time thus produced forms of agrarian domination and exclusion that accompany chronocratic politics. With the coming of the MDIP in the 1970s, a timescape set to the 'cultural' understanding of water and the ritual-agrarian calendar came into conflict with an abstract time attuned to the needs of intensified agricultural production within national and international rice marketplaces. Yet Mahaweli time remained a poor imitator of modern time as the MDIP had imagined it. Premadasa's garment time disciplined a waged-labour workforce to the demands of conveyor-belt production – a year-round six-day working week divided into precise units of working time, break time, and leisure time. In contrast, Mahaweli time disciplined small-scale cultivators restricted to the bi-annual six-week growing season. We suggest that it was precisely this *part-time* temporality of the MDIP that the alignment of water and fertilisers *in time* proved such a challenge. In the Mahaweli, months of time could pass without the imposition of the MDIP water timetable. There was significant possibility that Mahaweli farmers would in disciplinary terms *fall out of time* – from the standpoint of the MDIP schedulers – as they failed to align water and fertilisers at the right time. By the time of our fieldwork in 2016 it was clear, for Kajugama farmers at least, that monsoon uncertainties had displaced the irrigation system itself as the source of time-discipline in the Mahaweli.

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nothing, while spatial changes create lasting monuments…what we are measuring when we measure progression are changes in the actual regime of objects, also known as changes in space.' Change in the regime of objects not only marks but also generates time passing – time is to be understood as the effect of shifting spatial relations. (And because it is impossible to ever perfectly recreate any particular configuration in the regime of objects, it is perforce impossible to ever travel back in space….)

We have seen how shifting chronocratic regimes of water and fertiliser management compelled changing regimes of temporal discipline. If we view the passing of time in terms of the shifting arrangements of objects, we can see how Mahaweli time has been generated *from* the rearrangements of people, hydro-chemical infrastructure, and monsoons, rather than those things having been changed by time passing. If so, then the three cardinal points of time – universal, representational, and subjective – are not sufficient to understand time as they inevitably rely on a human vantage point for triangulation. To overcome this we need to pay attention to the ecology of objects and their relative positions and relations as the generative origin of time. The 30-year history of the MDIP we have just related can thus be read at the level of material relations between things – water, fertilisers, farmers, fields, forests, rice plants, policy briefs, presidents, the People's Bank, and the World Bank. Within this complex of things, the monsoon has emerged as an increasingly important influence in setting Mahaweli time as it has impinged upon the relative positions and relations between all these things that make up paddy cultivation in Sri Lanka. This is what we have called ecological time.

Conclusion

Anthropological models of time that take their epistemological roots for granted do not describe human time well, and the same problem restricts models that take the ecological for granted. In this chapter, our basic argument has been that recent anthropological discussions of time have pushed theorisation into productive new areas but have still not adequately overcome the baggage of the discipline's own intellectual history, which remains rooted in modern social theory. We took up positions developed by Alfred Gell and Laura Bear to demonstrate this view, using the example of the ways in which the MDIP itself has planned time through an industrial rubric to show what an anthropology of 'modern' time overlooks. We showed how in response to the long crisis of water and agrochemical management, the MDIP sought to instil a new work-discipline of timeliness, yet used models of time drawn from industrial capitalism when doing so. Our engagement with the ideas of Norbert Elias proved useful in showing just how similar was the reasoning between various Sri Lankan presidents and modern social theorists – and how by focussing on the level of human action, the MDIP failed to register that it was also chemical fertilisers and monsoons, not only irrigation engineers or farmers, which structured Mahaweli time.

We argued that anthropological discussions of time will remain limited if alongside human time we do not also consider that which falls beyond – the expansive ecologies of time. A study of time in agricultural contexts like the MDIP, which sit at the forefront of clashes caused by the meeting of Green Revolution technologies and monsoon uncertainties, necessarily must reset the underpinning assumption of the tempo and scale of agricultural work. Discussions of human time cannot contain the implications of temporal pressures that the climate crisis puts to bear on farmers, especially in the developing world. Here, we found the 'new materialist' approach of Graham Harman useful when seeking to move the discussion forward to considering what an approach to non-human time might involve.

   We do not mean for ecological time to replace social-modernist approaches but for it to offer an additional perspective that helps us to situate human beings within changing timescapes of experience. With the dawn of the Anthropocene as both a context of anthropology and a problem for anthropology, Amelia Moore (2016) has urged us to pay attention to the 'spaces' of human encounter with geo-climatic processes. We also urge our readers to pay attention to the temporalities of the Anthropocene. These temporalities invite consideration of not just *when* these encounters take place but *where* within the 'regime of objects'. They also draw attention to the dispositions and disciplines of time necessary for effective and affective attunement to (Latourian) networks of action that exceed the level of human agency, and the processes, often invisible, at work both under foot and above our heads. For Kajugama farmers, attunement was, for the most part, simply an impossible goal; agricultural work-time meant embracing uncertainty and chance as a technocratic problem as much as it did a close knowledge of the capacities and capabilities of one's own field and effective appeals to deities. For infrastructure projects like the MDIP, it means finding ways of thinking policy beyond economic A- or B-theories and asking what kinds of knowledge and skills Mahaweli farmers will require if they are to adjust effectively to climate-sensitive timetables. For anthropologists, exploring how people and institutions negotiate the relationship between sociological and ecological time offers scope for better understanding how and where cognitive and social time-maps interface with non-human time, which itself we must now accept falls within the purview of anthropological investigation.

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7 Partial decomposition

Peat and its life cycles

Richard Irvine

Stage of life

The wind raises the loose soil from the ground. The sky darkens. Cars pull to the side and turn off their engines, waiting for the dustcloud to pass and visibility to be restored. Tonnes of peat, formed under waterlogged conditions over thousands of years, are lifted up and carried away as dry powder.

This spectacle of the 'fen blow' – well known to those living in the East Anglian fens and variously described as eerie, beautiful, disturbing, or simply inconvenient – is a scene from the end of the life cycle of peat in a region where the wetland has been drained to produce rich, arable farmland.

In *Art and Agency*, Alfred Gell (1998: 10) argues that anthropology's depth of focus is biographical. "Anthropology therefore tends to focus on the 'act' in the context of the 'life' – or more precisely the 'stage of life' – of the agent. The fundamental periodicity of anthropology is the life cycle". Zoom in or zoom out too much, and anthropology's relationship with the social agent which it takes as its subject is lost. Yet this is much more temporally expansive than it first appears. What *is* the time-depth of a life cycle? A crucial point at the heart of this paper is that the human life cycle is never readable on its own – it exists in relationship with other biographies. Human stories of life, of production and reproduction, are not only situated within wider genealogies which expand the life history in time through kinship, but on an active, constitutive relationship with the resources upon which we depend, whose formation stretches over time-spans which appear to dwarf that of a human life and yet are necessarily present – either recognised or unrecognised – in our own economic and social activity. In this way, as Laura Bear (2014) points out, when we peer more closely at the apparent short-term focus of what Gell (1992: 314) deems the "action frame of reference… the shallow time of everyday life", we come to a recognition that labour, ecology, and the intersection between the two *thicken* our encounter with time.

So what do we gain from a focus on peat? Stuart McLean offers an evocative description of Europe's 'muddy margins' as "black primordial goo" (2007: 61): we stare into the peat and wonder what's down there. It seems to have an ancient life of its own. Indeed, in 1794, James Anderson of

Aberdeenshire, a Scottish agriculturalist interested in the fertility of the land and its suitedness for humankind, argued that when treading upon peat fens or bogs, what we stood upon was actually a single, living, growing organism fathoms deep beneath the surface, with the surface vegetation growing upon its dead skin (Anderson 1794). While this theory was subsequently rejected with the growing understanding that peat was not an organism in its own right but consisted of partially decomposed matter, it nevertheless success-fully communicates the sense that peat has a life cycle of its own. This life cycle is connected to that of the plants and animals that dwell in the peat wetlands and yet stretches to a duration of a different magnitude.

The life cycle of peat is constituted by the life cycles of organisms that serve as 'ecological engineers' (Malmer et al. 2003). The plants growing in the mire[1] provide the litter from which peat slowly builds up; microbial life is enrolled in the breakdown of the litter and in creating the conditions for ongoing plant life, with methanotrophic bacteria providing Carbon Dioxide for host plants, aiding the mosses of the upper vegetation in fixing nitrogen (Larmola et al. 2014); while fauna that manages the wetland by maintaining it at a particular stage of succession. For example, in East Anglia beavers, until their extinction in the sixteenth century, played an important role in the management of reeds on fenland, a role which humans now take up in extant patches of wetland by cutting reeds as part of nature reserve management.

In his ethnography of the Nuer, Evans-Pritchard (1940) introduces the concept of ecological time.[2] Seeking to describe the relationship between humans, cattle, land, and water in the Upper Nile region, his concept of ecological time emerges from the interaction of three different 'planes of rhythm': the physical rhythm; the biological rhythm; and the social rhythm. These rhythms engage one another, moving in step. A recognition of this interplay makes it clear that understanding the field means understanding more than just human activity – it requires situating that activity within what Ingold (1993) has described as the temporality of the landscape. And yet it would clearly be a mistake to imagine that humans sit in a coherent and resonant relationship with these rhythms. It is for this reason that I started the paper with a depiction of the fen blow: peat lifted by the wind as dust from the dry land following the human work of excluding water. We find ourselves witnesses at the end of a life cycle. This is what I want to present here, taking up ethnography from two fieldsites where life is lived in relationship to the peat, though the ecology and hydrology involved in peat formation, and the historical impacts upon the peat, are distinct. First, from the East Anglian fenlands: once dominated by groundwater-fed fen, though now, as highlighted above, the encounter with peat is predominantly with its dried-out state as rich, though wasting, arable soil. Then, from Orkney, where rainwater-fed bogs remain a significant part of the landscape, yet the life cycle of the peat – including its curtailment through significant erosion and peatland loss – reveals changing human relationships with that land. Both settings offer a sense of ecological time, interrupted.

Unsettling peat

Peat occupies an in-between state. Between wet and dry, it builds up land that attracts liquid descriptors: in the vivid words of the historian William Wheeler (1868: 3), the fens of East Anglia once consisted of "wide morasses, in which oozy islands were interspersed among lagoons and shallows". It has, of course, become a commonplace after Van Gennep (1909) and Turner (1969) to designate such in-betweenness as 'liminal' – and it is not always clear how and whether the tag fits. All the same, in the context of peat it is worth highlighting the unsettling potential of the terrain. Between living and dying, growing and yet ancient. Our uncertain footing on the soft wet ground threatens to plunge us from the present into something of a different time (see also McLean 2007, 2011). It begs the question: what's down there? Yet it is also worth thinking about the unsettling potential of peat in a different sense: Elizabeth Povinelli (2016) has recently set out to disrupt the distinction between life and non-life, seeing the policing of this boundary as an exercise of power, severing the possibility of meaningful relationships. As an aid to thinking beyond such boundaries, peat's intermediacy is conceptually rich.

First, its formation involves a dynamic relationship between living matter and dead matter. In its waterlogged state, the upper layer is biologically active and open to the air, aiding decomposition. The *biomass* at this layer consists of living organisms including plants and microbes as well as incompletely decomposed parts of plants and animals. This overlies a lower layer of litter from the decomposition process above; this layer is saturated with water and deoxygenated, hindering decomposition, and therefore consists of dead matter, or *necromass*, in conditions conducive to its preservation.

Thus, the interaction between these layers, in the words of geologist Gerd Lüttig (1986), is also a transition between *bios* and *lithos*. In the formation of peat, we see the breaking down of organic matter which is the building up of geology.

Social and economic life cuts into these dynamics. This history of formation is visible to those who dig into the peat soil of the East Anglian fens, be they farmers, ditch-diggers, or archaeologists. The recollections of William Henry, who lived and farmed near Ramsey, Huntingdonshire, and also worked for the drainage board maintaining the channels and drainage mill, show a detailed attention to the peat fen stratigraphy:

> On top, the soil is about 15″ thick: then ther's a layer o' peat, usually about 2′ or 3′, though it may be a lot more. Next comes the layer o' 'buttery clay', usually about three feet. After that there's a layer o' the peculiar peat known to us as 'bear's muck,'[3] on account of it being so difficult to work… The bear's muck varies in thickness, but there's always a screed of it, no matter how thin, atween the two clays, the hard blue clay and the buttery clay. This screed may be as little as an inch in some places, but it's allus there.
>
> (Marshall 1967: 113)

These layers reveal a particular environmental history:[4] first, the lower layer of 'bear's muck' formed in fresh-water wetland in waterlogged conditions caused by estuarine back-up due to sea level rise in the post-glacial period some 8,000 years ago. On top of this, we have clay deposit from the incursion of the sea. As the sea level subsided during a cooling of the climate some 5,000 years ago, we see a second period of groundwater fed peat growth on top of the clay; this growth continued until the fens were drained.

The important point to make here is that this encounter with the evidence of past environments is the result of work to create and maintain the drained arable landscape (and such drainage ultimately brings about the wastage of peat). Indeed, it was within this space of encounter that important developments in environmental archaeology could occur: Smith (1997), in her history of the work of Graham Clark and the Fenland Research Committee prior to the Second World War, shows how the post-drainage arable landscape brought archaeologists into contact with a history that was being revealed as the peat shrank, and how excavations in fenland farms formed the basis of knowledge of the stratigraphy being revealed during work to manage the land. We can thus read the stratigraphies provided by Graham Clark and William Henry in parallel as records of the drained fens revealed in the course of labour: modern agriculture in the fens creates the conditions for archaeology to serve as privileged witness at the end of peat's life cycle.

Indeed, Smith shows that this encounter with the drained fens enabled the development of a disciplinary revolution within archaeology: Clark's work demonstrated the value of the synchronisation of geology, archaeology, and botany, showing the importance of such techniques as pollen dating and an awareness of the significance of post-glacial sea level changes (see Clark 1936), redefining modern archaeology through a stratigraphic-geological approach. Excavations in the fen farmlands north of Cambridge enabled correlation between cultural and environmental 'layers' uncovered in the course of digging, fuelling a recognition that in order to understand changes in behaviour, we have to understand changes in habitat, with environmental change becoming the all-important independent variable (rather than, e.g. cultural diffusion or invasion) that could explain social change. Archaeology's conceptual revolution is entangled with economically driven habitat loss.[5]

The surface level characteristics of arable farmland are the product of massive labour. A systematic programme of drainage was advanced in the seventeenth century when a group known as the 'Adventurers', led by the Earl of Bedford, obtained contracts from King Charles I to drain the land and make it suitable for agriculture and to retain property rights in that which they had drained. The wetland was deemed waste to be made productive through work (Irvine 2015). Under the direction of the Dutch engineer Cornelius Vermuyden, the corporation commenced the embankment of existing rivers and the cutting of enormous channels to improve drainage and allow for more direct outfall to the North Sea, ranging in distance from 2 to 21 miles.[6]

Yet this grand project was by no means a once and for all victory. Indeed, the nature of peat led to a particular problem: as the land was drained and brought under cultivation, the level of that land rapidly lowered. This was partly the result of the contraction of the land caused by the loss of water during the drying process but is also a consequence of chemical processes following exposure of the formerly waterlogged peat to the air:

> As water is withdrawn from a body of peat and air fills the spaces in it, there begin swift chemical oxidations followed by bacterial and fungal attack and breakdown by animal organisms. The peat being essentially organic, the ultimate product of all these processes must, to a very large extent, be carbon dioxide that diffuses into the atmosphere.
>
> (Godwin 1978: 126)

Peat fen, once drained, wastes away.

As the labour of drainage becomes self-defeating, it is necessary to seek ever more efficient means of pumping water away from land and managing outfall. Wind-driven drainage pumps survived into the twentieth century, but from the mid-nineteenth century onwards these were superseded by steam-powered drainage engines with significantly greater power, enabling even more ambitious drainage works.

In 1850, William Wells, one of the landowners who had driven forward the project of drainage at Whittlesey Mere, southeast of Peterborough, sank a post in the ground in order to gauge the extent of peat wastage on the nearby land. At the time of sinking, the top of the post was level with the ground; by 1892, the post protruded 3m; today, it stands 4m proud (Hutchinson 1980; Rotherham 2013: 21). Thousands of years of formation lost within a couple of generations.

Wells clearly had a sense of the ecological transformation the drainage work at Whittlesey Mere would bring about. In an account for the *Journal of the Royal Agricultural Society of England*, he describes the scene as the last water was drawn away:

> Long before the last pools of water had disappeared from off the bed of the Mere large crowds of people from all the surrounding neighbourhood, and even many from distant parts of the Fens, had assembled. Some perhaps from a desire to be present at the last moments of a venerable friend whose fortunes were now reduced to the lowest ebb: others perhaps with whom the love of stewed eels preponderated over sentiment, from the prospect of a ready and abundant gratification of their taste. Of the hundreds – it would be no exaggeration probably to say thousands – who had assembled, nine out of ten came provided with sacks and baskets to carry off their share of the vast number of fish, which, wherever the eye turned, were floundering in the ever decreasing water... as the fading light of a blood-red sunset fell on the vast

multitudes of figures scattered in all directions over the dreary waste of slimy ooze, it left on the mind the same sort of impression of the supernatural as is left by some of Martin's ambitious pictures.

