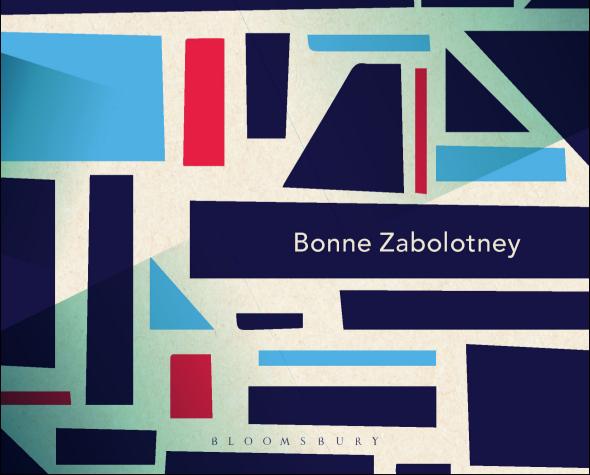
DESIGNING KNOWLEDGE

Emerging Perspectives in Design Studies Practices



DESIGNING KNOWLEDGE

DESIGNING KNOWLEDGE

Emerging Perspectives in Design Studies Practices

Edited by Bonne Zabolotney

BLOOMSBURY VISUAL ARTS London • New York • Oxford • New Delhi • Sydney BLOOMSBURY VISUAL ARTS Bloomsbury Publishing Plc 50 Bedford Square, London, WC1B 3DP, UK 1385 Broadway, New York, NY 10018, USA 29 Earlsfort Terrace, Dublin 2, Ireland

BLOOMSBURY, BLOOMSBURY VISUAL ARTS and the Diana logo are trademarks of Bloomsbury Publishing Plc

First published in Great Britain 2024

© Editorial content and introductions, Bonne Zabolotney

© Individual chapters, their authors, 2024

Bonne Zabolotney has asserted her right under the Copyright, Designs and Patents Act, 1988, to be identified as Editor of this work.

For legal purposes the Acknowledgements on p. xi constitute an extension of this copyright page.

Cover design by Louise Dugdale Cover image: Valeriya Simantovskaya/Stocksy

All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording, or any information storage or retrieval system, without prior permission in writing from the publishers.

Bloomsbury Publishing Plc does not have any control over, or responsibility for, any third-party websites referred to or in this book. All internet addresses given in this book were correct at the time of going to press. The author and publisher regret any inconvenience caused if addresses have changed or sites have ceased to exist, but can accept no responsibility for any such changes.

A catalogue record for this book is available from the British Library.

A catalog record for this book is available from the Library of Congress.

ISBN: HB: 978-1-3503-1984-4 PB: 978-1-3503-1987-5 ePDF: 978-1-3503-1979-0 eBook: 978-1-3503-1985-1

Typeset by Newgen KnowledgeWorks Pvt. Ltd., Chennai, India

To find out more about our authors and books visit www.bloomsbury.com and sign up for our newsletters.

CONTENTS

List of figures viii Acknowledgements xi Contributors: A community of practice xii

> Introduction: What we design in a design studies practice 1 Bonne Zabolotney

SECTION 1 REDIRECTING PRACTICES

Introduction: Redirecting Practices *Bonne Zabolotney*

- 1 Tactical ambiguity: Designing in the space between 9 *Bonne Zabolotney*
- 2 Yvy rembe'y rojapo (Land-bordering); between borderlands and intersections: Dismantling the colonial structures of modernist design 23 *Patricia Vera*
- **3** Design research practice narrative: 'Happy objects within reach' ³⁹ Hannah Korsmeyer
- 4 Languages and typographic representations 63 Leo Vicenti

5 Conversations with designers: Positioning ethics, values and experiences within a professional design practice ⁷⁷ *Mark Rutledge, Brian Johnson, Silas Munro and Bonne Zabolotney*

SECTION 2 PARADIGM SHIFTING

Introduction: Paradigm Shifting *Bonne Zabolotney*

- 6 InWorlding: Design practice and personhood 93 Sophie Gaur
- 7 Designing new narratives for untold design histories 113 Bonne Zabolotney
- 8 Making a design fiction from the inside-out 129 Anne Burdick
- 9 Design-enabled recommoning 143 *Dimeji Onafuwa*
- **10** Turning the body inside-out: Model-making, critical theory and self-accountability 157 *Myriam D. Diatta*

SECTION 3 IMMERSING

Introduction: Immersing Bonne Zabolotney

- **11** Kaleidoscopic storytelling: Positionality, indigenous ways and slow autoethnography 177 *Lisa Grocott*
- **12** Zen and design: Cultivating insight 191 Louise St. Pierre
- **13** The typographic translations of Borges's manuscripts 205 *Celeste Martin*
- 14 Centring anti-racism in design: From theory to practice 223 Terresa Moses and Lisa Elzey Mercer

15 It's not just about mountains you know: Nature-clothing writing as design practice 239 *Kate Fletcher*

Epilogue: Designing in good faith 255 Bonne Zabolotney

Index 259

FIGURES

- **1.1** Action framework, designating earlier research projects at the nexus of corresponding actions and concepts 13
- 1.2 Walls of Never Precious exhibit 15
- 1.3 Instagram post discussing Canadian Plastics 17
- 2.1 Pavements | La Chacarita, 2022 28
- 2.2 Rhizomes Map | Kuatia Michimi, 2021 30
- 2.3 Diaspora map fragment, 2022 32
- 2.4 America's map fragment, 2022 32
- 3.1 Tensions, negotiations and boundaries of DRPNs 45
- 3.2- Tensions, negotiations and boundaries of DRPNs as a
- 3.12 recursive, performative, co-constituted method 49
 - 4.1 'Béshí' is a revival of Oldřich Menhart's typeface, Parliament (1950–1) 67
 - **4.2** This ligature typeface was designed to simplify the orthography for Jicarilla language learners 69
 - **4.3** The ligature font took many forms through the author's thesis explorations, including this rendering as a micaceous vessel 71
 - 4.4 'ha'nas zani' (the ones who emerged), 2020 72
 - 4.5 'Soundtrack to an Exhibition', 2019 74
 - **4.6** Typographic exercises in critical imitation and stereotyping 75
 - 6.1 Ways of knowing 96
 - 6.2 CDIT model: Deepening design knowledge through an InWorlding process 97

- 6.3 Initial design practice models 101
- 6.4 Design practice model 102
- **6.5** Teaching prompt: Timelines and events cards, ThingSpeak, Design Studies course 107
- **6.6** Utopian Visions, a curated collection of utopias concepts, visions, and ideas, Cyville Castro, 3rd year design student, ECUAD 108
- 6.7 Monster cabinet, a collection of fearful illusions, Yanan Guo, 3rd year design student, ECUAD 109
- 7.1 Personal collection, Bonne Zabolotney 116
- **7.2** Medalta dinerware alongside its English counterpart, Bonne Zabolotney 118
- 7.3 Eaton's catalogue from 1955, Bonne Zabolotney 122
- 7.4 1934 Eaton's catalogue cover 123
- 8.1 A moment in the Trina story in three different media 131
- **8.2** Slide 52. A single moment captured from two different points of view 132
- 8.3 Prototypes created during the story's development 134
- 8.4 Trina's storyworld 138
- **10.1** Reflexive Model-Making process and material outcome 160
- **10.2** A cluster of snapshots from making and documenting the models 165
- **10.3** Image of finished model pertaining to facilitating a session with designers 168
- 10.4 Outline of characteristics for Reflexive Model-Making 169
- **11.1** Individual or collective. What if we didn't frame learning as a personal quest? 181
- **11.2** Talking points from the presentation in Tasmania 183
- 12.1 Rope made from day lilies 198
- 12.2 Immersive Reflection, the process 200
- **13.1** Typographic transcription of a page from 'The Aleph' 206

- **13.2** Scale reproductions of Borges's manuscripts used to discern his writing hands 210
- **13.3** Diplomatic transcription example from The William Blake Archive 211
- **13.4** A339 ('Risk is the Hair. . .') facsimile from the Amherst College Library ²¹³
- 13.5 Iterative drafts of Judería 215
- **13.6** Layers and examples of baseline shifts in Illustrator 216
- **13.7** Typographic translation of a page from 'Destino Escandinavo' 217
- 13.8 Hybrid texts 218
- 13.9 Texts in relief 219
- 13.10 White texts 220
 - **14.1** Participants using the Racism Untaught toolkit at the Design + Diversity conference 224
 - **14.2** The first iteration of the Racism Untaught workboard 228
 - **14.3** Participants engaging in the first Racism Untaught workshop 231
- **14.4.1–** Screenshots from the scenes of the story
 - 14.4.6 'The Apartment Meeting' 233
 - **14.5** A mock-up of the context cards showing the terms 'anti-Black racism' and 'misogynoir' ²³⁴
 - **14.6** A mock-up of a later version of the Racism Untaught workboard 235
 - **15.1** A footpath through Macclesfield Forest, England, near the author's home 241
 - **15.2** Moorland covered with bilberry, heather and rough grass in the Peak District national park, England 243
 - 15.3 Goyt Valley, Peak District national park, England 245
 - **15.4** Drystone walls still run across much of the north of England 248

ACKNOWLEDGEMENTS

he idea for this book grew from my doctoral dissertation, where I grappled with ways to redirect my communication design practice, reflect on my teaching and academic administrative experience, and develop my interests and dawning awareness in Canadian design history and its connection to design's political economy - all working towards a tangible practice in design studies. I have several people to thank for their support in developing this book. First and foremost, I am grateful for Laurene Vaughan's encouragement, guidance, and mentorship throughout my time as a PhD student and as a colleague in design education. I thank Olivia Davies, my editor at Bloomsbury, for her patience and kindness throughout this process. I continue to be inspired by my design colleagues at Emily Carr University, several of whom have contributed to this book. They are an amazing group of educators who have included me in lively and inspiring conversations about design and kept me on my toes. I also thank Lisa Grocott, another contributor to this book, who introduced me to the works of Hannah Korsmeyer and Myriam Diatta - excellent designers and scholars who have contributed their own chapters here. I am also so grateful for the love and support of my sister Jodie, who provided a quiet space at her house in the mountains where I could write my book proposal, walk through mountain trails, and occasionally laugh my head off.

Finally, I am thankful for my eternally patient and supportive family – my husband Stacey, my daughter Ava (an up-and-coming designer herself), and my son Zay. I would be lost without all of you.

CONTRIBUTORS: A COMMUNITY OF PRACTICE

Anne Burdick is a designer, scholar and founder of the Knowledge Design Lab. She is Acting Provost at ArtCenter College of Design. Her projects include the digital edition of the *New Variorum Shakespeare* (2021) with CoDHR at Texas A&M; *Digital_Humanities* (2012) with Johanna Drucker, Peter Lunenfeld, Todd Presner and Jeffrey Schnapp; *Writing Machines* (2002) with N. Katherine Hayles; and *Fackel Wörterbuch* (2000) for which she won the Leipzig Award for the 'Most Beautiful Book in the World'.

Myriam D. Diatta is an independent practitioner-researcher. Her non-disciplinary practice explores the work of creative practitioners and their relationships with critical theory. She holds a PhD from Monash University, Melbourne, Australia; an MFA in transdisciplinary design from The New School, New York City; and a BFA in interior design with a minor in industrial and interaction design from Syracuse University, New York.

Kate Fletcher is a professor at the Royal Danish Academy, Copenhagen. She is one of the most cited scholars in fashion and sustainability, and her work, including that on post-growth fashion, fashion localism, decentring durability and Earth Logic, defines and challenges the field. She has written and/or edited ten books available in eight languages. She is a co-founder of the Union of Concerned Researchers in Fashion. Her latest work is about design and nature.

Sophie Gaur practices across the fields of industrial design and visual communication. She teaches industrial design at Emily Carr University of Art and Design, Vancouver, Canada, and is an adjunct professor at the National Institute of Advanced Studies (NIAS), Bangalore, India, after having worked for many years at RMIT University, Melbourne, Australia. Born and raised in India, her practice is deeply informed by the intellectual and design cultures of that place. Her practice

focuses on design for, and through, the body, and exploring the intersections of design, mythology and language. She is also a book designer, working with poetry publishers, and the ways poetry is expressed in contemporary formats. She enjoys making objects, bookbinding, pinhole cameras and singing Hindustani classical music.

Lisa Grocott is a co-design researcher who thrives on collaborating with interdisciplinary teams on individual and cultural transformation projects. After a decade at Parsons School of Design, she now leads the Future of Work and Learning research programme in the Emerging Technologies Lab at Monash University, Melbourne, Australia. Lisa's relational approach to designing transformative learning is informed by collaborations with learning scientists, queer methodologists and education psychologists while drawing on her practice-knowing and Indigenous knowing. Born in Aotearoa, New Zealand, Lisa is of Ngāti Kahungunu descent on her mother's side, with whakapapa from the UK on her father's side.

Brian Johnson is a partner at Polymode, focusing on creative direction, design production, writing and teaching. He has guest lectured at the School of Visual Arts, Washington University, and the Institute for Contemporary Art at Virginia Commonwealth University. Born into a family of printers, Johnson is deeply invested in the production of good design without the expense of sacrificing our humanity, meeting both the client and the producer in the middle to respect all avenues of time and budget in a hyper-paced world. Johnson holds a BFA from the Rhode Island School of Design, where he met and began collaborating with Silas Munro. He also is Creative Director of Marketing at the University of North Carolina, Chapel Hill.

Hannah Korsmeyer is a designer, educator and research fellow in the Monash University Emerging Technologies Research Lab. Following a background in neuroscience (Trinity College, BSc) and critical design (Goldsmiths, University of London, MA), Hannah completed a practice-based design PhD at Monash University in 2022. Hannah's current research focuses on participatory methods of engagement, futures, co-design and feminist practice.

Celeste Martin is a communication designer and associate professor at Emily Carr University. She earned her MFA in design at the University of Iowa. Celeste specializes in typography and publication design. Her creative work examines the forms of written language and the spaces and manifestations of typographic texts. She has led numerous research initiatives on the re-conceptualization of book and text forms in emerging digital materialities. Her most recent work involves the translation of a corpus of Jorge Luis Borges's manuscripts of poems, essays and short stories.

Lisa Elzey Mercer is a designer, educator and researcher. Her interests are in developing and executing design interventions that fuel and sustain responsible design for social impact. The developed frameworks and tools are intended to create a space for conversation and knowledge exchange where participants can collaborate in creating new ideas and solutions. This type of methodology is evident in her current projects Operation Compass and Racism Untaught. She is an assistant professor of graphic design and design for responsible innovation at the University of Illinois.

Terresa Moses is a proud Black queer woman dedicated to the liberation of Black and brown people through art and design. She is the creative director at Blackbird Revolt and an assistant professor of graphic design and the director of design justice at the University of Minnesota. As a community-engaged scholar, she created Project Naptural and co-created Racism Untaught. She is currently a PhD candidate in Social Justice Education at the University of Toronto. She serves as a core team member of African American Graphic Designers and as a collaborator with the Black Liberation Lab.

Silas Munro is a partner of Polymode, a studio that leads the edge of contemporary graphic design through poetic research, learning experiences and making cool shit for clients in the cultural sphere, innovative businesses and community-based organizations. He is particularly interested in the often-unaddressed post-colonial relationship between design and marginalized communities. Munro holds an MFA from California Institute of Arts and a BFA from the Rhode Island School of Design, where he met Brian Johnson and began collaborating. Munro is Founding Faculty and Chair Emeritus at Vermont College of Fine Arts.

Dimeji Onafuwa is a Nigerian-American designer, researcher, artist and educator with experience in transition design. He currently manages a UX research team at Microsoft. Dimeji earned a PhD in design from Carnegie Mellon University. While at Carnegie Mellon, he studied commons-based approaches to user experience on platforms. Dimeji also holds an MBA and a BA in design and studio art. Dimeji co-founded Common Cause Collective, an interdisciplinary group of designers applying transition design methodologies to wicked problems in the Pacific Northwest. He has published papers, written book chapters and delivered keynote addresses and workshops on design and social justice.

Mark Rutledge is a graphic designer with decades of experience and currently is working from Whitehorse, Yukon. In addition to Mark's private- and public-sector

design experience, he is one of the few designers with deep roots and experience designing for Canada's Indigenous communities and organizations. Mark's portfolio is rich in annual reports, corporate brochures, research reports and book cover designs, but Mark's real passion is for branding and visual identity. Mark holds a diploma in graphic design from Seneca College, Toronto, and is a Certified Design Professional (CDP^{¬¬}) and National President of the Design Professionals of Canada (DesCan). He is also a Certified Registered Graphic Designer (RGD). He commits his time to many non-profit organizations and is connected to his Ojibwe roots, which hail from the Little Grand Rapids First Nation.

Louise St. Pierre researches and teaches industrial design, sustainable design and ecological practices at Emily Carr University. She is co-author of the internationally recognized book, *Okala Ecological Design*. Her most recent book, *Design and Nature: A Partnership* (2019), co-edited with Kate Fletcher and Mathilda Tham, gathered stories of how designers can build visceral understandings to work with nature. She continues to practice Vietnamese Zen Buddhism and to write and lecture internationally on design eco-literacy, with a focus on systems, animism and the understanding that humans are interdependent with natural systems rather than distinct or exceptional.

Patricia Vera is a Queer LatinX Mestiza (mixed race), architect, designer, educator and researcher with extended professional practice in design and architecture. Her practice has a special focus in land-based design, social innovation and sustainability. Her current research focuses in incorporating Indigenous knowledge and alternative epistemologies into land-based design and pedagogy. She teaches courses at Emily Carr University in Interdisciplinary Design and Critical Studies. Pat has an MDES from Emily Carr University, holds a Doctoral fellowship from the Social Sciences and Humanities Council of Canada and is currently a PhD candidate in Design and Social Context at RMIT University.

