


Please cite the Published Version

Ely, P  (2020) Designing Futures for an Age of Differentialism. Design and Culture, 12 (3). pp. 265-288. ISSN 1754-7075

DOI: <https://doi.org/10.1080/17547075.2020.1810907>

Publisher: Taylor & Francis (Routledge)

Version: Accepted Version

Downloaded from: <https://e-space.mmu.ac.uk/636482/>

Usage rights:  Creative Commons: Attribution-Noncommercial-No Derivative Works 4.0

Additional Information: This is an Accepted Manuscript of an article published by Taylor & Francis in Design and Culture on 14 September 2020, available at: <https://doi.org/10.1080/17547075.2020.1810907>. It is deposited under the terms of the Creative Commons Attribution-NonCommercial-NoDerivatives License (<http://creativecommons.org/licenses/by-nc-nd/4.0/>), which permits non-commercial re-use, distribution, and reproduction in any medium, provided the original work is properly cited, and is not altered, transformed, or built upon in any way.

Enquiries:

If you have questions about this document, contact openresearch@mmu.ac.uk. Please include the URL of the record in e-space. If you believe that your, or a third party's rights have been compromised through this document please see our Take Down policy (available from <https://www.mmu.ac.uk/library/using-the-library/policies-and-guidelines>)

Designing futures for an age of differentialism

Abstract

Humanity appears to be confronting an increasing number of health, economic, political, environmental and social crises which have been mainly brought about by human action itself. Whilst design has been complicit in such action, the paradigmatic strength of Design Thinking has amplified the agency of designers who now have the opportunity to reorient towards a way of designing which harnesses cultural difference to confront these crises. Drawing on Lefebvre's ideas of 'difference', Escobar's 'autonomous design' and through a process of cultural reflexivity, I propose an approach to design – differential design – as a practical endeavour which sensitively and respectfully draws upon different cultural perspectives and traditions to design for the future. I share empirical examples of three methods – 'worldviews', 'generative scribing' and the application of 'rhetoric' that, modestly and pragmatically, may be used to shift the ontological perspectives of designers in the social and political project of designing equitable and empathic futures.

Keywords: ontological design; rhetoric; generative scribing; worldviews; differentialism

Philip Ely is Senior Lecturer and research lead for design-led innovation at Curtin University, Perth, Western Australia. He is a design educator and researcher of design history, design thinking and typography and a practitioner in industry for over twenty years working in interaction design and design-led innovation in roles at IBM, Granada Media, Telstar and Design Bridge. He is the author of the *Social Startup Toolkit* for social entrepreneurs and has published work in designing for new media and the social shaping of technology. His current work focuses on our qualitative and quantitative understanding of the impact and value of design applied to social, public sector and enterprise innovation pulling together a network of researchers across five universities in Western Australia (<https://thestateofdesign.org>).

philip.ely@curtin.edu.au

Introduction: Design in time of crises

Humanity lives in an era of perpetual crises ripe for an application of the practice we call design. Climate change, poverty, racial inequality, the rise of far-right politics and now – as I write – a global pandemic likely to be the first of many facilitated (for the wealthy at least) by fast and affordable global air travel. Whilst many of these crises confront humanity now, others are likely to be forthcoming and we seem ill-prepared for their eventual arrival. Designers have a tendency to focus on fast or slow design ('time as

pace'), or on past, present or futures ('time as direction') (Pschetz and Bastian, 2018, 169-170) but we may have to broaden our framing of time to consider the cultural, social and economic consequences of our actions. Here, it may be helpful to apply Elise Boulding's idea of the two-hundred-year present - an idea that considers the present as starting one hundred years ago and the future as one hundred years from now. This two-hundred-year temporal scale encourages us to think about what *has* been designed (in the time of our grandparents) and what *will* be designed (for our grandchildren) (Boulding 1988, 17-37)¹. Our two-hundred-year present has just seen the passing of one global conflict, yet is still experiencing the rise of nationalist socialism, racial prejudice, a Second World War, the division of Europe, a nuclear arms race, famine in Africa, ongoing conflict in the Middle East, global fuel crises and a growing dominance of American-led consumerism. Much more than this has occurred in our extended lifetimes before we even explore the most proximate present: the rise of populist nationalism in America, Hungary, Brazil, Turkey, Britain, Italy and Poland; unprecedented urban population growth; the emergence of the Internet; further income inequalities between the top 1% percent of earners and the 99% of the rest of the population in the USA and the UK²; climate change; and a global health crises to be followed by a 'virus recession'. The ideological circle that we have circumvented brings us to back to an age of racial tensions borne of a claim of 'sovereignty', last seen in the nineteen-thirties. However, since the thirties globalization in trade, networked communications and social (digital) connectedness has paradoxically brought us closer together and throughout this entire period design has been complicit in acts of colonialism and oppression (cf. Tsoltanova, 2017; Schultz et al, 2018).

Appadurai (2017, 1) highlights how ideas of sovereignty are challenged by global economics (by multinationals and the corporate elite) and no national policy or framework can counter the demands of this elite. Unfortunately, democracy fails to keep corporate interests in check. What is driving us further apart is what Appadurai has described as fatigue with democracy: "an intolerance for due process, deliberative rationality and political patience that democratic systems always require..." (Appadurai 2017, 6-7). This matters for other parts of the world, for we can see that a fatigue with democracy at the origins of its birth

¹ The idea of past, present and future is, philosophically, classical. In an alternative philosophy of time, eternalism considers that these existences of time are equally real; in presentism it is only the present which changes – the past and future do not exist. Growing Block theory of time suggests that the past is as equal as the present, yet there is no future (see Broad, C.D (1923) *Scientific Thought*, New York: Harcourt, Brace & Co, pp.66-67 accessible at: <https://archive.org/details/ScientificThought/page/n63/mode/2up?q=growing+block>). Eternalism offers designers the reflexivity to consider, perhaps, the reasons for their actions (past), the actions they are taking (present) and the consequences of such actions (future). Presentism, as commonly perceived, may be read as short-termism where only the here-and-now is of most importance. Growing block theory reminds us that our actions now will (eventually) be seen as the past, yet our agency on the future may actually be negligible.

² Growing inequalities between the wealthy 1% and the remaining 99% of populations in Western Europe and the USA are in stark contrast to those in Japan (see Ballas, D., Dorling, D., Nakaya, T., Tunstall, H., Hanaoka, K., & Hanibuchi, T. (2016) "Happiness, Social Cohesion and Income Inequalities in Britain and Japan" in T. Tachibanaki (Ed.), *Advances in Happiness Research* (pp. 119–138). <https://doi.org/10.1007/978-4-431-55753-1>). See also: Dorling, D. (2015). Data on Income inequality in Germany, France, Italy, Spain, the UK, and other affluent nations, 2012. Data in Brief, 5, 458–460. <https://doi.org/10.1016/j.dib.2015.09.023>; Dorling, D. (2015) "Income inequality in the UK: Comparisons with five large Western European countries and the USA" in *Applied Geography*, 61, 24–34. <https://doi.org/10.1016/j.apgeog.2015.02.004>

(Greece, France, North America, Britain) coupled with, as Appadurai points out, the financial sector's idea that we are constantly at risk from economic disaster (creating a concomitant climate of economic panic) (ibid). This leaves nations across continents looking inwards at a time when we require 'togetherness' amongst the multitude to tackle our planetary problems.