<div align="right">(Wells 1860: 138–139)</div>

The evocation of the painter John Martin is striking. Martin produced dramatic landscape scenes of heaven, hell, and the last judgement, so the implication is that the transformation calls to mind a vision of the end-times.

Disjuncture

In a region where histories of agricultural productivity and of ecological degradation are entwined, the same land can be read simultaneously as fertile and as barren. The utility of the land for food production is clear: half of the total Grade 1 farmland[7] in England is in the East Anglian fens. Yet from another perspective this is "arable desert", to quote the term routinely used by conservation professionals in the National Trust and other organisations at an event I was involved in organising in 2013 at Wicken Fen, a wetland nature reserve seeking to expand its holdings through purchasing and subsequently 're-wetting' surrounding farmland as it came up for sale. They spoke of the drainage as the destruction of a habitat; though they encountered resistance among farmers who thought the real destruction lay in the "swampification" of prime arable land.[8]

Hence narratives of progress that celebrate the winning of land jostle with accounts of what was lost. For the contemporary ecologist and environmentalist Ian Rotherham, the drainage of peat in the east of England constitutes England's greatest ecological disaster. "The consequence of the changes wrought over three centuries probably constitute the greatest single loss of wildlife habitat in Britain and maybe in Europe. This was an ecological catastrophe almost beyond comprehension" (Rotherham 2013: 22). He catalogues species now extinct or critically endangered as the wetland that supported them ceased to exist; documenting botanical lists from the nineteenth and early twentieth century, he notes the almost complete loss of many of these plants, and the invertebrates which they supported. Rotherham's tone is strident: the process of drainage was the "greatest destruction to nature one could possibly conceive" (2013: 199), and he writes of the "atrocities" committed by intensive farming (2013: 9).

Earlier, I described the curtailment of peat's life cycle as an interruption of ecological time. At this point, I want to reflect on this 'interruption' in two ways. First, it illustrates a key dynamic of contemporary economic life: the rapid depletion of resources (peat soil) that are the product of long-term formation (see also Adam 1998). We see here a disjuncture between the expansive life-cycle of peat and the short term needs of our own life-cycle. Laura Bear (2014) draws our focus towards the doubt and conflict that characterises 'modern time'. Time measurement's force as an abstraction, independent of

human activity, has come to occupy a privileged role in the social rhythms of contemporary life: as E.P. Thompson (1967) outlined in his classic reflection upon time-capitalism and the dominance of the clock, the 'time and motion' studies which measured the efficiency of industrial labour demonstrate the conjoining of quantitative time as a scientific abstraction and the demands of capitalism. Yet for Bear, it would be a mistake to reduce modern time simply to a homogenous abstract time. Rather, "with our labour, we have to reconcile disparate social rhythms, multiple representations of time and non-human time" (Bear 2014: 20). And indeed, an encounter with the fenland in the course of labour reveals no homogenous marker of time. It involves a tension between the very different temporal registers manifest in the terrain of the anthropogenic landscape (Irvine 2017) – though whether such a tension can be fully mediated or reconciled. Peat wastage leads to the protrusion of other temporal frames into the present: the material impositions of past environments that "unpredictably emerge" (Bear 2014: 6). To what extent is 'reconciliation' possible here?

Second, while the Holocene time frame of the case under discussion is relatively short, I would argue it is important to see such habitat loss in the context of human agency and its potential impact within the deep time of geology (Irvine 2014, 2018). Mustering evidence of a 'great acceleration' in human activity after the Second World War, Steffan et al. (2007) link socio-economic trends, such as population growth and urbanisation, with earth system trends, including sharp increases in the amount of Carbon Dioxide and Methane in the earth's atmosphere. Their argument is that we should see the second half of the twentieth century as the point in time when humans became a truly "global geophysical force". Consequently, consensus within the working group[9] convened in order to determine whether or not the Anthropocene epoch should be formally included within the Geologic Time Scale has congealed around a mid-twentieth century Holocene-Anthropocene boundary, noting that while earlier anthropogenic changes have been regional and diachronous, transformation to the earth system since the mid-twentieth century has been global and near-synchronous (Zalasiewicz et al. 2015). The loss of peatlands, I would argue, should occupy an important role in this analysis.

While on the one hand, histories of the reclamation of wetland show that peat loss is a process in motion over centuries of management – by 1950, the arable character of East Anglian fenland was well defined – when we see this particular case as part of a dynamic of global change, the middle of the twentieth century does indeed have significance. The hydrochemist Louise Heathwaite (1993) points to a shift in the carbon balance of peatlands. Peat is a carbon pool, storing carbon as the peat accumulates. It therefore occupies an important role in the global carbon cycle. However, over the last 200 years, as a result of drainage of peatlands, as well as afforestation and extraction for fuel and fertiliser, we have seen a loss of this carbon sink capacity and an increased release of carbon as the peat wastes. Heathwaite

suggests that the middle of the twentieth century was the point at which peatlands shifted from being net sinks to net sources of carbon in our atmosphere. Recognising the far-reaching impact of such anthropogenic changes to our earth systems, the ditches cut to drain the peat may indeed leave their mark in deep time.

Reading biography in peat

Upon the peatbanks of the islands of Orkney, generational time intersects with the time of peat's formation, the mark of the annual succession of peat cutting tracing the places where parents and grandparents cut fuel, visible as a series of straight edges on the moorland (generally referred to as 'hill' land; see Vergunst 2012). Peat cutting is universally recognised as hard work, hence the common expression, "the benefit of peat is that you get two heats: one from cutting it, one from burning it". And again (as per Bear 2014), multiple rhythms are present in this labour of cutting into the land: that of peat's formation; that of the annual cycle (cutting the peat in April and hoping for good weather in the coming months to dry out the bricks once raised, ready to be taken home for winter fuel); but also that of generational memory – peat cutting, while having not entirely ceased, is generally seen as a reminder of past generations and their way of life, of tools stowed in the back of the shed by grandparents, perhaps to be used again in the future?

Delving into the stratigraphy of the peat requires different tools for different depths (see also Fenton 1978: 217–222), as demonstrated to me by Harvey Johnston, a farmer and island councillor who cuts his own fuel. First, a ritting knife, with its long serrated blade, is used for cutting through surface (and depending on the fibrousness of the ground you're cutting into, also to make a horizontal cut from the edge). A moor spade (with a broad blade) is then used for 'flaying' off the fibrous surface vegetation – this is lifted up in lumps "as big as you can handle" then set down again after peat extraction. (Harvey stressed that this re-laying of the surface vegetation in order to prevent exposure of the flayed land thus makes the practice of cutting for fuel, when done sensitively, "extremely environmentally friendly, there is no loss of vegetation whatsoever … gives a bit of variation … an asset to the hillside".) Finally, they use a tusker, which has a wooden footstep on the shaft for driving it into the ground, and on the blade itself a long wing at right angles for cleanly cutting and lifting the bricks of peat: "it needs a bit of skill and a good strong leg". While this cutting was generally (though not always) considered men's work, once cut, the "taking-oot" of the peat (described as the physically heavier part of the job) was traditionally done by the wife. The bricks would be "spread, laid oot flat. Left like that for a few weeks depending on the weather, and then raised", set up to lean against one another to continue drying, before being heaped – sometimes in very rainy years, the peat needs to be raised on a wooden pallet, if wet conditions mean that it can't be stacked directly on the ground.

As the principal source of fuel for those living on and working the land in Orkney, access to the moorland remained essential for rural survival well into the twentieth century, though by this time reclamation of land for agricultural purposes was rapidly diminishing the available resource (Willis 1983).[10] However, recollection of the economic necessity of using peat for fuel was generally accompanied by memories of the different stages of cutting and raising as social occasions: whole families would go up with picnics and homebrew, taking their fiddles. As Harvey remarked, "on a bonnie night there'd be dozens of folk on the hill and twas quite a community thing all talking to each other and neighbours". Though many recall fondly these good times that somewhat mitigated the strenuous nature of the work, it was generally acknowledged that the advent of cheap oil in the early 70s "kind of killed peat cutting". Some individuals may continue to exercise their cutting rights, but the sense of it being a general part of the annual cycle, and a collective, social occasion, is something that has subsided; "and it's never come back into fashion … yet! Yet! But it may do because it's sitting there and it's an asset, really … it's an asset we may have to call on again, ye never ken". Harvey's remark here about the future potential of peat finds some resonance within the island communities: on Rousay, the island where I am based, the Development Trust have investigated clearing and maintaining access to the peatbanks as a means of mitigating fuel poverty. One islander, on buying a new house, was irritated to note that during the conveyance, the lawyers had attempted to remove peat rights from the title deeds, and made sure that they were restored, as "ye never ken when you might need it".

This engagement with peat connects present-day needs with a history which is not only social but also environmental; digging into the peat we recognise the distinct properties of the different strata that reveal its long-term formation. Recalling, then, that that the history of usage delves into a deeper history, it becomes apparent that the characteristics of peatlands make them excellent archives of environmental change. Under the microscope, the atmospherically deposited particles within the peat build a vertical record of transformations in the landscape. Variations in preserved pollen at different depths reveal changes in plant presence; coprophilous fungal spores can reveal animal presence and potentially indicate changing land use (e.g. by making it possible to infer the presence of grazing animals in the landscape). For example, an analysis of cores taken from Hobbister, on the Orkney mainland, by the paleoecologist Michelle Farrell (2015) shows that peat began to accumulate from 5270BC, spreading upslope by 2460BC, and that by the middle Bronze Age heather heathland had become an important component of the landscape. In this time period, the decline of woodland can be traced. Pollen in the peat shows that around 5000BC, there would have been nearby woodland including hazel, birch, willow, and alder, with an understorey rich in ferns. The levels of tree pollen then steadily decline over the following 3,000 years. Importantly, however, this decline is not uniform, suggesting that woodland loss was localised rather something than

happening synchronously across the archipelago and that human impact and climate both played key roles in this process.

At Hobbister, the transitions revealed by coring into the peat are also revealed by those who dig the peat for fuel. This is the source of the peat used to fire the kilns during the malting process at Highland Park Distillery. In this way, once again the stratigraphy of environmental conditions over time can be read alongside with a stratigraphy revealed from the perspective of human usage. Those who dig and use the peat recognise the characteristics of different depths, combining cuttings from different layers. The top, or "Foggy" layer, consisting of the youngest peat just below the surface (up to 1,800 years old) is rich in heather, imparting a characteristic flavour to the malt used in the whisky. Below that is the "Yurphie", a darker more compacted layer, said to produce less smoke and more heat. At the bottom the oldest peat (more than 7,000 years old), known as the "moss", is lumpen and coal-like. This is a stratigraphy read not only as a record of time but also in terms of heat and aroma – a sensory engagement with long-term ecological cycles and geological formation in the present moment.

Yet this engagement is, of course, an extraction from those cycles for use in the now; to return to the theme above, what we are sensing is ecological time, interrupted. Recognising, then, that Hobbister is a working extractive environment, we can see that the cores taken by Michelle Farrell are a form of rescue archaeology. As part of the planning permission for peat extraction granted in 2008, it was noted that the machining of peat constituted the loss of a unique environmental record. Paleo-environmental analysis of the peat was specifically identified as an action to be taken to mitigate this loss.

We find ourselves, once again, witnesses to an ending. At Hobbister Moor, Highland Park now works closely with the Royal Society for the Protection of Birds and environmental agencies to manage the peatland and to create habitat in places where they have removed the peat, avoiding the creation of a "moonscape"[11] by relaying the surface turf and experimenting to establish the best conditions for peat regrowth. Yet the sustainability of peat extraction remains an open question: as the ecologist Kimmo Tolonen (1979: 294) has argued, "peat belongs to the renewable resources only in the geological timescale".

Of course, it would be a mistake to focus on extraction for use as fuel as the principal driver of global peatland loss: worldwide, others include extraction for fertiliser, afforestation, and – as we saw in East Anglia – drainage for farmland. Indeed, one might argue that the use as cut-land is, at least, more conducive to the preservation of wetland habitats by ensuring a continued value and demarcation for use that does not involve bleeding the peat. Yet other sources of value can lead more definitively to the desire to exclude water. In Orkney a particular factor in recent history has been reclamation of peatlands for grazing livestock (see Whitelaw and Kirkpatrick 1997). Returning to the island of Rousay, for example, we see the stark edges of moorland cover and visibly eroded peat on the hills.[12] These offer a visible

record of nineteenth and twentieth-century peat loss due to changing patterns and increased intensity of sheep grazing.

Yet the receding moorland tells a story of social as well as ecological transformation; here again, we see the cross-hatching of biographical and geological time. Rousay was the only part of Orkney subject to the large-scale clearances that completely transformed the geography of Highland Scotland. Today, Rousay's Westside bears the marks of that clearance, enclosed grazing land dotted with crumbling stonework, the shells of the dwellings of crofters who had to make way.[13] This is improved land: yet it was an improvement that took its toll on the island's population and on the peatlands the population lived with.

In 1989, an artist Rachel Harris, who had lived on Rousay since her teenage years, created a work of land art on the Westside to respond to this industrialised landscape. For her 'Quoy Dyke' project, she set out to involve the community in building a turf-dyke – a wall built from blocks flayed from the surface of the moor. Such dykes historically had snaked across the landscape, dividing the moorland commons from the townships with their cultivated run rigs. The materiality of the hill dyke stands in stark contrast to the rigid straight lines of stone which characterised the clear-enclosed landscape with their increased density of livestock.

The resulting work, a ring of turf upon the hillside, was then burnt as a bonfire party for the whole island to attend. A site of communal work and communal celebration at the edge of the moor, standing in contrast to the enclosed landscape below, the Quoy Dyke was an attempt at a different kind of reclamation to that which followed the clearance: a reclamation of a contentious landscape by the community.

In this sense, the Quoy Dyke looks to the future, asking whether reclaimed land might itself be reclaimed by the habitats and ways of life that once characterised it. Yet at the same time, the work's continued visibility almost 30 years on (sometimes mistaken for an ancient archaeological remain) shows the fragility of these ecosystems, witness to the deep and lasting marks the human life cycle leaves within the terrain that supports that life.

The thickening Anthropocene and the meaning of waste

Partially decomposed matter, peat opens a portal into time. Its life cycle is one of slow pace and long duration. As McLean (2007, 2011) evokes in his reflections on the encounter with Europe's 'muddy margins', there's something uncanny about the blackness of the peat: an almost vertiginous sense of being brought face to face with something deep below the surface, deep below the present. In East Anglia and Orkney, long and distinct histories of formation protrude from the peat, but these protrusions are a by-product of human rhythms of activity in dissonance with the physical and biological rhythms that constitute peat's life cycle. The forms of labour we have described (cutting drainage ditches; harvesting the peat) bring to the fore

the time-span of peat's formation and its environmental history, and make urgent the question of how human biographical time maps onto geological time. In both ethnographic settings, we have read stratigraphies of environmental history in parallel with stratigraphies encountered in the course of labour. As I have emphasised from the start, the human life cycle cannot be considered in isolation, but expands through time in relationship with the resources upon which we depend. That is why I began the paper at the end of peat's life cycle. The fen blow is a material manifestation of the conflict that Bear (2014) places at the heart of modern time; of ecological time, interrupted.

The depletion of peat impacts upon unique habitats and, in the course of doing, converts a carbon sink into a carbon source. The way in which we end peat's life cycle, then, tells us something about the human relationship with deep time: the mismatch between human consumption in the short-term and the long-term processes that generate the resources we depend on.

Reading Heathwaite (1993) on the mid-twentieth century shift in the carbon balance of peatlands, from sink to source, in relation to the emphasis which Steffan et al. (2007) place upon the 'great acceleration' in human activity following the Second World War, I have argued that the disjuncture in our temporal relationship with peat has a particular significance for our understanding of the Anthropocene. Yet I do not want to simply move from a truncation of ecological time to an analytical truncation: rather, the longer histories of human interaction with the peat tell a story about what James Scott (2017) has termed a 'thickening Anthropocene', the cumulative effect of regionalised changes and historical shifts which are required to understand how we reached the point we find ourselves at today.

Davis and Todd (2017: 763) seek to link the emergence of the Anthropocene to the history of colonialism, arguing that "the ecocidal logics that now govern our world are not inevitable or 'human nature', but are the result of a series of decisions that have their origins and reverberations in colonization". I believe that the significance of peat for Davis and Todd's crucial intervention is in demonstrating that a key characteristic of this history is a particular disposition towards land as waste waiting to be rendered productive. Decisions made on Europe's 'muddy margins' operate within these logics. Elsewhere (Irvine 2014), I have argued that drainage of the East Anglian fens can be seen as an instance of internal colonialism (see also Evans 1997), with the "rude, and almost barbarous" natives of the fens – to quote words used in a pro-drainage propaganda pamphlet (Dugdale 1662: 171) – treated as the primitive inhabitants of a newly discovered land. Such an attitude is well illustrated by Thomas Fuller ([1655] 1840: 147) in his contemporaneous account of the arguments raised for and against drainage:

> *Argument*: Many thousands of poor people are maintained by fishing and fowling in the fens, which will all be at a loss of livelihood, if their barns be burnt, that is, if the fens be drained.