Leo Vicenti (Jicarilla Apache) holds an MFA from the School of the Art Institute of Chicago where his research in visual communication design explores the relationships between Indigenous languages and design. Over his career, he has worked in a variety of mediums across graphic and fine arts, including environmental and spatial design. His current research approaches Indigenous language preservation, revitalization and the return of these languages to everyday use through the development of language support in typography and representation in the design field. These interests grew out of professional practice-based research as an exhibition designer, one that engaged with layers of histories, structures, objects, images, languages and places. **Bonne Zabolotney** is an interdisciplinary designer, educator and researcher focusing on Canadian design culture – particularly anonymous and unacknowledged works – and the political economy of design. She holds a PhD in design from RMIT, an MA in liberal arts from Simon Fraser University, Vancouver, British Columbia, and a BDes from Alberta University of the Arts. She teaches critical studies and communication design at Emily Carr University.

Introduction

WHAT WE DESIGN IN A DESIGN STUDIES PRACTICE

Bonne Zabolotney

hat are the ways that designers share the knowledge they create from designing? How might designers contribute to the field of design studies, specifically from the standpoint of design practice? This collection of essays explicates design knowledge in action and describes the awareness and insights we make when we practice design. A design studies *practice* is a material and tangible focus towards knowledge production and mobilization in the field of design. In this context, knowledge production is a part of our creative process or a resulting designed work. In whatever form this knowledge is embodied or substantiated, it requires mobilization – a dialogic flow of information between knowledge makers and receivers. To be considered mobile, knowledge is made social in a demonstrable way. The research and projects that constitute this practice flow between production and mobilization in both directions – both acts are influenced by each other.

Scholars have been diligently working in, and defining, the field of design studies for over sixty years, and it would take a longer essay than this introduction to provide a comprehensive survey of the field. Cameron Tonkinwise describes design studies as extraneous to studio practice (2014), closer to Chris Frayling's design research definitions (1993), positioning design studies as 'a kind of research into design that is nevertheless still for design' (Tonkinwise 2014, 9). Stuart Kendall prefers to see design studies as a 'community connected through dissensus'(2014, 345). In this definition, Kendall celebrates dissensus as a 'heterogeneous assemblage of hermeneutic and heuristic strategies' (2014, 345). Victor Margolin positions design studies 'as a place where design is still an open subject', explaining that 'the

design domains have produced new knowledge that would not have otherwise existed. Thus, design studies scholars have the obligation to follow suit and show how knowledge they produce is different from that generated within the traditional disciplines' (2013, 406). To Margolin, design studies scholars only respond to the work of designing - indicating a binary between those who design and those who study design and designing. Alternatively, Clive Dilnot simply calls design studies as 'contending with what we have made' (Fry, Dilnot, and Stewart 2015, 133), while Penny Sparke equally simplifies the definition of design studies as 'the outcomes of studying design' (2016, 1). In both Dilnot and Sparke's definitions, there is room for a diversity of voices, practices, and points of view. 'Contending with what we have made' creates a much-needed space for decolonization and coping with design's culpability in pollution and climate change. These definitions, however, place design studies as authorities who critique design and assess its impact. From this perspective, design studies assign value to design, designers, and designing. Overall, these views of design studies create a tension between what might be seen as a conventional and scholarly design studies practice - embedded in the critiquing, historicizing, and theorizing of design, relying on designers' work as subject matter – and the potential of a practice-based design studies, which centres the design practitioners' experience and voice(s) within a broader community, or spectrum, of design studies practice.

In this book, design studies practice differs from the act of critique, which develops a narrative about design after practices occur, privileging the historian. It also diverges from the concept of 'praxis' – typically recognized as a synthesis of theory and practice. Praxis privileges the theorist, occurring when concepts about design precede designing on an a priori basis. In both praxis and critique, designers/designing are not the motivating *sources* of knowledge. Conversely, a design studies practice produces knowledge about design through reflexive and iterative design practices. It *prototypes* knowledge, informs public debate, contributes towards future design methods, and develops insight into inclusive design culture narratives. It positions the designer and designing at the centre of design discourse.

Design studies practices encompass the methods, reflections, and measures designers implement during the creative process. It addresses how designers come to understand their knowledge-making abilities while they design. One of the challenges in a design studies practice is to move past the idea that 'thinking' and 'doing' or 'making' is a transactional activity. It is not merely *thinking in action* or *reflection in action* (Schön 1984) or based on *critique* during the creative process. Designers think deeply about their actions, skills, practices, impacts, and body of work *temporally*. In other words, how designers shift, change, grow, and come to know the meanings of their practice is iterative and *evolves over time*. A design studies practice acknowledges the palimpsest-like qualities of deep reflection, of learning and reaction, of designing work that contributes to a larger cultural

body. To pinpoint this self-awareness developed over time, I turn away from the sociology and psychology of self-reflection and instead borrow from literary theory, adopting the meaning and metaphor of anagnorisis. Anagnorisis is the critical moment of recognition (or self-recognition) that shifts a character's understanding from ignorance to knowledge: 'the very notion of recognition invites a reflection on forgetting, memory, and identity' (Le Huenen 2013). In literature, anagnorisis often occurs when a character's true identity is revealed. It is a lightning-bolt moment of self-recognition and awareness. For designers, anagnorisis occurs in the moment of understanding our own strengths, our knowledges, our impact, and our communities of practice. These moments tell us who we are as designers, why we design, where we find our purpose, and how we might contribute to the ongoing interpretation, valuing, and historicizing of design.

Axiological designing and the practices in this book

This book begins with the exploration and redirecting of design practices, moves towards repositioning design by utilizing new paradigms and ways of understanding our work, and finally examines the ways that designers are immersed in theories, philosophies, histories, and methods within a mature design practice. Design and designing have always contended with dichotomies: theory versus practice; professional practice versus academic or pedagogical practices; and the scientific inquiry of design (represented by methods, outputs, evidence) versus the philosophy of design (cultural context or cultural meaning). These tensions create crucial discourse about design, but do not always build meaningful connections to close the gaps or to soothe the discord located within these dichotomies. The practices represented in this book can avoid these tensions and be conceptually understood in other ways. In many instances described in this book, design studies merges with the political economy of design/designing in an axiological position. Axiology, essentially, is the study of value or worth. Because political economy underwrites or preconditions the way that we investigate, critique, historicize, and categorize design (Zabolotney 2021), axiological positions are unavoidable. They establish the relationship between monetary value and worth, cultural value, and ethics in design. These relationships guide how we choose to interact within a material world of designed things, potentially leading us to meaningful and inclusive narratives about design. Escaping the grasp of market-based capitalism is not an easy task in design. Designers often refer to their work as 'value-added' but do not always articulate what this truly means. The political economy of design directs design's monetary value, typically experienced at the point of purchase, but it can also affect design's cultural value. The monetary value of design supported

by professional practices and the cultural value of design described in our histories and theories remain at odds. This difference underscores a difficult truth for designers and historians – that despite the rhetoric built around the cultural, economic, and social values of design, contemporary economics support the concept that products of design economically depreciate with use (Zabolotney 2017). This depreciation affects the way in which we choose to culturally value design, or to exclude depreciated design from our histories and narratives. To add to this mix are design's concerns and responsibilities in decolonization and sustainment (Fry 2009) – a much-needed reconciliation with its ecological impact, ableist, and capitalist past.

Working towards axiological *designing* means that what we value in design and the way in which we create cultural, political, economic, and aesthetic value as designers in turn shape our values, economies, and ethics in everyday life. Design should not, and does not need to, impair this world. The design practices represented in this book are serious about redirecting their practices, being guided by conceptual and paradigmatic shifts in designing and developing a synthesis of values, ethics, methods, and personal histories towards an immersive design practice. Axiological designing also contributes towards the formation of interdisciplinary communities of practice. Practising professional designers and practice – designers within the academy want to form meaningful communities of practice – designers bound together by values, practices, and goals rather than only by disciplinary categories such as technologies, skills, or materials. They want to break through the boundaries and discourse set by professional associations who defer to the capitalistic fetishism of design, rather than the axiological positioning of design and designers.

The goals and limits of this collection of practices

The design practices described in this book indeed have goals and limits. This book does not speak for all practices in design, or for all subjects tackled in design studies, but demonstrates various ways in which to express the production of knowledge by placing designers at the centre of this knowledge.

While we stress the importance of communities of practice throughout this body of work, the individual and differing voice of each author in this book is important and intentional. The writing voices contained in these chapters are an extension of each unique mode of practice. The tone of various work shifts and amplifies as designers tell their own stories, write histories, and theorize about their work. This, in essence, represents the authentic plurality of design studies. To my mind, this does not equal dissensus as Stuart Kendall describes, but acknowledges and welcomes the messy conditions while we grow, decolonize, and come to terms with our practices with a real goal of futuring (Fry 2009) and reconciliation.

Finally, this book does not intend to refute design studies scholars who have thought deeply and written intently about design. It does, however, ask for the space for designers to make contributions to the field of design studies and to maintain the right to keep these contributions undisciplined, disordered, and sometimes contradictory. Design studies practices see multiple modalities of knowledge as equally important and challenge the textual authority that design studies have traditionally asserted. *Textual authority* in this case refers to the dominant form of knowledge – the written text. Within the varied attempts to prototype other practices of design studies, practitioners are still confronted by the authority and power of the written form of the knowledge they produce. This assertion admittedly creates a clear irony in this *written* book, which leverages the written word to assert the academic value of other expressions of knowledge, but it is a first step in forming a community of practice with designers who make and share knowledge.

References

- Frayling, C. (1993). 'Research in Art and Design', *Royal College of Art Research Papers*, 1(1), 1–5.
- Fry, T. (2009). *Design Futuring: Sustainability, Ethics, and New Practice*. London: Bloomsbury.
- Fry, T., Dilnot, C., and Stewart, S. C. (2015). *Design and the Question of History*. London: Bloomsbury.
- Kendall, S. (2014). 'Positioning Design Studies', *Design and Culture*, 6(3), 345–68. doi: 10.2 752/175613114X14105155617465.
- Le Huenen, R. (2013). 'Preface'. In Teresa G. Russo (ed.), *Recognition and Modes of Knowledge: Anagnorisis from Antiquity to Contemporary Theory*. Edmonton: University of Alberta Press, ix–x.
- Margolin, V. (2013). 'Design Studies: Tasks and Challenges', *Design Journal*, 16(4), 400–7. doi: 10.2752/175630613X13746645186043.
- Schön, D. A. (1984). *The Reflective Practitioner: How Professionals Think in Action*. New York: Basic Books.
- Sparke, P. (2016). 'Introduction'. In Penny Sparke (ed.), *The Routledge Companion to Design Studies*. New York: Routledge, 1–18.
- Tonkinwise, C. (2014). 'Design Studies What Is It Good for?', *Design and Culture*, 6(1), 5–43. doi: 10.2752/175470814X13823675225036.
- Zabolotney, B. (2017). 'Locating New Knowledge in an Unacknowledged Discourse'. In Laurene Vaughan (ed.), *Practice-Based Design Research*. London: Bloomsbury Academic, 19–28.
- Zabolotney, B. (2021). 'Political Economy Pushes Back: How Structures of Power Affect Design Culture (Redux)'. In *Attending to Futures*. Köln, Germany: Köln International School of Design.

SECTION 1

INTRODUCTION: REDIRECTING PRACTICES

Bonne Zabolotney

This section discusses what it means to redefine, change, or pivot towards a renewed practice. It focuses on the actions of designers as they build and refine practices or components of their practice. Tony Fry uses the term 'Redirective Practice' (2009) to describe the needs and ways for designers to develop towards the goal of Sustainment - that is, the state of design which no longer defutures our ecological reality through unsustainable outcomes. In these essays in this book, however, redirection takes on a different definition (with respect to Fry) and instead describes the shifts from expected established practices towards inclusive practices with unconventional qualities. Redirection, in these chapters, embodies the notion of emplacement (Zabolotney 2021). Displacement in design studies and its practices requires the occupation and control of intellectual space. This means asserting dominant perspectives, knowledge, and vocabulary about design which displaces local cultural knowledges. In contrast, emplacement recognizes the context and effect of design narratives (ibid.). Redirecting practices for emplacement recognizes designers as place-based and culturally embedded. It supports the idea that designers bring with them learning experiences and personal values to their work.

In Chapter 1, I identify the productive space of ambiguity and describe how embracing a framework of 'tactical ambiguity' allows designers to possess simultaneous contradictions and to remain open to interpretation as they develop histories and theories about design. In Chapter 2, Patricia Vera describes a method she calls Land-Bordering, 'which captures the transmission of memories and lived experiences as they connect to the land'. Hannah Korsmeyer, in Chapter 3, explains how she utilizes design research practice narratives to build a feminist design practice. She writes, 'we might better understand how to make transformations if we do not overlook how our own transformations are co-evolving with our co-design practices'. In 'Languages and Typographic Representations', Chapter 4, Leo Vicenti finds meaning and connection in design by coming to understand pre-colonial Apachean culture and its deep cultural roots in making. Vicenti states that 'understanding this complex history of ours, it has helped to reveal my indigenous design philosophy that lives through creation in the present'. In Chapter 5, I interview and discuss design practices with professional designers, who seek meaningful moments as they build and sustain their design practices. Mark Rutledge reflects on the influence of his life's experience as a child of the Sixties Scoop generation, and how love and reconciliation intertwine into meaningful practice and leadership. Like Vicenti, Rutledge also asserts that Indigenous cultures, by definition, have always designed. They have designed within their material needs, along particular production qualities, and within an everyday context. As with Rutledge's assertions about reconciliation in practice, Brian Johnson and Silas Munro, from Polymode, discuss the role of vulnerability and transparency in design and design studies practices. They mourn the loss of the mentors they never had a chance to work with while writing their stories into meaningful BIPOC design histories for a new generation of designers.

References

- Fry, T. (2009). *Design Futuring: Sustainability, Ethics, and New Practice*. London: Bloomsbury.
- Zabolotney, B. (2021). 'Points of Inversion: Upending Structural Narratives in Design History', Memory Full? Reimagining the Relations between Design and History. 2021 Design History Society Annual Conference. FHNW Academy of Art and Design, Basel, Switzerland.

1 TACTICAL AMBIGUITY:1 DESIGNING IN THE SPACE BETWEEN

Bonne Zabolotney

s a design studies practitioner located in Vancouver, Canada, I am preoccupied with anonymous and unacknowledged design in Canadian history - a sparse and neglected subject which lacks documentation and meaningful narrative. Canada is a country built by governmental and cultural colonialisms, with cultural policies that exclude design's contributions. Our thin record of design culture currently resembles Jody Berland's description of Canada's deficient cultural definition, described as 'conscious ambivalence on the reflexive side of a border across which narratives, identities, and agendas seem all too certain' (2009). Berland cautions that we may experience 'ambivalence bordering on self-erasure' (ibid.) and questions our absence of analysis in cultural studies in Canada, asking 'What constitutes an active or emancipatory cultural practice when the actors are in such a complicated mood?' (ibid.). Design culture and design histories in Canada occupy an ambiguous space, but this space need not be unproductive or unambitious. Rather, design studies practitioners can choose to take Liz Bondi's advice, encouraging us to embrace a 'politics of ambivalence, which is 'not about "sitting on the fence", but about creating spaces in which tensions, contradictions and paradoxes can be negotiated fruitfully and dynamically' (2004).

It is not the absence of a body of scholarly work in Canadian design which creates an ambiguous space; rather, it is the lack of tools and methods required to contribute to meaningful scholarly work in design studies in Canada. Developing practices and methods for design studies is crucial in order to intervene in a history before it is inadequately constructed. Ambiguity is a space of knowledge, filled with what I don't know.² The process of reflecting on what I don't know,

or what I need to know, leads to curiosity and action towards knowing. It leads to speculation and experimentation. It is a fluid space in which design studies practitioners can creatively dwell, to explore without the pressures of concluding, defining, problem-solving. In this space, emancipation and exploration are simultaneous.

This chapter describes the ways in which I adapt Berland's 'conscious ambivalence' and Bondi's 'politics of ambivalence' towards a framework of *tactical ambiguity*. These methods and approaches allow me to possess simultaneous contradictions and remain open to interpretation. Tactical ambiguity lends flexibility to design studies practices and helps to continually reshape tools and methods in building design cultures. It resists universal structures yet contributes to the creation of frameworks and other structural elements. It also assists in the development of reflexive practices and pattern synthesis (Cross 2006) by reinterpreting and revaluing research through abductive reasoning and informed speculation.

