

"Things Could Be Different": Design Anthropology as Hopeful, Critical, Ecological

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Introduction: The "Things Could Be Different" Impulse

We are presenting this paper as two people concerned with how things could be different. We understand this as a hopeful and critical approach to designerly-anthropological praxis that made from a position, partial and situated (Haraway, 1988), that is influenced heavily by the environmental or ecological. Bezaitis and Robinson (2011) have written about what they call a "things could be different" impulse in design, and it struck us as a telling and useful way of prompting our thinking about the issues raised by the call for Ethnographies of the Possible seminar. In their use, Bezaitis and Robinson speak of themselves, as academics with social science and humanities backgrounds who self-identify with the design/anthropology intersection, as 'immigrants'. They write:

The design/research intersection seems to be a very appealing destination for folks trained in what were once unrelated fields. The reasons an emigrant has for leaving a well-settled home are always varied, but a constant across those variations is the idea that *the future could be different* – at an individual level, but perhaps more importantly for many, the potential to bring change to the world, to shift the ground, to alter the rules. It has been no different for us.

Like many immigrants, we retain a good deal of where we come from in the ways that we think and in the values which we maintain, while at the same time trying to make as much out of the opportunities we came here to explore as we can. (*ibid*: 185)

Temporal orientations: assumptions and reformulations

It is often premised that design is a discipline that is constantly looking ahead, that it is a practice which is very much future-looking, that it has a ‘robust future orientation’ (Otto and Smith, 2013: 17). Anthropology meanwhile, often seems to be cast in contrast to this as a discipline that is fundamentally retrospective, as a practice that recounts lives lived in its ethnographies (Ingold and Gatt, 2013) and provides analysis of events and customs experienced in the past. Here, we are setting out to reformulate this premise. Whilst we can understand where these ideas of design as prospectively making things for the future, and of anthropology as retrospectively writing about lives past, we seek to destabilise any clear-cut correlation of one discipline with future-orientation and the other with a past-orientation.

We seek to do so partly because we do not recognise these temporal distinctions in our own experiences and observations of anthropology and design practice. Instead, in both anthropology and design, we argue, there *is* and perhaps always should be *a concern with that other which is possible*. Work in both realms can possess this critical orientation towards the possibility of difference. Furthermore, it can also and simultaneously be attentive to that which has happened and could have happened in the past. Thus, multiple temporal orientations simultaneously help to shape action in an understanding of the world in both anthropological and design works. To clarify, we see anthropology and design as practices sharing a concern with alternative and possible others: the others of contemporary cultures; the other and multiple histories revealed in reinterpretations; the other ways of living that might emerge with alternative shapings of the future. Such others are of course intertwined, with reinterpretations of the past influencing formations of the future, and vice versa.

Acknowledging the multiple and myriad ways in which people do or do not, have or might, make, interpret or imagine things different(ly) is an essential part of moving well away from too-oft privileged ideas of linear progress and development. These latter ideas seem to proceed as if life happens along some sort of fixed singular temporal track from a past through a present into a future. Instead, we are part of a movement towards a sense of lived experienced time that loops, circles, changes, is multiple and multi-linear (Latour, 1993; De Landa, 1997; Ingold, 2012).

Our other motivation to take the premise to task (i.e. the premise that anthropology and design have opposing temporal orientations) is that we consider the

attribution of different temporal orientations like this to be allocating responsibility for the shaping of the future to certain groups of people, certain professions, certain disciplines. We can see that, in a sense, one could identify different temporal orientations in all sorts of (academic) practice. Archaeology, history, craft and anthropology could all be disciplines set to the retrospective end of the temporal scale, while towards the other prospective end, we might position design, engineering and modern art. These kinds of allocations or positionings lock these disciplines in to certain roles. They run the risk of denying the necessity of history in informing future actions, of the innovation involved in craft, of the historical bedrock on which engineering projects rise, the lineages that designers, artists and their designs unfailingly belong to – even when they are attempting the avant-garde. Perhaps most importantly however, these kinds of positionings imply locations of responsibility for the work of creating better futures. This, we feel, is the project and responsibility of no single discipline, area of society or set of practices¹. Rather, it is the project of all.