> *Answer*: It is confest that many whose hands are becrampt with lazi-
> ness, live (and only live, as never gaining any estates) by that employ-
> ment. But such, if the fens were drained, would quit their idleness, and
> betake themselves to more lucrative manufactures.
>
>   (Fuller [1655] 1840: 147)

What we see here is the denigration of ways of life that make use of the
ecological rhythms of the peatlands as an idleness that fails to transform
the waste (demonstrable in their failure to 'gain any estates'). The right of
investors to transform and appropriate the land is justified precisely because
of a failure to recognise anything other than the interruption of ecological
time as evidence of productivity. Yet such an interruption sets in motion
unintended consequences.

The irony that the attempt to master 'waste' might bring about waste is
well expressed in a different context by Deborah Bird Rose in her account of
a consequent attempt to impose colonial agricultural will – a violent expan-
sion of the logic exhibited in British agricultural improvements. Rose (2004:
34) offers an account of Australian settler societies "built on a dual war: war
against Nature and a war against the natives". Locating Australian ecocide
within a global scene of extinction and the production of waste (2004: 36),
Rose inverts the settler perspective of the land as wilderness to be subju-
gated by recognising that among the indigenous Australians with whom she
works the true 'wild' is that brought into being by the violence of attempting
to transform the land. It is this forcing of the terrain which sets into motion
unsustainable practices that result in ecological and human degradation
and whose ultimate outcome cannot be fully grasped or controlled. This is
a landscape of "loss – of topsoil, riverbanks, and, ultimately, of many of the
species and habitats that supported indigenous life. Country is becoming
wild" (2004: 173).

A sense of peat primarily as resource inflates human utility in a way that
leads to the rhythms of the human life cycle cutting across the physical and
biological planes of rhythm that constitute peat's life cycle. If peat, as noted
above, cuts across obvious distinctions between life and non-life, the geon-
topolitics (Povinelli 2016) of peat's resourcification renders it an object for
utility rather than a living thing with which relationships are possible. The
most acute expression of such logic is the desire to transform wetland into
dryland, as land for arable farming (as in East Anglia) or as land for graz-
ing (as in Orkney).[14] This anthropogenic end of peat's life cycle begins with
its denigration as land in need of 'improvement' to become valuable. Yet
the transformation that brings waste into use is also, because of the prop-
erties of peat, a *cause* of waste: the oxidation of the carbon within peat,
paid forward through time in the recomposition of the atmosphere. This is
an interruption of ecological rhythms, the impact of which we cannot yet
fully grasp.

Our reclamation of peatlands has left a mark within deep time. An understanding of the relationship between the human life cycle and peat's life cycle requires a different kind of reclamation: a reclamation of the time-horizons required to understand the depth of the resources upon which human life depends.

Notes

1 The term generally used for any freshwater wetland system where peat accumulates.
2 Evans-Pritchard uses the spelling 'oecological'; as ecological is now the more commonly used spelling, I have shifted to that out of convenience.
3 While the term "bear's muck" is still in use within the fens, the usual explanation given for the name of this layer of peat on account of its smell.
4 See Godwin (1978) and French and Heathcote (2003) for accounts of the processes of peat formation and landscape change in the East Anglian fens over the past 10,000 years.
5 Smith's argument as an historian of science is that we should treat knowledge itself as the prime mover in disciplinary cultures rather than placing the emphasis on politics, class, religion, and so on. This may well be. However, my argument is that the emerging knowledge can only be understood in relation to the entwined economic and ecological transformation of the fens – whatever the influence of the individual attitudes of the researchers in relation to politics and economics of the time, there is no doubting that conceptually they were the beneficiaries of its environmental impacts.
6 See Darby (1956) and Godwin (1978) for accounts of the drainage of the land; see Harris (1953) for an account of Vermuyden's life and his role.
7 The highest possible grade under the Department for Environment, Food, and Rural Affairs' Agricultural Land Classification, designating:

    Land with no or very minor limitations to agricultural use. A very wide range of agricultural and horticultural crops can be grown and commonly includes top fruit, soft fruit, salad crops and winter harvested vegetables. Yields are high and less variable than on land of lower quality.

8 I discuss these tensions in some detail elsewhere; see Irvine (2015: 34–35, 37–39).
9 The Anthropocene Working Group of the Subcommission on Quaternary Stratigraphy was convened in 2009 and tasked with determining whether or not the Anthropocene epoch should be formally included within the International Chronostratigraphic Chart, more commonly known as the Geological Time Scale. In August 2016, this working group announced that it would indeed recommend the Anthropocene's inclusion; the search continues for the most appropriate stratigraphic marker indicating the presence of the Anthropocene in the geological record.
10 To destroy someone's peatbank by flaying it and allowing it to waste was a sure means of trying to make their continued survival on the islands impossible, and on occasion, this was used as a tactic to attempt to drive out unwanted clergy who, it was felt, had been forced on the community by lairds exercising their right of patronage (Rendall 2009).
11 This was a term used internally to describe areas left exposed post-extraction prior to 1992, at which point there had been approaching a decade of machine extraction without replacement of the top layer, leading to erosion and extremely limited vegetation re-growth.

12 Whitelaw and Kirkpatrick (1997: 60) note an 8% loss of moorland on Rousay in the period between 1946 and 1995 alone.
13 See Thompson (1981) for a history of clearance on Rousay; see Lee (2015) for a history of the cleared landscape in the longue durée.
14 In other regions of the UK, for example in Highland Scotland, the making of peat wastelands into productive land took the form of afforestation. This was one element of a transformation of Scotland with considerable ecological impacts and, within and entwined with those, human impacts. For an exploration of ideas of 'improvement' in Highland Scotland, see Jonsson (2013).

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8 Anticipatory nostalgia and nomadic temporality

A case study of chronocracy in the crypto-colony

Elisabeth Kirtsoglou

This paper expands on the view of Modern Greece as a 'crypto-colonial' space (cf. Herzfeld 2002). It offers an alternative reading of the so-called 'Greek-crisis', using the lens of chronocracy as developed in the introduction to this volume. An ethnographic engagement with the years of austerity, faced by Greek people since 2010, reveals chronocracy to be a colonial technology with political, moral and epistemic dimensions. Here I argue that chronocracy produces an anticipatory nostalgia: namely, a future-oriented affective state of longing for what has already been accomplished and at once yet to be achieved. I show how anticipatory nostalgia is distributed between relational, material and temporal ecologies. The Greek people, I argue, sustain a nomadic sense of temporality (cf. Deleuze and Guattari 2010), manifested in eclectic connections between time fragments that form provisional temporal assemblages. These are evident in my ethnography in the form of visualities, materialities, discourses and narratives. Nomadic temporality emerges as an expression of temporal agency that both resists and reifies chronocracy and anticipatory nostalgia.

My present analysis is intellectually indebted to several strands of scholarship. The writings of Michael Herzfeld (especially 2002, 2005, 2015, 2016a, 2016b) on crypto-colonialism, structural nostalgia and European moralism are central. However, I also draw on his earlier works on the making of the Modern Greek state and the marginalization of the anthropology of Greece (1986, 1987), as the impetus for this paper. I build on these works not only to support my claim that Greece ought to be analysed as a colonial space but also in my attempt to formulate the concept of anticipatory nostalgia and to connect it to chronocracy as colonial durability. Post-colonial studies' literature and an enormous body of Greek-studies' scholarship have provided substantial analytical and historical evidence on the colonization of the Greek past (Bhabha 1984, 1994; Chakrabarty 2000; Hamilakis 2009; Lalaki 2012; Mignolo 2011; Panourgia 2004; Plantzos 2016; Said 1978; Stewart 2014; Stoler 2006, 2016; Tziovas 2014). Interrogating this evidence enables me to draw connections between Greek antiquity, European modernity,[1] and the emergence of the colonized self. Recent anthropological studies of the Greek crisis form a framework that allows my ethnography to contextualize

the claim that Greek people are orientalized, moralized and pathologized as inadequate subjects of modernity (Athanasiou 2014, 2018; Dalakoglou and Agelopoulos 2018; Papataxiarhis 2018; Rakopoulos 2019; Thedossopoulos 2014; Triandadyllidou, Gropas and Kouki 2013). Finally, but most importantly, anthropological studies of temporality in general and specifically the pioneering work of Daniel Knight have provided me with the inspiration that has led to the concept of nomadic temporality (Bear 2014, 2016; Bryant and Knight 2019; Guyer 2007; Hodges 2008, 2010; Knight 2013, 2014, 2015, 2016; Knight and Stewart 2016).

I ask that the present work is read not as an apology or as an inter-textual strategy of redemption (cf. Argyrou 2002) but as a specifically de-colonial anthropological effort which demonstrates how chronocracy can be seen as colonial duress (cf. Stoler 2016). On the backdrop of the Greek case, the paper ultimately questions the linear temporality of progress and argues that through repetitive cycles of ruination and substitution (cf. Navaro-Yashin 2009) the time of modernity has cyclical and eschatological properties.

The nomads of time

On a warm, sunny afternoon in late June 2015, I was sitting with several of my friends and interlocutors at a café in the picturesque harbour of my hometown, Volos, a medium-sized city in Magnesia, Thessaly. The negotiations between the newly elected government of the Radical Left (SYRIZA) and the 'Troika' (the IMF, the European Commission and the European Central Bank) had reached a stalemate. The German chancellor, Angela Merkel, the president of the European Commission, Jean-Claude Juncker, and the president of the European Council, Donald Tusk, were yet again threatening Greece with expulsion confirming that the EU was fully prepared for what in recent parlance has come to be called a no-deal scenario. According to the local newspaper, folded on the relevant page on the table in front of us, Juncker had declared that Grexit would be the only way forward if an agreement was not reached by the end of that week. Furthermore, he promised humanitarian assistance to alleviate expected shortages in medicines, food and petrol.

George, a public servant in his late forties and a traditional supporter of the Greek communist party, was emphatic in his view that he had been 'absolutely vindicated'. He reminded the rest of the company how, during the years of affluence (commonly referred to in Greece as the pre-crisis era), he kept warning his friends that the EU was nothing but a 'wolf-alliance' (*lykosymmahia*). "People and politicians were calling the EU our 'partners' (*etairous*) and our 'allies' (*symmahous*)", George said and continued: "Allies! What sort of alliance can a lamb forge with a wolf?" "Ah", Stefania sighed,

> you started again your communist parlance. If it was up to you guys Greece would have been like Cuba. Get it into your head: Greece

belongs to the West. Europe owes us everything. Greece *is the essence of European civilisation* (*tou Evropaikou politismou*). Even the term 'Europe' for Christ's sake is Greek!

"Ok", George replied in a caustic manner, "when we run out of petrol and medicines as a result of a no-deal bankruptcy (*atakti hreokopia*), we can give the petrol and pharmaceutical companies IOUs with the head of some ancient Greek philosopher printed all over them.[2] They'll definitely appreciate that!" "I have actually stocked on my mother's blood-pressure medicines, just to be on the safe side", Stefania remarked and added "do you think we should be filling our car reservoirs with petrol?"

Before anyone had the chance to reply, Vicky, a 40-year-old single woman who owned her own architectural firm, joined the company. She threw herself on a chair and wiping her forehead she almost broke to tears as she exclaimed:

> dudes, I can't believe it! (*den to pistevo*). Half of my close friends are blocking me on Facebook because I dared post that the government should fold. Some called me a German collaborator (*dosilogo* – a term used for Greeks who collaborated with the Nazis in WWII). Others said that they don't want anything to do with a 'Euro-remainer' like me (*menoumevropaia*), and my own cousin commented on my post that 'if the Greek fighters of 1821 were like me we would be still under Ottoman rule'. My own cousin won't talk to me anymore! We have all gone crazy! (*trellathikame teleios*). We are back in the civil war (*eimaste ston emfylio*).

"They are damn right", Nicholas replied firmly to Vicky, and he added "you are either on the side of your own people, or you are with the troika and yes this is a civil war. There is no middle ground". Katerina, a night nurse in her thirties, agreed and alluding to a phrase allegedly coined by a Greek independence fighter back in 1821, she told Vicky:

> The government shouldn't fold. They can't fold. We are Greek! We shouldn't grovel. Greeks remain upright, even when they talk to their own Gods.[3] Greece needs no-one but God. Her God and our ancestors stand by us (*o Theos is Elladas kai oi progonoi mas*). We will fight alone and we will make it.

The conversation continued for hours. Through heated and more casual statements, my friends agreed and disagreed. They agreed that Greece was not where it *deserved* to be at that moment and that it should somehow *return* to 'normality' (*na epistrepsoume stin kanonikotita*) and to the 'good days' (*stis kales epohes*). They disagreed of course –like many other citizens at the time – on what constituted 'normality' and 'good days' and on how this

'return' was to be accomplished. For Stefania, a now unemployed woman who used to work in retail, and a long-standing supporter of the conservative party, the 'good days of Greece' were to be found in its ancient past; in the era when "Greeks produced science and art", in the "glorious days", when the country was "the beacon of civilisation" (*o faros tou politismou*). The Europeans should be reminded, she maintained, that "they can't throw us out" because there "can't be such a thing as Europe without Greece in it".

Stefania echoed the sentiments of many Greek people who were astonished by the readiness of the European authorities to oust the country from the euro-currency over a *financial* debt. Scepticism and feelings of suspicion towards Europe have been documented in the country as early as the nineties (cf. Kirtsoglou and Theodossopoulos 2010a, 2010b), but the complete unwillingness of the Europeans to consider the continent's *cultural* debt to Greece as part of the equation was certainly not expected. Stefania got out of her pocket a two-euro coin. "Look at that", she said to George. "Look at it. This is not just money. It is a token of what Greece is to Europe". The coin (on its national side) depicts a scene from a third-century AD mosaic found in Sparta showing Europa being abducted by Zeus who has assumed the form of a bull. Europa is a figure from Greek mythology after whom Europe was named. George shook his head. "Live your myth in Greece", he replied to her sarcastically, alluding to a popular local beer advertisement designed for tourists.

Clearly, George did not share Stefania's vision. For him, 'the good days' were the days of WWII, when the nation resisted the Nazi occupation and later on struggled through a civil war to accomplish the communist revolution and to establish '*laokratia*' (rule of the people). A loyal member of the communist party, George "did not trust the government of the Radical Left (SYRIZA)" and regarded it a "non-authentic expression of the Left". He nevertheless, "almost felt tears rolling down his eyes", on the night of SYRIZA's electoral victory earlier that year. George recounted to us the moment when Costas Lapavitsas, a SOAS professor of Economics and newly elected SYRIZA MP, celebrated his party's success by singing the anthem of EAM (National Liberation Front). Sponsored by the Greek Communist Party, EAM and its military wing ELAS (National Popular Liberation Army) were the main social movements at the heart of Greek resistance against German occupation in WWII. In celebration of SYRIZA's victory, Costas Lapavitsas started singing on camera EAM's 1946 anthem, a Greek version of the Russian Katyusha song:

> Three letters illuminate our Greek generation and show us the bright path through which we will bring freedom. They are the lights of our struggle and the people faithfully follow; young and old, they all cheer, long-live EAM. EAM saved us from the famine,[4] it will also save us from enslavement and has a laocracy (rule of the people) programme. Long-live EAM.

The SYRIZA party supporters gathered around Lapavitsas that night also sang the anthem in unison. My own mother, from our living room in Durham, sang alongside them in front of the satellite TV with her fist up, in a stentorian voice, surprisingly remembering every single verse of the song despite her 80 years of age. George also sang the anthem again the day of our meeting, and his voice trembled and his hands shook as he recalled the scene. Nicholas and Lia, the fervent SYRIZA supporters in our table, joined him, temporarily casting aside differences between the communist party and the Radical Left. For them too, the good days were the days when "people rose-up against the Germans", and also later, when they "struggled against the US-sponsored military junta (*Amerikanokiniti hounta*)" of 1967–1974.

Nicholas, a civil servant in his mid-forties, and Lia, an English teacher in her late thirties, frequently joined the anti-austerity demonstrations of 2011 and the occupation of Syntagma Square in Athens, having to travel some five hours on the bus from Volos. "Those demonstrations were 'full of the souls of 1944' (*gemates apo tis psyches tou 44*)", Lia explained to me. In November 1944, after the withdrawal of the German army from Greece, the British forces present in the country demanded the immediate disarmament of ELAS. The EAM representatives in the transitional government at the time were opposed and resigned. EAM organized a massive demonstration on December 3, 1944 that turned into a bloodbath, with over 30 people dead and approximately 150 wounded, when the police opened fire against civilians. A characteristic photo of that day, which went viral between 2011 and 2015, shows a row of young women dressed in black, kneeling down on the pavement of Syntagma Square, holding a big placate that reads "*when the people face the danger of tyranny, they choose either their chains or the guns – EAM*". "Yes", Lia stated,

> we were [as] once (*imastan ena*) with the souls of those EAM women and men (*Eamitisses kai Eamites*) when the police threw their tear-gas and their stun grenades (*chimika kai krotou-lampsis*) to the marching crowds [in 2011]. We returned to those glorious days of fearless resistance, and from there we fought the austerity regime, not only the Germans and their economic occupation but also their local collaborators and their cheerleaders.