From the particular, towards the general, and back

Throughout my research³ I have used ordinary and everyday design objects from my own collection – works of design that are overlooked in our sparse Canadian design history.⁴ This immediately places me in an ambiguous state because there are no precedents or larger body of scholarly work in which to reflect on the impact and interest of specific artefacts in my design collection. I am left to speculate on the ways to contextualize this work within a larger network of design. Tactical ambiguity requires locating the ontological space between the particular/specific and the general/universal considerations of design. While not naming them as ambiguous or ambivalent spaces, other design studies scholars have touched upon this topic, sometimes with caution, other times with great interest. Celia Lury relates the academic concern of generalizing particular research outcomes - the proliferation of the interpretation of outcomes – as 'the problems of how to defend the value of the always relative existence of epistemic things, and the special legitimacy ("rigour") and distinctiveness or not of disciplinary knowledge' (Lury and Wakeford 2012). Ambiguous space can indeed lead a designer astray, but to maintain engagement and avoid a linear progression of particular experiences directed towards generalizations, it's important to remain fluid and open to the transformation of ideas. For example, in his essay 'Familiar Things' (2011), Ben Highmore describes his relationship with a 1970s-era chair from Habitat. Highmore's descriptions of his chair are intertwined with the history of Habitat in the UK and of his nostalgia of listening to specific music while seated in the

chair. With his specific music-memory, he connects the genre of music directly to a genre of furniture. Highmore uses his chair as a point of investigation to understand our relationship with the ordinary, and how we might transfer ideas about objects like his chair to the social sphere without particularizing: 'One way, then, of edging beyond the particular towards the general is to suggest that objects can be treated as symptoms for something wider, more diffuse' (ibid.). Highmore's comment about particularizing is helpful in sorting through the emotional or affectual nature of personal possessions to move to a broader consideration of collections - not only as a network of habits or behaviours (Baudrillard 2005) but also as a wider landscape of objects that exist throughout everyday life. Daniel Miller also sees personal collections or possessions as indications, or symptoms, of 'retaining a commitment to understanding humanity as a whole' (2008). Another way of considering the spaces between the particular and the general is to understand design and design practices throughout history as a series of nodes within a network. Networks can be built and rebuilt according to need and context, just as histories and narratives about design can be recontextualized and retold from varying perspectives. This approach is emphasized by Guy Julier, who encourages us to be less concerned with design viewed as singularities and instead view them as 'the orchestration of networks of multiple things, people, and actions' (Julier and Munch 2019). Johan Redström similarly examines 'the tension between the general and the particular' (2017) but argues for a more fluid approach: the consideration of particulars requires some precision, and that specific examples are useful, but that generalizing or universalizing the particulars requires a construction of paradigms (ibid.). This fluid approach means moving from the particular to the general, and from the general to the particular, during the design-making process. This requires breaking down both general and broad questions to detailed interrogations and then reframing the results back into a larger paradigm.

Values, attitudes, ethics

The practice space of tactical ambiguity requires tools, paradigms, and a comfort with uncertainty as it moves between the conceptual spaces of 'the particular' and 'the general'. It calls for a positive attitude towards transparency and openness to future change. This means approaching research projects with patience, generously sharing outcomes and paradigms with others through various modes of discourse, optimistically inviting others to speculate on my work and design objects in question, practising reciprocity through critique and discourse, and returning scepticism with compassion and kindness. These values and attitudes require discipline and practice themselves. 'Emancipatory cultural practices' (Berland 2009) cannot be formed through cynicism, or designers risk replicating what Daniela Rosner refers to as the dominant design paradigms: individualism, objectivism, universalism, and solutionism (2018). Rather, Rosner encourages us to embrace alliances and collectivity in our work, 'ignite recuperations' to better understand the complex contexts of design, interpret design as 'interferences' within 'regimes of practice', and remain open to positioning design as 'extensions, sustaining material outputs through their continued circulation in practice' (ibid.).

The tactics of tactical ambiguity

Between 2017 and 2019, I developed a working framework for knowledge production that could be adopted, adjusted, and redeveloped with use by other design studies practitioners. This framework is a structured and unconventional way of examining design from various lenses and perspectives that contextualizes design rather than idolizes it. It pushes back on the pressures of the political economy of design (Zabolotney 2021) to privilege the named, or so-called iconic, works throughout design history and encourages the production of knowledge in ways that subverts textual authority.⁵ As I worked through my research, I began to merge theories from other disciplines with the historical investigation of specific objects and ephemera from my personal collection, or material autobiography (see Chapter 7 of this book). This developed new perceptions in ways that reflected and supported my structural framework of actions and tactics. As I continued to develop my framework and challenge the conventions of cultural valuation, I utilized abductive reasoning to position each design work culturally, politically, and historically. Nigel Cross refers to abductive reasoning as 'the logic of conjecture' (2006). This reasoning was particularly useful when confronted with an absence of information or context, which occurred when I was compiling information about plastic toys made in Canada, or when my research interviews did not necessarily expose a commonality between the participants. In this mode of knowledge production, I synthesized and constructed patterns and commonalities where possible, and deployed abductive reasoning where the patterns were less discernible and where information was scarce (Figure 1.1).

This framework was built upon observations and experiences from research projects. It utilizes what Redström refers to as 'ostensive definitions' (2017) – defining or naming things through making in design which is 'a very basic way in which humans connect things and words, or concepts'. Redström also encourages designers to read theories from other areas, arguing that 'if the work is carefully done, it can be understood as a building up of the worldview that constitutes the context of the "basic beliefs" of a design programme; it is to create and conceptually furnish a place where one can work'. He explains further that alternate theories

Conceptual Findings

Actions & Tactics	De-Trash: reconstitution or reconsideration of artifacts once treated as trash	Refutation: refusal to accept the status or interpretation of an artifact	Filter/Sieve: separation of individually regarded artifacts to achieve future alignment with other artifacts	Constitution: the reification with collective acceptance of an idea
Pierce: to "cut through" experimentally	1951 Moose Jaw Film; cuts through nostalgia	Maclean's Magazine Cover, 1951	Prep work for <i>Never Precious;</i> cuts through perceptions of banality	Medalta Dinerware; cuts through industrial history
Consign: to position decisively	Eaton's Catalogue as design artifact	Anonymous Design: public presentations	table of Eaton's Catalogues at <i>Never Precious</i> exhibit	New Paradigms Presentation at UACC
Pivot: to move from one position to another; reframe	<i>Never Precious</i> plate breaking and subsequent removal	Political Economy book chapter and public presentation	Personal Collection (pivots from particular to general)	Never Precious exhibit
Transmute: to change the expression/ matured in form or substance	Medicine Hat News ceramics feature	Ontario Archives documents and Sam Carter's 1941 Eaton's Catalogue	Interviews with Collectors	Eaton's Catalogue as Colonial Folklore
Spam: to repeatedly and relentlessly send out information	Canadian Pacific Travel Brochures (one post every 7 minutes)	Plastics Instagram Feed	Eaton's Walls in <i>Never Precious</i> exhibit	Social Media Ads/Promotions

FIGURE 1.1 Action framework, designating earlier research projects at the nexus of corresponding actions and concepts.

offer 'different access points to critiquing established and dominant positions' and that it is not necessary to align work with these theories but instead could be considered how the project differentiates from other theories. Here he uses the metaphor of figure-ground relationships rather than the typical cause-and-effect of applied theory (ibid.). As I began to question the language which I was using to engage in my research I saw the opportunity to use language and terms that activated the work and encoded my practice. I originally kept a list of terms that

I believed was already embodied in my research or where I could assert actions with intent. These terms included: nimbleness, pivot, flex, contract, spamming, intruding, perforate, pierce, transfer, consign, shift, and translate. Celia Lury refers to these methods as '-Ings!' (2018). They are 'compound methods' that involve a blend of practices, opening the researcher to ways to 'intervene in and make the present active' (ibid.). Ultimately, I chose five terms that possessed the ability to represent one or more of these ideas and could be consistently applied and activated in the future as viable methods. These were:

- *Piercing or puncturing*: experimenting with a premise in such a way that it 'cuts through' ways in which a design might be typically considered, disregarded, or positioned, with the goal of arriving at specific conceptual findings. The impact of piercing could be evident in a single anecdote or example. It is intended to make a conceptual dent that could be verified or contested in the future.
- *Consigning:* asserting and committing decisively to a concept or a positioning of design. Unlike piercing, which can be speculative, experimental, and/ or provocative, consigning takes a solid perspective to arrive at the four conceptual findings in the framework.
- *Pivoting*: moving from one theoretical position to another with the intent to challenge each position and to speculate future possibilities of a design artefact's status. When pivoting, you must understand the significance of pivoting away from or pivoting towards a particular conceptual space. For example, pivoting away from art history towards a narratological framework requires an understanding of why that might be necessary and what new insights this could provide.
- *Transmuting:* changing the expression or premise of design, usually in a way that indicates an alteration towards a more mature state than where it began, as in a metamorphosis. For my research, the act of transmuting also required a cross-reference or second source to assist in the maturation of information. That meant suspending the analysis of any design artefact until more information became available, or until additional research methods assisted in developing more knowledge.
- *Spamming*: using the indiscriminate force of repetition and relentless information to emphasize concepts about design to as many recipients as possible. In true definition, spamming occurs on the internet; however, I have also experimented with spamming during my 2017 *Never Precious* design exhibit.⁶ Spamming is not subtle. It is intended to create leverage for the benefit of the overall project. Spamming may also adopt instances of piercing, consigning, transmuting, or pivoting, but it foremost works with a large amount of information within a short period of time (Figure 1.2).



FIGURE 1.2 Walls of *Never Precious* exhibit, spammed with pages from a 1964 Eaton's Catalogue. Photos by Bonne Zabolotney.

These terms were weighed against conceptual findings - the de-trashing of design artefacts, the refutation of the premise or status of design, the sorting or filtering of design, and the constitution or reification of design – that describe the intended impact of each project and arose from the context of the work at hand, and the goals I had established to reposition the cultural consideration for each example. The concept of *de-trashing*, or not-trashing, is the reconstitution or reconsideration of artefacts once treated literally as trash. Refuting is the refusal to accept the status or interpretation of an artefact, usually paired with new possibilities to consider. Sorting or filtering is the separation of individually regarded artefacts to achieve future alignment with other artefacts, or within a series of similar artefacts. Constituting is the reification with collective acceptance of an idea, or the effort to make an assertion about design real and substantial. These findings should change and evolve over time as the field itself changes and broadens to accept alternative ways of building an inclusive design canon. In using this framework, there is no evaluation of 'good' or 'bad' design. Formal and aesthetic analysis can take place within the framework, but the conclusions and positioning of design artefacts are based on cultural impact and the context of design work temporally - in other words, how it may be considered throughout time - and how it may be considered by other cultures.

Research projects and case studies: Tactical ambiguity in action

Despite Highmore's concerns about particularizing specific designs in ways that might distort our understanding of its general meaning or context, Redström's assertion that 'the dichotomy between the particular and the general can be conceived as a design space' (2017) encourages a design practice situated in the ambiguous space between the particular and the general, where I might speculate about design artefacts and their place in history. Moving between specific or detailed assertions towards general concepts and directions echoes the convergent and divergent processes in design development and erodes the notion that ideas and concepts move in one direction only - towards refinement and commodification. For example, the Transmute: Refutation project begins with the discovery of a specific Eaton's catalogue from an interview participant's collection that was also the subject of analysis in Eaton's business archives in the Ontario Archives. Crossreferencing the archived analysis with the actual and original catalogue itself makes space for a renewed comparative study. It also begins to refute the archival specimens as business or industry records, and instead repositions them as historical evidence of design. As this project matures (transmutes), it can move to a new place of action within the framework: *consign*, with a goal to constitute the knowledge further through production and mobilization. This practice of moving back and forth through the framework, from particular to general knowledge, allows me to resist the urge to build monuments or icons of Canadian design and instead attempt to parse the sometimes coherent, and other times disconnected, network of Canadian design culture. Similarly, Redström's work in making design theory supports this method:

whereas others look toward the universal for support and stability, design needs theories that support conceptualizing, articulating, making, communicating, collaboratively creating, and so on, something new and particular. (2017)

Another research project, situated at the *Spamming: Refutation* nexus, existed exclusively on social media and developed a prototypical mode of discourse for design studies practice. Over the course of two days, I spammed my Instagram and Facebook feeds with forty posts that introduced nascent ideas about plastic toys manufactured in Canada. This project refuted the idea that plastic toys were created only to entertain children and hypothesized that plastic toys were also created as a test site for material integrity and research into the extent to which plastic could be used for other industrial purposes.

There is little to no available information about the licensing and collaborations between plastics manufacturers in Canada or where any original designs for plastic

toys originated in Canada. Most, if not all, of the toys displayed in this project were manufactured by injection-moulding techniques with experimental plastics. The print design and packaging for the toys are Canadian, however, and offer some insight into the effort in responding to a demanding market for toys. It is evident, however, that plastic toys from several plastic moulders and manufacturers were a prolific element in Canadian culture from the 1940s onwards. The toys from my personal collection featured in my social media feeds are from three different Canadian companies: Reliable Plastics Co. Ltd, Percy Hermant Co., and Peter Austin Manufacturing Co. These toys were all made in Canada, but we don't know if they were designed in Canada or if the toys were adapted from US licensed patents. The packaging for these toys, which appear to be designed and printed in Canada, deserves equal attention as exceptional and anonymous Canadian design. This project could also be considered as a piercing tactic, as it speculates and asserts a position with little supportive data. I chose spamming as a preferred tactic for this project with a goal to solicit possible responses from social media users, hoping that other non-designers would reply with additional information to move this case study forward to other conceptual findings (Figure 1.3).

There are anecdotes and some evidence to support the idea that plastic toys were used as test sites for material integrity and manufacturing during early plastic and injection-moulding booms in the 1940s and 1950s. The Canadian History Museum online claims that Reliable Toys used surplus plastic, but Donald Emmerson states that toys were the testing ground when new plastic compounds



FIGURE 1.3 Instagram post discussing Canadian Plastics.

became available, stating 'During World War II most of Reliable's plastics production was for war uses but whenever plastic compounds became available the company tried them on toys. The first were jeeps' (1978). If the plastic materials performed successfully as toys, then Reliable deployed the knowledge about this material for unspecified war uses. Also, according to Emmerson, Percy Hermant Ltd was a 'well known molder' (1978) who also made toys. Percy Hermant, the company's namesake, also owned a company called Imperial Optical, which made eveglass lenses. Could they have also possibly manufactured eveglass frames? The Sta-Lox bricks were manufactured by Peter Austin Manufacturing Co., formed by Kelton Manufacturing Company to produce toys. Kelton Manufacturing is listed in a 1941 Statistics Canada report, listed under women's clothing. There is evidence that each of the three toy plastics companies was either connected to other companies that manufactured unrelated items such as eyeglasses or textiles, or it was publicly known that they manufactured war-time supplies. In the case of Reliable Plastics, they used the same company name for all their products. The lack of archival or written information about the history of both Peter Austin Manufacturing and Percy Hermant is curious because Emmerson indicates that the manufacturing of plastic toys during the mid-twentieth century was a prolific and profitable industry. Given the large amount of products produced during the 1940s and 1950s, it is odd that the business archives of these companies are not more apparent or accessible. Emmerson also related a particularly alarming, yet revealing, anecdote originating from the former president of Reliable Plastics:

Reliable Toy was one of the first to use plastisols, around 1947–48, using Goodrich vinyl resins. 'We played around with little squeeze toys. We had a few prototypes molded and they looked beautiful. I left one overnight on the desk. The next morning, I picked it up and lifted the lacquer off my desk as well. In those early days, the plasticizer used to bleed'. ... Around this time the injection molding of doll's heads and limbs was largely supplanted by plastisols which were found to be more skin-like and flexible. (1978)

Using abductive reasoning, it is possible to speculate that these companies manufactured toys with experimental plastics to test the stability and capabilities of new materials and processes, without regard to the safety of children in terms of exposure to harmful plastics and without an understanding of the environmental impact of producing a prolific number of plastic toys.

Toys as material tests is a *justifiable speculation* when considering the unusual attention to detail in many of the toys. There also seems to be experimentation in connectors and joints in plastics, which tests the limits and strengths of plastic material, as demonstrated in the Reliable Plastics' ukulele, or in the wheels and connectors of a set of Reliable Plastics' trains. The Percy Hermant Bus is composed of at least three different plastics: a removable top of the bus, made with clear

plastic (possibly a kind of polystyrene); a red plastic body (also polystyrene); and two removable figures plus a stationary driver inside the bus, made of a pliable vinyl. The figures of children are highly detailed. These details are not only an indication of quality from a consumer perspective. They also continue to attest to the fidelity of the plastic material, as well as the capacity of plastic moulds to produce important details for other non-toy objects. Demonstrating material strength, flexibility, and usage in toys that receive a rigorous test – children's play – allowed manufacturers to apply these qualities in more serious areas: war effort, clothing (buttons, zippers, etc.), and eyeglasses. Each toy was a material lesson for these manufacturers.

Developing transferable and flexible frameworks

The actions and tactics defined in my framework support tactical ambiguity and provide flexibility to explore projects with intent. The framework is meant to be broad and interpretable, but in order to deploy any of the listed tactics, a researcher must have an interdisciplinary knowledge of theories, histories, and methods of other fields. It would not serve this project to develop tactics to disrupt the field of design studies without an understanding of the impact in the field. It would neither strengthen this project by superficially misrepresenting theories and approaches from other fields. The framework is intended to be deployed with interdisciplinary consideration and scholarship, even where some actions are more experimental than others.

This framework must also withstand usage from other scholars and practitioners, in fields within and without design. The opportunity for this scholarship in Canadian design studies is unique and short-lasting: this area of study is relatively vacant, leaving an opportunity to explore new ways and means of understanding design culture without having to refute an existing canon of works. Canadian design scholars have an existing opportunity to build something meaningful and inclusive – there is no need to fall back on existing frameworks with restrictions and boundaries of how we might identify and value design works, or how we define what can be called design.