Designers find themselves in an arguably increasing position of privilege, at least in economies that turn to design to develop innovative new systems, services, products and practices. If design has proven its economic value (Heskett, 2017), it is time for it to build on this popularity to turn to issues of environmental and social concern and to embark on a political endeavour to reorient global capitalism. Design has become the cultural expression of modernism which is turn a cultural expression of capitalism; design thinking has become part of the 'inept' modernising manager's lexicon (Srnicsek and Williams 2017, 71). This form of design that dominates popular (business) consciousness is one that has in recent times acted as a form of Trojan horse (Wrigley 2018, 3-5). A Californian derivation of decades of European design practice and research, Design Thinking has become *the* paradigm in business and innovation literature that has done most to raise the Modernist ideals of the Bauhaus, the 'human-centredness' of Scandinavian *participatory design* and work emergent from Human-Computer Interaction (HCI) studies even if it does not itself acknowledge explicitly these origins (Brown 2008, 2009). In finding itself in the world of corporate CEOs, Design Thinking has placed design with the city walls of corporate America, Europe and Asia. The paradigmatic strength of Design Thinking has been perpetuated by American-owned global social media powers – LinkedIn, Twitter and Medium for example – and has come under healthy criticism in recent years for its limited articulation of a broader design practice, methods, philosophies and histories from across the globe (Kolko 2018; Vinsel 2017). Criticisms include over-simplification of design as a messy, thoughtful, complex process; the trivialisation of the role of craft and making things; an 'empathy lite-ness' that suggests that empathetic and meaningful connection with people can be achieved in a matter of hours or days; and that Design Thinking has become a tool for consultancies to sell their work but not actually drive real innovation.

These criticisms are certainly founded by everyday experiences of design thinking encountered by those who legitimately claim to be professional designers or design leaders. However, there are a number of insights that we can glean from the emergence of Design Thinking that may help shape design for the future:

1. Design Thinking has legitimised the position of the design profession in the wider capitalist economic system;

2. Design Thinking has widened an interest in designerly ways of knowing and doing, which has foregrounded the substantial number of methods and outcomes of design practice;
3. Design Thinking, conceived of as a Kuhnian (Kuhn 1996) paradigm provides us with scaffolding by which a 'new and improved' form of design may take shape;
4. The rhetorical power of Design Thinking has shown us how the intent of design can be amplified not only for corporate benefit but public good too;
5. The processual, heuristic, human-centred attributes of design thinking can be foregrounded in further conceptions of *doing* design.

Even if designers' positions at the boardroom table is to be short-lived, it is during this time that the corporate concern for 'human-centredness' and 'innovativeness' amongst its human resources (staff) should be awakened by designer concerns around growing economic inequality, environmental catastrophe and a dismantling of the welfare state. Designers are increasingly being brought in to help shape 'business models' for organisations to innovate; such business models will require thinking beyond profit to people and planet – there is no business to be had when the world burns. What follows is an elaboration of an approach to designing – differential design – that builds on this recent work.

From plural to differential

Arturo Escobar's *Designs for the Pluriverse* (2018) offers a much needed and laudable framework for a decolonial, degrowth future and offers an ontological reframing of design³. A cultural anthropologist, Escobar builds on feminist, decolonial and transition design theories to propose an approach to design – autonomous design – which gives agency to communities and cultures which are not part of the western, modernist and capitalist hegemony. Whilst Escobar provides some practical examples of plural, polyvocal design in the form of transition design (or "*designs for transitions*, and *design for social innovation*" (Escobar, 2018, 138), the text is predominantly ontological and therefore philosophical. As he neatly summarises at the end of the book, Escobar proposes a praxis space "generated by the interplay of an ethics of world making and a politics of social existence, and to bring a processual and relational ethic into design itself and into all

³ In his review of *Designs for the Pluriverse* in this journal, Juan Carlos Rodriguez Rivera suggests that Escobar's most interesting concept is "the notion of design-free territories...beyond the effects caused by the design of patriarchal capitalist modern life". (Rivera, J.C.R, (2019) "Book Reviews: Designs for the Pluriverse: Radical Interdependence, Autonomy and the Making of Worlds by Arturo Escobar" in *Design and Culture*, 11 (3), pp 355-360.

we do” (ibid, 226). Escobar has set the foundation to reorient the practice of design but there is much work to do to turn such philosophical and theoretical thinking into action.

I acknowledge that as desirable as autonomous design (or a ‘design free’ world) may be (Escobar, 2018 214), there still exists (and may for some time) designers working in many parts of the world who wield significant agency and power over the marginalised, disenfranchised and excluded. To build on Escobar’s ontological foundation, I therefore propose an approach to design –*differential design (dd)*⁴ – which aims to harness the strengths of cultural difference whilst providing pragmatic heuristics (cf. Dalsgaard, 2014) that may enable designers to go about their education or their work in support of planetary (ecological) sustainment and human wellbeing. Differential design thus emerges from the adoption of methods that aim to inspire the sociological imagination⁵ of designers’ minds (including my own) to the value of histories and practices of cultures that we do not readily identify as our own.

Differentialism is a contested term. For example, Peter Martin refers to differentialism as an ideology which radicalizes distinctions “by emphasizing culture and difference in place of biology and hierarchy” (Martin, 2013). This is a conception of difference which fuels racist agendas, separating and maintaining distance between “us” and “them” (ibid, 59). A more progressive and positive conception of differentialism can be found in media studies, where cultural differentialism suggests that “cultures are different, strong, and resilient” (Steger et al, 2014, 374). This is a non-racist conception of cultural difference, which considers the importance of maintaining cultural heterogeneity rather than homogeneity.

This (as I would frame it) positively-oriented differentialism has its origins in Henri Lefebvre’s *Le Manifeste differentialist* (The Differentialist Manifesto) published in 1971, which Shields describes as an “extreme pluralism” which demanded “an end to political *indifference* through forms of popular democracy, grassroots involvement and self-organisation (*autogestion*)” (Shields, 1999, 108). Lefebvre is known more widely for his sociological and philosophical work on the critique of everyday life, production of social space and rights to the city, and is recognised as a pioneer of urban studies and applied sociology (ibid). A vast majority of his work (sixty books and over three-hundred articles) - including *Le Manifeste differentialist* - remains untranslated into English, Spanish or Italian and for this reason he is often misunderstood or drawn upon in a piecemeal basis yet his influence on progressive (left-wing) politics in 1960’s and 1970’s France (and

⁴ I use the lowercase ‘dd’ to distinguish this approach to design from the Decolonizing Design (uppercase ‘DD’) movement. (See the Special Issue of this journal Volume 1, 2018 edited by Schultz et al; and more recently Taboada et al (2020).

⁵ C. Wright Mills’ *The Sociological Imagination* (1959) recognised that our understanding and meaning for a singular individual in society relies on a wider examination of the historical events that have placed us there. Thus, “[t]he problems of our time – which now include the problem of man’s [sic] very nature – cannot be stated adequately without consistent practice of the view that history is the shank of social study” (Wright Mills, 1959, p.143).

latterly in Latin America) is recognisable (ibid, p.7). Over the course of sixty years, Lefebvre's ideas can be described as threads or Lefebvre himself as a "conducting wire of motivating ideas and sentiments from group to group and generation to generation" (Shields, 1999, p.4). His ideas about *difference* gestate over a number of years and works (cf. Lefebvre, 1991 [1974]; 2002 [1961]) but it remains, I argue, as politically and socially relevant to contemporary life in our materially-centred world as it did back in revolutionary nineteen-sixties France.

Lefebvre conceived of a theory of difference to provide legitimation for diverse communities - including immigrants, women and regional movements - and he was set against integration by 'acculturation', centralism and imperialism (Lefebvre, 2005, 109). Importantly, Lefebvre called for a "difference in equality" not simply at the level of individual or group, "but on a world scale, between peoples and nations" (Lefebvre, 2005, 110) - not in the sense of general equivalence but relatively and qualitatively as a *right to difference*. Lefebvre saw this right to difference as a fundamental human right which was likely to come about not simply through discourse⁶ but also by political struggle. He did not see these rights to difference as a "closed list of legal or moral principles, but as a series of practical maxims with the capacity to alter everyday life" (ibid).

It is in this spirit that I propose differential design (dd) as a suite of practical heuristics in support of the Escobarian project. I conceptualise differential design as it emerges from a reading of Lefebvre and Escobar, and from everyday design practice, conscious that I do so not to reify any particular design nomenclature but to make sense of ideas from theory and practice that may share common ground. The guiding principle of differential design is an acknowledgment - and harnessing - of cultural difference to expand the ontological outlook of a designer, resulting in the development of practical ways to embed such cultural thinking in practice. By way of empirical example, I set out below how I (and others) might set about differential design practice.