For Lia and Nicholas, 'normality' was about not being tied down by austerity memoranda (*mnimonia*). They heavily criticized both the conservatives and the socialists for "abandoning the country to the hands of her lenders" and for accepting so easily the "transference of European banks' losses onto the shoulders of the Greek people". Lia had always been a SYRIZA supporter, since the party had a mere 3% electoral representation, chiefly because of SYRIZA's social rights' agenda and the party's emphasis on issues of gender equality. Nicholas, on the other hand, had been swinging between the socialist party (PASOK) and the Radical Left (SYRIZA). He

grew up – as he stated – with the legacy of Andreas Papandreou (the founder of PASOK and an ex-prime-minister between 1981 and the early nineties). Nicholas "had Andreas in his soul (*stin psyhi tou*)" and he strongly believed that "if Andreas was alive, Greece would have never come under the control of the Troika".

Nicholas's grandfather was an ELAS fighter and his family had suffered persecution and discrimination throughout the cold war years, by the "state of the Right" (*to kratos tis deksias*). Andreas Papandreou was elected with a stunning 48% majority in 1981, just seven years after the fall of the military junta in Greece. Papandreou clearly "laid claim to the ideological heritage of EAM" (Karakatsanis 2001: 127; cf. also Veremis 2008: 138). His social-ist government officially recognized the contribution of the WWII EAM/ELAS resistance movement and fostered a political culture of opposition to the traditional Right that prevailed in Greece until 1974 (cf. also Kostis 2013: 815). Nicholas had somewhat distanced himself from the socialist party however, when that "turned the same with the conservatives", under new leadership in the nineties. For him, SYRIZA was "the country's new hope" (cf. Bryant and Knight 2019: 132–133).

Like Nicholas and Lia, Vicky also felt like she was back in December 1944 when she recounted almost tearfully the breaking down of long-standing relationships with friends and family over a Facebook post. Only for Vicky, December 1944 marked the beginning of a bitter civil war that cost the lives of many and caused "unrepairable damages to families, neighbourhoods, and the country as a whole for years to come". The fate of many Greek peo-ple (like Nicholas's family) who had joined the resistance movement against the German occupation in WWII through the National Liberation Front (EAM) and the National Popular Liberation Army (ELAS) was sealed in the cold war years. They suffered outright persecution, imprisonment and exile as political dissidents (cf. Panourgia 2008). Their families, and even other ex-EAM/ELAS supporters who ceased to be politically active, found it difficult to secure employment, or pursue university degrees, as they were considered 'guilty by association' and were 'filed' by the police as 'beta' (crypto-communist) citizens.[5] Historical research clearly indicates that many Greeks who collaborated with the Nazi occupation regime between 1941 and 1944, survived – physically, politically and economically – after the retreat of the German forces and throughout the cold war precisely because they made themselves pivotal in the persecution of communists (cf. Chaidia 2004; Mazower 2004). The Greek military that managed eventually to stage the coup of 1967 derived much of its power from the fact that it was seen as the 'guarantor of post-civil war order' by the US, whose interference in cold war Greek politics was blatant and almost institutionalized (cf. Stefanides 2005: 322–328).

Despite acknowledging the "struggles of the Left" (*tous agones tis aris-teras*), the civil war was for Vicky one of the darkest places she could be. She found nothing glorious in this era which pre-figured the kind of divisive

political tension that led in present time her own cousin to stop talking to her. For Vicky, becoming a 'normal country' meant going back to the nineties, "the years of development (*anaptyksi*) and modernization" (*eksyhronismos*). It meant accepting the country's debt and the "moral duty" to repay it "as every other European country would have done". Normality for Vicky was synonymous with the alignment of Greece with European modernity encapsulated in a mixture of "liberal social values, a moderately socialist approach to welfare and social support and a secular state". Vicky paid homage to the 'Modern Greek Enlightenment' (*Neoellinikos Diafotismos*), an intellectual movement that supported the dissemination (*metakenosi*) of European Enlightenment ideals to the Greek-speaking Orthodox populations of the then Ottoman Empire after 1700. This movement paved the way for the 1821 uprising and the foundation of the Modern Greek state. By liberal social values, Vicky meant an emphasis on "the individual and her rights as a citizen". From within European modernity, Vicky dreamt of a "smaller state", enhanced entrepreneurial opportunities, which she termed as "laissez faire", the eradication of the Greek "clientalist ethos" that supposedly led to corruption and subsequent fiscal derailment and, above all, the "enforcement of the rule of law and the strengthening of institutions". A basic welfare system was important to her, but on the basis of the liberal value of "equal opportunities" and not necessarily as a system for the redistribution of wealth from the richer to the poorer. The desire for a secular state where "logic triumphs over superstition" was for Vicky what made her "quintessentially Greek and *thus* European". "The heirs of Aristotle", she claimed, "cannot in the 21st century continue believing in the miracle of the holy fire and transport the fire from Jerusalem to Greece in a special flight". Indeed, according to the Orthodox tradition adhered to by Greeks, and also by other Eastern Orthodox people, the holy fire emanates miraculously from Jesus Christ's tomb every Easter. It is transported from Jerusalem to Athens on the presidential aircraft and it is received as a state leader following VVIP protocol. "The Greek people", Vicky maintained, "ought to stop living in the Middle-Ages, and finally catch up with the rest of Europe. *We* invented logic and science. I do not understand how we live in this state of self-exile from it".

Vicky belonged to that segment of the Greek public who found themselves a few days before our meeting, on the June 22, in Syntagma Square demonstrating this time against the looming Grexit. Their central motto was 'we remain in Europe' (*menoume Evropi*) and they supported either the conservative party (New Democracy) or a particular wing of the socialist party (PASOK) known as 'the modernizers' (*eksynchronistes*). The 'modernizers', chiefly represented by ex-prime-ministers Costas Simitis and George Papandreou were "liberal academics and technocrats, educated in the West" who "despised the 'oriental' and 'religious' aspects of Greek culture, which they blamed on Ottoman rule and backward Orthodoxy" (Douzinas 2013: 35).

The seeds of the liberalization of the Greek economy were planted in the late eighties, by the conservatives, but the project of 'modernization' was

launched full-scale in the mid-nineties by the socialist government that fol-
lowed the death of Andreas Papandreou. Its chief aims were privatization,
the reformation of social security, and the restriction of the influence of the
church on public and political affairs. As Douzinas notes, "modernization
was neo-liberalism with a human face", which attempted to "bring Greece
closer to its European partners" (2013: 35). Despite the fact that it was pri-
marily engineered by a socialist government, many of its constituent aims
were also shared by the conservative party that alternated the socialist one
in power from the mid-nineties until 2009. Most of the central aims of the
modernization project, however, were never fulfilled under either socialist or
conservative leadership. The Greek public demonstrated a persistent resist-
ance to the privatization of the public sector, which was thus only partially
achieved. The attempted introduction of private universities was averted
by massive student demonstrations and occupations of school buildings
(*katalipseis*), while the initiative to reform the social security system caused
general strikes that brought the entire country to a standstill. Finally, the
radical separation of church and state caused a different but equally large
segment of Greek society to take the streets in protest, responding to the call
of the late archbishop Christodoulos who coined the term 'people's gather-
ings' (*laosynaksi*) for those particular demonstrations.

Some of the chief goals of modernization were reintroduced to Greece
by the troika as a series of structural adjustments that accompanied the
austerity measures. Compliance with these appeared equally central to the
attainment of fiscal targets in the various negotiations between Greek gov-
ernments and the EU/IMF. Crisis as a state of emergency did not only pro-
duce fiscal austerity but also highlighted the urgency of catching up with
Europe in all matters political, cultural and institutional (cf. Douzinas 2013;
Gropas et al., 2013). In this framework, the allegedly 'enlarged' and 'expen-
sive' public sector was presented as a by-product of 'clientalism', which was,
in turn, explained in terms of a backward ethos of 'amoral familism'[6] and
Greek 'collectivism'. Even Douzinas, a professor of Law at Birkbeck and
later an MP of the SYRIZA government, who – alongside all other SYRIZA
party members and supporters – defied the theory of 'Greek exceptionalism'
as a cause of the Greek crisis, wrote in 2013:

> Modernization was a mechanistic importation of Western models with-
> out consideration of anthropological [*sic*] differences. *The habits, con-
> ventions and values* that support the Greek economy *differ from those of
> the West*. Identities and social bonds are based on family, friends and the
> community… the attempt to introduce the *European model of socialized
> individualism* failed… *The Greek ethos, with its mild nationalism, secular
> religiosity and familial base*, remains one of the strongest in Europe. *In
> its corrupted version it promotes neoliberalism; it is also the most powerful
> force for resisting it*. It became the first target of austerity measures.
>
> (36–38 emphasis mine)

The stereotypical narrative of presenting Greek cultural exceptionalism as incompatible with Western values and models is, I argue, a deeply orientalist idea (cf. Said 1978). This is not to say that modern Greeks do not have their own cultural specificities, similarly to other communities and regions in Europe and beyond. Greek cultural difference however has been persistently presented as an irreconcilable eccentricity that underpins the Greek inability to follow 'European' political projects. The ensuing 'urgency' to *become European* or to *catch up with Europe* saturates public, political and intellectual spheres in Greece since time immemorial (cf. Gropas et al., 2013).[7] It encapsulates the perceived incongruence between the country and Europe, which is itself a variation of the theme of discrepancy between Modern and Classical Greece.

Classical Greece has operated in the collective imagery of both Greeks and other Europeans as an 'absent presence' that paradoxically constitutes Modern Greece "at once as the collective spiritual ancestor and a political pariah in today's 'fast-capitalist' Europe" (Herzfeld 2002: 903, 2005: 18). Portrayed as having a collectivist ethos and a perplexing religiosity combined with nationalist tendencies, the Greek People are consistently orientalized. Their relational patterns are reduced to amoral familism that allegedly promotes and sustains networks of patronage, clientelism and corruption. Their cultural specificities are caricatured as unmodern beyond redemption. Ultimately, the Greek people are produced in local and international imagination as a degenerate mutation of their glorious ancestors, or, in the best case scenario, as the exotically unruly anti-heroes of European modernity.

My informants' narratives need to be understood against this backdrop of orientalizing stereotypes. What then emerges are a series of provisional timescapes, or 'chronotopes', where various knots of narrative become temporarily entangled and disentangled (cf. Bakhtin 1981: 84; Bear 2014: 7; Kirtsoglou and Theodossopoulos 2010a). These chronotopes do not strictly belong to the past, the present, or the future. They are poly-temporal enactments (cf. Bryant and Knight 2019) that, in effect, *produce* the past, the present and the future. This is not only accomplished through periodization and the ordering of history in a before and after manner (cf. Kosellek 1985) but also through a collapse of historical temporalities.

Similarly, to many of their fellow citizens, my friends and interlocutors inhabit these polytemporal chronotopes in a nomadic fashion. The notion of nomadism here serves to indicate the manner in which subjectivities emerge as assemblages of events, of discursive, visual, sensorial and material fragments of time that form provisional and eclectic connections (cf. Deleuze and Guattari 2010; Hamilakis 2017). The classical past and all its ruins are scattered around the country. They figure prominently in art and everyday contexts, reminding Greek people of their glorious patrimonial heritage, while also acting as powerful representations that attract visitors to the country (cf. Basea 2015; Herzfeld 2002: 902). These representations contrast starkly with visions of the 'oriental' Ottoman era and form

continuities in hegemonic versions of national history between the classical past, Byzantium and a glorified 1821 war of Greek independence (cf. Lalaki 2012). They circulate alongside counter-histories told at family dinners, the legacy of communist-sponsored resistance to the Nazi occupation and other historical instances that make their way into songs, books, stories, urban landmarks, material culture, symbols and linguistic idioms. They are tied together in various and sometimes unforeseen combinations producing patterns of inclusion and exclusion, solidarity and conflict.[8] Greek people might thus find themselves all in the same space but they remain nomads of time, situating a variety of pasts in the present and the futures it contains.

Nomadic temporal subjectivities in Greece emerge as heterogeneous ensembles of events, variable intensive affects and durable colonial debris (cf. Deleuze and Guattary 2010: 82–83; Stoler 2016). Experiences of economic, political and cultural dependence and a persistent, unremitting orientalism that folds itself into the fabric of time produce the Greek subject as an exceptionality. Orientalism as colonial sedimentation is first and foremost enacted in national history. The history of the nation is aggressively promoted through education and an institutionalized emphasis on the country's classical past. This emphasis is intimately connected to how European powers imagined the Modern Greek state at its inception (cf. Hamilakis 2009; Herzfeld 1986, 2002; Panourgia 2004; Stewart 2014; Tziovas 2014).

During the years of austerity, Greek people were further orientalized and construed as radically different to other Europeans by the hegemonic gaze of officials, local and international newspapers, academics, elites and publics (cf. Antoniadis 2012; Dalakoglou and Angelopoulos 2018; Knight 2013, 2015; Leontidou 2014; Papataxiarchis 2018; Triandafyllidou, Gropas and Kouki 2013). The austerity measures and the so-called structural adjustments did not have purely fiscal targets and effects. As Douzinas (2013) has argued, they also attempted to address the alleged Greek eccentricity in its various manifestations. Patterns of inheritance, for example, are a case in point. As tangible expressions of kinship relations they were disproportionally affected by the heavy taxation imposed on property (cf. Knight 2018). The public sector was demonized as the embodiment of clientelism, supposedly underpinned by Greek familism. The opening of 'closed' professions (like taxi driving or pharmacy store owning, often passed down from parents to children) became a matter of paramount importance to the Troika. Further separation between church and state was promoted as a matter of supposedly fiscal obedience since, *strictu-sensu*, priests in Greece belonged to the public sector.

Perhaps, the most blatant example of orientalism as a criminalizing colonial technology of governance is the stereotype of the 'Greek habit of tax-evasion', a narrative that was circulating widely in 2010–2016 in public and official discourses. In September 2011, the senior IMF resident representative in Athens, Bob Traa, gave a speech at the Economist conference, stating that the fiscal programme imposed by the Troika was not delivering the expected results because of the Greek habit of tax-evasion.[9] Tax-evasion

was presented at the time as a symptom of the Greek lack of trust in the state, a sad remnant of the years of Ottoman rule when Greek-speaking, Christian Orthodox subjects resisted the Ottoman regime through practicing fiscal disobedience.[10] In February of the same year, Traa had publicly reprimanded the Greek people (on camera) urging them to 'cut down on bribery', using the Greek term *'fakelaki'* (literally a little envelope, the term is always understood to mean a bribe). Allegedly, Greeks habitually escaped taxation through bribing government officials (just like in the Ottoman period). As it transpired later, the EU/IMF programme failed to deliver the expected results, not because the so-portrayed post-Ottoman subjects were cheating the state but owing to technocratic miscalculations incorporated in its original design. Despite overwhelming research-based evidence to the contrary, coming from the IMF's own chief economist Olivier Blanchard, a strategy of tight and sudden austerity was adopted, slowing down the economy and deteriorating the country's economic indexes (cf. Blanchard and Leigh 2013). [11]

To return to Vicky, Stefania, Nicholas, Lia, George and Katerina whose ongoing debates represented those of ever-widening segments of Greek society at the time, it was evident that they were not just disagreeing over ideology. They were all speaking as different chronopolitical exiles. The orientalized stereotypes evoked to justify austerity measures denied coevalness to Greek subjects, thus expelling them from a common present and forcing them to inhabit chronotopes of 'radical alterity' (cf. Kirtsoglou and Simpson this volume, Fabian 1983; Kirtsoglou and Tsimouris 2016, 2018). These exiles were not only hegemonically forced upon them by elites, officials and the media (as I have tried to explain in the previous paragraphs) but were also, in important ways, self-imposed. My interlocutors embodied the continuous, historic struggle of large parts of Greek society to *become what they once were*. In other words, they became victims of the tyranny of their own past, experienced as future potentiality.

Vicky and Stefania – representing the Greek people who remain loyal to the project of 'modernization' – spoke from the chronotope of ancient Greece as a constituent element of European and Modern Greek Enlightenment. Modernity provided them with their vision of 'normality', which was for them both an already accomplished achievement and simultaneously the 'not-yet' (cf. Bryant and Knight 2019: 197–199; Plantzos 2016). Katerina, the 32 year old martial arts instructor, who used the words of the 1821 fighter to claim that Greeks should 'stand up' to EU/IMF, was speaking from the chronotope of Modern Greek ethnogenesis. According to this narrative, the establishment of the modern state was supposedly achieved by the persona of the unruly Greek/Balkan, Christian Orthodox anti-hero who fought allegedly 'alone', outgunned and outnumbered by the mighty Ottoman Empire and who attracted the admiration of the European Great Powers of the time turning them into supportive philhellenes. In reality of course, the modern Greek state was established as a crypto-colony, a "buffer zone between the colonized lands and those as yet untamed… compelled to acquire

[its] political independence at the expense of massive economic dependence" (Herzfeld 2002: 900). Local elites sought to redeem Greek social atomism through presenting it as a variety of 'European individualism' (ibid.: 904).