In order to make our case for a more nuanced understanding of the temporal in relation to the anthropological, to design and to responsibility for the shaping and imagining of the future, we will draw upon a number of examples from our work. These are examples of people making things, a fact that we hope to show is important, and they are also examples that highlight the usefulness and therefore centrality of environmental thinking and practice to our case. For, as we intend to illustrate, the environmental prism offers a particularly valuable insight into the nature of the anthropological and of design because of the way that it promotes the importance or centrality of the material in our present and future lives, because of the way that it focuses consideration upon changes as they happen over time such as movements, entropies, growths, exchanges and flows, and – fundamentally – because of the way that it demands a critical and ethical reflexivity about humanity's impact upon the planet that is linked to this extended temporal awareness.

¹ Joachim Halse has made a similar argument in his article 'Ethnographies of the Possible' when he argues that 'Anthropology could leave contemporary future making to those privileged enough to claim directions for attractive futures on behalf of everyone, or we can begin to employ the anthropological sensitivity to differences and particularities as an active driving force of establishing design events as more open-ended dialogues about what constitutes attractive from various viewpoints' (2013:194).

Design: caught-up in the close-present

Design, like any other human practice, is temporally mobile, by which we mean that its contemporary engagements are shaped by past ideas and makings, and its contributions to future human life are emergent in an ongoing present. However, we would argue that this temporal mobility of mainstream design is rather limited and restrained. That is, we contend that design does not cast its reflexivity extensively far back, nor its imagination profoundly far forward, and that such temporal limitations have real material consequences in contributing to the ecological crises of waste, pollution and climate change, and their associated economic disparities.

Over the last few years we have been observing design practice within educational and commercial studios, focusing on perception and creativity in relation to material form and environmental change. Considering the temporal dimensions of our observations, we note that design is often associated with ideas of the ‘new’ and ‘innovation’, whereby creativity requires ‘thinking outside of the box’ or ‘starting from a blank sheet of paper’. Here, the ‘new’ appears to be formed by relinquishing the past, transgressing the constraints of everyday social life and an orientation from a position of blank, untainted neutrality.

However, such a position is implausible. As imaginative as design practice might be, it is - as with all human practices - intimately entwined with the transformations of the past; not only a recent past of years or decades, but a far past of centuries and millennia. No matter how determinate the form of a box, or blank a sheet of paper, these starting points are in fact particular sorts of *forms* which are cast from ideologies and material practices with extensive historical traces. Such starting points directly influence the potential of imagination and the way in which imaginings become materially effectual.

It would appear then that design finds its current creativity in precisely the drawing (or construction) of a blank canvas over a much more patterned, nuanced and temporally mobile complex. It is a skilful utilisation of a level of ignorance which places material concerns of the far past and far future to one side in order to enable the creative practitioner to pretend that they are starting from a clean slate and thus attain an ethical comfort with the idea of projecting a new object into an unknown future. It is important to note that to practice this form of creativity does genuinely involve the enskilmement of particular perceptual and ethical dispositions in relation to

time, materials and ecology. An enskilment that, understandably, is discouraged rather than nurtured in the critical, social and environmental sciences where, by contrast, the direct intention is to extend trajectories of temporal understanding and their social and ecological effects.

Thus, design practice is one of *temporal expedience*, with its creativity limited to objects of concern and their respective time-frames. For example, within packaging design, temporal concerns are typically minutes, days or weeks; within product design, time is focused from months to years; for building design, perhaps up to a few decades and with infrastructure design (such as that concerned with energy, resource and transportation systems) timescales are framed around decades, if possibly to centuries. Such temporal scales are familiar within the design studios we have worked within where the ultimate focus is on transforming studio-based prototype experimentations to commercial mass-productions that comply with the temporal parameters set by manufacturers and legislators (such as ‘sales guarantees’). It is rare for mainstream designers to be in commercial situation whereby they might attend to ‘the long now’ (Brand, 2000); a stance - perhaps a much more mobile one than we are used to - which considers cultural evolution across extra-temporal spans more similar to those typically considered by archeologists or geologists in their studies of the past. Within the context of expedient action in the everyday setting of a design studio, the opportunity to reflexively acknowledge inherited perceptual histories of form are rare, as is the occasion to think far forward beyond the material and temporal confines of objects of concern. Consequently, mainstream design is typically drawn into what we could call a close-present: the present of a recent yesterday, limited now and almost tomorrow.