Tactical ambiguity is productive in moving my practice away from the expectations of canon-building and towards articulating networks of design culture. It enables design studies practitioners to create space to confront others or develop dialogue, speculate and experiment with ideas before constituting them, and suspend judgment about design – not to remain scientifically objective but to subvert the expectations of any established conceptual or cultural structures. Ambiguity helps to continually reshape tools and methods while Canadian design culture emerges and clarifies because it *resists structure*. 'Ambiguous forms of knowledge are not easily assimilated to disciplines or marketing categories, and

they complicate the notion of academic output, reintroducing something more vital and messy, something undisciplined' (Kember 2020). Tactical ambiguity affords me the ability to confront a messy, disorganized, and dislocated history all the while building a flexible infrastructure that invites others to participate. It is meant to mobilize and bring knowledge into the public domain, providing structural opposition to the private and propriety space of authorship and material possession, and it allows for non-designers and design studies scholars to engage and participate in the work to produce greater cultural meaning and context.

Notes

- 1 The terms 'ambivalence' and 'ambiguity' are somewhat interchangeable throughout this chapter. Ambivalence is often thought of as resisting solutions with mixed feelings, whereas ambiguity possesses the qualities of openness and uncertainty. It's entirely possible that my conflation of terms remains intentionally ambiguous, in order to freely explore various spaces and to stubbornly remain impervious to precision and categorization.
- 2 Ambiguity, in this chapter, is not agonistic. Carl DiSalvo defines agonism as 'a condition of disagreement and confrontation a condition of contestation and dissensus' (2012) which promotes a dynamic and ongoing critique of democratic constructs. While my tactics of ambiguity are equally open-ended and possibly provocative, they do not always share the same political goals in which agonistic practices are focused. The tactics in this chapter reveal an underlying political economy of design in Canada (Zabolotney 2021) but ultimately exist to build a methodology towards design history.
- **3** Much of the work in this chapter is taken from my PhD research and dissertation and subsequent Canadian design history research (Zabolotney 2019).
- **4** I discuss my personal collection as a material autobiography and other paradigms in which to reconsider design histories in Chapter 7 of this book.
- **5** As mentioned in the introduction of this book, 'Textual Authority' refers to the dominant form of knowledge the written text.
- 6 In June 2017, I curated *Never Precious: Anonymous Design in Canada* at the Charles H. Scott Gallery in Vancouver, British Columbia. The aim of this exhibit was to display everyday designed items from the early to mid-twentieth century to address the historical problem of identity within Canadian design. This exhibit also demonstrated a rich, varied, and prolific scale of Canadian design, mainly overlooked by design historians.

References

Baudrillard, J. (2005). *The System of Objects: Jean Baudrillard*, trans. J. Benedict. London: Verso.

- Berland, J. (2009). 'Writing on the Border'. In S. Mookerjea, I. Szeman, and G. Faurschou (eds), *Canadian Cultural Studies* (pp. 472–87). Durham, NC: Duke University Press.
- Bondi, L. (2004). 'For a Feminist Geography of Ambivalence', *Gender, Place and Culture*, 11(1), 3–15.
- Cross, N. (2006). Designerly Ways of Knowing. London: Springer.
- DiSalvo, C. (2012). Adversarial Design. Cambridge, MA: MIT Press.
- Emmerson, D. W. (1978). Canadian Inventors and Innovators 1885 to 1950: Pioneering in Plastics. Toronto, ON: Canadian Plastics Pioneers.
- Highmore, B. (2011). Ordinary Lives: Studies in the Everyday. London: Routledge.
- Julier, G., and Munch, A. V. (2019). 'Introducing Design Culture'. In G. Julier, A. V. Munch, M. Nygaard Folkmann, H. Jensen, and N. Skou (eds), *Design Culture: Objects* and Approaches (pp. 1–9). London: Bloomsbury Visual Arts, Bloomsbury.
- Kember, Sarah (2020). 'Writing Out of Turn'. In Kat Jungnickel (ed.), *Transmissions: Critical Tactics for Making and Communicating Research* (pp. 195–208). Boston, MA: MIT Press.
- Lury, C. (2018). 'Introduction: Activating the Present of Interdisciplinary Methods'. In C. Lury, R. Fensham, A. Heller-Nicholas, S. Lammes, A. Last, M. Michael, and E. Uprichard (eds), *Routledge Handbook of Interdisciplinary Research Methods* (pp. 1–26). New York: Routledge.
- Lury, C., and Wakeford, N. (2012) *Inventive Methods: The Happening of the Social*. New York: Routledge.
- Miller, D. (2008). The Comfort of Things. Cambridge: Polity.
- Redström, J. (2017). Making Design Theory. Cambridge, MA: MIT Press.
- Rosner, D. (2018). *Critical Fabulations: Reworking the Methods and Margins of Design*. Cambridge, MA: MIT Press.
- Zabolotney, B. (2019). *Discontented: Actions and Tactics of a Design Studies Practice*. RMIT University. https://researchrepository.rmit.edu.au/esploro/outputs/doctoral/Disconten ted-actions-and-tactics-of-a/9921863640101341#file-0 (accessed 29 November 2022).
- Zabolotney, B. (2021) 'Political Economy Pushes Back: How Structures of Power Affect Design Culture (Redux)'. In *Attending to Futures*. Köln, Germany: Köln International School of Design.

2 YVY REMBE'Y ROJAPO (LAND-BORDERING); BETWEEN BORDERLANDS AND INTERSECTIONS: DISMANTLING THE COLONIAL STRUCTURES OF MODERNIST DESIGN

Patricia Vera

s a LatinX brown Mestiza queer woman, the different intersections that determine who I am are also my *borderlands*: those cultural borders that I redefine as intersectional margins, where the racialized view of capitalist and modernist societies defines and delimits geographies and cultural identities, creating oppression, discrimination, and marginalization.¹ In this chapter I present a methodology that I define as *land-bordering*, which captures the transmission of memories and lived experiences as they connect to the land and the intersections that influenced that experience. It is making 'with' the land, to become a space of possibilities and sympoiesis² (Haraway 2016).

Land-bordering proposes a design process of emergence through dismantling the colonial structures of modernist design that exacerbate the individual and the universal, by looking back, reading place, recognizing its Indigenous sovereignty (Behrendt 2003 in Akama, Hagen, and Whaanga-Schollum 2019), and tracing the footprints of a community that aims to build a world where many worlds can fit (Zapatistas Manifesto, in de la Cadena and Blaser 2018, 1).³ Che reñoi hague Paraguaipe, Ava Guarani retã, umi español omondákue ymaguare. Che aiko ha amba'apo Kanatape, Ava x^wməθk^wəỳəm (Musqueam), Skwxwú7mesh Úxwumixw (Squamish) ha səlilwəta?ł (Tsleil-Waututh) tetãpe. Ko Tetã ndoñeme'ê maramove. Tetã memby ha'e ko tetã kuera tendotá.⁴

Mestizaje and the context of a 530-year-old race dilemma

I am a Mestiza, which comes from Mestizaje⁵ and means mixed race, in my case of Indigenous Paraguayan Guaraní ancestry and European Spanish and Italian ancestry. I was born in the Global South, in Asuncion, Paraguay, on the traditional and stolen territories of the Guaraní peoples. Recognizing my own identity and bringing in my own cosmology to the land where I am situated makes me embody my presence on the place where I live and work, the unceded territories of the x^wməθk^wəỷəm (Musqueam), Skwxwú7mesh Úxwumixw (Squamish), and səʾlilŵəta?ł (Tsleil-Waututh) peoples in Vancouver.

In the 'Deep Rivers of the Latin American Race' (2022: 16), Rita Segato describes the concept of race in the context of coloniality. She argues that

the landscape is seen as a monument inscribed by the events of expropriation, enforced servitude and extermination. Bodies are also seen as landscapes, as part of an 'earth that passes' ... race is the sign, legible on the body, of a position in history and of our belonging to a landscape that has undergone the invasion that we call the Conquest and colonial expropriation. Race is itself a consequence and part of this landscape.

In their book *Sorting Things Out* (2000), Bowker and Star make a distinction of what is to belong to a community of practice for marginal people of determined racial groups that belong to more than one race. These marginal people, according to them, maintain multiple memberships because they have to negotiate a duality of identities. I would argue that this taxonomy is imposed while assuming that race is a category that can classify and give membership in a community to this individual for either one race or the other. It totally deconstructs or tries to give a simplistic solution to what it is to be of mixed race, which in the case of our Latin American Mestizaje means actually to choose between the colonial identity or the Indigenous identity. The social constructions of the Western world are presented then as assumptions because the perspective doesn't come from the point of view of the Mestizo but of the observer, the Western taxonomer. Then, I ask: *how can we change the perception of race as a social common denominator utilized to create a human taxonomic hierarchy? How do we counter-deconstruct the pervasive view*

of the modern world that builds upon this racial classification to maintain the coloniality of power?

Aníbal Quijano's (2000) theoretical framework presents the concept of 'coloniality of power' as the contextualization of the colonial systems and structures in Latin America. He defines the social and political space that dominates our Latin American societies as a hegemonic power in which the concept of race is created to sustain it. The 530-year-old history of coloniality in the Americas perpetuated race as a colonial way of domination. It gave the colonial infrastructure the tool to determine social hierarchies, even human and non-human classifications. Indigenous and Black people as slaves were not considered humans in many colonial structures. This taxonomy of race as a concept works for the colonizer while the infrastructure is still sustained in the realm of capitalist modern societies. But how much longer can it be sustained?

We had our stories, our knowledge, our ways of organizing, our ways of praying and our ways of mapping our territories. But none of that was of importance to the Whites. They made their written words and their maps the only valid ones. Thus, we lost our territories, and the younger generations were turned away from the ways of our ancestors. The colonizers completely disregarded our realities and asserted their own views of us. (Barras in Blaser et al 2004)

Wengrow and Graeber, in their book *The Dawn of Everything* (2022), speak of the 'Western arrogance', the assumption that there is only one (valid) version of the world – a world that today is suffering the consequences of that arrogance through environmental and social catastrophes. Paraguayan Yshir Indigenous leader Bruno Barras proposes 'Life projects' as a way of diverting from the 'desarrollo' (development), the model that modern corporations and governmental institutions in Paraguay utilize to erase, dispossess, and exterminate Indigenous cultures. 'Life projects' aim to bring back autonomy and agency to their communities in order to restore their original ways of relating with and taking care of their territories. It is based on educating younger generations with their ancestors' original knowledges and reinstating their Indigenous history as their real history. Daniela Rosner also talks about design practice presenting critical fabulations as: 'ways of storytelling that rework how things that we design come into being and what they do in the world' (Rosner 2020).

Design practice is about walking the talking. It is about expanding the space of the studio and academia to embody our responsibility and accountability in promoting social and environmental justice. The inequalities that we live with in our societies – racism, discrimination, displacement, violence – put people in the margins through design. We must un-design and un-learn the colonial, modernist, and capitalist practices that are destroying our planet. The cry for change that our mother earth demands has a louder voice today. An ontological shift is possible by derailing the 530-year-old dilemma to alternatives that are proposed by methodologies and technologies that Indigenous knowledges have been utilizing for millennia in their intrinsic relation with the planet.

Ko ara pyahu, Che aikoteve, Che ajapo ko tapo mbojoapy ha amandu'ase ha añe'ese che anga guive. Asapukai, ajahe'o, akunu'u ha ahayhu. Ko ara pyhare mimbi, aikua'ase mo'o oime che reta ñe'e Mo'o rotopata ore reta tekove okañy hague?

On the gleamed surface of the night that comes, I seek to know where and when can I breathe back with the voice of my soil? Memories of a land that never forgets. Histories that always have been in the back of our hearts. We have turned them around in despair, in fear while following a lie. The empty promise of a bastard world that doesn't belong to us. The mute sound of a river that doesn't flow because it runs on forced streams of novelties that are false. It is time of reckoning the damage created by monsters of colonial afflatus. Our histories need to be retold. Our mother (earth) needs to be listened to. (Vera 2021)⁶

Land-bordering as an Indigenous research methodology

In Cree scholar Shawn Wilson's book, Research Is Ceremony (2008), Wilson graphically represents the four 'Western' aspects of research: epistemology, ontology, axiology, and methodology as a circle, indicating that within an Indigenous research paradigm, these four aspects blend from one into the next. 'The whole of the paradigm is greater than the sum of its parts' (p. 70). Further to this, Wilson explains that 'The ontology and epistemology are based upon a process of relationships that form a mutual reality. The axiology and methodology are based upon maintaining accountability to these relationships' (pp. 70-1). This leads me to understand that Indigenous research is all about relational accountability. It is about how we connect to each other maintaining the axiology of place by utilizing methodologies that are accountable to our relations. I present land-bordering as an Indigenous research methodology that sits on an ontoepistemic framework. It proposes an ontological design within the pluriverse, paraphrasing Arturo Escobar when he brings forward the concept of a pluriverse of 'socio-natural configurations; in this context, designs for the pluriverse become a tool for reimagining and reconstructing sustainable worlds' (Escobar 2018). The pluriverse is a world of many worlds in which we disconnect and untangle from the modernist infrastructure.

Land-bordering has other complementary methodologies and methods that I propose as companions in carrying the message or action that a project or particular research needs. These methodologies can refer or reveal the same memories, lived experiences, and intersections that connect us to the land. Colloqu-ing is dialogui-ng, communicat-ing. When we pause and look around us, we see the world and the multiple possibilities of doing, making, and designing our present worlds towards the emergence of ecologies of planetary care. Colloqu-ing is about world-ing while conversing and passing on the knowledge that we receive. Listen-ing is probably the most important 'allied' design methodology to land-bordering. It conveys learning from the acknowledgement of incommensurable layers of unknowns and thus of possibilities. Listening to the land is co-creating with it. It is understanding that we are part of an ecosystem where we co-exist, where humans and non-humans transcend time in worlds that ended and re-started many times. Listening to the land informs us of the notion of uncertainty, that we don't know and that we will never know it all. That being from the land is being Indigenous and, therefore, being of nature and of the world. Rhizom-ing is a method that proposes within the pluriverse to connect among each other. It is about bridging and building the invisible web of selves, that through the acknowledgement of our heterogeneity and the diversity within our different identities the need for a societal and ecological change is conveyed. This method deepens the discourse of decolonizing our human positionalities and embracing our true identities in spite of the comforts that merging and assimilating bring from the short-lived promises of modernism.

Emergences in the pluriverse

Writing this chapter finds me in Asuncion, Paraguay, walking the 'landscape' that Rita Segato describes as 'an earth that passes' (2022). This is a landscape that is marked in my body with my own Mestizaje – a Mestizaje that now finds me in company. We are Uno that is multiple when we recognize ourselves in the unequivocal memory of our shared Indigenous history. Our ancestors join the walk reclaiming our identity. The traces of tacit stories that are written in silence on the pavement of La Chacarita⁷ remind me of both the colonial monster that devours and conquers, and the Indigenous memory of a land that converses with its inhabitants. We started our four-hour walk with Uru and Pato, two local residents or 'chacariteños'. I was invited by two friends, architects as myself, to learn about the work that people of the community of La Chacarita with fellow Latin American architects and artists did in co-creation, two years ago in the context of 'La Bienal de Asuncion' (Figure 2.1).⁸

Walking with the locals opened a different experience of 'the most dangerous neighbourhood in Asuncion' where the marginality and precarity of the landscape present itself with hope and despair. Uru starts saying that they are proud of who they



FIGURE 2.1 Pavements | La Chacarita, 2022.

are and that what they will show us speaks for who they really are, not what people say. There are tiles on the road that shine brightly, the sun is here to warm up our hearts in a vivid conversation. We walk by homes that have no sidewalks whatsoever, the doors open to the streets becoming the patios or communal points of encounter. A group of residents are sitting on the street, we salute them in Guaraní, they smile and continue their colloquy. We go down steep stairs and arrive at a space that has a big mural of a cat. Uru and Pato explain to us that the murals that we find everywhere while we walk are part of the bienal's project and represent the people that live in those houses. They are made by local artists that tell the story of La Chacarita with colour and pride: the house of a famous musician, a soccer player, a dancer. We pass by a social club that has an old Lapacho tree in the middle of the building and as Uru and Pato told me, the Lapacho tree is one of the oldest 'club members' having its own membership number – a tree that is protected and familiar to all. The new pavements are made with tiles and bricks that were collected from construction sites, giving a picturesque and unique look to the streets. The concept of retrofitting as a normal practice in the design of their dwellings builds structures that make sense when put together. There are many communal spaces with streets that function as a sole corridor of numerous plazas: emergence of a design that brings the sense of community together, reinforcing an identity that is sustained in the contradiction of histories that the colonial infrastructure diminishes and excludes.

Rhizomes of selves

I started exploring in the context of my master's project: the design of Indigenous mapping as an introspection of my own identity and diaspora and as a connector,

a bridge through which I could amplify other voices. It is a quest to find the connections between land and our intersections: the borderlands that Gloria Anzaldúa recontextualizes when she declares, 'I am a border woman' (1987). For Anzaldúa, being a border woman is to be Mestiza but also an immigrant, a queer, and a woman of colour. I am also all of that. The journey was/is mine and was/is of many. It is the journey of the Border-people: the immigrant, the Mestizo, the queer, the Indigenous, the 'other' in the Global North that has a voice that wants and needs to be heard.

As an example of this work, I present Kuatia Michimi, which means little book in Guaraní. It is the first text that I wrote on rhizomes, where I explored colloquing and listen-ing through the creation of a book containing ten stories and a map of rhizomes. The book and the map are interconnected by the compilation of voices of strong women of colour that share their souls and teachings through their writing. I listened to these women and brought in my own voice to reflect, to share, and to start making rhizomatic maps in the pluriverse. In this first rhizomatic map, I created an iconographic system representing the different intersections of colour, race, gender, sex, class, and social identity that define and delimit who we are and influence how we build our relationships.