Methodology for differential design

The starting point for differential design is an adaptation of reflexivity - cultural reflexivity. The origins of reflexivity are found in the often-cited work of Donald Schön (1983) and the professional designer's ability to reflect-in-action. Although Beck and Chiapello (2017) have encountered few instances of critical

⁶ Following Marx and Engels, Lefebvre is known as a dialectic materialist scholar. As Shields (1999, p.6) has noted, dialectical materialism is at the core of Lefebvre's work and this is reflected in the style of his writing which is often in a Socratic question-and-answer form. Lefebvre's reflections on the concept of differentialism in the third volume of *The Critique of Everyday Life* is in a dialectic form that aims to address both critics and exponents of his ideas.

engagement with Schön's ideas in design research, reflexivity as a credible methodological orientation has populated health (Aronowitz et al, 2015), social sciences (Bourdieu and Wacquant, 1992; Hammersley, 2003), science and technology studies (cf. Lynch 2000 for a critique), education (Cohen et al, 2017, 302-303) and business (Brannick and Coghlan, 2006) for some time. Schön describes reflective practice as being "a form of reflective conversation with a situation" (Schön 1983, 295) which includes not only the specifics of a particular moment of practice but practice within the context of a wider communication between practitioner and client or patient. In other words, in applying his (sic) technical expertise it is incumbent on the practitioner to both communicate his understanding to the client *and* endeavour to discover what the different meanings of this professional knowledge has to his client. Cultural reflexivity, as I apply it in this article, is a form of reflexivity by the professional (design researcher) which pays particular attention to both one's own cultural values, norms and understandings (cf. Akama et al, 2019a in this journal) and those of collaborators, stakeholders and audiences. My (and others) reflections on cultures begin to articulate a respectful practice of design and three provisional methods by which differential design may be practiced in support of an Escobarian design for the pluriverse.

Ontological opening through worldviews

The act of designing, either in its individualistic (auteur) or collaborative (participatory) forms, is one that relies on the personal dominion(s) of the designer and other designers (whether professional or lay practitioners) to shape a transdiscursive practice (Kim 2017, 322-324 and 437-443). Designers are explicitly enrolled in the maintenance of a hegemonic socio-economic system (e.g. global capitalism or Xi-ist communism) or assume activist roles which are contrary to these hegemonies. In whatever role they play, their 'designing' involves personal acts of authorship, leadership and persuasion from a position of (often) privilege or (occasionally) exclusion. Given the power and agency that designers often wield, how can we best open our minds to alternative perspectives and use this knowledge to affect positive change?

An exemplar of opening up ontological perspectives can be found in an analysis of indigenous perspectives, and one in particular resonates well. Noam Sheehan's article in the journal *Design Studies* offers perhaps three ontological reorientations that designers – in any region – may consider as a framework for a differential design of the future which acknowledges personal worldviews and those of others (Moran, Harrington and Sheehan 2018). Firstly, Sheehan considers colonial success and wealth (in which design is highly implicated) benefitting many through a "disregard, denial and exploitation as primary to the epistemology for development" (ibid 72). He sees design as being "silently enacted" and "often invisible" in

modern societies (ibid). In an Australian context, this is manifest through environmental damage, war and social dislocation.

Sheehan then goes on to (re)present the idea⁷ that in Aboriginal cultures the living environment is essential to human consciousness and Indigenous Knowledge is therefore embedded into Country: "...being on Country means being enveloped in the outside mind through being engaged in the relationships of Country" (ibid 76). This is not a colonial, territorial claim for land, but more a human connection to earth and the living and dead beings to have been found there. Aboriginal stories (dreamtime) passed on through elders are human narratives woven with those of land, animals and spirits which carry knowledge from one generation to the next (ibid). Such dreamtimes form an important part of indigenous epistemology⁸. For Sheehan, a social design of the future acknowledges these perspectives and decolonizes not only the present, but the future too.

What we glimpse here are the beginnings of not only a de-centering of design but a radical departure towards design which has multiple centres (perspectives); a design of proud *difference*. What we have seen before is what I would term a 'thin' difference, in which design has *acknowledged* the existence of 'other' beyond the perspective of the dominant designer, author, commissioner, movement or nation. A 'thin' use of 'worldviews' as a methodology for design for example, can be found in Stanford d.School's citation of Diederik Aerts (Gabora and Aerts, 2009), whilst a slightly 'thicker' (meaningful) application of 'worldviews' can be found in Future Studies, where Richard Slaughter uses the method for whole-view perspectives from communities or co-creators in shaping future environments, towns, urban settings or any complex system (Slaughter, 1996). Aboriginal worldviews in particular have been given consideration in concerns around coastal sustainability (Stocker, Collard and Rooney 2016) and bushfire management (Ruane 2018) and more broadly in Australian history, politics, and comparative psychology (Graham 1999); a philosophic Arab-Islamic worldview provided by Jamekeddine Ben-Abdeljelil is an historical outlook revealing the intertwinement of Greek and Arabic culture and the centrality of the Arabic language (a language of poetry, the Koran and of religious tradition) (Ben-Abdeljelil 2009, 11-29). In this latter volume, and in support of my argument, Note et al see that the influence of worldviews – in the way we comprehend the world, others and ourselves – "should not be underestimated or neglected" (2009). Worldviews - which can be written, drawn or spoken in any number of ways - enable us to orient ourselves as humans (and designers) and to

⁷ One of the most significant discussions of Aboriginal ontologies can be found in Kenny, A (2013) *Geist through Myth: Revealing an Aboriginal Ontology in The Aranda's Pepa: An Introduction to Carl Strehlow's Masterpiece Die Aranda- Und Loritja-Stämme in Zentral-Australien (1907-1920)*, 135-68. ANU Press, 2013. <http://www.jstor.org/stable/j.ctt5hg76k.14>.

⁸ In many, for instance the Wadjuk Noongar people of Western Australia, entirely different conceptions of the seasons (as an example six instead of the Western four) show how local ontologies connect human to environment.

comprehend the world around us. Beyond this, they can be rightfully considered not as 'right' or 'wrong' ways of looking at the world and our relations with others (and the environment) but as a method for understanding within intercultural, global settings. As Note et al advise, a polylogue between different cultural perspectives "requires a certain relativisation of one's own understandings and a willingness to reconsider them. Without this, any intercultural encounter is doomed to fail from the start" (Note et al 2009, 2).

Worldviews as a differential design method

In design, then, we can use worldviews as a pragmatic method for thinking and doing design. Applied at a local level, it allows us to understand the traditions, beliefs and values of the people we design *with* as well as *for*. On a more regional and national scale, designing with worldviews in mind allows us to understand that communities and consumers are not one homogenous whole, but a complex, heterogenous mix of cultures, religions and politics that need to be reconciled. On a global scale, the design of statesmanship and diplomacy requires reconciliation, cohabitation and co-creation with the worldview in mind; we stand not alone but together in environmental, health and economic crises. What follows is a brief exploration of how cultural reflexivity through worldviews can reorient our ontological view.

In 2016, I migrated from the UK to Australia, joining a long line of British academics to join Curtin University in Western Australia to research and teach in design (including Tony Russell, Cal Swann, Alun Price, Suzette Worden and David Hawkins). A year later, a reorganisation of our respective Schools brought colleague Francesco Mancini (originally from Italy) and I together into a newly formed School of Design and the Built Environment. Knowing little about our pedagogical, theoretical and practical interests, we embarked on semi-structured 'conversation' – as a form of self-historicization (Fallan & Lees-Maffei, 2015) – to help us understand our respective worldviews. We structured our conversation around possible (shared) European histories, design and architectural practice and common ideas and values using 'influence maps'. Influence maps are a derivation of 'affinity diagramming' found in design practice (Hannington & Martin, 2012) and are participant-drawn artefacts that enable individuals to visualise their life histories (see Figure 1 below).