Nicholas, Lia and George, despite the differences between communists and the Radical Left, spoke from the chronotope of revolutionary struggle as an achievement, and simultaneously as a goal, of many leftists in Greece. Their expectations of economic and political 'liberation' from the EU/IMF officials, who had practically run the country since 2010, would be shattered in less than two months. The Troika managed to force the SYRIZA government into what many in Greece saw as a historic compromise. In the week that followed the conversation recounted here, capital controls were imposed on Greek banks. In spite of this extreme measure, Greek citizens voted against the continuation of austerity in a referendum that followed. Threatened with an imminent no-deal Grexit, the SYRIZA government conceded to the demands of the Troika, and by August, they signed a new memorandum that brought more debt, further austerity measures and a new package of structural adjustments. The government's compromise caused a split within the party and between SYRIZA voters.

On the morning after the ratification of the new loan agreement in the Greek parliament, Lia told me that 'General Scobie was again in Greece'. 'There is no future', she said, "at least not for us. Another 60 or more years of domination lie ahead. We are finished (*teleiosame*)". Lia was alluding once again to December 1944 when the British forces under Lieutenant General Scobie (with the help of the newly created Greek National Guard that incorporated many former German collaborators) overpowered EAM/ELAS in Athens, forcing the Greek Communist Party to accept an armistice. The civil war that followed ended with the defeat of the Left. The subsequent establishment of a particular cold-war regime of foreign intervention and persecution of communists and their 'sympathizers' meant that the country "possessed nothing comparable to the social compromise forged elsewhere in Europe in the fifties and sixties… no welfare state, no democratic party… Wage levels continued to be miserably low and work-place regimes were very repressive" (Laskos and Tsakalotos 2013: 24). Lia's anticipation of the 'normality' of 'people's rule' remained locked in the chronotope of hope as refuge from reality; a timescape filled with postponed dreams that accommodate what cannot exist in the present or in the foreseeable future.

The nomadic temporalities evident in the arguments of my friends, and among Greeks more widely, are in many ways paradoxical. They are bursting with narratives of political causality and accountability inspired by retrocausal readings of the past and the future-as past (cf. Kirtsoglou 2010: 86–87; Plantzos 2016), but they also carry orientalist visions of the colonized self. The latter manifest themselves as perpetual re-turns to a future that has been allegedly already accomplished. These re-turns to the future-past produce paradoxical feelings of what I have termed *anticipatory nostalgia*. This kind of nostalgia is different from Herzfeld's structural type (2005).

Whereas Herzfeld's structural nostalgia refers to a 'longing for the primordial self and for an age beyond the state' (ibid.: 22), anticipatory nostalgia is a future oriented, affective condition. I also argue that it is an explicitly colonial predicament. In the following section, I will attempt to substantiate my claim and demonstrate the connections between chronocracy, the central concept of this volume, nomadic temporality and anticipatory nostalgia as a colonial condition.

Chronocracy, nostalgia and nomadic temporality in the crypto-colony

The claim that Greece needs to be analysed as a colonial space caught between an idealized classical Hellenism and perceptions of what constitutes European modernity is thoroughly supported by previous research in the field of Greek studies (cf. De L' Estoile 2008; Herzfeld 1986, 1987, 2002; Lalaki 2012; Leontis 1995; Stewart 2014; also Tziovas 2014). Hellenism (as a political and aesthetic representation of the Greek classical past) is a Western model cultivated in Europe and disseminated through Greek speaking elites and philhellenes to the Ottoman world where it became one of the ideological platforms of the 1821 war of independence (cf. Stewart 2014: 10). Classical Greece was an already colonized timescape appropriated by European classicists, architects, historians, artists and politicians. It was hegemonically enacted on the newly established Modern Greek state in a variety of discursive but also material ways, and it was inscribed onto Greek and European urban spaces through the neoclassical architectural rhythm (ibid.; see also Gourgouris 1996; Leontis 1995). As Panourgia explains, neoclassicism (in art, architecture, literature) became an integral part of the European project of modernity (2004: 166). The appropriation of the classical Greek past reminds us of Mignolo's argument that "there is no modernity without coloniality" (2011: 3) and evidences modernity's 'plural genealogy and ecology' (Mitchell 2000: 12–13).

European colonization of ancient Greece as a constituent principle of the Enlightenment project (cf. Stewart 2014: 10) posed for Modern Greek people a chronopolitical conundrum right from the very first years of the foundation of the new state. Their 'gaze towards the future' had to pass through "a re-articulation, a reformation and repossession of an antique ideality" (Panourgia 2004: 167). As the German Minister of Justice of the first (also German) King of Greece stated in 1834, Greek antiquities constituted: the "contact point between the actual Greece and the European civilization" and therefore had for the Kingdom of Greece "an enormous political significance" (ibid.). In order to connect with Greek antiquity and join *through* it 'European civilisation', the Minister advised in 1836 that "all the Greeks had to do was to mimic the Germans" (Panourgia 2004: 176).

It becomes evident that Modern Greek people were seen right from the start as inadequate members of European modernity. Their modernization

as progress and as a process of becoming full members of a hegemonic Western cultural timescape plays out as a vicious circle. It passes through their identification with the past, which in its turn depends upon successful incorporation of European modernity through mimicry. This demand for identification, or what Bhaba called "to be *for* an Other" happens through an entanglement of presence and absence (1994: 45, 47; cf, also Herzfeld 2002: 916). The colonial subject can only exist through resemblance either to the colonizer or to the orientalist stereotypes of her that emerge as a result of the colonial situation (cf. Bhaba 1994: 48; 1984).

The multiple orientalist visions of the self form predictable and unpredictable connections with various fragments of time – as I have argued – in a nomadic fashion. A nomadic sense of temporality destabilizes the process of cultural signification and constitutes national culture as a series of provisional dialectics of diverse temporal events (Bhaba 1994: 216). The appropriation of classical Greece by right-wing and fascist regimes in the twentieth century for instance (cf. Hamilakis 2002, 2009; Tziovas 2014) causes this aspect of the past to be downplayed, frowned upon or ridiculed as 'kitsch' by communists and leftists like George, Nicholas and Lia. Nevertheless, the ancient Greek past may come to be defended on a different occasion by the same actors who usually refuse to identify with it, as it comes to form conditional entanglements with other events, affects and materialities in a new temporal assemblage.

To substantiate my claim, I will offer the example of George; my communist friend who made fun of Stefania by remarking 'live your myth in Greece' when she was showing him the euro-coin's depiction of the Greek classical past as a proof of the unbreakable connection between Greece and Europe. Despite being entirely aware of the relationship between Hellenism and right-wing discourses, George was among the first to join demonstrations against the treaty signed between Greece and North Macedonia in 2018 ending decades of dispute over the name of the neighbouring country. Given his communist loyalties, I asked him why he was joining the protests. I reminded him that the Greek communist party was the first political alliance in the history of Greece to recognize the right of Macedonians to self-identification, towards the end of the civil war in 1949. "This has nothing to do with self-identification", George replied to me and explained:

> This is a mixture of FYROM (Former Yugoslavic Republic of Macedonia) extreme nationalism and NATO's imperialist programme to control the Balkans. The fact that I loathe (*sihainomai*) Greek nationalists does not mean that I applaud the FYROM ones. Do you know that FYROM is full of kitsch cast statues of Alexander the Great whom these people are taught to claim as their ancestor? This is all about what NATO wants to establish in the area: a series of satellite states existing for its own purposes.

Since 2017 (when Greek negotiations with North Macedonia were officially announced), George incorporated the motto 'Macedonia is Greek' (*i Makedonia einai Elliniki*) into his social media profile, in a sticker on his car and on his keyring. He was not the only non-right wing to feel that way. Mikis Theodorakis, composer of *Zorba's Dance* and of many famous songs, and an unconventional leftist who eventually entered the Greek national parliament as a conservative, spoke publicly in one of the major demonstrations against the treaty, accusing the government of the Radical Left that signed it of 'leftist fascism' (*aristerostrofo fasismo*).

The continuous reworking of different time fragments into diverse temporal assemblages in a nomadic fashion produces hybrid understandings of Hellenism and Greekness (cf. Hamilakis 2009). It also allows the colonial gaze to fold and refold into cultural and political life to a point that separating the two becomes impossible. From within these different understandings of Hellenism, modern Greeks suffer from a distinctive version of chronocracy: that is, *the discursive and practical ways in which temporal regimes are used in order to deny coevalness and thereby create deeply asymmetrical relationships of exclusion and domination* (Kirtsoglou and Simpson this volume). As crypto-colonized subjects of chronocracy, Greek people have been, as Herzfeld argues, doubly victimized. They "suffer the political and economic effects of colonialism itself, but they are excluded materially and epistemologically" from processes of formal recognition of their situation (Herzfeld 2002: 919–920).

Being at once products and creators of a European modernity to which they are not fully accepted causes paradoxical feelings of anticipatory nostalgia for a future-past. Nostalgia has been discussed in anthropology in relation to post-Soviet spaces (cf. Boyer 2006, 2012; Todorova and Gille 2012). More widely, the concept has been used to address methodological issues (Berliner 2015), loss and restoration (Boym 2001), moral critique and social change (Parla 2009) and subaltern memory (Atia and Davies 2010). Angé and Berliner's edited collection on Anthropology and Nostalgia goes beyond Eastern Europe to bring ethnographies of different regions of the world into a fruitful discussion of nostalgia and its relationship to the social production of history, materialities, past, present and future temporalities (2015).

The kind of nostalgia I refer to here is an explicitly colonial condition. It can be understood as a future-oriented, affective state of collapsed hope (cf. Bryant 2015) and postponed perfection. It is embedded not only into the minds and hearts of my Greek interlocutors but also in the minutiae of their material environments, from where it is 'discharged upon them' as an experience of 'ruination' (cf. Navaro-Yashin 2009: 5). Anticipatory nostalgia expresses an affective dimension of subjectivity that emerges out of the continuous struggle of Greek people to negotiate at once their glorious past as a vested right and their continuously postponed future as a reflection of this past (cf. Plantzos 2016).

Anticipatory nostalgia is a product of chronocracy enacted in everyday experience and in relations to material, visual and discursive environments (cf. Basea 2015; Plantzos 2016). In terms of the classical past, gazing at an ancient site nearby, studying your history lesson for tomorrow, handling a euro-coin, watching an actor cry "this is Sparta" in a blockbuster movie, force people to re-turn to an idiosyncratic affective state of lack and accomplishment. This is true for all hybrid versions of Hellenism: the simplistic one that portrays Hellenism as the glorious ideal and the more complex 'modern' articulation that emphasizes reason and secularism. Alternative historical motifs are equally evocative of anticipatory nostalgia. The vision of the unruly Balkan, Christian Orthodox anti-hero, or the subject of frequently romanticized, twentieth century revolutionary resistance may seem to be attractive counter-chronocratic, de-colonial alternatives. In reality, however, they are similarly unattainable positionalities since they also enact *states of freedom achieved and at the same time yet to happen.*

As an affective state, nostalgia for what has been already accomplished and at once for the anticipated condition of being liberated from chronocratic domination causes hands to shake, voices to tremble, tears to roll down the eyes, deep feelings of injustice, pride and inadequacy. It fills the future with the past and the present with future orientations (cf. Bryant and Knight 2019). It encourages understandings of the self as always already defiant and at once defeated (cf. Herzfeld 1987). Anticipatory nostalgia is embedded into and emitted from visual, discursive and material ecologies (cf. Navaro-Yashin 2009). It saturates 'the street' (*to dromo*, *to pezodromio*) as the paramount landscape of resistance (cf. Dalakoglou 2012, 2018) and the Syntagma Square where the Greek anti-austerity indignation movement developed in 2011 in the shadow of past struggles, like the big EAM demonstration of 1944.

The Greek 'crisis' as a state of emergency and 'urgency' to *catch-up* with European, capitalist modernity accentuated anticipatory nostalgia, as it was nothing more than yet another variation of chronocracy as a colonial political technology. Much like in the 1836 newly established Kingdom of Greece, 'all the Greeks had to do' since 2010 was 'to mimic the Germans'. This time the advice was not offered by the 1836 Minister of Greece's German King but by the likes of the 2013 Germany's Minister of Finance, Wolfgang Schäuble, the Dutch President of the Eurogroup, Jeroen Dijsselbloem, and the French chairwoman of the IMF, Christine Lagarde. It was echoed by local elites and politicians who insisted that Greece *had to become a normal country by returning to the path of modernization, progress and development.*

In a detailed analysis of 2011–2016 official discourses on the Greek crisis, Stavrakakis and Galanopoulos (2019) reveal that 'normality' was presented in the official narratives of conservative and socialist governments as a series of 'turns' and 're-turns' to the future of European capitalist modernity. The medium of identification was this time, not the classical past, but the austerity measures. Austerity would allegedly help the country to return to

the normality of the markets and eventually, through its full participation in the capitalist system, to become reinstated in the EU as an equal partner. This is what a number of EU officials, Greek politicians and journalists maintained. Speaking at the Conference of the Greek Union of Entrepreneurs in October 2014, the then leader of the socialist party that participated in the Greek coalition government claimed that "*the return to normality is not a return to the past, but a return to the future*" (my emphasis, Stavrakakis and Galanopoulos 2019: 181). Achieving normality through an austerity programme that would help Greeks to successfully imitate their European counterparts, rendered – yet again – the country's present "something that is absent and temporally deferred… a representation of time that is always elsewhere, a repetition" (Bhaba 1994: 51).

Chronocracy, however, did not just manifest in Greece as a colonial technology of governance. It was also enacted as *phroneses* (cf. Bear 2016; Kirtsoglou and Simpson this volume), that is, in the form of a series of *moral* statements about the Greeks as degenerate mutations of the ideal modern European citizen (cf. Herzfeld 2016a, 2016b; Knight 2013). Articulated by local and international officials and the media, these statements presented Greeks as Ottoman relics who would not hesitate to cheat the state or the EU for personal gain. Through an emphasis on Greek anachronism and dubious moral standards the crisis was not presented simply as an economic or a fiscal event but as a proof of the Greek people's moral and cultural lag (cf. Douzinas 2011; Gkintidis 2018; Rakopoulos 2019). As Graeber (2011) has argued, debt is not actually an economic but a moral statement (cf. also Athanasiou 2014: 7; Goddard 2019; Narotzky 2016; Sabaté 2016). As such, the way the country's debt was handled constitutes a particular facet of chronocracy that served to deny the Greek people *moral* (as well as cultural and historical) coevalness with the rest of Europe.

Epistemic chronocracy – as a form of denying coevalness through regimes of expert knowledge – was also a feature of political, journalistic, academic and technocratic discourses of the crisis. Austerity was a regime primarily designed to transfer the financial risk of major European banks onto the shoulders of Greek and other European citizens.[12] Nevertheless, it was presented and defended as an expert remedy to a country's lagging modernization. During the so-called 'crisis', Greek people's fates, their future 'progress' and their future as progress were decided in closed Eurogroup meetings and also in Hilton, a landmark hotel in Athens where the Troika met with local government officials. These critical decision-making events at the margins of the state (cf. Das 1995; Knight and Stewart 2016: 10) created asymmetrical timelines between decision-makers and those forced to bear the consequences of other people's decisions (cf. Kirtsoglou 2010). In official and public discourses that medicalized and pathologized the 'Greek condition', forms of expert knowledge were employed as diagnostic tools and simultaneously as therapies of the country's assumed pathologies (cf. Stavrakakis and Galanopoulos 2019; Stoler 2006: 410). In one of my visits

to Athens in 2013, I took a taxi to a meeting I had near the Hilton hotel. Upon hearing where I wanted to go, the taxi driver remarked: "Ah, you want to go to the hospital!" "No the Hilton hotel", I replied failing to tune in to his subtle irony. "I know", he replied

> at the hospital. This is where Greece, the Big Patient as they call it now (*o megalos astehnis*) is supposedly lying[13]. All the top doctors have come from Europe (*apo tas Evropas*) and confer all the time about what kind of chemotherapy they will give her in order to cure us from anachronism (*apo tin anachronistikota*). But you know what happens when you get a big dosage of such medicines. You die and that's the end of it (*pethaineis kai teleionei to zitima*).

The Greek colonial condition has been continuously rearticulated in diverse – and conflicting – narratives of progress as the 'normal' expected future orientation. As a collective ideal, progress may appear as being oriented towards a specific end but is in fact a cyclical aporia, as it heavily depends on defeating that which came before (Navaro-Yashin 2009: 7). In terms of how modernity approaches progress in scientific knowledge, revolutions demand that past approaches become defeated and ruinated (ibid.; Kuhn 1970). In turn, progress as modernity's collective societal goal commands that the past is symbolically destroyed as it is conquered, overcome and transformed into a place of no-return, which can be only preserved as singularized history (cf. Bhabha 1994: 56; Chakrabarty 2000; Koselleck 1985; Lyotard 1985). Progress as a quintessential principle of modernity rests on a strict ordering of time in temporalities of before and after and celebrates change, development and substitution of the old and parochial in favour of the new and better. Since this process is both continuous and relentless, its telos remains a slippery and precarious feature. The moment we achieve progress, the goal of future progress reappears in front of us. There is a saying in Greek that captures this aporia well: "the better is the enemy of good" (*o ehthros tou kalou einai to kalytero*).