¤≻ SEX ¤≻ RACE ¤≻ CLASS ¤≻ GENDER ¤∹ COLOUR ¤⊲' IDENTITY ∴ ↔ → ↔ PLURIVERSE

The study of these connections creates a journey through a rhizomatic system, in which the writings and thoughts of these women overlap within the cultural borders of identity and intersectionality that are traced in the map. The rhizomes reach out to the reader, opening a dialogue, a colloquy where each connection is unique and heterogeneous. The map provokes and conveys that different cosmologies can look at each other, listening and building diverse connections (Figure 2.2).

In this book, I also explore the deconstruction of the Latin alphabet as a provocation. I changed the vowels to Unicode characters used to write Indigenous languages, as an exercise of writing English with foreign characters, similarly to how these alphabets attempted to write languages that have an oral structure. The written version of my native Guaraní language doesn't do justice to its onomatopoeic words in which meaning comes into being through enunciation. In these cases, the colonial grammar of the written Guaraní makes writing it an act of violence against the fullness of the spoken language.

KO kuatia ñe'e michimi oguereko pa (10) tembiasaku'e. Amombeúta ndeve umi mba'e kuera ñande sy oipotá rojapo ħagua umi yvyretã oguerekota ħeta retã oñondive.



FIGURE 2.2 Rhizomes Map | Kuatia Michimi, 2021.

This ïs å lïttlě nøn åcåděmic bøøklět with těn støriěs thåt døn't wånt tø følløw cøløniål děsïrěs. It prěsěnts ïtsělf ås å contråptiøn thåt prøvøkěs whåt å litěraturě rěviěw ïs. Whěn ïděås årě writtěn døn't cømě frøm thě thrøåth ånymørě. Thěy tråvěllěd ållreådy thrøugh låyěrs øf tørn skin tø the bråin. Ånd ït ïs ïn thě bråïn whěrě cølønizåtiøn stårtěd. It ïs whěrě thě/thåt mån søŭght for lånd ånd richěs thåt dïdn't beløng tø him: ÅT MY ÅNCĚSTØRS' BĽØØD CØST.

The Americas map, the Diaspora map, and the Borderlands map are the cartographic representations that followed in my research to bring back the memories and the voice of my soil. A voice that cries, that speaks out loud, that cares and loves. They speak from my own epistemological embodiment of the lands that I lived, and I live on. They also want to un-design colonial spaces by showing the colonial implications of the current ways of living. Racism, discrimination, displacement are consequences of a system that is broken from its inception.

These maps propose a novel system of communication, drawn by utilizing visual representation of the relations between land and the particular intersections that define our positionalities. This system builds its own language which in the specificity of my rhizomatic maps speaks from my own Paraguayan Guaraní

cosmovision, its ontology and its axiology. It also represents the ample network of Latin American Indigenous Mestizaje, which presents itself wishing to communicate and bridge towards other epistemologies.

The Americas map talks about identity, migration, diaspora, and discrimination. It brings back my recollection of the colonial Paraguayan cartography, the symbolic conventional limits of nature with its rivers that run throughout the continent as if MY rivers (the Parana and the Paraguay rivers) could reach me. It transforms the arid soil of the Paraguayan Chaco into the dry lands of New Mexico where Brazilian mulata migrant Lenilda Dos Santos died of thirst while crossing the desert in 2021. It shows the colonial diagram of the city of Asunción where I was born, where I have memories of discrimination, homophobia, and fear. It also tells the story of Lorenzo Silva who was murdered at a bus stop in 2016, for being an 'Indio' by a passer-by in a car, who was unfortunately carrying a gun. Stories that are not new in the Global South, but also not new in the Global North with multiple tragedies caused by racism and discrimination every day. In this map, new symbols also appear. They are icons that represent questions: 'Who'; 'What'; 'Where'; 'How'; 'When'. They are wound marks that question the colonial limits of our Mestizaje and assert the unequivocal Indigenous sovereignty of our lands.

¥ WHO? N WHAT? ₽ WHERE? ▷ HOW? ◊ WHEN?

The Diaspora map tells the story of my own diaspora to Canada and my Mestizaje. It is written mostly in Guaraní, with the 'wound marks' asking: Where do I arrive? When did I arrive? Did I arrive? Who can I afford to be? How do I land? What is to be Mestiza in a foreign land? When does it start to be foreign and how do I start to belong? This map has a complex story to tell and the more I look at it, the more I see things, anew. Its borderlands are not permanent; they appear and disappear in different locations. It's the story of the immigrant, their unknowns and uncertainties.

The Borderlands map encompasses the concept of land-bordering, acknowledging land and my positionality which is defined by my own immigration and all the intersections that make me who I am in this land. It also defines from where I will bring my voice in and what knowledges I will create, carry, and pass on to others. With these maps, I also explore materiality and I question making through design as an embodied practice. In this iteration, the map goes through the plotter and both my body, and the plotter became a contraption out of need from each other. Finding the ocean, the rivers, the airport where I landed in Montreal fourteen years ago, the city lights that blinded me – seldom memories of a diaspora that is inserted in the subtle lines of an emotion, a wish, and a hope. The unearthed inheritances of voices that can speak through mine. Land and soul escape the white ink. They are the pen-tracing of lived experiences. Histories that

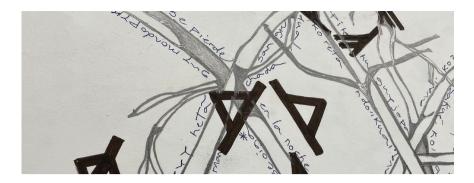


FIGURE 2.3 Diaspora map fragment, 2022.



FIGURE 2.4 America's map fragment, 2022.

are told in silence. The tacit that speaks about the materiality of place in a native cosmology (Figures 2.3 and 2.4).

Land-bordering in pedagogy

I have been exploring through pedagogy, how our intersectionalities, our 'borderlands' influence the way that we interact in our communities and how through introducing Indigenous knowledge we can recognize the lands where we are situated. My course at Emily Carr University, called *Re-reading Place*, was recognized by colleagues and students for land-bordering as an innovative approach. Working with Indigenous cultural local advisers, we engaged Indigenous local knowledge, languages, and protocols in place-making and wayfinding design

processes. We introduced students to the acknowledgement of their own histories and positionalities while making connections with the land. Some of my students found that land-bordering was a re-orientation to design and community.

I learned that land positionality through design is a way of humbly grounding a project to its space and has the potential – through the gathering of community – to create unity, reflection, and conversation, I learned that by grounding a project in positionality, roots, narratives and landscapes are shared and transformed into growth and further learning. (A. Dixon 2021)⁹

Land-bordering allows me to bridge and build connections on the land where we are situated and to teach that we are beings with a sum of multiple intersections that can bring riches to the class interactions and learnings. I tell the students that land-based design is about connecting and listening to the land. It is about situating ourselves with our own positionalities, conveying the story from the place where we are situated. It is building our practices acknowledging place and community. I tell them to speak from whom they are and to not be afraid of that. To acknowledge their own history, whatever it is or whatever they can afford it to be.

Land-bordering in emergent futures

Life presents itself as a gift. It is made of unique moments that once they turn into memories stay with us for years to come. It also carries the memories of our ancestors, who set themselves in our inner selves as a reminder of who we were and who we are going to be.

Modern neoliberal, capitalist theories tell us stories of a man who succeeds in his own individuality, who exists within a universal paradigm where progress and wealth mean happiness. This model presents a scaffolding of histories that contradict each other and that depart for many resemblances and many disparities. I recognize the big effort that is to contradict a canon that is embedded in Western education and lived experiences, and that also prevails in the colonial models in the Global South. Hence, what does it take to truly enact being in company, to co-create and to build and to construct with others?

In Guaraní cosmovision, we have two souls: the soul of the body, ã, and the soul of the spirit, ñe, which means language, sound with sense. This soul is in the throat, and it expresses itself through speaking, singing, praying, reflecting. The Teko Porã: el buen vivir, or good living, is the Guaraní way of living, where the two souls co-exist through an embodied experience with the land. Living is a quest for the land without evil: Yvy mara'ei. This cosmovision makes the Guaraní peoples build a connection with the earth that is based on care, respect, and responsibility.

Heidegger asked a simple question: 'What is to dwell?' Arguing that 'dwelling is the manner in which mortals are on the earth' he continues saying: 'but on the earth already means under the sky'. Both also mean remaining before the divinities and include a 'belonging to men's being with one another. By a primal oneness the four: earth and sky, divinities and mortals, belong together in one' (Heidegger 1977). Following this Western philosopher's argument, I encounter a bridge to my own Guaraní cosmovision.

Then could we say that 'building' community could be 'dwelling' as of being of the earth, the spiritual dimensions of our souls in connection with our ancestors, being with the other and co-creating in conviviality. Giving first, in reciprocity and responsibility to the community we serve. And by living in conviviality, in community we start creating emergent futures in which our connections, our rhizomes of selves converse in the pluriverse. In my research, I imagine an imaginary dialogue between Deleuze and Guattari, arguing from *A Thousand Plateaus* (1980) and Gloria Anzaldúa, citing her thoughts from *Light in the Dark* (2015). In this dialogue, the concept of the sole tree with individual roots confronts the idea of rhizomes as webs of identity: networks of multiple heterogeneous connections that communicate to each other within their own multiplicity. These rhizomatic connections shift their materiality as they explore different constellations of representation, relationships, and identity constructs. They engage and connect within their own affordances and necessities.

Time is circular, as memories are. If we start from the future, we take care of the present and we never forget the past. We look back to move forward with ontologies that shift from the colonial canons that pervasively destroy our planetary ecologies.

As Arturo Escobar argues (1995),¹⁰ 'reality has been colonized by the development discourse'. Development is an excuse utilized by colonial groups to displace Indigenous communities from their lands. Bringing the promise of food and development, our forests are being destroyed, our ecosystems are being dismantled, our peoples and the creatures of the land are being murdered, and our waters and mountains are being taken. Our mother earth is speaking out loud every day, telling us that this 'development' is, in reality, destruction, and we still don't listen.

Anne Marie Willis (2006) warns us of the important and dangerous influence of design work in the world. She explains that

Design is something far more pervasive and profound than is generally recognized by designers, cultural theorists, philosophers or lay persons – designing is fundamental to being human – we design, that is to say, we deliberate, plan and scheme in ways which prefigure our actions and makings – in turn we are designed by our designing and by that which we have designed.

We must un-design our colonial practices. It is a decolonial collective effort that recognizes the multiplicity of cosmologies that have been supporting it for millennia. A work effort that I believe can restore environmental and social justice practices, making an ontological shift in design thinking and practice in the pluriverse.

'Heta rēta roguatá hiári. Heta rēta rojapo. Oime heta rēta ijapú. Oime heta rēta añete. Ava mbarete ndive oime tenda hae'kuera guara año. Ore roipota peteî rēta joa ndive. Ko peteī rēta roipota oguerekota heta rēta oñondive'

Many worlds are walked in the world. Many worlds are made. Many worlds make us. There are words and worlds that are lies and injustices. There are words and worlds that are truthful and true. In the world of the powerful there is room only for the big and their helpers. In the world we want, everybody fits. The world we want is a world in which many worlds fit.

Zapatista Manifesto of the Lacandon Jungle (de la Cadena and Blaser 2018, 1), Guaraní Translation provided by the author

Notes

- 1 I presented this definition of Borderlands in a paper called Between Borderlands and Intersections: Roñe'e Yvype (We talk about land). (Vera 2021).
- 2 Sympoiesis as defined by Donna Haraway in her book *Staying with the Trouble* (2016) is a simple word that means 'making with'. It is a word proper to complex, dynamic, responsive, situated, historical systems. It is a word for worlding-with, in company. Sympoiesis enfolds autopoiesis and generatively unfurls and extends it.
- **3** I coined the definition of land-bordering in the context of my studies during the Master of Design at Emily Carr University (2020–2).
- 4 Land acknowledgement in Guarani: I was born in the Global South, in Asuncion, Paraguay, on the traditional and stolen territories of the Guarani peoples. I live and work on the unceded territories of the x^wməθk^wəỳəm (Musqueam), Skwxwú7mesh Úxwumixw (Squamish), and səliliwəta?ł (Tsleil-Waututh) peoples. I recognize the Indigenous sovereignty of these lands which means that they were never ceded.
- 5 Mestizaje is a Spanish word that is defined by the Spanish Royal Academy Dictionary as a mix of different races or cultures which come from the 'encounter' between diverse ethnic and cultural groups.
- 6 I take this writing from 'Rhizomes of Selves, Indigenous mapping as a carrier of histories' (2021), a project from my Master of Design at Emily Carr University of Art & Design (2022).
- 7 La Chacarita is infamously called the most dangerous neighbourhood in Paraguay. It is a community of informal dwellings that were consolidated into an almost onehundred-years-old neighbourhood. It is a place that sits on the border of the Paraguay river, building a unique and unforgettable landscape.

- **8** 'La bienal de Asuncion' is an architectural biennale held every two years. This work refers to the 2020 biennale.
- **9** https://www.ecuad.ca/news/2021/land-based-design-ecu-campus-decolonial-way finding
- **10** Cited from Arturo Escobar's book *Encountering Development: The Making and Unmaking of the Third World* (2012) where he analyses the Western definition of un-developed or Third-World countries.

References

- Akama, Y., Hagen, P., and Whaanga-Schollum, D. (2019). 'Problematizing Replicable Design to Practice Respectful, Reciprocal, and Relational Co-designing with Indigenous People', *Design and Culture*, 11(1): 59–84. https://doi.org/10.1080/17547 075.2019.1571306.
- Anzaldúa, G. (1987). *Borderlands/La Frontera: The New Mestiza*. San Francisco, CA: Aunt Lute Books.
- Behrendt, L. (2003). Achieving Social Justice: Indigenous Rights and Australia's Future. Australia: Federation Press.
- Blaser, M., Feit, H. A., and Mcrae, G. (2004). *In the Way of Development: Indigenous Peoples, Life Projects, and Globalization*. London: Zed Books in Association with International Development Research Centre, Ottawa; New York.
- de la Cadena, M., and Blaser, M. (eds) (2018). *A World of Many Worlds*. Durham, NC: Duke University Press. https://doi.org/10.2307/j.ctv125jpzq
- Bowker, G. C., and Star, S. L. (2008). Sorting Things Out: Classification and Its Consequences. Cambridge, MA: MIT Press.
- Deleuze, G., and Guattari, F. ([1980] 2017). A Thousand Plateaus: Capitalism and Schizophrenia. London: Bloomsbury.
- Dixon, A. (2021). 'Unpublished Student Feedback'. In *Re-Reading Place*. Emily Carr University of Art and Design.
- Escobar, A. (1995). *Encountering Development: The Making and Unmaking of the Third World*. Princeton, NJ: Princeton University Press.
- Escobar, A. (2018). *Designs for the Pluriverse: Radical Interdependence, Autonomy, and the Making of Worlds.* Durham, NC: Duke University Press.
- Foucault, M. (1994). *The Order of Things: An Archaeology of the Human Sciences*. Illustrated, Vintage.
- Gloria, A., and Keating, A. (2015). *Light in the Dark = Luz En Lo Oscuro: Rewriting Identity, Spirituality, Reality.* Durham, NC: Duke University Press.
- Haraway, D. (2016). *Staying with the Trouble: Making Kin in the Chthulucene*. Durham, NC: Duke University Press.
- Heidegger, M. (1977). *Basic Writings: From Being and Time (1927) to the Task of Thinking (1964)*. New York: Harper & Row.
- Quijano, A. (2000). 'Coloniality of Power and Eurocentrism in Latin America', International Sociology, 15(2): 215–32. https://doi.org/10.1177/0268580900015002005.
- Rosner, D. K. (2020). CRITICAL FABULATIONS: Reworking the Methods and Margins of Design. SL: MIT Press.

- Segato, R. L., and Mcglazer, R. (2022). *The Critique of Coloniality: Eight Essays*. New York: Routledge.
- Vera P. (2021). 'Between Borderlands and Intersections: Roñe'e Yvype (We talk about land)'. In R. M. Leitão, I. Men, L. Noel, J. Lima, and T. Meninato (eds), *Pivot* 2021: Dismantling/Reassembling. 22–23 July, Toronto, Canada: Design Research Society.
- Wengrow, D. and Graeber, D. (2022). DAWN of EVERYTHING: A New History of *Humanity*. SLLondon: Penguin Books.
- Willis, A.-M. (2006). 'Ontological Designing', *Design Philosophy Papers*, 4(2): 69–92. https://doi.org/10.2752/144871306x13966268131514.
- Wilson, S. (2008). *Research Is Ceremony: Indigenous Research Methods*. Black Point, NS: Fernwood.

3 DESIGN RESEARCH PRACTICE NARRATIVE: 'HAPPY OBJECTS WITHIN REACH'

Hannah Korsmeyer

When you are designing?

When we talk about feminism(s), whether referring to its vast literature, theories, and principles, or diverse cultural contexts, or iterative waves, we increasingly must talk about it in the plural to avoid misunderstanding each other. I do not remember exactly when I first called myself a feminist. I can recall some, but not all, details about people, readings, and life experiences that have contributed to evolutions in my own working definition of feminism. Many of the personal learning experiences about feminism I have had throughout my life become muddled or blend together. However, I do remember exactly when my inherent sense of *being feminist* gave way to a new sense of *becoming feminist*.