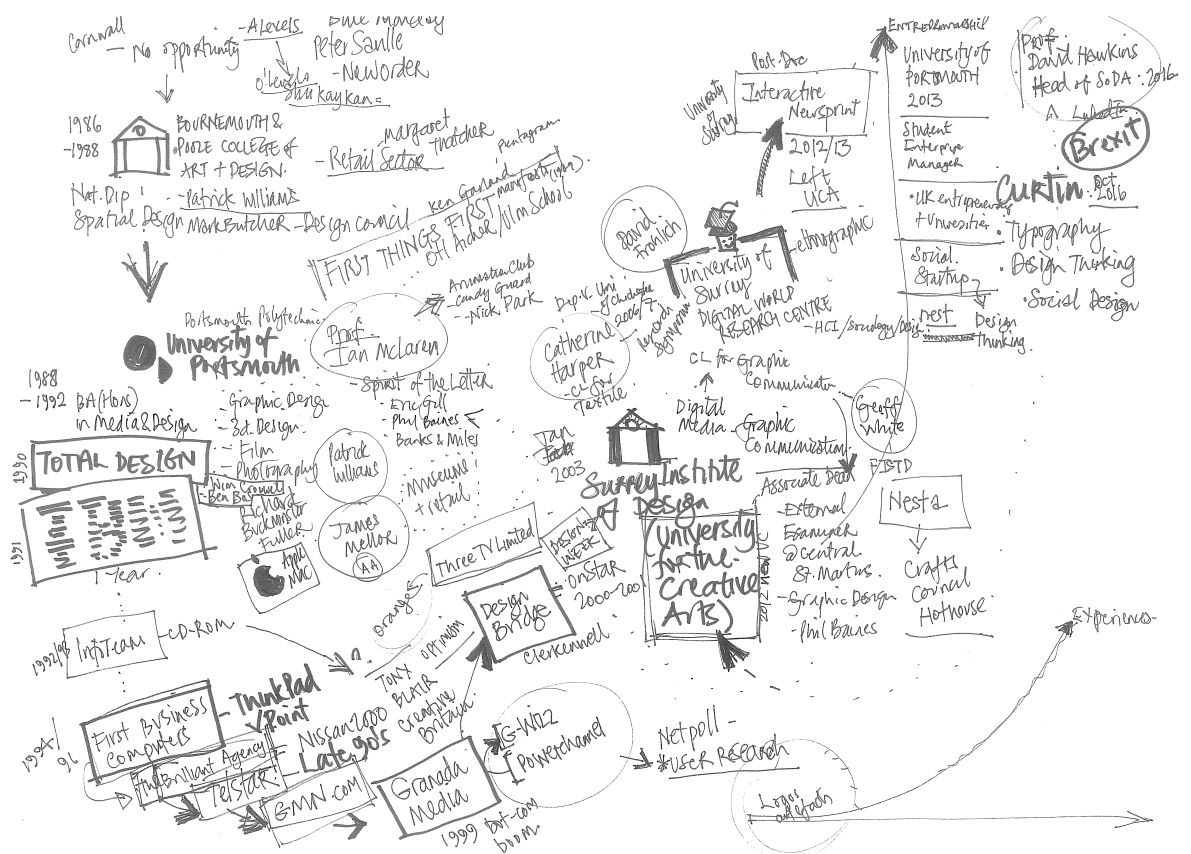


Figure 1 Philip Ely's affinity diagram, showing the passage of time, design projects, influences and employers, shaping his worldview

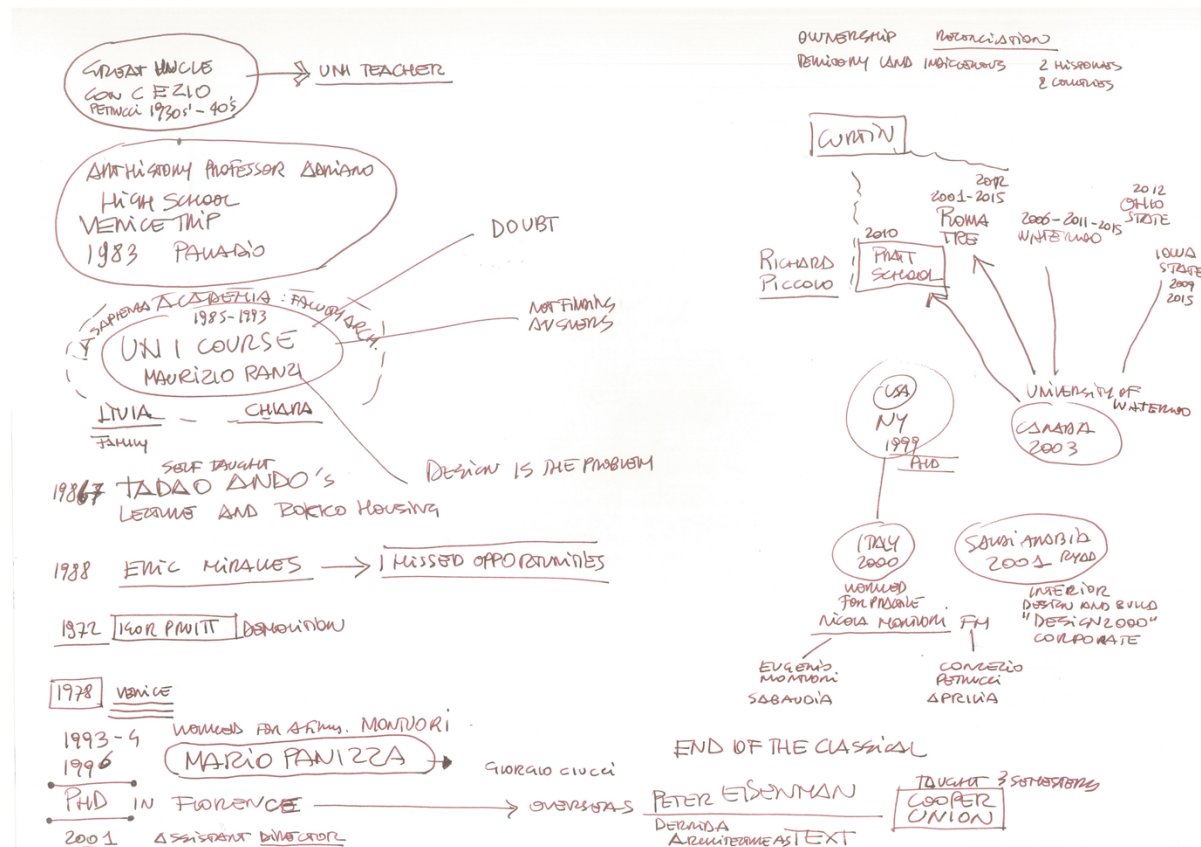


Figure 2 Francesco Mancini's affinity diagram, showing passage of time, architectural projects, influences and employers, shaping his worldview

Not too dissimilar to social network maps, these hand-drawn maps of relationships with people, projects, ideas and workplaces allow the participant in a research project to explore these relationships with researchers in 'real-time'. The process of drawing influence maps is complimented by the use of the 'think aloud protocol', a method originally deployed by Clayton Lewis at IBM in 1982 for product and systems design. The protocol encourages research participants to talk out loud whilst performing a task; in our case, explaining our influence maps in response to the question 'how did we get here'? Our broad question of how we got to Perth was centred on the people, projects, ideas and workplaces that have shaped our personal histories to-date. We then drafted short, written biographies (of approximately 2,400 words) which we have analysed through a form of inductive content analysis (Weber, 1990). This form of self-historicization would enable us to discover more about our individual design and architectural histories, practices and ideas which we bring into a new education environment.