To address these limits, escape the close-present, design does well to critically reflect on the environmental. Thinking through the prism of the environmental invites or provokes an attention to extended temporalities and the transformative qualities of *materials*, rather than foreclosed attributes of the *object*. A concern with the environmental reveals materials in flux, continually undergoing transformation, materials giving rise to objects for a time, which, regardless of their minutes or centuries of existence, eventually become subsumed within shifting material states, turned over, and lead on to further emergent things. Within this understanding of the environmental, then, materials are uncontainable, resisting objectification and

attempts of constructed ignorance or ‘blank canvassing’ and reductionist foreclosure. An environmental focus only serves to reveal the amorphous, deceptive, and often wild qualities of materials-in-transformation².

Such an extra-temporal perspective on the transformative potential of materials is increasingly evident in the continued evolution of ‘design for environment’ philosophies and methods, which are typically motivated by ethical, holistic and long-term views of eco-systems. As an example, one of the most recent developments in this area is the formulation of the ‘circular economy’ framework which models objects as ‘roundputs’, designed to be ‘made and made again’ through a continuous process of reproduction and material flow (Ellen MacArthur Foundation, 2014). Such formulations, which indicate the existence of material histories and futures, sit in notable contrast to conventional throughput linear depictions of the design process where materials appear to arrive with no origin and leave with no destination.

What is potentially apparent here is a shift in creative design practice. One that understands the sheet of paper that it starts-out with, not as blank slate, but a rich inherited material substrate to be reflexively worked with, and that perceives its constraints not as the internality/externality of a box requiring to be innovatively worked out of, but rather as material lineages to be improvised *with*. This shift appears to draw us away from a notion of design as a *model*, which can be applied to any given circumstance, and more towards design as an anthropological *practice*, reflexive and respondent to the particular conditions of the field.

Anthropological work is not retrospective: it moves with the currents of life and living

Shifting, now, to consider the anthropological in relation to this idea of temporal orientations, again we will suggest that we do not see anthropological work as being retrospective. We will draw from our own understandings and experiences of anthropology as a taught academic discipline, of it as a wider project of the humanities (as it strives to understand people’s ways of life), and also from anthropological work that we have carried out with people who are themselves precisely interested in the shaping of contemporary and future societies and

² By ‘materials’ we refer to *all* materials – those of bodies, organisms, synthesised things, organic life, geological and their varied physical states - solid, gaseous and fluid. ‘Wild’ in this context then, is for example, the unpredictability of our cleaning chemicals once released into the sea, as much as it is the untameable seas, or ravaging crop blights.

environments. With this latter work we find that these people provide us with an interesting case of participants in our anthropological research helping to shape our understanding of what the anthropological is and/or could be.

As we see it, then, anthropological work is by and large carried out with people who are living, and whose lives and memories are on-going often long after their engagements with anthropologists, and intersections with anthropological works, have come to an end. So, whilst the anthropologists encounter with the people might have then led to their film-makings, photographs, writings and lectures, there is always a sense that these productions (which will live on in numerous and often unplanned ways) are both enabled by and entwined with lives, stories and processes that are ongoing.

Furthermore, we consider the anthropological project as being one which is often allied with the projects of those with whom the anthropologist works. We mean this in a similar sense to both David Harvey (2000) and Hirokazu Miyazaki (2004) when they talk of contributing to ongoing efforts in social theory to reclaim the category of hope for progressive politics (e.g. Hage, 2003; Zournazi, 2003). In Harvey's words: 'exercising an optimism of the intellect in order to open up ways of thinking that have for too long remained foreclosed' (2000: 17). In our terms of sharing a project, sometimes the anthropologists project and the participants' projects are literally and specifically one and the same, sometimes they are only metaphorically and/or much more generally allied.

We concede that in some cases, it is true, the projects are quite dissimilar: the anthropological project having a direction that is in stark contrast to the project of those the anthropologist is working with. However, even in this latter of cases, there is still no denying that there is a future-orientation, inherent in both the anthropological work and in the living culture being studied. Even if, as happens rather rarely, anthropologists declare their project to be that of the disinterested observer, it is really only here where we feel one could think of an anthropological work without an *intentional* future-orientation. But even an absence of *intention* does not necessarily imply an absence of *effect*, regardless of whether the nature of the effect is acknowledged or not.³

³ The apolitical is not an option, in fact, it is itself a political position; just as claiming to not have an aesthetic or ethical concern is in fact an aesthetic or ethical position.