Progress, it would seem, can only exist in a linear time frame so that we can prove the changes by putting them *behind us* and meaningfully strive towards future change. Through exponential repetition of this process however, linear time acquires *cyclical properties*. The repetitive cycle of substituting the new best with an even newer better-best renders the process of progress entirely predictable. As such, modernity's belief in progress can be seen as an eschatological condition (cf. Guyer 2007). Just as members of various Christian denominations feel they *know* the direction of time towards a salvationist end, the subject of modernity feels she *knows* time's infinite trajectory.

Because progress cannot but be at once achieved-and-yet-to-be-accomplished, it is actually a state that fills us all (not just the Greeks) with anticipatory nostalgia. We live in a constant condition of being nostalgic of our futures, and we *can be* nostalgic of them because *we allegedly know*

already what they will look like: better than our pasts and presents. Our eschatological belief in progress is our common colonial condition at the heart of both neoliberal capitalism and the revolutionary visions of resistance to it. Both frameworks are ultimately products of modernity, and as such, they are oriented towards a future potentiality envisaged as a state *hitherto* 'better' than the present.

I believe that my Greek informants strive to resist the aporia of progress through what I have called nomadic temporality. The polytemporal character of Greek political and historical experience has been documented chiefly in the work of Daniel Knight (2013, 2014, 2015, 2016) and in his collaborations with Stewart (2016) and Bryant (2019). The renewed interest in Southern Europe and austerity made temporality a fruitful entry point of analysis. For example, in relation to memory and resistance (Narotzky 2016), forgetting and suppressed memories (Pipyrou 2016) and trauma and affect (Alexandrakis 2016; Apostolidou 2018). These works complemented anthropological discussions of historicity (Stewart 2016), the near future (Guyer 2007), debt and fiscal disobedience (Graeber 2011; Han 2004; Roitman 2005), hope (Miyazaki 2004, 2006), speed cultures of modernity (Virilio 2005), the study of time through labour (Bear 2014) and the concept of time as a technique (Bear 2016). What does yet another take on temporality have to offer to an already established body of relevant literature? What does the term 'nomadic' bring to the debate?

My inspiration here comes from Deleuze and Guattari's work on Nomadology (2010). In this work they set out to convey the anti-genealogical, impulsive and volatile character of nomadic existence. Here, I extend their thinking by describing a nomadic sense of temporality and one which could potentially be perceived as a de-colonial strategy of resistance to the predictable, ordered cyclicality of modernity as progress. In this sense, I prefer to view the way in which my informants blend temporalities superimposing one upon the other and folding them into each other, as an anti-chronocratic act of rejecting modernity's impulse to order time through the notion of progress.

At each turn of history, Greek temporal subjectivities appear to be composed of collapsed fragments of time. As the colonial condition compels them to move seemingly 'ahead', my informants instinctively apprehend that linearity is nothing more than a short-term illusion; a small fragment of a bigger curve. When one walks on a straight line, one knows that this is actually part of an elliptic earth and if one keeps walking, one will eventually reach the same point. Similarly, nomadic temporalities destabilize the linear illusion of modernity-as-progress and reveal its cyclical properties. Greek temporalities are nomadic, I argue, because they resemble complex, curvy configurations with manifold, unbounded interconnections between different time fragments that produce potentially infinite temporal assemblages as they expand in all directions.[14] The anti-genealogical, impulsive and volatile character of nomadic temporal existence is revealed in the way various time fragments are being recursively and retrocausally assembled

and re-assembled in provisional chronotopes. This kind of temporal diso-bedience, causes historical events to be selectively re-lived in the present (cf. Knight 2015), connecting nominal notions of past, present and future with the local and the global in instances of analogical thinking (cf. Sutton 1998).

Nomadic thinking is in a sense the inverted image of anticipatory nostalgia. Conversely to anticipatory nostalgia that is ultimately a future-oriented event, nomadic temporality is eclectic and sometimes unpredictable. It creates all sorts of unexpected connections between events that maintain "the possibility of springing up at any point" (Deleuze and Guattari 2010: 5). Its consistency is that of a 'fuzzy aggregate' plural, affective and distributed between persons and things (ibid.: 44, 82–83). Since nomadic temporality is a kind of anti-progress temporal agency, it is also non-teleological. It is not organized around temporal *trajectories* (cf. Bryant and Knight 2019: 17–18). It enacts a multi-accentuated sense of time as contingency and promotes the creation of serendipitous entanglements between experience, memory, inference, affect, visuality and materiality. Just as nomadic temporality remains stubbornly anti-progressive and non-directional, however, it also reifies colonial duress (cf. Stoler 2016). Colonial vestiges are inscribed and re-inscribed onto the manifold temporal surfaces through a process of successive folding and re-folding of chronocracy into the fabric of time. The manner in which chronocracy enters and inhabits nomadic temporality poses a limit to the subject's temporal agency and renders it an assemblage of thoughts, discourses and practices that both resist and reify the relevance of the colonial gaze.

Conclusion: a long-standing grief – kaimos

> but Greece, as it is known, never dies and as it has been foretold one day it
> will rise again from the dead.[15]

Different scholars, including myself, have documented through the years Greek feelings of injustice over the unequal relations of power promoted by the failed project of modernity (Herzfeld 2002, 2016a, b; Kirtsoglou 2006, 2010; Sutton 1998; Theodossopoulos and Kirtsoglou 2010a, 2010b).[16] Up until 2010, my interlocutors used to tell me that they were the asymmetrical allies of Europe and of the US (cf. Kirtsoglou and Theodossopolos 2010b). They provided me with complex narratives of political aetiology, as they elaborated on their relationship with an imaginary West, of which they felt 'simultaneously an image, a creation, an appendix, an ally and an enemy' (Kirtsoglou 2006: 64). The open secret of Greek political, cultural and economic dependence (cf. Herzfeld 2015) was locally articulated after 2010 as a case of straightforward colonial domination. The term 'debt-colony' (*apoikia hreous*) was one of the most frequent expressions my interlocutors employed to describe their experiences in the years of austerity. They offered it to me in supermarket queues and later on at the long queues in front of ATMs after the imposition of capital controls in the summer of 2015.

They used it to express their anticipatory nostalgia of the times (always past and yet to come) when Greece was/will be seen as a sovereign country and an equal member of Europe and the world. They employed it to talk about freedom, democracy and dignity, the values they have fought/fight/will fight for against an 'imperialist capitalism' that sought to operationalize their lives and to turn them into 'slaves for the world's few'.

The feeling of being colonized – taken over as a cultural and political subject – has deep historical roots in Greece. What was termed as the 'Greek crisis' and the way this was handled institutionally, in public and in media discourses, has nothing 'new' to offer to our understanding of the Greek historical and political condition. It cannot be considered as a kind of rupture in time or as a bounded event. It is merely another facet of Greece's chronocratic relationship with an imaginary European modernity and its institutional and informal propagations. As Herzfeld argued, the 'EU is a successor to Great Power imperialism' (2016a: 11). Modern Greece has been unofficially colonized culturally, politically and economically since the inception of the Modern Greek state. In fact, it may well owe its very existence as a state to the fact that classical Greece had been already appropriated as an integral part of European modernity (cf. Beaton 2014; Tziovas 2014). The manner in which Greek people were chronocratically orientalized, moralized and pathologized since 2010 is just another manifestation of their chronic colonial condition. The stereotypes of profligate tax-evading citizens of an unmodern state that needed to finally become European or else exit the EU were nothing but variations upon the same crypto-colonial themes played out for nearly 200 years.

Through neoclassicism, Hellenism or neoliberalism, the Greek people have been diachronically admonished to 'catch-up' as a matter of urgency. Indigenous resistance to the project of (capitalist) modernity has been routinely exoticized, romanticized, and pathologized (cf. Theodossopoulos 2014). From within their colonial condition, my informants are ridden with a chronic, anticipatory nostalgia of the future-past (cf. Kirtsoglou 2010: 86–87; Plantzos 2016). Modernization-as-progress is experienced as an orientalizing project of 'ruination' and destruction (cf. Navaro-Yashin 2009) of the Modern Greek cultural eccentricities: their failure to become individuals (cf. Stewart 2014); their collectivist and familist ethos (cf. Douzinas 2013); their 'mild' – and not so mild – nationalism (ibid.; Kitromilides 1989), their superstitious religiosity that contravenes Enlightenment ideals of reason and logic (cf. Argyrou 2002: 60–61, 100), their 'archaic' notions of retributive justice (cf. Loizos 1988), their 'conspiratorial' irrationalism (cf. Brown and Theodossopoulos 2003; Sutton 2003) and their Ottoman-inspired clientalist predisposition were all deemed unfit for the modern, contractarian, fast-capitalist Europe (cf. Herzfeld 2002, 2016a, 2016b; Kirtsoglou 2006). All in all, Greek people have been continuously *urged* to re-turn where they once were or else stop laying claim to the classical past as the holy grail of modernity (cf. Tziovas 2014: 16).

What I have tried to analyse in this paper (namely Greece's colonial condition, its relationship to the chronocratic properties of modernity-as-progress and the production of anticipatory nostalgia) is tied to the concept of nomadic temporalities. My Greek informants seem to be refusing to view the past as history to be preserved. For them, the past remains alive (cf. De L' Estoile 2008; Knight 2015). They also refrain from defeating old frameworks and stubbornly bring all kinds of temporalities onto complex, manifold configurations where everything is potentially related to everything else. Their nomadic sense of temporality both resists and reifies anticipatory nostalgia. The array and unpredictability of connections between different time fragments resist the ordering of time and constitute temporality an open 'expansive ecology' (cf. Widger and Wickramasinghe this volume). The folding and refolding of temporalities into different temporal assemblages, however, reproduces orientalist images of the self and perpetuates anticipatory nostalgia as the affective structure of the Greek colonial condition. Caught in the net of this impossibility, Greece, or *Ellada*, as my informants prefer to call it, is an entity similar to Schrödinger's cat: it at once 'rises from the dead and never dies'. As Christina, one of my dearest Greek friends frequently states, "*every problem has a solution. A problem with no solution is not a problem. It is a long-standing grief (kaimos). Ellada my dear is a kaimos*".

Notes

1 The use of the term 'modernity' here does not denote a homogenous temporal, political or historical entity. My analysis demonstrates the 'plural genealogy and ecology of modernity', evident in its relation to the appropriation of the classical Greek past (Mitchell 2000: 12–13).

2 IOU – an abbreviation of the term I Owe You – is a kind of informal promissory note which acknowledges debt but does not specify the terms and time of repayment. The term IOU was introduced to public discourse by the then minister of finance Yanis Varoufakis who saw it as tool in a possible parallel electronic payments system, in case Greece was suddenly expelled from the Eurozone. See Yanis Varoufakis *Adults in the Room*, p. 287, section *mea maxima culpa*.

3 *Eimaste Ellines. Den proskyname. Emeis kai stous Theous milame orthioi.*

4 This verse of the song refers to the soup kitchens organised by EAM during the Great Famine of 1941–1943 German occupation. For how the Great Famine pictured in Greek experiences of the crisis see Knight (2013, 2015). For EAM's soup kitchens see Margaret Poulos (2014), esp. Section 4.2.

5 'Beta' here is an official characterization (not to be confused with 'second class citizen'). For more on this subject see Clogg (1979: 168; Samatas 1986: 35).

6 The term was coined by Banfield in his 1958 study of a Southern Italian village. The concept of amoral familism sought to provide an explanation of why certain societies fail to progress. It argued that backward societies were not investing their energies towards the public good and prioritized present orientation over future planning. Banfield's proposition was warmly received and used for several years in relevant sociological literature (cf. Ferragina 2009).

7 For further historical contextualization, see Diamantouros (1994) on Greek cultural dualism, pointedly discussed in relation to the crisis by Triandafyllidou, Gropas and Kouki (2013).

8 For example Knight's (2015) informants experience austerity through the Otto-
   man past and the 1941 Great Famine, rather than focussing on the civil war era.
9 https://www.imf.org/en/News/Articles/2015/09/28/04/53/sp091911.
10 See Antoniades (2012) http://www.lse.ac.uk/Hellenic-Observatory/Assets/
   Documents/Research/Research-Projects/Greek-Econ-Crisis-in-the-International-
   Pressen.pdf; http://content.time.com/time/magazine/article/0,9171,1958721,00.html.
11 https://www.theguardian.com/business/2013/jun/05/imf-underestimated-
   damage-austerity-would-do-to-greece. For an accessible explanation of what be-
   came known as the Blanchard-Leigh fiscal multiplier, one of the chief faults in the
   EU-/IMF design of the fiscal austerity programme see https://briefingsforbrexit.
   com/the-imf-abetted-the-european-unions-subversion-of-greek-democracy/
   and Jonathan Porte's (National Institute of Economic and Social Research)
   comment https://www.niesr.ac.uk/blog/no-debate-please-were-europeans.
12 In 2010 the country's fiscal derailment meant that it could potentially default
   on its payments to international investors in National Bonds. European banks
   (particularly German and French) were exposed to this risk. The remedy of-
   fered by the EU and the IMF was a mixture of heavy, horizontal taxation (to
   address quickly the country's fiscal derailment) and bigger loans presented as
   'bail-outs'. Disregarding the evidence offered by the IMF's chief economist
   Olivier Blanchard, the heavy austerity measures imposed significantly slowed
   the Greek economy, causing the country's Gross Domestic Product (GDP) to
   plummet. As a result, the Greek external debt as percentage of its GDP soared.
   The main reason that Blanchard's advice was overlooked was in fact the urgency
   to remedy the exposure of the European Banking system to Greek National
   Bonds. The austerity regime needs thus to be seen as a financial tool primar-
   ily geared towards saving the European banking system rather than 'reviving'
   or 'sorting out' the Greek economy. Its externally facing goal (safeguarding
   European banks) was achieved, but its internal goal (strengthening the Greek
   economy) failed miserably. The blame for this failure was consistently cast upon
   the Greek people through a series of orientalising, culturalist discourses about
   their alleged resistance to modernisation.
13 This metaphor used extensively during the crisis by European and local politi-
   cians and officials has its own interesting multitemporal character. The image
   of Greece as a 'patient', covered head to toe in a plaster cast, has been proposed
   by the dictator Papadopoulos to justify the junta's intervention in Greek politics
   (see Van Dyck 1998: 16).
14 For mathematically inclined readers, what I am referring to here is a sense of
   temporality akin to a Riemann's surface. The term nomadic is indexical to the
   holomorphic function of temporality.
15 *Ma i Ellada os gnoston, pote tis den pethainei, ki opos ehei eipothei, kapoia stigmi
   th' anastithei.*
16 For an account of why modernity was indeed a failed project, see Kirtsoglou
   (2006, 2010, 2014); Kirtsoglou and Thedossopoulos (2010, 2013); Christou (2018).

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9   The moment ethnography becomes past

De-temporalising ethnographic nostalgia

Dimitrios Theodossopoulos

Ethnography comes with many gifts. One of them is the ability to freeze social reality in time. Ethnographic accounts of social change stop, unavoidably, at the time of publication. Publication generates a rupture of irreversibility that deprives ethnographic narratives from re-adapting to an ever-changing social reality. The published version of each ethnographic present eventually becomes part of an academic-field's history – a record of some peoples' lives, views and experiences which can be used as a measure of scholarly comparison. This creates a sense of finality in ethnographic writing, rooted in the indisputable fact that ethnography is always past or – to use Raymond Williams's (1977) warning about social analysis in general – experience converted into a finished product, a fixed form.

Temporalisations of this kind hinder our view. They obscure how an ethnographic present turns, silently, into a past; as well as a parallel process: how a well-received ethnography becomes a comparative standard to measure the transformations of the future. Ethnographic fields, regional or thematic, are structured by what has been published before. This is a productive process that enables the comparison of temporally located views. Brick by brick, chapter by chapter, we erect protective shelters to nurture our ideas, to reflect about contrasts and continuities and to lead our analyses to conclusions. Silently and unobtrusively, we erect fences that protect and nurture knowledge, but also decontaminate it, rather artificially, from contradiction.

What remains largely invisible is the degree to which what has already been written defines our ethnographic experience in the present and future. The books and articles of our teachers and colleagues in our fields and also our own published work, structure – in so many fundamental ways – the comparisons, analyses and representational strategies of the ethnography that has not yet been written. Our ethnographic fields encourage us to continuously rediscover the people we study in terms that are meaningful to those fields. 'Academic jargon, conceptual frameworks and intellectual fashions' shape our understanding of categories and our struggle to escape from them (Jackson, this volume). Our points of reference, descriptive or theoretical, are constructed within disciplinary fields and anchored in time: what has been

written before is often another ethnographic time. By depositing our knowledge in ethnographic fields, we generate the conditions of what Fabian (1983) calls allochronism, the imprisonment of ethnographic reality in a static time capsule, an objectified temporality that is different from our own.