Beyond the broad-based shared belief in the agency of design and architecture to improve human conditions, our practice, research and teaching remains as distinctly different as before we arrived on Australian shores. In the early stages of our migration to the intellectual periphery, we reflected on the pace of life, the local reluctance for change and a still-evident sensitivity amongst the 'locals' of our British and

Italian colonial past even in a 'global' university. These reflections heighten our sense of where we come from and how we 'fit' into our new community, stretching our social capital (Lin 2001) to its limits. Such reflections bring to the fore the tainted past of colonialism: our individual consciousness of the British colonial past in Australia (Ely) and the familial Fascist past in Italy and a sense of (Roman) cultural supremacy (Mancini). Our reflections have actually enlightened our understanding of local cultures that we now encounter. Wanting to assimilate well into Australian society, we are under no illusions that our histories and practices are in a state of negotiation with our new local community. Indeed, in trying to understand who and what is here, our research has itself broadened awareness amongst Australian staff and students of their own local cultures as we bring these perspectives into our teaching. Through our interest in local design and architectural history, we have encountered prejudices around indigenous land usage and planning; hidden narratives (and 'modes' of storytelling) on the establishment of the Swan River Colony (Colbung/Nundjan Djiridjarkan, 1995; McGlade, 1998); violence inflicted on the Stolen Generation (Johnston & Forrest, 2017); and, tellingly, a limited representation of Aboriginal Australians in the design industry (Huppertz, 2014; St. John, 2018). Our enthusiasm for knowing who-is-who and who-was-who in Western Australian design and architecture, as we rebuild our social networks, has put us in the centre of the construction of local design history. In this way, migrant design academics are not only mediators in the shaping of local cultures but also catalysts for a wider evaluation of incoming and pre-existing (local) philosophies, approaches, knowledges and skills in design and architectural education and practice.

Spending time exploring each other's worldviews – post-migration – has provided the cultural reflexivity that I argue differential design can provide; understanding our differences and using this to shape design discourse and action. But there are also other ways that we can enact differential design by drawing on both practice and theory from a variety of cultural perspectives to help shape better futures and below I draw attention here to two further examples. Both have the potential to transform everyday design practice (and education) and, in the long term, prove that design has real humanist intent: one is drawn from ancient Egypt; the other from ancient Greece.

Drawing on great civilisations of the past

One of the guiding principles of contemporary approaches to design is 'human-centredness' (Giacomin 2014) requiring empathy and understanding of people's individual (and collective) needs, problems and desires. The approach is often exemplified by the application of ethnographic methods, which encourage designers to observe, interview and analyse human behaviours, actions, attitudes and thinking

(Crabtree, Rouncefield and Tolmie 2012; Pink and Leder Mackley 2015; Pink, Akama and Sumarttojo 2018). Emergent from the colonial overtones of anthropology, ethnography is nevertheless a methodological attempt to immerse designers in the human lifeworld and – as design ethnography – is a collaborative approach to designing that can be applied to a wide range of cultural and inter-cultural settings. However, design ethnographers are still susceptible to a cultural ‘distance’ by which their embeddedness and therefore full understanding of a cultural situation is limited by only a partial immersion in the lifeworld of the other humans they are ‘observing’. A way to overcome this anthropological distance, I propose, is to engage in a form of design practice which more authentically fulfils the promise of the Greek origins of the word ethnography: by writing *with* and *for* individuals and groups that – to the designer at least – are entirely different to them. This method has its origins in ancient Egypt: generative scribing.

My discovery of generative scribing came through practice, as I spent an increasing amount of my time as a design academic making sense of problem situations through graphic facilitation, graphic recording, or sketchnoting (Klanten et al, 2016; Rohde, 2013). I first encountered generative scribing through Kelvy Bird’s *Generative Scribing* published in 2018, but by coincidence discovered that she was visiting Western Australia from Boston (USA) to work on a collaborative community project with indigenous elders in the northern part of the state, and we met up in May 2019.

Generative scribing has been described by Kelvy as a “a visual practice unique in our age, a distinct art form of the 21st century, functioning in the moment, across cultural boundaries and as a device for social seeing” (Bird 2018, 1). Bird explains how scribes (from the Egyptian meaning *Sesh* after the ancient goddess of wisdom, Seshat) would record stories of events, marking the passage of time. She suggests that more recent application of this visual scribing in design can be found in 1981 in a process of “wall scribing” (usually known as graphic facilitation or graphic recording) where design team members listen to a conversation and draw what they hear (Bird 2018, 4). Bird’s *generative scribing* is drawn from a practice-based model influenced by individual and organisation learning theories (Argyis 2010; Argyis and Schön 1974; 1978), systems psychology (Kantor 2012), leadership archetypes, organizational structures (Senge 1990) and the most significant contribution from Otto Scharmer’s concept of ‘presencing’ (2009). This latter idea, applied to the art of generative scribing provides an almost spiritual connectedness with individuals a designer may encounter in the room, ‘presencing’ being a compound word describing *sensing* and *presence*. Thus, the generative scribe, immersed in a room of strangers must focus their interest in advocacy and inquiry, and an understanding of the group dynamics of conversation and the culture of organisations, to truly *be with* the

people they interact with. It involves an act of listening, pausing and then scribing to make sense of the collective understanding in a room (Bird 2018, 34-35).

Kelvy's work in Western Australia in 2019 helped lay the foundation for recent work at the Presencing Institute reconnecting Australian aboriginal elders Noel Nannup, Richard Walley and Carol Innes into a Global Activation of Intention and Action (GAIA) Journey, which has connected people across geographies and cultures during the COVID-19 lockdown. Over a fourteen-week period, Kelvy has been listening, mirroring, differentiating and 'surfacing' (Bird, 2020a, 30-31) to generate an image as "an emerging reality" (ibid) (Figure 3).



Figure 3 One of Kelvy Bird's 13 drawings from the GAIA Journey over 14 weeks (Presencing Institute, 2020) with Australian Aboriginal Elders Noel Nannup, Richard Walley and Carol Innes. The centre (the 'inhale') - signified here by a teardrop - shows some of the 'sadjoy' emergent from the sessions during the lockdown period. Captured around the outside of the teardrop are reflections from the Elders and the rest of the GAIA participants showing the wisdom of 65,000 years on Wadjuk land; the connectivity of the vibrating land to people across continents; and a sense that we face crises together. Image: Kelvy Bird www.kelvybird.com/wilma-rising/

Bird distinguishes generative scribing from two other forms of scribing – a 'systems approach' which maps systems and connectivity or a 'story approach' which simply shares a narrative (ibid). In sharing the image above, Bird explains "it is my most recent work – and probably my best to date, since conceptually it breaks the time-bound mode of traditional scribing" (Bird, 2020b). This act of visualization, for me, seems to be a much more 'authentic' form of eliciting understanding from different cultural positions and places the designer - as a generative scribe - in a position to "expand our consciousness and deepen our capacity" (Bird, 2018, 148) for collective, positive, design action. Generative scribing, as a method for making sense of

where and who we are and where we might be headed, is a pragmatic tool which can literally and metaphorically draw upon the visualizing and sense-making skills of designers in shaping futures which do not privilege the designer as an author of an “ideal state” but helps people to interpret and align “wholeness” to take ideas forward (ibid, 36). As Escobar himself has highlighted, the idea of collective creation (presencing) and destruction (absencing) is an ontological design framework. Generative scribing is a practical method that can bring forth differences between individuals and, collaboratively, bring such voices together for collective action. Egyptian sesh may have simply recorded events of the past; designers as generative scribes can collaboratively plan for the future.

Reclaiming rhetoric for design activism

A second idea from ancient civilisations (and my third and final heuristic for differential design) is the idea of rhetoric. Mainly attributed to the ancient Greek philosopher Aristotle, rhetoric has attracted much interest from design scholars for either generative or critical purposes. Generatively, ideas emergent from rhetoric have been applied to visual forms of communication and persuasion to help shape approaches to the design of artefacts. For example, building on the work of Gui Bonsiepe (1965), Hanno Ehses’ substantial pedagogic enquiries into rhetorical strategies in graphic design have applied Aristotlean genre of *logos* (logic – appeal to reason), *pathos* (appeal to emotions) and *ethos* (ethical appeal) alongside rhetorical tropes such as *antithesis*, *irony*, *metaphor*, *pun* and *amplification* to provide graphic designers with a repertoire of heuristics by which they may approach the design of visual artefacts such as advertising posters, brand identities and blogs (Ehses 2008; Lupton and Ehses 1996; Ehses 1984). Ehses’ work still continues to resonate with design educators today, with Veronika Kelly arguing that professional designers of today – even if they do not say so explicitly – use forms of deliberative rhetoric (Kelly 2014). Kelly has also examined ways that postgraduate communication design students can improve their design outcomes through the application of rhetorical methods (Thiessen and Kelly 2017). More broadly, Per Liljenberg Halstrøm has explored how design argumentation can be enhanced by the use of rhetoric to celebrate the value of design (Halstrøm 2016; Halstrøm and Galle 2014) and the use of *topoi* (places – in this case places of the mind) as a way of framing design argumentation (Halstrøm 2017).