In the previous years leading up to this moment, I worked as an embedded participatory designer or design research consultant for a variety of projects on topics directly related to feminism and gender equality. In this role, I was responsible for designing innovative research methods and workshop materials for co-design events. The purposes of these events varied, but gender was usually a central focal point within the overarching project. Some objectives included: establishing a national agenda for the primary prevention of sexual violence and harassment; ensuring safe access to reproductive and sexual health; co-designing solutions to improve safety for women and girls in public spaces; generating strategic action plans for organizations related to gender or feminist topics; co-speculating feminist futures; designing engagements about gender and digital technologies; and organizing public-facing awareness and activism events about gender and inclusivity.

And yet, in this 'feminist' practice, I have seen how easily well-intentioned research initiatives using participatory approaches and community consultations can be co-opted. The method of writing described and demonstrated in this chapter aims to create space to examine personal experiences of navigating complex co-design situations and account for becoming feminist through co-design.

On paper, making the shift from *being feminist* to *becoming feminist* requires just three extra letters. But in practice, it took me years to recognize that there could be tensions between these orientations. This realization has since marked a monumental change in my orientation to this work. Rather than using feminist theory as a tool or lens that can be applied to co-design practice, I now consider how co-design practice is a means of shaping and shifting a designer's personal understanding of feminism.

So, before we begin, I invite you to take a moment to think about your own design practice.

Can you remember a time – even a fleeting moment – when you may have been practising feminism?

Many of us might not be able to pinpoint a heroic memory of clear-cut activism in our everyday work. But if you think about what a more personal version of feminism might mean to you, maybe there are also smaller moments when your sense of feminism shaped an action or a gesture in your practice. For example, maybe there was an underlying sense of feminism in a small change you made to a recruitment process, or in the pacing of a co-design event. Or maybe it was in your careful framing or phrasing of a key insight for a government report. Maybe it was in the location of a meeting venue or the aesthetic choices of collaborative making materials. Perhaps feminism was present during a tense moment when you needed to negotiate contradictory interests among important stakeholders. Or perhaps feminism supported you to create a tense moment so that stakeholders would show more interest in important contradictions. And if you are able to recall a moment when feminism may have been present (or, equally, another moment when it was noticeably absent) in your practice, can you also remember how you felt? Where were you? Who else was there? What sounds could you hear around you? Were you sitting or standing or moving? How had you come to arrive at that moment and what were you hoping would happen next?

The method and style of writing I describe in this chapter intend to create space for practitioners to share these personal stories of practical, iterative, embodied feminisms that are usually relegated to the background of co-design projects. As design-led methods are increasingly extending into the public sector, more and more of us find ourselves at the nexus of complex power dynamics and formal commitments to positive social impact. In this context, communication of practitioner knowledge beyond discrete projects can be especially difficult, due to both the specific situated nature of the work and the often-strict conventions around hierarchical reporting structures.

And yet, these are also the tricky contexts where feminism and feminists are tested in practice. As I argue, these difficult projects are rich sites of personal feminist pedagogy. They are where each of us is honing our understanding of how power operates and, often tacitly, tracing and responding to the visible and invisible forces affecting collective efforts to make real change. I am curious about all the personal stories that are happening alongside these projects, in the background. How are we strategizing and learning from what we *come up against* as we pursue feminist approaches? How are we making shifts and which of our feminist attempts are getting blocked? What might we be blocking? After several difficult practice experiences, Sara Ahmed's feminist theories found me at a critical juncture, helping to redirect this practice. The influence of personal experiences on our individual and collective practices can be hard to describe but, as I have done many times, we can look to Ahmed to help articulate why they are important contributions:

By using the idea of sweaty concepts, I am also trying to show how descriptive work is conceptual work. A concept is worldly, but it is also a reorientation to a world, a way of turning things around, a different slant on the same thing ... A sweaty concept might come out of a bodily experience that is trying. The task is to stay with the difficulty, to keep exploring and exposing this difficulty ... Not eliminating the effort or labor becomes an academic aim because we have been taught to tidy our texts, not to reveal the struggle we have in getting somewhere. Sweaty concepts are also generated by the practical experience of coming up against a world, or the practical experience of trying to transform a world. (2017: 13–14)

From these descriptions, I will be accounting for the micro-feminist tendencies of my material design practice that have generated 'sweaty concepts'. Each project

situation has influenced my evolving, personal understanding of feminist theory and shifted my orientation and approach to practice. As our field strives to better understand the difficult, complex work of using co-design to help make social transformation, I use narratives to suggest that we might better understand how to make transformations if we do not overlook how our own transformations are co-evolving with our co-design practices. My hope is that, as you read about my experiences, you also find moments of resonance and tensions in your own practice experiences. By bringing these micro-experiences into the foreground, we might make new concepts about our collective processes of *becoming feminists* as we try to make transformations in an unequal world.

Design research practice narratives

While my project-grounded practice was located in applied contexts in partnership with other research teams and institutions, the development of this writing method was situated within the WonderLab cohort of the Emerging Technologies Research Lab at Monash University. WonderLab is a diverse community of researchers and designers, but with a core focus on deepening learning experiences and interrogating mindsets, beliefs, assumptions, privileges, and biases. This lab is focused on participatory methods and co-design engagements that strive to amplify lifelong learning. We are especially interested in interrogating participatory practices and intermediate designs for co-design events.

With the guidance of Stacy Holman-Jones and Lisa Grocott, several colleagues in WonderLab and I began developing 'design research practice narratives' (DRPNs) as a form of performative auto-ethnographic inquiry (e.g. Harris and Holman-Jones 2016). This method draws from foundations in critical creative and performative writing (e.g. Pollock 1998, 2009), affect theory (e.g. Berlant 2011, 2019), and feminist writing (e.g. Lorde 1984; hooks 2000). We all have our own approaches for using this method, and this chapter provides in-depth detail about the particular DRPN approach I adapted for a particular feminist phenomenological study. My discussions with colleagues in WonderLab and using DRPNs were integral in the transition from following a project-grounded methodology towards feminist phenomenological interrogation of my practice experiences.

Following the work with WonderLab to establish this method for design practitioners,¹ my own approach involved refining this method for further investigating how feminist tendencies evolved, materialized, and were enacted through co-design practice. Ahmed's theories bridge the gap between histories that are not over and a speculative wondering of what alternative possibilities we can make happen. She emphasizes that practising feminism, like design, is iterative

and worldly. We gain knowledge of transformation through the everyday actions and labour of trying to make transformation. So, if we look at how we might acquire feminist tendencies, it is not useful to bracket this inquiry into discrete descriptions of projects. The repetition and evolution in practice, across contexts and situations, is the feminist pedagogy – parsing the knowing into projects risks interrupting this process of *becoming with design practice* and forecloses aspects of our ability to share and compare accounts in the field at other scales. This is where a DRPN becomes a very useful reflective technique in service of feminisms.

Broadly, DRPNs have been, for me, a recursive technique of analysis for drawing together the most salient insights derived *from* co-design practice with the most salient feminist concepts from Sara Ahmed for co-design practice. These detailed first-person practitioner narratives emerged as a mode to analyse embodied experiences of project-grounded feminist research. They served as a reflective technique to better understand the entangled process of making co-design workshop materials and how these experiences inform and influence ongoing co-design practice and feminist concepts. Departing from conventional project descriptions and comprehensive workshop documentation, the narratives aim to provide a thicker description of how feminist-designer 'tendencies' (Ahmed 2017) evolve and are enacted, made manifest, performed, and informed by co-design practice. They focus and deepen the material 'back-talk' of reflective practice, allowing for more critical interrogation of what might begin as a 'general reflexive orientation' (Pihkala and Karasti 2016). This method also shares some foundational ideas with the reflective writing method of 'mind scripting' which has been used by practitioners to become aware of and question implicit assumptions behind the decisions they make in practice and the possible wider impact this may have. The method of mind scripting is a useful precedent for this work focused on the reciprocal relationship between practice and a practitioner's evolving understanding of feminism, as participants were reported to learn more about how their 'implicit assumptions may influence their future work and general belief systems in society' (Rommes, Bath, and Maass 2012: 658). The DRPN method also shares intentions with the 'method stories' approach developed by Lee (2012), who advocates for designers to reveal and share stories of the valuable learning that occurs while they are in the process of crafting appropriate innovative design research methods, rather than simply publishing and sharing the finalized versions.

The DRPNs are intentionally distinct from detailed project case studies or broad theoretical frameworks, and aim to highlight a subjective, meso-level, messy, ongoing space of becoming. By 'bracketing' (Ahmed 2006) off and deviating from conventions around sharing co-design knowledge, this research introduces another scale of storytelling that is not bounded by discrete projects. At this scale, the narratives allow greater attention to explore the complex and ethical implications of the socio-material, situated, anticipatory, and tacit decisions practitioners make when they are designing the materials *for* 'designing with' others. These stories attempt to transcend the specificity of various applied projects, to model another way designers might curate, share, and meaningfully learn from each other's reflective practices.

In my approach to the DRPN, I was interested in grappling with the feminist tensions around 'self' and 'subjectivity', therefore it made sense for me to spend more time with the theoretical framings of the original performative writing methods of Della Pollock (1998, 2007, 2009). The narratives are meant to be evocative, inspired by performative writing methods to evoke 'worlds that are otherwise intangible, unlocatable: worlds of memory, pleasure, sensation, imagination, affect, and in-sight' and begin to collapse a formal distinction between creative and critical writing. This writing does not aim to comprehensively document or represent 'an objectively verifiable event or process but uses language like paint to create what is self-evidently a version of what was, what is, and/or what might be' (Pollock 1998: 80). This method does not attempt to convey comprehensive descriptions of a co-design method or project or case study. Rather, the narratives are intentionally incomplete tellings to necessitate co-production of meaning with the reader. The writing serves as both a reflective and speculative means for sharing how we act upon and evolve our embodied knowledge and experiences as practitioners. I did not set out to follow a uniform procedure or protocol for using narrative to explore the phenomenological experiences in the background of my practice, yet they developed to share some consistent qualities. The narratives:

- provide accounts of actively designing workshop *materials* to explore how these materials might 'talk-back' to my position as a designer-researcher and the project situation, to help notice and amplify *orientations, intentions,* and *tendencies* that may be operating in the background of project situations
- follow, deepen, trace, and transform moments of *resonance* between co-design practice experiences and theoretical concepts from Ahmed
- reveal the *relational* aspects of practice, such as meaningful moments that arise from ever-evolving relationships among people, perspectives, places, and things
- explore a sense of *movement* and/or *stasis* in practice; consider personal shifts, drifts, and blockages in a practice that seeks to make change

The above aspects of practice are discussed through performative writing techniques. Therefore, the writing of narratives is also:

• intentionally *partial* to amplify *ambiguity*, to invite reader *interpretation* and *co-construction* of meaning, and to preserve *anonymity* where necessary;

- interspersed with short stories, vignettes, and anecdotes about *memories* and moments in my *life outside design practice*, as either juxtapositions or reinforcements of the feminist concepts that influence co-design practice;
- *embodied, affective,* and *situated* to ground the account in details of the sensory or atmospheric aspects of the context;
- are primarily told in the *present-tense* to place myself and the reader into a story that is still *emerging* and open to multiple interpretations, rather than something that is complete.

In Figure 3.1, I illustrate the theoretical tensions about reflective and performative writing techniques that are being negotiated through in a DRPN. Namely: how to open subjective, personal experiences to wider critique; how to avoid both complete clarity and deliberate obfuscation; and how to balance providing accurate accounts of material events and their consequences in the world with creative writing and metaphorical techniques that can provide a different kind of knowing and meaning. In this wrestling and balancing of different accountabilities, the DRPN method also holds space for performing a more 'uncomfortable reflexivity' (Pillow 2003).

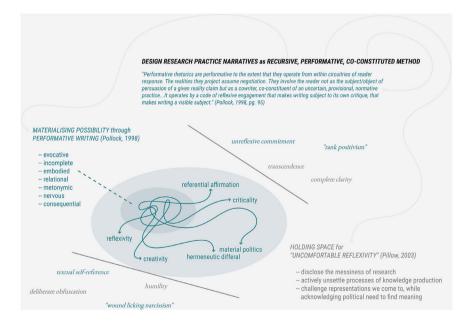


FIGURE 3.1 Tensions, negotiations and boundaries of DRPNs as a recursive, performative, co-constituted method.

In summary, narratives are told in the first person and offer conflicting, subjective, critical positions within and between personal accounts. In other words, this approach seeks to enact, rather than simply illustrate, a feminist, phenomenological, pluralistic, and relational approach. The practice narratives are used to interrogate lived experiences of co-design practice and better reveal my own participation and evolving orientations in this practice. This approach is an inquisitive engagement that resists tidy frameworks, and instead aims to hold space for evolving and plural perspectives, both *within myself* and for readers. The narratives are told as first-person vignettes to share the embodied and materially mediated knowledge that comes from practice in a way that more closely mimics how this knowledge might continually evolve iteratively and abductively in practice. However, the narratives are also intentionally partial and metonymic, so that other practitioners must interpret and find their own meaning. By weaving my experiences in conversation with Ahmed's queer and feminist theories, the process of writing the narratives served to deepen understanding of my shifting intentions in this work. In their final versions, the DRPNs serve as recursive research artefacts that demonstrate a more reciprocal relationship between design practice and feminisms that can be interpreted by others. Like Ahmed, I hope to provide a description of personal practices and experiences that can often be difficult to describe. I hope to draw attention to designer contributions within these complex spaces and to demonstrate that sweaty concepts about how to make change in the public sector can be generated through applied design practice experiences.

I also want to note that the memories interspersed with accounts of design practice in this narrative were not necessarily the most significant, emotional, or impactful experiences in my life that have shaped my views about feminism. Of course, some of those experiences are deeply personal to a degree that I would not want to share publicly. Instead, the anecdotes in the upcoming narrative have been curated to illustrate how the unremarkable or mundane, overlooked everyday practices of doing co-design might also influence our personal understanding of feminism, whether or not these findings are generalizable. The narratives trace and make connections among different embodied memories and are not meant to portray comprehensive documentation of an objective event, but convey one possible interpretation of a subjective experience.

As co-design practitioners, we often take on the labour of holding many perspectives at once, but we pay less attention to how our own perspective contains multitudes, contradictions, and complexity. Heightening this awareness may also be a helpful empathic reminder that all 'others' we encounter through co-design are becoming with us. They are just as complex, contradictory, and multitudinous, even if we perceive them as a single individual. Through using performative writing techniques, narratives allow me to trace how my own subjectivity is relational and, importantly, changeable over time. Through the active process of recalling past memories within the affective, embodied, current situation, it becomes difficult to present these accounts as demonstrable, stagnant, 'facts.' Instead, the narratives focus attention towards what meanings have persisted from these experiences and influence my current understanding. They invite you to question my stance. On a concrete level, the narratives not only share possible explanations as to why I may have designed methods and materials in particular ways but also embodied insights about the project situations which would never be included in other modes of formal dissemination, like a government report of the work, or a toolkit or case study of the design methods.

There were certain resonant concepts and theories from Ahmed that I had in mind while writing. These ideas offer one means of interpretation and connect the life and practice experiences described within the narrative to wider feminist theories and concepts, while also demonstrating how these concepts are equally generated by design practice. For this narrative, I was especially interested in the complex, sometimes ambiguous or contradictory way designers might be implicitly working with *affect* while shaping the methods and materials for co-design workshops. I attempt to illustrate my anticipation of how I hoped that certain workshop materials might affect participants in the workshop, and I also bring my own affective experiences to the foreground, so that they become visible and possible to critique. The following discussion draws heavily from Ahmed's theories of affect, and her critiques of 'happiness', 'happiness scripts', and 'happy objects'. I use these theories to illustrate complexity and highlight possible opportunities within our collective efforts to co-design visions of 'preferred futures'.

Happiness becomes a form of being directed or oriented, of following 'the right way'. (Ahmed 2010b: 9)

In Ahmed's book *The Promise of Happiness* (2010b), she is not concerned with defining what constitutes happiness or what it means to be happy, but rather asks what does happiness *do*? She is curious about how some objects become associated with happiness and how ideas of happiness influence and enforce power relations. She explores how we are compelled to move towards certain objects that we think will make us happy and, equally, how we are compelled to recoil or move away from objects that do not promise the same affect. These 'happy objects' range from everyday things that affect us positively, like a favourite food or a treasured gift from a loved one, to much larger societal principles, values, and constructs which we judge to be good or to hold the promise of 'the good life' (e.g. Rai 2018). For example, Ahmed wants to better understand how certain social conventions become associated with happiness (e.g. marriage and the nuclear family, heteronormativity) and how this 'promise' of happiness means that entire institutions and infrastructures are created to support people to follow this happiness 'script'. She sees happiness as both a motivating and exclusionary

force: our conceptions of happiness can foreclose on possibilities of other ways of being and prohibit those who are not oriented along dominant paths from pursuing happiness in alternative ways. She points to a tangible example of this exclusion for LGBTQ+ people, who may experience the promise of happiness as a devastating pressure to conform to heterosexual norms. Family members might, from a place of concern about a possible life at risk of facing more difficulty and obstacles, insist: 'I just want you to be happy'. Ahmed talks about affect as being 'sticky' in this way. Happiness 'sticks' to some objects and not others, regardless of how these objects might affect people differently.

Rather than seeing affect as only an individual's interior feeling state or a collective atmosphere, she is concerned with how the stickiness of affect sustains or breaks connections between ideas, values, and objects. She cites Hemmings (2005, cited in Ahmed 2010b) and Tyler (2008, cited in Ahmed 2010b) for critiques of the individual autonomy of affect and questions how both objects and those who are near to us affect us. This 'relational self' is core to feminist phenomenology and resists mind/body and body/world dualisms. This idea, combined with the critique and concepts about affect in Ahmed's work, has implications for how we conceive of the purpose and effects of collaborative co-design events and working with the lived experiences of participants.