Perhaps much of this understanding of anthropology comes from the ways in which we have been taught anthropology and the ways in which we in turn teach it, (and, of course, this means also that we are including teaching as both a future-concerned and fundamental aspect of both design and anthropological practices). Teachers, either in person, or via persuasive texts, from within the discipline and out (perhaps most famously, Marx), have instilled in us a sense that we and our work are part of something that is not only concerned with understanding the world but also capable of contributing to changing it. This belief then helps extend the anthropological well beyond the confines of academic halls, or journals for that matter, out in to the wider world. Here it contributes to education in the widest sense, as Hylland Eriksen puts it: ‘apart from providing accurate knowledge of other places and societies, it gives an appreciation of other experiences and the equal value of all human life, and not least, it helps us to understand ourselves... Anthropology can teach humility and empathy, and also the ability to listen, arguably one of the scarcest resources in the rich parts of the world these days’ (2006: 130).

Our argument here is also founded upon the idea that the lives that we study as anthropologists are lives that we contribute to, in shared worlds that we together inhabit and help shape. Research carried out with eco-home self-builders in Scotland and New Mexico, in 2005 and 2006, gives a keen sense of this, perhaps most clearly as it provides insight into how people envision and make greener futures (Harkness, 2009). Moreover, it reveals, once again, that the environmental prism, or an environmental approach, shapes and influences people’s relations to and understandings of space-time, experimentation and future-casting, and – perhaps most importantly – underlines the centrality and political importance of making. The environmental approach towards living and making, that eco-builders take, are ones which are fuelled by and, in turn, generate extended temporal scopes or long understandings of the now. Furthermore, these communities of people are enabled or as some of the builders themselves put it ‘empowered’ to forge alternative futures: equipped with abilities to critique histories and the status quo; to imagine different ways of living (often drawing ideas from examples of ways of living in other places or times); and also to competently (Shove, Watson, Hand and Ingram, 2007) experiment and create homes which – never quite finished and thus always open or

on-going – are transformative projects at levels from the individual, to the social, to the environmental and global.

The off-grid eco-builders attended to the long now, to a much extended sense of the historical and future implications of making, materials, actions, in a variety of ways: for example, materials for construction are sourced with consideration of their provenance and their life-after use; things such as architectural components are considered in terms of their material form, their qualities, but also their embodied energy; recycling, re-using, reclaiming and repurposing are integral to the activities of building and lend a cyclical sensibility to the whole project; and finally, waste is completed reenvisioned – despite the taboos – as plentiful resource! What we see here is an environmental approach to living and making that has a fundamentally different temporal nature: that is one that is temporally and spatially extended, and one that is multiple-simultaneous, which leads to a more fluid sense of materiality. Put more simply, it is an approach that is fundamentally *not* object-bound, but rather is sensitive to the on-going flows of materials throughout the world, and the impact or effect of human action, movement and making within these flows.

Design anthropology: entwining the threads of a hopeful ecology

We have been suggesting that anthropological and designerly practices can both be, and can be understood as, imaginative, critical and conscious of, and attendant to, the environmental-material. Furthermore, we have argued that studying different ways of living, and sharing them, is about opening-up our understanding of the possibilities of contemporary and future life. Perhaps even about different tellings of history. It is, as Harvey (2000) and Miyazaki (2004) have both described it, about having space for alternative modes of knowledge, critical thought and, we might add, alternative modes of action. Designing artefacts and processes is similarly about considering how things have been made, or might have been made differently, and about how we might make things differently in our time and whether others do things differently already.

We are arguing for an approach to design anthropology which critically and reflexively questions ideas and/or assumptions of spatio-temporal orientation, clarity of vision and positionality-responsibility. In this approach, we postulate the need to consider alternative perceptions of time, such as that of the Aymaran people of South

America who live “with the future behind them” (Núñez and Sweetser, 401:2006); a way of perceiving time which has the potential to provoke a ‘facing up to’ the profound significance of the past in how it shapes contemporary design. From this perspective, the future is *fuzzy* - in the sense that it can only be peripherally gazed into and it is full of multiple and various possible versions of itself. This is no different from history (*his-story*) and looking at the past, where memories paint various and interpretative versions of events happened, and the victors are those who live to tell their stories. This argument of course, is one that various scholars, many feminists amongst them, have taken when they have challenged us to consider that positions taken are always situated and partial. Thus, what emerges here is an idea of designerly and anthropological enterprise, which, rather than being positioned fixedly in orientation to the all the facts of the past or the all the possibilities of the future, is more so situated in a temporally dynamic realm that can only partially account for the continued convolutions of socio-environmental change.