Beyond these generative examples, rhetoric has a *critical* role to play in design. Richard Buchanan is well cited as a source of inspiration on ideas around rhetoric and design and has argued that Aristotle’s idea of distinguishing *forethought* from any particular act of making is concerned with discovery, invention, argument and planning - *ergo* design. For Buchanan, such forethought is the precursor to the distinct

discipline of design although, of course, design did not emerge in the ancient world (Buchanan 1995, 31). Whether verbal rhetoric is a form of design, or design a form of rhetoric is an argument that distracts us from the immediate problem of popular rhetoric that is shaping inter-cultural relations: the most pressing concern of how rhetoric can enhance the agency of design; indeed, of the rhetorical power of design. Buchanan rightly points out that universities are able to make the distinction between basic and applied research but are unable to understand the “gulf that exists between applied research and the development of successful products” (Buchanan 2001, 193-194), the latter requiring the expertise of design and making. I argue that the aim of designers and design educators, therefore, is to assume a rhetorical stance, arguing not only amongst the academy and ‘industry’⁹ for its rightful embeddedness in processes of knowledge and value creation (Heskett 2017, 179) but also to deploy rhetorical tactics, plans and events to embolden human-centred design efforts. In tumultuous times a reclaiming of rhetoric for the effective persuasion of audiences is a necessary counterweight to the rise of populist rhetoric which uses the broadcast power of social media to deny climate change, espouse right-wing nationalism and reinforce the hegemony of neoliberal capitalism. Differential design therefore needs not only to acknowledge cultural difference, human- and planetary centred-ness through ethical logic, reasoning and collaboration, but – using the genres and tropes found in the arts of rhetoric – apply written, visual and verbal language that is much more powerful than it (broadly) currently deploys.

This is not a delusory ambition, for there are designers whose projects powerfully exhibit concerns for people and planet. Empirical examples include: Annelys Devet’s provocative design label *Disarming Design from Palestine* (Devet 2017)¹⁰ which aims to support designers and makers in developing their products and making a living; graphic designer Ronny Edry’s founding of the *Peace Factory* advocating for peace between Israel and Iran (“*Iranians we will never bomb your country, We ❤️ you*”) (Edry, 2012); and *Action for Hope* - an initiative led by seventeen Arab artists and activists which, under the umbrella of the *Cultural Resource (Al Mawred Al Thaqafy)* which has been providing cultural relief (cultural development programmes) in response to the Syrian refugee crisis and economic distress in informal settlements in Egypt¹¹. Each of these three examples demonstrate the use of visual and verbal rhetoric which is human, pragmatic and powerful and is perhaps best conceived of as design activism. Other forms of design activism

⁹ Industry in the broader sense – include commercial and non-commercial entities

¹⁰ De Ver’s earlier (and ongoing) work, *Subjective Atlases* is an attempt to ‘map’ countries and regions from the personal perspectives of photographers, designers and architects in what is described as a “bottom up” approach. To date, twelve such mappings have been undertaken, ranging from the EU (from the perspective of Estonia) and Hungary, to Pakistan and Colombia – see <http://subjectiveatlas.info/about/>, last accessed 16 March 2019.

¹¹ Action for Hope website at: <http://www.act4hope.org/about-action-for-hope/#background> and Al Mawred Al Thaqafy (based in Lebanon) at: <http://mawred.org/>, both last accessed 20th June 2020.

can be found in Bas van Lier's survey of design activism at *whatdesigncando.com* drawing on the work of the What Design Can Do collective in Mexico, The Netherlands and Brazil (Van Lier 2018).

Design activism does take many forms – as actions of demonstration, communication, convention, competition, service, events or protest (Thorpe, 2008) - but what binds them as effective agents of change is the strength of their rhetoric. My own example includes the design of a brand identity (*Figure 4*) for a research project – *Social Design in Action* – which started as a project to design a visual identity for a community project but became a programme of action-oriented design research for the creation of unified health, education and community services (Ely, Saad & Smith, 2020).



Figure 4 Brand identity for 'Social Design in Action'. The identity acted as a rhetorical device to amplify the work of three design researchers looking to support the funding of a community project in the City of Armadale, Western Australia.

In this example, like those from across the Middle East and South America mentioned above, design is used to visually represent a community of agents (here – specifically- designers, architects, health, education and community practitioners) and instil a sense of urgency amongst stakeholders and funders. The graphic creates legitimacy amongst scholars – explicitly saying “this action-oriented research project is real”. Rhetoric for design here is not the form of rhetoric pejoratively seen as “bald persuasion” or “persuasion outside of the innovative context of design, or bad persuasion, relying on a failed or seriously flawed design” (Kaufer and Butler 1996, 5) but a rhetoric that frames a design argument for the most humanely and planetary positive outcome. *Social Design in Action* was not a research project with the global social reach of (for example) the work of the Arts Factory - which created the visual tools and materials for the global Extinction Rebellion movement (Glyn & Farrell, 2019) – but, nevertheless, through a series of practical workshops and actions, aimed to positively alter everyday life (Lefebvre, 2005 110). The social and political project of improving life on earth when confronted by the extremes of far-right nationalism, climate change denial, male hegemony or energy crisis cannot be undertaken with science and reason alone; design (and designers) in the form of differential design must take up the rhetorical challenge.

Designing for difference

We are reminded daily of the ‘unprecedented times’ that we live in through global broadcast and social media. In less than a year, for example, Australia has had to live with bushfires on a scale not experienced before (Boer et al, 2020), exposure to the COVID pandemic and now the likely recession as a result of the Great Lockdown. When we consider our two-hundred-year present, these are unlikely to be

isolated events; the worse may be yet to come. Optimistically, we can design for our future if we make the ontological turn (Escobar, 201, 52; Fry, 2011) by recognising that such designs of the future should recognise the voices from many cultures (disciplinary, sub- and altern, ancient, indigenous, Global North and Global South and more) in our efforts; this is work that Yoko Akama & Joyce Lee (2019b) have already begun in this journal. Differential design is a political and social endeavour which draws attention to cultural difference and gives power and agency to voices hidden by the many hegemonies (and prejudices) that permeate our everyday. The three empirical and practical examples that I have provided here – the use of worldviews, generative scribing and the reclaiming of rhetoric – are intended as a modest starting point for design practice which is culturally-aware, sensitive and supportive. Whilst the methods are drawn from a cultural milieu which are predominantly from the Global North and from civilisations that have themselves (at various times) fuelled a cultural hegemony of their own, my intention is to emphasise the richness of pluralist perspectives both as a source for new ways of designing but also as processes for representation and inclusion in the spirit that Lefebvre perhaps intended in his conceptualisation of differentialism.

Acknowledging the pitfalls of merely plundering human cultures across temporal and geographic zones for intellectual extraction, differential design - afforded by cultural reflexivity – is an invitation to reframe the way we design, flattening our socio-cultural world (cf. Latour, 2005, p.138) so that everyone has a voice.

Acknowledgements

I acknowledge the traditional owners of the land on which I live and work, the Wadjuk people of the Nyungar Nation and pay my respects to Elders past, present and future. Thanks to Francesco Mancini and Kelvy Bird for their generosity in sharing their images and personal insights. The GAIA Journey at the Presencing Institute with Elders would not have been possible without the work of Katie and John Stublely at the UWA Centre for Social Impact. Thanks, too, to Qassim Saad for our discussions about the colonial past in Iraq and the Eastern Mediterranean Region which shaped the origins of the concept of differential design. Finally, I would like to thank the anonymous reviewers of this article for their invaluable critique.