In this chapter, I use the analytical notion of 'ethnographic nostalgia' to make visible some of the time distortions effected by what is written before. I define ethnographic nostalgia as a desire to locate those we study within an ethnographic field, our longing and aspiration to capture the ethnographic present as this has been previously described by a particular academic literature.[1] Ethnographic nostalgia captures the structuring effect of previous ethnographic knowledge on ethnographic production in the present: our inclination to see the people we study through the lens of the books we have read about them; or the degree to which our choice of research topics (and our privileging of certain parts of social reality as an object of study) is structured by our respective fields.

I am concerned here with the biases generated by ethnographic nostalgia: they are cyclical, multi-layered, relentless and recurring. But I will put forward an optimistic message: reflexive awareness of ethnographic nostalgia can help us temporarily deconstruct allochrony and establish a productive relationship with past ethnographic records, which encourages detailed and comparative knowledge. An awareness of our ethnographic nostalgia – yes, we all have a smaller or larger measure of it – can help us reposition ourselves against the 'academic chronocracy' of our fields. I add the adjective 'academic' to the concept introduced by Kirtsoglou and Simpson (in this volume) to refer to the management of a given record of knowledge and the power inherent in it. If twenty-first century anthropology has drifted away from – and temporalised as 'closed' – the lessons learnt by previous critiques of ethnographic power and authority, the concept of ethnographic nostalgia invites some critical and timely de-temporalisation.

What is ethnographic nostalgia?

At the moment of its publication, ethnography is temporalised and turned into a record: an informative, authoritative record that shapes the ethnographic gaze of future scholarship. Everyone who has completed an ethnographic project may share this temporalising experience. We keep trying to confine social reality to textual or visual descriptions, interpretations and analyses, and we apply our magic to keeping it alive. Does it work? Sometimes, we have the illusion that it does. But what is the impact of this effort on the ethnographic project? Ethnographic nostalgia redirects attention to the transformation of the ethnographic present into past. It engenders distortions – allochronic biases of all kinds – but also an opportunity to reconfigure our understanding through comparison and our desire to connect to a previous ethnographic time: the time of the academic literature in our fields, which is always one step behind the social present.

Ethnographic nostalgia is noticeable in the impact of previous ethnographic writing on new ethnographic writing. As an analytic construct – depicting a way of seeing the world – it can help us confront our inclination to pursue nostalgic connections between social reality and what other authors – or even we ourselves – have said about a particular society before. This type of nostalgic predilection is a familiar experience to most ethnographers. It is detectable in the pleasure we experience when we discover that social structure-and-form bear some continuity with the past – in particular, with a previous standard of comparison as established within an ethnographic field. It is also noticeable in the unhappiness or melancholia we may experience after failing to observe continuities with a previously recorded ethnographic past: the realisation that the society under study has changed significantly or irrevocably (from a given standard of recorded sociality or cultural pattern).

Three anthropological nostalgias

To aid the analysis that follows, I would like to compare 'ethnographic nostalgia' with three other anthropological nostalgias. Each one makes visible different aspects of the nostalgic gaze and its temporalising consequences for the ethnographic project.

I should start with a nostalgic trope that has been already used extensively to expose the colonial roots of the Western encounter with Otherness. This is Rosaldo's (1989) 'imperialist nostalgia', a concept that foregrounds the desire of the coloniser to lament for what colonialism has already eliminated. A central element in the concept is the perspective of a redemptive quest: a Western observer seeks to rediscover what Westernisation has transformed – to salvage a colonised and fractured world when this is not threatening anymore. The concept captures strikingly the perspective of the 'benign' (so to speak) coloniser, or the post-colonial tourist (mostly that of the off the beaten track variety), who may be curious and educated enough to entertain a certain appreciation of Otherness, but cannot escape *his* (sic) ethnocentric belief in the civilisational superiority of the West.

Imperialist nostalgia meets ethnographic nostalgia when the ethnographer mourns the loss of an ethnographic authenticity defined by a previous record of specialist accounts. A key element in the blend of imperialist and ethnographic nostalgia is an eagerness to prioritise the surviving fragments of a lost social world in the face of overwhelming evidence of social change: this may result in disproportional attention to 'pure' indigenous cultural forms (supposedly uncontaminated by modernity), at the same time as the catering to a modern anthropology. 'Imperialist nostalgia', like ethnographic nostalgia, is fundamentally allochronic in Fabian's (1983) terms; it places the ethnographic object in a disappearing modality (see, Clifford 1986; Bissell 2005; Berliner 2015). Rosaldo's formulation exposes – with a good deal of irony – the contradictions of the salvaging approach: infantilisation disguised as idealisation; for example, of non-Western Others.

Another type of anthropological nostalgia focusses inwards – on temporal comparisons within one's own culture – to capture the loss of familiar social worlds altered by time. Michael Herzfeld (2005) has used the term 'structural nostalgia' to refer to a nostalgic inclination recognisable in the bemoaning of successive older generations. It depicts a yearning for an irrevocable age of balanced, idealised sociality, a perfect social time that existed sometime before but is now 'slipping from our fingers' (Herzfeld 2005: 64, 147). Herzfeld's conceptualisation reveals a key element of the nostalgic perspective: the degree to which its attraction is difficult to challenge. How can the present time (with all its imperfections) ever compete with a purified vision of an irrecoverable communal past? This is why structural nostalgia is so appealing to ethno-nationalist narratives, including right-wing populism as we have seen it more recently in the US and the UK: ethno-nostalgia revives a sanitised vision of the national community as powerful and sovereign, uncontaminated by infiltrating Otherness.

The relevance of structural nostalgia for the ethnographic project can be expanded beyond analysing the nostalgia of Others to encompass ethnographic self-idealisation (Herzfeld 2005). Each successive generation of ethnographers generates portraits of a given society, which become purified by the filtering of the writing process and dignified by the patina of passing time. The ethnographies of the past set an idealised – 'monumentalised', to use one of Herzfeld's favourite terms – standard of comparison with the present. A combination of ethnographic and structural nostalgia can help us see how the black and white mystique of a previous ethnographic record frames the evaluation of an ethnographic present: the sanitised picture of how society was before is likely to contrast unfavourably with an imperfect or contradictory present. As Raymond Williams puts it, the ethnographer here can be compared to the elderly person who deploys the memory of a former Golden Age 'as a stick to beat the present' (1973: 12).

One more anthropological nostalgia has been introduced more recently by David Berliner (2015). It is subdivided into two alternatives: 'exo-nostalgia', a feeling of loss for a past that has not been directly experienced by the nostalgic perceiver, and 'endo-nostalgia', a longing for a lived, experienced past (Berliner 2015: 21). Both these nostalgic variants intersect with ethnographic nostalgia and present us with thought-provoking and deconstructive possibilities. Let's take, for example, the ideal type of the exo-nostalgic ethnographer, a familiar scholarly figure who is attached to an image of the society under study that has emerged from reading previous ethnographies in a regional field: this may very well be an archetypical image of the society under study reconstructed anthropologically, often before fieldwork.

At the pre-fieldwork stage, exo-nostalgia can be conceived as a preparatory state for ethnographic nostalgia. It motivates a desire to seek connections between an experienced present and a not-yet-directly experienced past. During fieldwork, the exo-nostalgic ethnographer is exposed to the productive intersection of direct experience, which is compared to the

knowledge derived from previous ethnographic interpretations. The degree to which he or she experiences enthusiasm in discovering connections with such a previously established ethnographic past – or feelings of loss when such a past is fractured and partially irrecoverable – is a measure (and testament) to the pervasive allure of ethnographic nostalgia.

Direct experience provides opportunities to challenge exo-nostalgia, while simultaneously nurtures ethnographic-endo-nostalgia. Here, Berliner's (2015) second nostalgic variant can provide us with an additional critical perspective: 'the ethnographic experience produces a great deal of endo-nostalgia for intense social events and encounters, but also the banalities of every-day life once lived by the researcher in the field' (2015: 21). The veteran fieldworker battles such nostalgic longings embedded in the memory of a personally experienced social world that is now purified by time – and often by the previous writing of the ethnographer her/himself. 'Multitemporal fieldwork' (Howell and Talle 2012) – the practice of returning to field over time – invites the possibility of challenging endo-nostalgic permutations. The memory of a society as it once was merges with the memories of a younger ethnographic self, interacting with a cohort of respondents who may be now dead or sadly affected by the passage of time. It is not easy to contain the endo-nostalgic variation of ethnographic nostalgia. The transition from exo-nostalgia to endo-nostalgia – in the life course of the ethnographer – makes visible the cyclical nature of the nostalgic view, an issue I will discuss in the following sections.

Limitations

Ethnographic nostalgia is often triggered by the fleeting impression that the recorded past is repeated in the present. Such a nostalgic feeling comes with handicaps and recompenses. I will first discuss the disadvantages, which are many but easy to summarise. As anticipated in my discussion of 'imperialist nostalgia', one limitation is related to anthropology's salvaging project: the antiquarian mission of amassing data from societies perceived as losing their archetypical character. This was a mission undertaken with urgency during the greater part of the twentieth century. There was a sense of having arrived 'too late', which made anthropologists look like pre-apocalyptic prophets (Berliner 2015: 24–25). James Clifford, George Marcus, Renato Rosaldo, and many others have caricatured the salvaging inclination of earlier anthropology. The scope of this critique is somewhat generalising and overlooks contradictory evidence. Old-fashioned anthropological nostalgia for what was lost did not merely reflect a salvaging intention – which it undeniably had – but also sometimes a firm political stance against the distracting effects of colonialism and Western imperial expansionism (see Kapferer and Theodossopoulos 2016; Werbner 2016).

Despite its generalisations and omissions, the critique of anthropology's salvaging mission is necessary and productive because it paves the way to

examine a burden that is more intimately connected with the ethnographic version of nostalgia. This is the proclivity to see contemporary cultural practices in terms framed by the past – as if they represent an embedded continuity of a sort, a deeper social essence, an innermost authenticity hidden beyond (or privileged over) an external superficial reality (Miller 2005). This approach has roots in Western enlightenment philosophy, the pursuit of an inner, deeper authenticity (Lindholm 2013; Theodossopoulos 2013a). It generates the preconditions for allochronic ethnography (Fabian 1983), the distancing of our ethnographic subject in a de-politicised time capsule: a more authentic world, hidden behind a visible, superficial surface.

Nostalgic allochronism also involves a separation of intention from context and meaning (Theodossopoulos 2016b), an oversight common in exoticising accounts of the Orientalising variety. It is as if the ethnographer prioritises the recognition of continuity in structure and form over the strategies and intentions of those who enact such repetitions. Hindsight, provided by reinventions of tradition, offers insights into how such continuities can be misleading, especially in the case of nationalist narratives and re-enactments (Hobsbawm 1983). But, more often than not, cultural representation is negotiated in fluid narratives that generate a grey zone where local intentions interact with globalised stereotyping and appropriations; such as in the case of ethnic self-commoditisation (see Comaroff and Comaroff 2009). Maybe the term 'inventiveness', as Sahlins (1999) has argued, is more appropriate for capturing local intentionality. Undoubtedly, inventiveness and intentionality are easily overshadowed by a nostalgic approach that focusses heavily on cultural continuities.

Temporalising in concentric cycles and within fields

Last in my list of burdens engendered by ethnographic nostalgia is a drawback that, I believe, can be turned to an advantage and an opportunity to direct attention to ethnographic representation more generally. The drawback is the cyclicality of ethnographic nostalgia: its propensity to re-emerge, again and again, sometimes at the very moment one feels that nostalgia has been exposed and overcome. The problem here lies in the incorporation of the ethnographic product into academic fields of knowledge, for example, the propensity of each ethnographic description to create standards for comparison and analysis. In this respect, ethnographic nostalgia is rooted deeply in the epistemological assumptions that support the production of ethnography.

Ethnographers flirt – creatively and analytically – with the ethnography of the past. Ethnographic nostalgia – the desire to discover continuities in social structure and form – emerges from this productive relationship. Even when ethnographers denounce their longing for such continuities, their accounts are likely to structure the ethnographic nostalgia of the future. Each ethnographic account becomes in time an ethnography of the past and a

record of comparison in a given field; and, simultaneously, it becomes an anchor point for the nostalgia of its author (and possibly other authors in the field).

It is this challenging – cyclical and interminable – relationship with our published work (and that of our colleagues) that reproduces ethnographic nostalgia as a possibility; one that is inclined to reappear with loop-like consistency. It is this prospect that urges me to stress that one single triumph over ethnographic nostalgia is never enough: the temporalisation of one victory may prove prematurely reassuring. As soon as we drop our guard, we are likely to slip into ethnographic nostalgia once again – as with other anthropological predicaments that demand constant self-awareness, for example, ethnocentrism.

Is ethnographic nostalgia redeemable?

I have now reached the point where I have to fulfil my earlier promise to discuss the redeeming qualities of ethnographic nostalgia. This may seem a daunting task, considering the multiple distorting effects generated by the nostalgic view. The three anthropological nostalgias I outlined above present a persuasive case for purging the ethnographic project from the nostalgic inclination. Imperialist nostalgia, as Rosaldo (1989) plainly states, is simply colonial and unredeemable. Structural nostalgia, as Herzfeld (2005) aptly demonstrates, can be intimately linked to the nationalist project (and its profoundly exclusionary logic) – as shown more recently in Eurosceptics' response to Brexit. Berliner's (2015) exo-nostalgia encourages us to denounce a particularly exoticising yearning to salvage disappearing, undiscovered – but not directly experienced – lands and societies.

I should declare my unreserved commitment to all these strands of critique. There is nothing desirable about the colonial, essentialist or exoticising dimension of ethnographic nostalgia. In fact, an uncompromising confrontation with the distorting nostalgic view should be every ethnographer's priority. It is interesting to note, however, that this confrontation itself can open new and unanticipated avenues of deconstructive and radical engagement with the ethnographic project, making original perspectives and knowledge available. Ironically, the vicious cyclicality of the nostalgic effect invites a productive engagement: the uncovering and unsettling of academic chronocracy. The latter is conceived here as the temporalising power of academic authenticity in particular fields.

There is a fascinating dimension inherent in the deconstructive capacity of ethnographic nostalgia: every critical confrontation with it is likely to encourage the repositioning of ethnographic representation *vis-a-vis* a relevant (earlier) ethnographic record. In this process, every time we challenge ethnographic nostalgia, a record of ethnographic particulars is likely to emerge enriched with new knowledge and perspectives. This deserves to be celebrated as a temporary victory over the nostalgic view – a defeat of a certain

static or allochronic bias that is inherent in ethnography or a victory against academic chronocracy. But alas! Hidden in our celebration for each deconstructive accomplishment lies the seed of a new, as yet unrealised, wave of ethnographic nostalgia. Our enriched ethnographic records will, in turn, become transformed to a new authoritative standard of comparison, which will unavoidably structure – to a greater or lesser degree – ethnographic nostalgia in the future; for example, that of our students or even of ourselves in forthcoming returns to the field. This cyclical pattern operates as a vicious circle.

I propose that a simple, creative adjustment in our perspective can turn desperation into hope. In its capacity as an endless potential distortion for ethnographic representation, ethnographic nostalgia can play a positive role for the ethnographic project overall. The battle against the nostalgic-allochronic view invites a constant contest of awareness – a continuous call-for-attention against temporalising biases in ethnographic representation which can bring about a transformative potential.

Through its methodological and theoretical denial, ethnographic nostalgia can motivate the interrogation of the relationship between intentionality, social structure and cultural form in ethnographic representation. The desire to trace nostalgic connections with an ethnographic past introduces a diachronic comparative element to the ethnographic gaze, which can problematise the very presupposition of continuity and social change. Even the antiquarian approach of precision and attention to ethnographic detail can highlight inconsistencies in social life that can help us escape from or subvert the bounded conception of culture. Our longing to relate to the nostalgic imponderabilia of our ethnographic fields can lead us into contradictions – discontinuities that reveal themselves through close comparison and empower a temporary escape from the nostalgic loop.

It is in such terms that ethnographic nostalgia, through its temporary denial, can re-animate a static ethnographic representation, only to set the conditions of freezing it again, after its re-admission (in a revised form) into an ethnographic record. This continuous, cyclical, comparative exercise makes layers of interconnected knowledge available – for example, regarding local practice and its meaningfulness – and sets the conditions for interrogating the intentionality of both the ethnographer and her local actors. In this productive sense, ethnographic nostalgia draws attention to the relationship between structure and agency, where structure is layers of accumulated ethnographic knowledge and agency is the relevant and intentional use of such knowledge in the present and future.

The bittersweet taste of ethnographic nostalgia: examples

It is unconvincing – and probably arrogant – to maintain that ethnographic nostalgia has never touched – even for a fleeting moment – an ethnographer's work. Certainly, ethnographic nostalgia appears with less (or more)

frequency in particular sub-fields or fieldwork contexts. Sometimes, it invites a confrontation with the ethnography that has come before, working as a motivating force for conceptual and theoretical refinement and sometimes it remains undetected; a distorting lens that hovers over the ethnographic narrative. I should offer examples to illustrate both these possibilities, but I hesitate to point a finger at the nostalgia of others. Instead, I will turn on my own ethnographic practice, which I can deconstruct without causing offence. Conveniently, my work in Greece and Panama provides scope to reflect upon nostalgic variants of anthropological fieldwork 'closer' and 'further away' from home.