While her book goes into considerably more detail, in short Ahmed (2010a: 29) summarizes that the phenomenological experience of 'happiness' involves three major components:

- **1** affect (to be affected by something)
- 2 intentionality (to be happy about something)
- **3** evaluation or judgement (to be happy about something makes something good)

And yet, of course, it is not so simple in social and lively contexts. Our feelings of happiness can be both unique to us as individuals and socially mediated. We might both influence the happiness of others and be influenced by the happiness of others. Co-design practitioners are often preoccupied with the affective qualities of co-design events. The atmosphere of a workshop often feels integral to whether or not the event is successful. However, Ahmed describes several ways that these three components of happiness come together that have implications for how co-design practitioners might think about the impact of this affect. She begins with common conceptions about happiness in group spaces – as either 'outside-in' or 'inside-out', which will likely resonate with most co-design practitioners. From there, she deepens these ideas through connecting affect to wider dominant 'happiness scripts'. As I was reading this work, her ideas seemed to challenge basic assumptions in co-design literature about the causal relationships between affect, empowerment, and oppression. It seemed to challenge the unspoken expectations

Narrative | Happy objects within reach



Two figures – perhaps a young man and young woman – walk along briskly, rounding the street corner. They seem happy; engaged in the kind of energetic conversation shared between friends on a favourite topic. While looking at them, I notice that the young woman's foot kicks out as she walks. A light breeze seems to catch her ponytail just as she is about to step off the curb. There is something about both these details that reminds me of my childhood friend, Allison. But, of course, it isn't her. It could be someone like her, though.

At the same corner, a car has stopped and another pedestrian begins to cross the road. Or is it a road? There's only one vehicle in sight, so maybe this part of the city has been designed around foot traffic. It might be one of those streets that becomes pedestrianised on weekends. Across from me, I can see someone else who is also overlooking the scene from above. This person is sitting alone, bringing something up to their face with their hand. Maybe they are getting some fresh air during a lunch break, feeling content to let their mind wander as they watch the hustle and bustle below.

But from this perspective, it is harder to guess what the rest of the people in this scene are doing. Are those two friends being followed by the person behind them, or no? A bit further in the distance, it would be easy to miss the shadowy figure leaning over, reaching for something that is obscured from my view. Should I be concerned for the person on the right, the one with her hair tied back in a bun? The way the light hits her silhouette, I cannot tell whether she is coming towards the brightness of the busy corner or heading away from me, towards that shadowed area behind.

I press a small pinch of sticky tack under the foot of another paper figurine, then gently fold it at the knees and elbows. My quick experiment seems to be working: in what must have been less than 2 minutes, I have a tiny cityscape of laser-cut paper shapes and people built on my desk. I think these workshop materials will help participant ideas and speculative scenarios come alive, even for those who might not arrive feeling confident in their own creativity. Right now, everything in this scene is made of purple construction paper, but there already seems to be enough detail in the blocky shapes to trigger some associations and ideas, when placed in relation to each other. I'll be interested to see whether introducing more colours feels more inspirational or takes away from the cohesiveness. In any case, the final version won't be purple, which is not included in the branding identity for this project. I'm not wasting any of the good colours on this first test cut because time is running out and I'm sure there won't be able to go purchase more paper before the event.

FIGURE 3.2 Tensions, negotiations and boundaries of DRPNs as a recursive, performative, co-constituted method.

Lisa had shared some pictures of model-making kits by the Japanese architect Terada Naoki while brainstorming workshop materials for a previous project. We went in another direction then, but I have the website up on my computer screen again now. The kits are beautifully simple, yet so specific and situated in a local context. In the version I'm looking at, the styles of things like street signage and vendor carts seem to immediately place you in Tokyo, with visual details that somehow evoke the other senses too. They are captivating. I have been wondering if it would be possible to create something similar for this workshop. At the end of the event, we will be making models of public spaces, focused on designing them to be safer for women and girls. I wonder what details I will need to include for these model-making materials to feel like they are specifically for Melbourne; how they might add a particular excitement for the people who know this city so well. I have only been here for a few years, so omost of the participants will know it in an intimate way much better than I do. But maybe some details in the background of this place stand out to me more as a newcomer because they feel unfamiliar.

Chasing this potential, I have already spent too much time re-creating the details of a Melbourne tram carriage in Illustrator last night. I settled on the small Z3-class model, more distinctive than the modern D-class or E-class series. I was drawn to its boxy structure and angled display screen. While looking up reference images, I learned it debuted in Melbourne in the mid 1970s and 80s. Apparently the original designers had been inspired by the trams in Scandinavia, liking their European look. Half a century later, their inspiration has reverberated into my own mental image of the Melbourne cityscape. I'm reminded of the longer history of European influence on this place.

Almost before I can see it in my mind, I can hear the sounds of the bell and rumble as it travels down its tracks. I can feel my shoulders draw up slightly as ageing double doors screech open and shut at each stop. To me, this tram is now an iconic and visceral part of my everyday experience of this city. Creating safer public transport is also one of the central interests in this research project, so it is, in fact, relevant to include in the collaborative model-making workshop materials. I hope the details in my rendering will help evoke these senses for participants or prompt their own embodied memories of how it really feels, sounds, smells for each of them to travel through this specific place. That seems like it might make a difference to the conversation, albeit a very tiny difference. In actuality, it would probably do just as well to summon a general notion of public transport. I wonder for a moment if all I need is a rectangle with wheels. But that would risk being a bit uninspiring. Since it was late last night anyway, I gave in to the temptation to customise. I feel less guilty about wasting time on trivial things like this outside business hours.

But business hours have come back around again and I am the first to arrive in the digital fabrication lab this morning. It's a sunny day and I am feeling refreshed, despite a late night. I flip a switch on the wall and the fume exhaust system whirrs to life, promising to take any toxic contaminants released by my experiments elsewhere. Unlike these machines, the first laser cutter I ever used was an old finicky model. Combined with my inexperience back then, I could always expect to ignite whatever I was cutting at least once. I learned to stand by vigilantly with my fingers poised above the emergency stop button, ready to let any tiny flames fizzle out before finishing the job. Even though this hasn't happened for years now, I still strike

FIGURE 3.3 Tensions, negotiations and boundaries of DRPNs as a recursive, performative, co-constituted method.

that stance. But rather than entering a state of hyper-awareness, I let myself be mesmerised by the stream of light slicing intricate patterns, listening to the soft thumping sound as it changes direction on the axle. During these fast-paced projects, I really enjoy these moments of standing still, getting surrounded by the now-familiar smoky smell of an idea becoming something I can hold in my hands, something tangible I can hand over to someone else.

I do not have endless time to spare. Since this pattern is more intricate than the other workshop materials and will take longer to cut, I go straight to a colour we will be using at the actual event, forgoing the test run in purple. I spread the construction paper into a fan shape on the counter to pick out a colour from within our project branding palette. For some reason, my hand settles on the hot pink. It is a dark, vibrant hue, yet almost fluorescent.

I surprise myself – I would normally never consider 'making something pink' a meaningful feminist tactic. I would probably roll my eyes if someone else made the design choice to use pink in an event about women, girls, and gender equality. Feminism does not have to be feminine, after all. But now, holding this paper, I am wondering why I think the workshop materials should not be overtly, explicitly, stereotypically feminine. Or at least why my kneejerk reaction is that pink materials will mean these issues will be taken less seriously or that pink materials might somehow undermine or detract from the goals of this workshop. Or worse, that pink materials could somehow – even slightly – detract from the crucially important applied outcomes stemming from this project.

My little sister was watching me and waiting patiently for her turn at the piano when her eyes widened. She had just noticed something seriously amiss, which the rest of us seemingly had overlooked: a pink ribbon in my hair. She grasped my mom's arm, but my mom smiled down at her, putting a finger to her lips. They looked at each other, forming a quiet agreement. My sister's initial concern gave way to mischievous delight and she smiled too. Her wait became a nervous but exciting period of suspense. What would happen when she finds out? Unaware, I looked up and down between the keys and the sheet music in front of me. My braid fell back and forth over my shoulder, sometimes dangerously swinging into the periphery of my view as my sister watched, tensing and squirming in her seat. Yet for me, the ribbon remained in the background, dangling nearby or lightly pressing against my back, somehow never catching my attention. I was focused on practising the right notes.

Supposedly, it was not until we were back home, getting ready for bed that night, that I finally noticed the ribbon. I do not recall how I reacted at the time, but years later my mom tells us this story and by that point we could all smile like the two of them had that day. She insists that she only forced me to wear pink that one time. I imagine I would have retaliated by wearing my favourite outfit to school the next day – green sweatpants and a black hockey jersey – to try to undo the reputational damage caused by my proximity to that girly bow. I am sure my 'tomboy' commitment to never wearing pink would only have been strengthened by once wearing it against my will. I do know that, as a child, I had kept myself as far from

FIGURE 3.4 Tensions, negotiations and boundaries of DRPNs as a recursive, performative, co-constituted method.

that ribbon as possible. It still got plenty of use as part of my sister's favourite dress-up outfit: a purple leotard and pink tutu. After any given day, it would have been put away in the same drawer in the bathroom. That is where it was always kept, even long after my sister outgrew playing dress-up, even over years as we both came back home for visits as young adults.

Maybe if I could go visit my mom today, the ribbon would still be there. On the other side of the world, Alzheimer's is quickly eroding most of her memories, even her happiest ones. But perhaps if she could touch and hold the ribbon, and all it contains, it could help her tell that story again. Or maybe it could help her feel some fleeting sense of these experiences we've shared. I used to want this distance between me and the pink ribbon, but now I wish we could be closer together again.

With a mechanical flourish, the laser twirls around the final cut in the template and returns to its resting position at the top left-hand corner of the cutting bed. I open the lid and reach into this space, carefully peeling up the masking tape that held the paper steady while it transformed from a simple sheet into an intricate design. It flutters in my hand as I carry it to a table top nearby. The moment of truth: will it support itself as a stable 3D form? Amazingly, all the notches seem to line up on this first go. It looks promising. One by one, I guide various paper tabs and they lightly snap into place. On the last one, I feel a little surge of excitement. It looks great. Whatever you might be busy doing, whoever you are, this hot pink tram cannot go unnoticed in the background: it demands your attention.

The details are a spot-on miniature depiction of the trams I see every day from my apartment and from the office, but the colour hints at an alternative possibility. What else might need to change in order for something so overtly, stereotypically, 'feminised' to be built into the basic infrastructure of our city? I'm holding it in my hand, but I am imagining what it would be like to actually see this tram, life size, rumbling down the street, announcing that we are doing things differently now. It would be strange, but the intricacies of the laser-cut model – its tiny side mirrors, functional doors, iconic silhouette – make this little daydream feel somehow less outlandish. I almost want it to be a real thing.

But right now, there's no time for reverie. I rush to gather all my things, delicately placing the tram on top of the stack of leftover construction paper, and march upstairs to our shared office. As always in the final weeks leading up to one of our events, my arms are full and I'm walking quickly. But now I find myself more aware of my movements and momentum. As I whip through the familiar halls and doorways, I'm being careful about how much I disturb the air around me. I don't want the tram tumbling off the stack of paper.

Look at this![?] I exclaim as I walk in, holding it proudly out in front of me. Obligingly, the pink tram is met with small cheers and tiny applause from my teammates, who look up from their desks for a moment to share in my excitement.

FIGURE 3.5 Tensions, negotiations and boundaries of DRPNs as a recursive, performative, co-constituted method.

I think there were about 70 of us in the room, but I remember it being quiet. The tone was formal; there were black tablecloths on all the tables and a team of support staff in matching black uniforms. The space was cavernous, with beige walls, high ceilings, and an audience of mostly white men. There were no windows. Even though we were seated at round tables in groups, we would not have the chance to directly interact with the people around us that day. In fact, at least half the people at each table would spend the day with their backs turned to the others, re-orienting their seats to face the presentations from sector experts on stage at the front of the room.

The conference had begun promptly at 8:30am with a booming video call from a British expert in counterterrorism, security, and surveillance for the kind of public spaces I have been researching. I was impressed with the amazing feats of engineering and counterterrorism measures he presented, especially those that you would never notice, like windows and lights made of shatter-resistant glass. But soon I found myself trailing off, wondering if it was more straightforward to make a public space shatter-resistant than it was to make it harassment-resistant.

Going into a coffee break before our presentation on safety for women and girls, my colleague and I started to distribute some eye-catching folders with more information and supplemental material about our research. This conference could be a good networking opportunity, even though our research was a bit of an outlier on the agenda. At one table a stocky man with a fully shaved head looked up from his phone to ask me about the catering. Unfortunately, I did not know any more than he did. Maybe he had mistaken me for a member of the event staff since I was handing out folders. But I had also been asked a similar question earlier in the day by another conference attendee, which was an odd coincidence. I wondered if it was because my outfit was mostly black. I glanced around at the staff from the conference attendees could present their work without a hitch.

Later, I was in the lobby writing a last-minute note for my part of our presentation when I saw an older man approaching from across the hall. He was walking with the elevated energy of someone rushing between important commitments. His demeanour was friendly as he too asked me something about event logistics. It was clear that, for the third time, I had been perceived as event staff instead of a speaker at the conference. Again, I found myself explaining politely that I did not know. We were both swept up in the inertia of his late arrival and somehow speaking at the same time, so he may not have had heard my answer to his question, but he spotted my nametag and interrupted himself:

'Ah, Hannah! Will you be distributing kisses to everyone in the next session? '

FIGURE 3.6 Tensions, negotiations and boundaries of DRPNs as a recursive, performative, co-constituted method.

I had been glancing down to gather my papers before heading back into the conference room, but my eyes snapped upwards to meet his. I saw a twinkling smile. *Kisses*? It was such a bizarre question, yet exclaimed with such a happy delivery that I was not offended or even uncomfortable, just baffled. Before I could respond, a real member of the conference centre staff, wearing all black like me, gently let us know that the next session was starting and ushered us inside.

The man had not introduced himself, but as he addressed the audience for his presentation, I realised that I knew his name. He was a senior researcher, a full professor, and the only other academic at this industry conference. In the end, he was also the only other person at the conference to bring up gender in his presentation. It was a small bullet point, but I was happy he mentioned it. It would give our research more credibility with this audience. We were the last to present and, although the other talks had led to short but lively Q&A sessions, our presentation was met with tired silence. But it was the end of the day. It was broken by the footsteps of the conference convenor joining us on stage before taking the microphone to relay a thank you on behalf of everyone.

Later, some seemed to have made plans with each other to carry on their networking at the casino nearby. I had accidentally walked out behind them in the same direction and worried for a moment they thought I was trying to tag along uninvited. But no one seemed to notice when we passed by the tram stop and I broke off from the back of the group.

When the tram arrived, I found a seat by the window. It was getting dark outside, making it hard to see through my own reflection in the glass illuminated by the artificial tram lights. I was still wearing my nametag, which reminded me of the strange encounter in the lobby earlier. Still baffled, I found myself forensically piecing together what could have prompted the joke about me kissing the other conference attendees. I looked more closely at the sticker on my chest. Maybe, if he were glancing quickly at my messy handwriting, he could have interpreted an 'X' to be written in the smaller letters under Hannah. That was not what I had written there, but I decided to give him the benefit of the doubt. I was just as happy to let the joke go as he had been to tell it. After all, I had enjoyed the conference and I wasn't willing to make something small into a bigger deal than it needed to be. I peeled off my nametag, crumpled it into a tiny ball, and dropped it into my bag. The last thing I needed at that moment was for a stranger to see my name and use it as an excuse for a forced conversation or to follow me off the tram. This had happened before with forgotten name tags on public transport. But this time, thankfully, it was just a quiet ride back.

I used the quiet to remember another day I had spent at the very same conference centre about 6 months prior. That day, I had been forewarned that I was entering a contentious space. I had been hired to conduct a large-scale workshop with a sexual and reproductive health organisation. The organisation had closed operations for the day to enable everyone to come together to co-create their strategic vision for the next 5 years. This contract came with warnings by the new CEO that tensions were high and the organisation had become extremely siloed. I had braced myself for a difficult day. And yet once we were in the space

FIGURE 3.7 Tensions, negotiations and boundaries of DRPNs as a recursive, performative, co-constituted method.

together, doing the activities and using the materials provided, the energy had shifted. The materials invited us to perform another side of ourselves (during the icebreaker, participants were invited to try out different collaboration roles and mindsets, through 'try it on' lanyards that they could take on and off throughout the day such as active listening, vulnerability, optimism, etc.). They were invited to disagree. As I sat there remembering how it felt to negotiate that contention in the very same setting, I was glad that my practice involved more workshops than research presentations. Making things together was different; it created more possibilities to shift, not just present, our perspectives.

With the pink tram temporarily placed on the shelf behind me, it is time to develop and iterate on the other participatory model-making materials I have started. Unlike the gorgeous model kits by Takedo that had served as inspiration, the goal of this workshop is not to try to reproduce the city spaces of Melbourne just as they are now. I am aware that these materials also have to do something more: we want to evoke but also re-imagine the possibilities of these spaces. We want to re-make and unmake these spaces to be less exclusionary, to be safer for more people. A hot pink paper tram will not change the city, but in combination with more materials, I hope everyone will be well-equipped to chase a promise of something else or at least become open to wondering where a promise of something else could take us. Glancing around at the other things on my desk, I see the sticky notes reminding me to check on the other crucial aspects of the upcoming workshop:

'Therapist' – this is a new role we are trialling at the workshop, someone who will participate alongside everyone else but also be on standby if anyone needs more support. It is out of an abundance of caution (we have been making many other efforts to try to create a safe space), but topics about gender, safety, and public spaces can affect people in ways they do not necessarily expect. Also, the people and things you encounter at the workshop can also affect you in ways you do not expect.