References

- Appadurai, Arjun (2017) *Democracy fatigue* in Geiselberger, H, *The Great Regression*. Polity eBook: Cambridge.
- Akama, Yoko, Penny Hagen and Denas Whaanga-Schollum (2019) "Problematizing Replicable Design to Practice Respectful, Reciprocal, and Relational Co-designing with Indigenous People" in *Design and Culture*, 11(1), 59–84. <https://doi.org/10.1080/17547075.2019.1571306>

- Akama, Yoko and Joyce Yee (2019b) "Special Issue: Embracing Plurality in Designing Social Innovation Practices" *Design and Culture*, 1(0), 1–11. <https://doi.org/10.1080/17547075.2019.1571303>
- Argyris, Chris. (2010). *Organizational traps: Leadership, culture, organizational design*. Oxford University Press: New York, NY.
- Argyris, Chris and Donald Schön (1978) *Organizational learning: A theory of action perspective*, Addison Wesley: Reading, Mass, USA
- Argyris, Chris and Donald Schön (1974) *Theory in Practice. Increasing professional effectiveness*, Jossey-Bass: San Francisco.
- Aronowitz, Robert, Andrew Deener, Danya Keene, Jason Schnittker and Laura Tach (2015) "Cultural reflexivity in health research and practice" in *American Journal of Public Health*, 105, S403–S408. <https://doi.org/10.2105/AJPH.2015.302551>
- Beck, Jordan and Laureline Chiapello (2018) "Schön's intellectual legacy: A citation analysis of DRS publications (2010–2016)" in *Design Studies*, 56, 205–224. <https://doi.org/10.1016/j.destud.2017.10.005>
- Ben-Abdeljelil, Jameleddine (2009) "Ways of Intellect: Forms of Discourse and Rationalization Processes in the Arabic-Islamic Context" in Note, Nicole, Raúl Fornet-Betancourt, Josef Estermann and Diederik Aerts (Eds.) *Worldviews and Cultures: Philosophical Reflections from an Intercultural Perspective*, Springer Science + Business Media, B.V, NL, pp. 11-29.
- Bird, Kelvy (2018) *Generative Scribing: A Social Art of the 21st Century*, Cambridge, MA: PI Press
- Bird, Kelvy (2020a) "Visual Presencing" in Gunnlaugson, O., and Brendel, W. (2020) *Advances In Presencing Volume I*, Trifoss Business Press: Toronto
- Bird, Kelvy (2020b) Personal communication with the author, email, 20th June 2020.
- Boer, Matthias, M., Victor Resco de Dios and Ross. A. Bradstock (2020). "Unprecedented burn area of Australian mega forest fires" in *Nature Climate Change*, 10(3), 171–172. <https://doi.org/10.1038/s41558-020-0716-1>
- Bonsiepe, Gui (1965) Visual/Verbal Rhetoric in: *Ulm No. 14/15/16*. Ulm: hfg Ulm
- Bourdieu, Pierrie and Louis Wacquant (1992) *An Invitation to Reflexive Sociology*, Polity: Cambridge.
- Boulding, Elise (1988) *Image and Action in Peace Building* in *Journal of Social Issues*, 44:2, pp.17-37
- Brannick, Teresa and David Coghlan (2006) "Reflexivity in Management and Business Research: What Do We Mean?" in *The Irish Journal of Management*, 27(2), 143–160.
- Brown, Tim (2008) *Design thinking* in *Harvard Business Review*, 86:6, pp.84-92

- Brown, Tim (2009) *Change by design : how design thinking transforms organizations and inspires innovation*, Harper Business: NY
- Buchanan, Richard (1995) *Rhetoric, Humanism, and Design* in Buchanan, Richard and Victor Margolin (Eds), *Discovering Design: Explorations in design studies*, Chicago: The University of Chicago Press, p31
- Buchanan, Richard (2001) *Design and the New Rhetoric: Productive Arts in the Philosophy of Culture*. In *Philosophy and Rhetoric* 34 (3): 183–206. doi:10.1353/par.2001.0012, p.193-194
- Cohen, Louis, Lawrence Manion and Keith Morrison (2017) “Reflexivity” in *Research Methods in Education*, Taylor & Francis Group: London, pp. 302–304
- Colbung, Ken [Nundjan Djiridjarkan] (1995) *Yagan: the Swan River ‘Settlement’*, Australia Council for the Arts: Redfern, NSW
- Crabtree, Andrew, Mark Rouncefield and Peter Tolmie (2012) *Doing Design Ethnography*, Springer, London.
- Dalsgaard, Peter (2014) “Pragmatism and design thinking” in *International Journal of Design*, 8:1, pp.143-155
- Devet, Annelys (2017) *Disarming Design from Palestine, About Us* available from:
<http://www.disarmingdesign.com/about-us/> last accessed 20th June, 2020.
- Edry, Ronny (2012) *Peace Factory* available from: <http://thepeacefactory.org> , last accessed 20th June, 2020
- Ehshes, Hanno (1984) “Representing Macbeth : Case Study in Visual Rhetoric” in *Design Issues* 1 (1 (Spring)): 55–63
- Ehshes, Hanno (2008) “Design on a Rhetorical Footing” in *Design Papers* 6. Halifax, Nova Scotia: NSCAD University, available at:
https://www.academia.edu/6712838/Hanno_Ehshes_Design_on_a_rhetorical_footing, accessed 10th March, 2019.
- Ely, Philip, Qassim Saad and Dianne Smith (2020) *Monsters in the borderlands: Designer-academics in action in Proceedings of the Design Research Society Conference DRS 2020 “Synergy”*, August 11-14, DRS/Griffith University: Brisbane
- Escobar, Arturo (2018) *Designs for the Pluriverse: Radical Interdependence, Autonomy and the Making of Worlds*, Duke University Press, Durham & London.
- Fallan, Kjetil and Grace Lees-Maffei (2015) “It’s Personal: Subjectivity in Design History” in *Design and Culture* 7 (1): 5–27. <https://doi.org/10.2752/175470715X14153615623565>.
- Fry, Tony (2011) *Design as politics*, Berg: London
- Gabora, Liane and Diederik Aerts (2009) “A model of the emergence and evolution of integrated worldviews” in *Journal of Mathematical Psychology*, 53, 434-451;

- Giacomin, Joseph (2014) "What Is Human Centred Design?" in *The Design Journal*, 17:4, 606-623
- Glyn, Miles and Clare Farrell (2019) "Arts Factory" in Farrell, Clare, Alison Green, Sam Knights and William Skeaping (Eds) *This Is Not A Drill. An Extinction Rebellion Handbook*, Penguin Random House: London, pp.120-125.
- Graham, Mary (1999) "Some Thoughts about the Philosophical Underpinnings of Aboriginal Worldviews Basic Precepts of the Aboriginal World View" in *Worldviews: Environment, Culture, Religion* 3 (1999): 105-188
- Halstrøm, Per L., and Per Galle (2014) "Design as Co-Evolution of Problem, Solution, and Audience" in *Artefact III* (4): 3.1-3.13.
- Halstrøm, Per L. (2016) "Design as Value Celebration: Rethinking Design Argumentation" in *Design Issues* 32:4 doi:10.1162/DESI_a_00415
- Halstrøm, Per L. (2017) "Rhetorical Tools for Discovery and Amplification of Design Arguments" in *Design Issues* 33 (1). doi:10.1162/DESI_a_00422.
- Hammersley, Martyn (2003) "Reflexivity" in Lewis-Beck, Michael S., Alan Bryman and Tim F. Liao (Eds.), *SAGE Encyclopedia of Social Science Research Methods* (pp. 933-935). SAGE Publications: Thousand Oaks, CA.
- Heskett, John (2017) *Design and the Creation of Value*, London: Bloomsbury.
- Huppertz, Daniel J. (2014) "Introduction: Reframing Australian Design History" in *Journal of Design History* 27 (2) pp. 205-223
- Johnston, Michelle and Simon Forrest (2017) "Koolark Koort Koorliny: reconciliation, art and storytelling in an Australian Aboriginal Community" in *Australian Aboriginal Studies*. 1: pp. 14-27.
- Kantor, D (2012) *Reading the Room: Group Dynamics for Coaches and Leaders*, San Francisco: Jossey-Bass.
- Kaufer, David S., and Brian S. Butler (1996) *Rhetoric and the Arts of Design*, Mahwah, New Jersey: Lawrence Erlbaum Associates.
- Kelly, Veronika (2014) *Design as Rhetoric in the Discourse of Resonance Why Resonance ?* In DRS2014. Available at: drs2014.org.
- Kim, Henry Hongmin (2017) "Structural Process of Design | Consilience and Conrescence" and "Conrescence of Ontological Design Principles" in Kim, Henry Hongmin (Ed.) *Graphic Design Discourse : Evolving Theories, Ideologies, and Processes of Visual Communication*, Princeton University Press, New York, NY