I vividly remember reading the classic monographs of my first regional sub-field, the anthropology of Greece. They painted a picture of rural Greece that was familiar to me and yet nostalgically exotic: a vanishing world outside my immediate experience. I use the notion of 'exotic' here in a double sense: as that which comes from the outside – a productive exteriority (inspiring new perspectives) – and the orientalised exotic – indicative of a failure to benefit from exteriority (Kapferer and Theodossopoulos 2016). My exterior position in this example was predicated on having been raised in the same country with the people I was reading about, yet in a thoroughly different social setting. Anthropology at home seemed close to home, but not close enough (see Pina Cabral 1992; Narayan 1993; Bakalaki 1997).

In the early 1990s, my ethnographic nostalgia was anchored in John Campbell's time in the field (the 1950s), immortalised in his *Honour, Family and Patronage* (1964) a monograph that defined what later became the anthropology of Greece. Campbell's work was connected to my present through the books of his students.[2] This record of knowledge addressed a particular past, which, in my mind, related to a black and white time-scape, reminiscent – in its rustic pictoriality – of 'classic' cinematic depictions of rural Greece from the 1950s and 1960s. Greek cinema represented the people of the Greek countryside as backward, occasionally naïve, comical, but also noble, authentic, uncontaminated by modernity (cf. Kalantzis 2019). Anthropological portraits corrected this orientalising picture: they were nuanced, detailed and analytically authoritative. They helped a novice anthropologist like me – an urban dweller born in modernity – connect the dots, understand the logic behind practices and values. It was this process – which felt like an eye-opening revelation – that triggered my nostalgic desire to conduct fieldwork in a rural community, to interact with the record of ethnographic work that was laid before me.

In 1990, when I started my fieldwork on the island of Zakynthos (cf. Theodossopoulos 2003), a great deal of what my anthropological predecessors had described was still easily detectable. My older respondents were farming – and managing their lives – according to an ethos of self-sufficiency. Without much encouragement they recounted to me, with a heavy dose of 'structural nostalgia', the fundamental principles of a previous time of 'balanced perfection' in social relations (Herzfeld 2005: 64 or 147), which

was nevertheless marked by hardship and feudal inequalities. I absorbed this knowledge with salvaging enthusiasm, aware that I was recording something 'precious', dissimilar from the prevailing modernity of that particular moment. I can now see with clarity that my relationship with a previous ethnographic record directed my gaze towards a certain past: generating productive comparisons, which I copiously acknowledged and prioritised, while neglecting other (more timely) topics of enquiry (such as environmental politics beyond the immediate vicinity of the local community).

In so many respects, a previous record of ethnographic knowledge steered my attention towards particular topics during my first anthropological fieldwork. Although I departed for the field with an aim to study a dispute between farmers and urban environmentalists, I soon lost my interest in the latter: they seemed to me too modern, middle-class and privileged to constitute a priority. I leaned instead towards the cosmological depth of the rural culture in search for ontological meaningfulness. I persuaded myself that I was searching for a 'thicker' interpretation rooted in the past, one that stretched beyond politics enacted on the surface of social relationships. What I could not see at that moment was the profound influence of the previous ethnographic record on my view of the present: the strong urge to search for meaningfulness in cultural practices recorded before.

A few years later, John Campbell confided to me that he chose the Sarakatsani, a group of transhumant shepherds, in an attempt to relate to the anthropology of the 1940s and 1950s. Very much like the African pastoral people studied by his teachers, the Sarakatsani 'lacked central political institutions', 'lived in intimate interdependence with their animals', and had a unilineal descent system (Campbell 1992: 164). Campbell took with him to the field a copy of *The Nuer*, hoping to forge connections between his Greek field site and a broad disciplinary field. In the absence of a previous ethnographic record about Greece, an anthropological literature about African pastoralists provided the model for analysis – an exoticising choice, which was eventually productive. By emulating the conventions of an older field of enquiry, Campbell started one of his own; his decision to work in the Mediterranean contributed to the foundation of an anthropological field.

The late 1980s and early 1990s was a time of transformation in Mediterranean Anthropology. To purge itself from its previous static focus on tradition (and an orientalising view of the Mediterranean as Northern Europe's southern Other) the field was renamed Anthropology of Europe (see Goddard, Llobera, and Shore 1994). From the 1990s onwards a new wave of anthropological monographs about Greece focussed on urban topics and alternative subjectivities.[3] Fieldwork in village communities – perceived as isolated laboratories of tradition – became gradually outmoded. Roger Just (2000) has reflexively explained how he was caught in the middle of this transformation: he searched for isolated villages untouched by modernity only to discover threads of global and timely interconnections. Later, he revised his monograph several times to adapt to such transformations.

Much like Just, I found myself in the uncomfortable grey area between the older, village-focussed Mediterranean anthropology and the buzzing contemporaneity of the anthropology of Europe. Not only did I embark on fieldwork in urban Greece but I also developed a desire to test my relationship with the earlier, salvaging vision of anthropology, this time in a completely new fieldwork location. In 2005, I arrived in the Panamanian rainforest to work with an Amerindian indigenous group, the Emberá. My choice of location was, from the start, a provocation to the salvaging inclination of earlier anthropological works. I picked a community that had opened its doors to the world to entertain international tourists in search of authentic Amerindians. The overall context invited the interrogation of the exotic, encouraging me to unearth layers of nostalgic expectation – that is, versions of 'imperialist nostalgia' – predicated in the dynamics of ethnic commodification in the periphery of power (see Comaroff and Comaroff 2009).

Despite my decision to frame my enquiry in juxtaposition to allochrony, I was soon entangled in the treacherous – cyclical, constantly re-emerging – tentacles of ethnographic nostalgia. A record of previous studies on the Emberá had generated in my mind a standard of authenticity, which complicated my observations in the field, in a myriad of unsuspecting ways (see Theodossopoulos 2016a, 2016b). Every time I saw the Emberá enacting practices recorded by anthropologists of previous generations, I could not stop myself rejoicing at the thought that indigenous culture persisted against waves of modernising change. Such a nostalgic filter was embedded in the belief that cultures have a fundamental core of alterity; a basic timeless essence that can potentially perish. This is a static and limiting vision that obscures the synthetic dynamism of cultures and their ability to change (Carrithers 1992; Sahlins 1999, 2000).

During my time with the Emberá, I encounter numerous nostalgia traps, amplified by the performative re-enactment of older traditions in the present. Every morning, men and women in the community I studied dressed in traditional garb to dance and be photographed by tourists only to return to their non-performative daily chores later in the afternoon. As I soon came to realise, the separation between modernity and folklore – everyday life and performance – was not absolute or unambiguous. Some individuals continued performing some tasks dressed in traditional clothes – the dress code of their forefathers – even after the tourist had left (Theodossopoulos 2016a). Other cultural practices, such as dance – originally conceived as the re-enactment of a vanishing culture – have now became part of contemporary life: the Emberá dancers improvise and add new elements to the dance; their children playfully re-enact traditional dances just for their own entertainment, making the dances of the past part of contemporary life (see Theodossopoulos 2013b).

The examples outlined above can encourage allochronic illusions: indigenous practices from an earlier time have become elements of an emerging present: what was originally conceived as a tourism spectacle is now relived

as a daily routine. Such transformations generated the impression in my mind that the Emberá who perform for tourism walk out of the pages of an older book – which triggered my ethnographic nostalgia, again and again: every time I caught myself rejoicing for the return of what I thought it was lost, or every time, I 'rediscovered' older indigenous patterns in the present, the footnotes of older ethnographies.

The allochronic properties of this nostalgic rejoicing were a burden during my fieldwork. A burden that I managed (only partially) to overcome when I accepted that the Emberá were simultaneously 'indigenous-*and*-modern' (Theodossopoulos 2016a). The hyphen in this formulation served as an antidote to ethnographic nostalgia, drawing attention to the continuous oscillation of modern and indigenous identities, an ambivalence which I referred to, drawing from Herzfeld (2005), as indigenous *disemia*. To battle nostalgia, I taught myself to celebrate the mixing of the old form with what was new: modern-*and*-indigenous transformations – practices, technologies, consumption preferences – in infinite permutations (cf. Conklin and Graham 1995; Conklin 1997; Gow 2001; Ewart 2007; Santos-Granero 2009).

It would be delusional to state that my confrontation with ethnographic nostalgia is over. The publication of my book about the Emberá, and the solutions I provide in it, has now become another authoritative record – a standard of ethnographic authenticity of a sort. It contrasts with other developments in the anthropological literature about indigenous Latin America, which include neo-structuralist approaches – for example, perspectivism, which overstates indigenous alterity as if this is locked in a time capsule. Such theoretical proclivities, reminiscent of an older unconsciously allochronic era of anthropological work (Turner 2009; Ramos 2012), can be stimulating – as with most nostalgic variants – but also exoticising (Kapeferer and Theodossopoulos 2016) or sometimes, a mixture of the two. In short, the taste of ethnographic nostalgia is bittersweet.

Temporalising of the crisis of ethnographic representation

Over a generation separates us from anthropology's crisis of representational self-awareness instigated by feminism and postmodernism in the 1980s. Those who remember that period have either decided to forget it or to benefit from it, and we can probably detect the benefits in the subtle way that reflexivity is now accepted as a solid tool of our trade. But there is also a younger generation of anthropologists – who completed their training in this century – who have not significantly suffered *or* gained from the productive challenges engendered by the crisis of ethnographic representation. They have, admittedly, absorbed elements of this previous critique by osmosis, through the nostalgic-*cum*-heroic narratives of senior colleagues and the overall formative effect of a previous record of scholarship.

Nevertheless, it is fair to argue that twenty-first century anthropology is less concerned with issues of ethnographic authority. In fact, popular theoretical

trends, such as perspectivism and the ontological turn, have reinstated a degree of authorial certainty to anthropological writing that is reminiscent – in theoretical rigorousness, but also allochronic exoticism – of classic mid-twentieth century accounts (Kapferer and Theodossopoulos 2016). There is a practical explanation for this trend. We can safely claim that anthropologists have learned their lessons regarding ethnographic representation; that the issue was thoroughly addressed in the last two decades of the twentieth century and is now closed. The anthropology of today is, by and large, fairly reflexive and moderately aware of the tricks of power in ethnographic representation. This explains a reduction in self-criticism amongst anthropologists in the present day. The crisis of representation has been emplaced in a safe time before our present time; it has been temporalised as a debate of the past.

The temporalisation of the crisis of representation was partly predicated by the volumes that framed the postmodern turn in 1986 (see Clifford and Marcus 1986; Marcus and Fischer 1986). By framing their critique in juxtaposition to an earlier record of scholarship, the impetus of self-interrogation was anchored in the productive work of a particular generation. Consequently, the debate was rooted to a specific point in time: the period when anthropology engaged – with all due attention – with the issues of ethnographic authority and representation; for example, the late 1980s and 1990s. We cannot fail to notice a 'millennial tone' in the original (crisis of representation) manifesto (James, Hockey and Dawson 1997: 1), which contributed to its temporalisation.

There is a linear, sequential – almost social evolutionist – logic in operation here. It is often assumed that anthropologists were unaware of the power inherent in their academic authority and writing for a long time; an early period of innocence that lasted for the greater part of the twentieth century. Until one day, anthropology woke up to the possibility that its narrative was not an absolute representation of social reality. According to this linear view one assumes that anthropology has now 'progressed' – it has become more conscious, self-aware and reflexive. The crisis of anthropological representation is thus historicised – located in the period (a decade or so) of intense debate that followed 1986. This implicit assumption, which assumes a sort of inevitable progression, is self-exonerating: it is assumed that anthropology has now evolved to a less-authoritarian discipline.

In this respect, self-criticism regarding ethnographic representation has fallen into its own trap. It has temporalised its critical edge, relocated the problem (of representation) in another time that has now passed. Consequently, the crisis of representation became an allochrony, in Fabian's terms. We have denied ourselves coevalence with the crisis of representation, by placing it in a specific (closed) space and time, at a safe distance from current issues of representation. The underlying assumption here is that any problem of representation – if identified – can be fixed once and for all. This reassuring, self-exonerating thought hides from view the obvious fact that representational biases continuously re-emerge like a phoenix

rising out of the ashes. My focus on ethnographic nostalgia in this chapter has drawn attention to the cyclicality of such representational distortions.

Conclusion

We keep trying to confine social reality to written descriptions, interpretations and analyses, which acquire a publication date and stand the test of time. We apply our magic to keeping such accounts alive for as long as possible. Does it work? Sometimes, we have the illusion that it does that our ethnographic work overflows with the energy and vivacity of the societies we studied. The richness and persuasion of our accounts enlarges our fields of inquiry. Every bit of new information that we add to our academic fields generates new waves of ethnographic nostalgia in the future because it has the potential to stand as a standard of ethnographic authenticity for a next generation.

Ethnographic nostalgia, as an inclination to pursue connections with a previous ethnographic record, is an analytical concept that can help us understand the temporalisation of social reality through the filter of what we or our colleagues have written before. Any account of a social reality that becomes part of a written past has the propensity to emulate enthusiasm or grief in its eventual verification or disproval. In all respects, and by definition, ethnographic nostalgia is rooted in comparison: that of an ethnographic present with one or many ethnographic pasts; as many (or as few) as the accounts in a given ethnographic literature.

Ethnographic nostalgia emerges from the grey overlapping area in between what Berliner (2015) calls exo- and endo-nostalgia: the desire to conceptually unite pasts that we have, and have *not*, directly experienced. In the production of anthropological knowledge, this 'grey' area is the meeting point of a previous and an emerging ethnographic authenticity. It often engenders a potentially creative interweaving of perspectives (e.g. diachronic comparison), but also many irredeemable distortions – most notably, the allochronic tendency of freezing reality in a time that is decontaminated from the present (Fabian 1983).

The broader lesson that emerges from our confrontation with ethnographic nostalgia is the need to de-temporalise our critical engagement with ethnographic representation. The concentric cyclicality of the nostalgic view and the ever-growing structuring effect of the ethnographic record generate a distorting potential for anthropological interpretation – but also the potential to acquire new insights through the reflexive deconstruction of such distortions. The nostalgia for a previous ethnographic past – often our very own ethnographic writing – can infiltrate subsequent and mutually interdependent analyses, and its subtle influence – creative and/or distorting – is not easily detectable.

There is a certain immediacy here: ethnographic nostalgia is always timely and nearer than it seems. This is why I argue that the crisis over ethnographic representation does not need to be confined to – and conveniently temporalised in – a particular moment in anthropology's history – for example, the 1980s. The very accumulation of new knowledge in the last 30 years

has increased the nostalgic inclination: the degree to which previous ethno-graphic accounts structure the ethnography of the present within particular fields. An increasing awareness of ethnographic nostalgia will help us see how overlapping layers of previous interpretations can reconfigure anthro-pological imagination, but also how our analyses are intertwined with – and regulated by – our subfields, in a creative, mutually interdependent, but also potentially distorting relationship.

In its reflexive, deconstructive capacity, ethnographic nostalgia – as a predicament fully registered but not renounced – can lead us towards the de-temporalisation of ethnographic writing: the long-established project of liberating anthropology from the denial of coevalness and ethnocentrism (Fabian 1983) or its preoccupation with difference at the expense of sameness (Jackson, this volume; see also Argyrou 2002). Such a broad, reflexive pro-ject engenders the potential for radical change within the discipline by draw-ing attention to 'anthropology's own chronopolitics' (Ringel, this volume) and their implications within wider 'chronocratic regimes' (Kirtsoglou and Simpson, this volume). As with ethnocentrism or allochrony, and other biases, ethnographic nostalgia has the potential to regenerate itself at the very moment when ethnographers claim they have escaped from it – in the moment that ethnographic endeavour becomes a finality: a struggle that seems (deceptively) to have been fought and won. This is neither cause for celebration nor cause for grief. It is an opportunity to renegotiate and de-territorialise and de-temporalise knowledge in our fields.

Notes

1 I first developed the concept of ethnographic nostalgia to expose my exoticising ethnographic gaze of the clothes and representational strategies of an indigenous group in Panama, the Emberá. A definition of the concept and ethnographic exam-ples that demonstrate its application are available in the monograph *Exoticisation Undressed* (Theodossopoulos 2016a) and a volume –*Against Exoticisation* – published in the same year (Theodossopoulos 2016b).
2 For example, du Boulay (1974), Herzfeld (1985), Hirschon (1989), Just (2000), and Stewart (1991). Not all authors on my reading list were students of Campbell – see indicatively, Friedl (1962), Loizos (1975), the earlier work of Kenna, Dubisch, and Papataxiarchis. Yet the influence of Campbell was formative in structuring the anthropology of Greece as a field.
3 See indicatively, Faubion (1993); Panourgia (1995); Kirtsoglou (2003); Bousiou (2008).

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