As we have attempted to show through our brief examples above, it is the environmental which really crystallises the importance of this extended temporal approach. We are thinking about the temporal in a lived, material and experienced sense. Therefore, the question of responsibility for future-making becomes a tangible, perceived and practical reality. That is, eco-approaches are about *what* matters, *and* about matter itself⁴. They bring a fundamental grounding in the material (though this is not a grounding that prevents or is opposed to imaginative flights), and a grounding in the responsibility to and of making. Temporal orientations, then, now understood to be multiple and non-oppositional, might be understood as being about how we deal with stuff and also with each other; eco-justice and social justice are inextricably linked.

We contend then, that design and anthropology do not have differing temporal orientations, at least not from the point-of-view that one discipline is backwards-looking and the other forwards-looking. We view design and anthropology as being equally influenced by their historical forms, developments and tracings, and see both as being engaged and active presences that are helping shape the future. As disciplines however, we have seen that too often there is either an absence or a gulf between their different exercisings of a *temporal reflexivity* and of the way in which

⁴ Also in the sense that Karen Barad (2003) and others in the material feminist, humanities and social science schools have persuasively argued that *matter matters*.

temporal responsibility is considered relevant to the practising of their disciplinary crafts. As we have argued, these frissures between different practices become profoundly important when concerned with matter itself, and how it undergoes transformation to become benign or disruptive within the long-term dynamics of ecosystems. Here, temporal orientations, reflexivities and responsibilities gain real poignancy and significance as there is recognition of both anthropology and design's roles in the ways in which human practices are attentive to, capable of changing, empowered to influence, and must be held accountable for, the future state of things.

However, to circle back to what design and anthropology very much share, we should return to their concern with the unfurling of possibilities, of alternatives. And it is this attention to *diverse manifestations of the possible* where an integrative practice of design anthropology can make a significant contribution to exploring how *things could be different* in a hopeful and critical way. Design as a creative practice is in constant conversation with the possible; exploring ways in which practices might be carried out, how materials might be used, what sort of forms things might take and how future transformations might influence the enlargement of human potential. Anthropology is also engaged in a constant conversation with these possibilities of practice, materials, form, future and human potential. However, the focus of anthropology is one which evolves through a gathering of the manifold ways in which these possibilities take place across the diversity of human life. The opportunity for design anthropology is therefore to draw on a reflexive and diverse understanding of humanity and direct such insight towards the formulation of a more *open* material life, one that somehow lends itself to continued reinterpretation and resists foreclosure⁵.

Thus, rather than considering design and anthropology as two temporally opposed directional vectors which require to be adjoined to form a temporal span, we can instead see design and anthropology as two flexible temporal strands, which already weave through multiple pasts, presents and futures. Currently, these strands often have widely differing properties, however, environmental versions of both strands introduce important changes to the way that design and anthropology are practiced and theorised - particularly in relation to the temporal and to issues of socio-environmental responsibility. These changes help to entwine the strands. Together, these two -- now environmentally influenced -- strands can be woven, to form *design*

⁵ One way to approach this is to consider the possibility of 'designing environmental relations' through the interplay between design, form and environmental perception (Anusas and Ingold, 2013).

anthropology; a twine which extends the temporality and sensitivity of design and which amplifies the agency of anthropology in its role in shaping the material world. As a form of human practice it has the potential to perceive, imagine and help realise more open ways of thinking and more possibilities in/for the material world.

Having been inspired to start thinking about Ethnographies of the Possible with the “things could be different” impulse, we wish to close with a venture into how we imagine design anthropology might be evolving, ie. *how things might be different*. Drawing threads together we would suggest that it could be different constellations of the following:

Like the eco-builders and circular designers, the concern of design anthropologists would be environmental, ie. with/in the activity of life, and the processes of how we make things would become more grounded in or attentive to the ecological and material, to issues of justice, resources, power, (bio)diversity, and inclusive of the other-than-human. Design anthropology would be reflexive, critical, attentive to both the aesthetic and the ethical. It would be non-linear, meaning not working to linear developmental forms, but rather, attentive to the circular, the multi-linear and multi-perspectival. Thus, design anthropology practice would likely be situated and responsible: anthropological and design practitioners would hopefully see themselves and their practice in the creation of worlds (even down to their consumption practices, their organisation of their workplaces, and the material processes used to share their knowledge). Responsibility, it would be recognised, lies with us too – not just those others we see as having been specifically tasked with future-making.