- Klanten, Robert, Anna Lena Schiller and Sven Ehmann (2016) *Graphic Recording – Live Illustration for Meetings, Conferences and Workshop*, Gestalten: Berlin
- Kolko, Jon (2018) *The Divisiveness of Design Thinking in Interactions*, XXV:3, pp.29-34.
- Kuhn, Thomas S. (1996) *The Structure of Scientific Revolutions*, 3rd ed. University of Chicago Press: Chicago
- Latour, Bruno (2005) *Reassembling the Social: An Introduction to Actor-Network-Theory*. Oxford University Press: Oxford; New York, NY. <https://doi.org/10.1017/CBO9781107415324.004>
- Lefebvre, Henri (1991 [1974]) *The Production of Space*, trans. D. Nicholson-Smith, Blackwell: Chicago.
- Lefebvre, Henri (2002) [1961] *Critique of Everyday Life, Volume II*, trans. J. Moore, Verso: London
- Lefebvre, Henri (2005) *Critique of Everyday Life Volume III: From Modernity to Modernism (Towards a Metaphilosophy of Everyday Life)* (English Translation), Verso: London
- Lin, Nan (2001) *Social Capital: A Theory of Social Structure and Action*, Cambridge University Press, Cambridge, UK, p.17-19
- Lupton, Ellen and Hanno Ehses (1996) *Rhetorical Handbook: An Illustrated Manual for Graphic Designers*. 2nd ed. Halifax, Nova Scotia: Nova Scotia College of Art and Design/The Herb Lubalin Study Center of Design and Typography.
- Lynch, Michael (2000) "Against Reflexivity as an Academic Virtue and Source of Privileged Knowledge" in *Theory Culture & Society*, 17(3), 26–54.
- Martin, P. (2013). Racism, differentialism, and antiracism in everyday ideology: A mixed-methods study in Britain. *International Journal of Conflict and Violence*, 7(1), 57–73. <https://doi.org/10.4119/UNIBI/ijcv.277>
- McGlade, H. (1998) "The repatriation of Yagan: A story of manufacturing dissent" in *Law Text Culture* 4:1, pp. 245–25
- Note, Nicole, Raúl Fornet-Betancourt, Josef Estermann and Diederik Aerts (Eds.) (2009) *Worldviews and Cultures: Philosophical Reflections from an Intercultural Perspective*, Springer Science + Business Media, B.V, NL
- Pink, Sarah, Yoko Akama and Shanti Sumartojo (2018) *Uncertainty and Possibility: New Approaches to Future Making in Design Anthropology*, Bloomsbury: London.
- Pink, Sarah and Kerstin Leder Mackley (2015) "Social science, design and everyday life: refiguring showering through anthropological ethnography" in *Journal of Design Research*, Vol. 13, No. 3, pp.278–292
- Presencing Institute (2020) *Sense-Making In A Time of Crisis*, April 10th with Carol Innes, Colleen Hayward, Noel Nannup and Richard Walley, available at: <https://vimeo.com/showcase/6958829/video/408784159>, last accessed: 21st June 2020.

- Pschetz, Larissa and Michelle Bastian (2018) "Temporal Design: Rethinking time in design" in *Design Studies* 56 (2018) 169-184, <https://doi.org/10.1016/j.destud.2017.10.00>
- Rohde, Mike (2013) *The Sketchnote Handbook*, Peachpit Press, USA.
- Ruane, Simone (2018) "Using a worldview lens to examine complex policy issues: a historical review of bushfire management in the South West of Australia" in *Local Environment*, 23: 8, pp777-795
- St.John, Nicola (2018) "Australian Communication Design History: An Indigenous Retelling" in *Journal of Design History*, 31 (3) OUP: Oxford, pp. 255-271
- Scharmer, Otto (2009) *Theory U: Leading from the Future as It Emerges*, San Francisco: Berrett-Koehler.
- Schön, Donald A. (1983) *The Reflective Practitioner: How Professionals Think in Action*, Basic Books, USA.
- Senge, Peter (1990) *The Fifth Discipline: The Art & Practice of the Learning Organization*, New York: Currency Doubleday.
- Shields, Rob (1999) "Postwar Intellectual" in *Lefebvre, Love and Struggle: Spatial Dialectics* Taylor & Francis Group: London (pp 108-109).
- Schultz, Tristan, Danah Abdulla, Ahmed Ansari, Ece Canlı, Mahmoud Keshavarz, Matthew Kiem, Luiza Prado de O. Martins and Pedro J.S. Vieira de Oliveira (2018) "Editors' Introduction" in *Design and Culture* Decolonizing Design Special Issue, 10(1), 1–6. <https://doi.org/10.1080/17547075.2018.1434367>
- Slaughter, Richard (1996) *Futures: tools and techniques*, Futures Study Centre: Melbourne, Victoria.
- Srnicek & Williams, A (2017) *Inventing the Future: Post-capitalism and a World Without Work*, Verso, London
- Stocker, Laura, Len Collard and Angela Rooney (2016) "Aboriginal world views and colonisation: implications for coastal sustainability" in *Local Environment*, 21:7, 844-865, DOI: 10.1080/13549839.2015.1036414
- Taboada, Manuela. B., Sol Rojas-Lizana, Leo X.C Dutra, Adi VasuLevu M. Levu, (2020) "Decolonial Design in Practice: Designing Meaningful and Transformative Science Communications for Navakavu, Fiji" in *Design and Culture*, 12(2), 141–164. <https://doi.org/10.1080/17547075.2020.1724479>
- Thiessen, Myra and Veronika Kelly (2017) "What Students Say about Their Work and What It Says about Their Work. Toward the Development of Rhetorical Practice in the Educational Design Studio" in *The Design Journal* 20 (sup1). Routledge: S1511–20. doi:10.1080/14606925.2017.1352675.
- Thorpe, Anne (2008) "Design as Activism: A Conceptual Tool" in *Proceedings of Changing the Change: Design Visions, Proposals and Tools*, Torino: Allemandi Conference Press.
- Tlostanova, Madina (2017) "On decolonizing design" in *Design Philosophy Papers*, 15(1), 51–61. <https://doi.org/10.1080/14487136.2017.1301017>

van Lier, Bas (2018) *Designing Activism: 31 Designers Fighting for a Better World*, Amsterdam: What Design Can Do.

Vinsel, Lee (2017) *Design thinking is kind of like syphilis — it's contagious and rots your brains* in *Medium*. Dec. 6, 2017 available at: https://medium.com/@sts_news/design-thinking-is-kind-of-like-syphilis-its-contagious-and-rots-your-brains-842edo78af29

White, Michael (1988) "Interview with Tony Russell transcript (p1-7)" for *WAIT to Curtin: a history of the Western Australian Institute of Technology* (Perth, WA: Paradigm Books, 1996) available at: http://espace.library.curtin.edu.au/R/-?func=dbin-jump-full&object_id=118614&silo_library=GENoi

Wright Mills, C (1959) *The sociological imagination*, New York: Oxford University Press

Wrigley, Cara (2018) "Editorial: Deception by design" in *Design, Business & Society*, 4: 1, pp.3-5