Design anthropologists would be attentive to material flows rather than discreet and bounded objects, so often created for rapid consumption and then waste. With an attentiveness to the past-present-futureness of life and living (the creativity and blurriness of recounting past or imagining futures, both) they would also have a more open-ended, and non-foreclosed idea of how making, planning and living in society and on this shared planet happens and could happen. Furthermore, their project would be recognised as collaborative, in that living is a collaborative project and the sharing of approaches, the interdisciplinary too, is essential in our efforts to combat our current global environmental concerns.

Finally, there would be license across design anthropology to be prospective, to draw on an extended pool of material possibilities, and to bring the *anthropological imagination*, which is so often about bringing out the alternative possibilities of things, to bear in the design process. Such a disciplinary entwinement, as is imagined and depicted here, does not only suggest interesting intellectual avenues and useful practical applications to explore, but we view it is a highly *necessary* form of practice to enact a transition to a more nuanced and attuned way of working with the temporal dynamics of materials in the context of a hopeful ecology of life.

Bibliography

- Anusas, M. and Ingold, T. (2013) 'Designing Environmental Relations: from Opacity to Textility.' *Design Issues: A Journal of History, Theory, and Criticism*, 29(4): 58-69.
- Barad, K. (2003) 'Posthumanist Performativity: Toward an Understanding of How Matter Comes to Matter.' *Signs: Journal of Women in Culture and Society*, 28(3): 801-831.
- Bezaitis, M. and Robinson, R. (2011) 'Valuable to Values: How 'User Research' Ought to Change.' In A. J. Clarke (ed) *Design Anthropology: Object Culture in the 21st Century*, 184-201.
- Brand, S. (2000) *The Clock of the Long Now: Time and Responsibility: The Ideas Behind the World's Slowest Computer*. New York, NY: Basic Books.
- DeLanda, M. (1997) *A Thousand Years of Nonlinear History*. Brooklyn, NY: Zone Books.
- Ellen MacArthur Foundation (2014) *A New Dynamic: Effective Business in a Circular Economy*. Cowes: Ellen MacArthur Foundation.
- Ingold, T. and Gatt, C. (2013) 'From Description to Correspondence: Anthropology in Real Time.' In W. Gunn, T. Otto and R. C. Smith (eds), *Design Anthropology: Theory and Practice*. London: Bloomsbury, 139-158.
- Hage, G. (2003) *Against Paranoid Nationalism: searching for hope in a shrinking society*. London: Merlin Press.
- Halse, J. (2013) 'Ethnographies of the Possible.' In *Design Anthropology: Theory and Practice*. In W. Gunn, T. Otto and R. C. Smith (eds), *Design Anthropology: Theory and Practice*. London: Bloomsbury, 180-196.
- Haraway, D. (1988) 'Situated Knowledges: The Science Question in Feminism as a Site of Discourse on the Privilege of Partial Perspective.' *Feminist Studies*, 14(3): 575-99.
- Harkness, R. (2009) *Thinking Building Dwelling: Examining Earthships in Taos, NM and Fife, Scotland*. PhD. Aberdeen: University of Aberdeen.
- Harvey, D. (2000) *Spaces of Hope*. Edinburgh: Edinburgh University Press.
- Hylland Eriksen, T. (2006) *Engaging Anthropology: The Case for a Public Presence*. Oxford: Berg.
- Ingold, T. (2012) 'Toward an Ecology of Materials'. *Annual Review of Anthropology*, 41: 427-42.

Latour, B. (1993) *We Have Never Been Modern*. Cambridge, MA.: Harvard University Press.

Miyazaki, H. (2004) *The Method of Hope: Anthropology, Philosophy and Fijian Knowledge*. Redwood City, CA: Stanford University Press.

Núñez, R. E. and Sweetser, E. (2006) 'With the Future Behind Them: Convergent Evidence From Aymara Language and Gesture in the Crosslinguistic Comparison of Spatial Construals of Time.' *Cognitive Science*, 30(3): 401-450.

Otto, T. and Charlotte-Smith, R. (2013) 'Design Anthropology: A Distinct Style of Knowing.' In W. Gunn, T. Otto and R. C. Smith (eds), *Design Anthropology: Theory and Practice*, 1-29.

Shove, E., Watson, M., Hand, M. and Ingram, J. (2007). *The Design of Everyday Life*. Oxford: Berg.

Zournazi, M. (2003) *Hope: New Philosophies for Change*. New York, NY: Routledge.