'Coffee cart/catering' – another member of the team is tasked with securing our caffeine for the day. We know how important coffee is for a successful workshop. We are expecting between 60 and 90 participants and we will be spending a full day together. Maintaining energy and momentum is a big part of our approach.

'Voucher' – for those who will be joining the workshop outside of their paid work capacity, we want to make sure we find a way to reimburse them for their time. Thankfully, the details will be sorted out by the project coordinator. With all the coordination I am doing for this event, I am very glad not to be doing that paperwork. Most people will be joining us in their paid capacity. There will be public servants, engineers, designers, activists, and various public service providers, alongside youth activists and community members with lived experience.

All of these 'to do' items, among others, are essential for hosting and taking care of the participants. But tonight, my focus is on the *making* materials we will use when we finally all

FIGURE 3.8 Tensions, negotiations and boundaries of DRPNs as a recursive, performative, co-constituted method.

come together. I am reworking some of the methods our team has used before, a bit of a twist on an architectural charrette. Some topics on the agenda will also require new approaches. For those who are brand new to designing, what will they need in order to confidently construct, rethink, and envision safer futures? Creative methods, like feminism, can sometimes be divisive or exclusionary.

I pushed the bathroom door open and hustled into a stall where I could hide for a moment. I leaned against a sickly, pale-green stall and looked up at a flaking spot of water damage that was developing on the ceiling. I wondered how I could walk away, cut my losses, and withdraw. But as I weighed up the options, it was clear that leaving this degree early was the only choice that could possibly be worse for my career and my savings than staying to finish it. I would have to.

Research methods and processes was a core requirement, but I needed to step out. Already about a month into my Master's degree program in critical design, I now knew beyond a shadow of a doubt that I had made a grave mistake. Before this, I had felt more bemused than anything. I had explained to myself that the lecturers were probably just catering to other students who did not have a research background like I did, they wouldn't want to overwhelm anyone brand new to this area. I could understand that. But that was not research. More disturbingly, it also did not seem to be design. I wasn't confused by these 'research methods' we were learning, I was horrified. None of these 'creative' methods could possibly produce any verifiable evidence. If you followed these approaches, you would have no way of backing up your claims. This 'research' wouldn't stand a chance against the lightest scrutiny in the real world. All my prior training in neuroscience had taught me how to scan reports, case studies, and articles to spot possible tiny infractions from the most robust application and execution of the scientific method. Similarly, I had been taught that any deviations or oversights in carrying out your objective procedures could invalidate the results and you would have nothing. Or worse, you would have produced research that was misleading or inaccurate.

And the methods being described in this class were not tiny infractions. Another wave of incredulity struck me as I thought about what was still happening in the lecture hall just beyond the door. I had escaped temporarily because I thought I might become visibly upset. It was too late. I had already left my job and moved to another country to pursue this degree. I had been so excited to learn the fundamental drawing and rendering skills I would need to develop new products and devices that could make a demonstrable positive impact on other people's lives. I could take this financial risk because at the end, I would have the concrete skills to get straight back to work again. But somehow, instead of learning these core skills, I seemed to have stumbled into a degree that was just going to be useless in the real world. I did not want to be there.

FIGURE 3.9 Tensions, negotiations and boundaries of DRPNs as a recursive, performative, co-constituted method.

I am both excited and a bit overwhelmed by the diversity of participants we are expecting at this workshop. I imagine everyone will be arriving with different expectations of the day: some are drawn to co-design for its promise of concrete outcomes. Others for amplifying voices that would normally be missing in decision-making processes. Some will be outspoken feminist activists, others will be starting to consider how gender inequity relates to their sector for the first time. Some participants will be cis women, some will be trans women, some will be non-binary, some will be cis men, some will be young, some disabled...I have not been leading the recruitment process for this workshop, but I have been worried about who we might be forgetting to include. I have also been very worried about tokenistic inclusion.

But at the moment, one of the things I am preoccupied by is thinking about participants who will be new to creative methods. I have heard horror stories from other design-led projects where people felt so alienated by the creative methods introduced by embedded designers that they took sick leave to avoid the distress caused by unwelcome design approaches. This is not the kind of disruption I want to cause through this workshop. Instead I want all participants, regardless of design experience, to be positively affected by the workshop materials. I want them to feel excited to build something together and to feel proud of the result: to feel compelled to follow the promise of the successful physical manifestation of their collective ideas. If they are willing to take on the risk of challenging conversations, I at least want them to feel happy about their contribution to what we create together. Deviating from institutional norms is hard enough without also questioning your own creativity along the way.

For this event, I have planned an ambitious 6-in-1 workshop structure, almost like a trade show. It is taking place mid-way through the project, building on findings from previous phases of the research. We have a sense of the wide variety of stakeholders, many of whom hold contrasting ideas about how to frame the problem as well as conflicting ideologies on how best to move forward. The issues at the core of this feminist work exist on multiple levels: collective action needs to urgently address problems that are the products of gender inequity, while also addressing the wider drivers and aspects of gender inequity itself. Some participants will be seeking to do one more than the other. Both these orientations require different approaches and methods. I will be leaving the choice to them. Well, at least a bounded choice. There will be a variety of topics and approaches, and they can choose to join the one that most intuitively aligns with their own motivations for participating. The tables are arranged on a spectrum: topics where we think we have the most data, evidence, and certainty for how to proceed are positioned near the entrance. But, as you move to the back of the room, the topics become increasingly shrouded in ambiguity, uncertainty and conflict about what we should do next. My hope is this will welcome a more diverse range of perspectives to the discussion and expose participants to unfamiliar frames and approaches without demanding that everyone embrace all of them. Half of the conversation topics at some point make use of a charrettestyle model-making method we have been perfecting as a team, so I am tweaking the materials to suit this project.

In previous iterations, I had been adamant that the human paper figurines we made available for this model-making needed to reflect a diversity of real skin tones. I did not want racial and

FIGURE 3.10 Tensions, negotiations and boundaries of DRPNs as a recursive, performative, co-constituted method.

ethnic diversity to be something that was not addressed explicitly in the visions of futures. However, in looking over images of previous workshops, the shiny, happy, visions of diverse and inclusive futures took on a saccharine tone – it seemed that through making these images, we had enabled the discussion about the real-world complexity of inclusion to be bypassed. This was an unexpected downside. The happiness and almost magic-like quality of these materials to make tensions disappear could affect us in ways that were counterproductive. Photogenic materials could prevent us from engaging deeply with the harder, unhappier topics. By offering symbols of diversity like the PRIDE flag and the Aboriginal flag into the modelmaking materials, were some participants just making their visions based on what they thought was the 'right' answer? Or were some genuinely prompted to think inclusively or to shift their assumptions and expectations about safe public spaces?

I am not sure. So, this time I am aiming for ambiguity. There needs to be a mix of feminine, masculine, and androgynous forms for the laser cut paper people. Silhouettes need to reflect a variety of clothing attire and uniforms; different hairstyles and textures; diverse ages and abilities, sizes, and shapes. I am especially careful to make sure that the representation reflects the diversity of participants I know will be joining us on the day, so everyone will feel represented in the materials. It is uncomfortable and exactly the surface-level, tokenistic inclusion process I do not want for the participants. Instead of combining simplified geometric shapes, I opt to hand-draw the silhouettes, so that the paper people look more like individuals you might encounter as you move through the city, rather than a nameless demographic category. Maybe a crooked or wobbly line will remind someone of a certain person they really know.

I carry over the hand-drawn quality to the patterns and shapes of the non-human materials as well. I need diurnal and nocturnal animals (gendered safety concerns are amplified at night). Plants are always important in safe public spaces (but they need to be the right height and density to not obstruct sight lines). As I watch the paper city take form, I like that the imperfect aesthetic does not obscure the human labour which goes into producing these model-making materials. These elements clearly came from somewhere, which maybe means their origin is more open to critique.

As I'm finishing, I notice all of the human figures are drawn as individuals, except for one. I have outlined a silhouette of a large masculine figure conjoined and holding hands with a small child. This is subtle, but I think I know why I have done it. Earlier phases of the project consistently associated women's concerns about navigating public space with parenting and caregiving responsibilities and it bothered me. I feel like I now need to gently trouble this stereotype. It's a personal view I'm enforcing, but I reassure myself that anyone unhappy with my choice can simply snip the man and child apart with a pair of scissors on the day. I'm not sure I can identify the emotion I feel about this possible participant rebellion. On the one hand, the unexpected aspects of workshop encounters are what I look forward to the most – when the materials get used in ways I never intended. As much time as I spend carefully curating and bringing ideas, research findings, and materials into reach, my intentions do not dictate actual use. Participants will always be drawn towards or away from these materials differently than I am. There is a small element of risk in overtly bringing my personal touch to this practice. Someone might be outraged that we would focus on fathers or male caregivers when

FIGURE 3.11 Tensions, negotiations and boundaries of DRPNs as a recursive, performative, co-constituted method.

the majority of caregiving responsibilities still fall on women. Someone else might see that pairing and be prompted to worry for the child's safety. And yet, I know that there is no way to fully remove my perspective from these materials, so maybe it is somehow more ethical to make their connection to me more obvious.

After drawing dozens and dozens of different people, animals, plants, and other things found in public spaces. I pause to consider what else I can bring to the table. Or rather, what else I will be leaving on the tables for everyone to use. I cannot be at all 6 tables at once on the day. Purposefully, they won't be watching me at the front of the room, as I present my expert opinion. They'll be turned towards each other, orientating towards their shared visions. I hope I have struck the right balance of ambiguity so that the models they make will challenge the orientation I bring to this work. I also hope the ambiguity in the materials is evocative or provocative enough to trigger their creativity and inspiration, but also open-ended and spacious enough that they can easily forge a path I would not expect.

It's not long to wait now to find out how my feminist intentions will extend into the actual event.

FIGURE 3.12 Tensions, negotiations and boundaries of DRPNs as a recursive, performative, co-constituted method.

of these practices that get reinforced in every workshop documentation photo of smiling participants collaborating.

My hope is that, like Ahmed's research has done for me, the following DRPN will provide moments of resonance – or dissonance – with your own practice and prompt you to notice or reflect upon aspects of your work that may have become background.

Note

1 The work of WonderLab is featured in https://www.designingtransformativelearning. com/resources which offers free templates for designers to work with: https://miro. com/app/board/uXjVO_5YYH8=/.

References

- Ahmed, S. (2006). *Queer Phenomenology: Orientations, Objects, Others*. Durham, NC: Duke University Press.
- Ahmed, S. (2010a). 'Happy Objects'. In M. Gregg and G. J. Seigworth (eds), *The Affect Theory Reader* (pp. 29–51). Durham, NC: Duke University Press. https://doi.org/10.1215/9780822393047-001.
- Ahmed, S. (2010b). The Promise of Happiness. Durham, NC: Duke University Press.
- Ahmed, S. (2017). Living a Feminist Life. Durham, NC: Duke University Press.
- Berlant, L. G. (2011). Cruel Optimism. Durham, NC: Duke University Press.
- Berlant, L. G. (2019). The Hundreds. Durham, NC: Duke University Press.
- Harris, A., and Jones, S. H. (2016). Writing for Performance. Teaching Writing. Rotterdam: Sense. https://doi.org/10.1007/978-94-6300-594-4_2.
- Hemmings, C. (2005). 'Invoking affect: Cultural theory and the ontological turn'. *Cultural Studies*, 19(5), 548–67.
- hooks, b. (2000). Feminism Is for Everybody: Passionate Politics. London: Pluto Press.
- Lee, J.-J. (2012). Against Method: The Portability of Method in Human-Centered Design. Aalto University, School of Arts, Design and Architecture. http://urn.fi/ URN:ISBN:978-952-60-4860-4.
- Lorde, A. (1984). Sister Outsider: Essays and Speeches. Freedom, CA: Crossing Press.
- Pihkala, S., and Karasti, H. (2016). Reflexive Engagement: Enacting Reflexivity in Design and for 'Participation in Plural'. ACM International Conference Proceeding Series, 1: 21–30. https://doi.org/10.1145/2940299.2940302.
- Pillow, W. (2003). 'Confession, Catharsis, or Cure? Rethinking the Uses of Reflexivity as Methodological Power in Qualitative Research', *International Journal of Qualitative Studies in Education*, 16(2): 175–96. https://doi.org/10.1080/0951839032000060635.
- Pollock, D. (1998). 'Performing Writing'. In P. Phelan and J. Lane (eds), *The Ends of Performance* (pp. 73–103). New York: New York University Press.
- Pollock, D. (2007). 'The Performative "I"', *Cultural Studies* \leftrightarrow *Critical Methodologies*, 7(3): 239–55. https://doi.org/10.1177/1532708606288649.

- Pollock, D. (2009). 'Beyond Experience', *Cultural Studies* ↔ *Critical Methodologies*, 9(5): 636–46. https://doi.org/10.1177/1532708609338036.
- Rai, S. M. (2018). 'The Good Life and the Bad: Dialectics of Solidarity', *Social Politics: International Studies in Gender, State & Society*, 25(1): 1–19.
- Rommes, E., Bath, C., and Maass, S. (2012). 'Methods for Intervention: Gender Analysis and Feminist Design of ICT', *Science, Technology, & Human Values*, 37(6): 653–62.
- Tyler, I. (2008). 'Methodological Fatigue: The Politics of "The Affective Turn". *Feminist Media Studies*, 8(10): 85–90.

4 LANGUAGES AND TYPOGRAPHIC REPRESENTATIONS

Leo Vicenti

note on the format: writing and reading are relatively new ideas. Indigenous peoples for the most part (see Cherokee and Canadian syllabics) haven't had a long history in writing for intercultural exchange; writing generally isn't a part of our communities' traditional cultural practices. Before colonization, there were more important things to worry about than to create some weird system of symbols for use in documenting our culture; we were already experts in storytelling and oral histories. As an Indigenous design practitioner, I struggle with my writing as I try to fit into this foreign system. To make this a meaningful and structured experience, I have spent quite some time reflecting and documenting questions and answers that I feel might help give insight into my practice.

First let me introduce myself:

*Dáazhóo! (Hello!) My name is Leo Vicenti. I am an enrolled member of the Jicarilla Apache Nation. I have my BA in graphic design from Fort Lewis College (FLC) and an MFA in visual communication design from the School of the Art Institute of Chicago (SAIC). Additionally, I have also taken a summer online course focused on the design of display type through the 'Type @ Cooper' programme and am currently part of the cohort in the 'Type West' online certificate programme for type design at the Letterform Archive. Along with this path, I have worked several years in the museum industry as an exhibition designer with specialization in projects involving Indigenous communities. A big part of this work typically involves engaging with the languages of these communities, whether it is aimed at preservation, revitalization, or representation.

(* 'o' is missing a combining macron below diacritic. We can revisit this later.)

I acknowledge my identity as a nomadic Apache man, currently living on the Semiahmoo territory and working on unceded, traditional, and ancestral territories of the x^wməθk^wəỷəm (Musqueam), Skwxwú7mesh Úxwumixw (Squamish), and səlilwiəta?ł (Tsleil-Waututh) peoples.

Practising design

Currently, my design practice is flexible. I don't feel like I attach myself to any specific ideas when taking on a project, but I do think about how I might approach it. I have a few focuses: art, craft, visual design, and exhibition design. This variety usually makes things more interesting and fun, and each area helps broaden perspectives for the others. I've built bridges from one to another so when looking at possible outcomes, there is a spectrum or percentage level for ideal engagement and efficiency.

I come from a family of traditional artists. By traditional arts I mean the longstanding practice of creating sumac and willow basketry, micaceous pottery, bead work, and the fabrication of traditional regalia. It's debatable as to how to position these creations in art or craft practices, or in relation to exhibition design, how these items become artefacts. These practices predate colonization and have a variety of stories engrained in the process. Before, during, and after anecdotes can accompany memories and add to understanding of seasonal cycles that Indigenous communities are familiar with. Mapping the practice to the cycle is something that is usually passed down through mentorships. Personally, I'm fortunate to have the exposure to such information from my family growing up. My late relative, Felipe Ortega, told me that we have no word for art in Apache; we only have 'creating beauty'. In this belief, everything is and isn't art. It could be a moccasin, it could be a dress, it could be tying your hair.

Since my time at FLC, I have committed myself to understanding the material and visual cultural practices of my tribe. I had enough exposure during that time which added to my own search for language resources at FLC. When looking at artefacts in a museum, I could understand how to identify the piece by its materiality, what is communicated in its visual motifs, and how to go about researching its language and/or collective memory. Basketry is a good example – I can identify the material by the colour of the fibres used; if the rim was braided, which is a unique characteristic that's specific to my tribe; and the design, which might say whether the piece was utilitarian, a specific family's design, or whether it might have been used in a ceremony.

Trade is also an important consideration as the Jicarilla were somewhat buffers in the economic trade centres of northern New Mexico, especially in Pecos, Picuris, and Taos pueblos, where there are multiple documented accounts of mutual exchange. Buffalo and related items accompanied goods from bartered interactions on the plains, which made their way back to the central south-western economy. Micaceous vessels fashioned from local clay deposits in the region were often sold among the variety of items going in and out of this trade system; some examples might include objects – beads, shells, scraps of metal, stones, knives, leather/hide, and so on – or even food – meat, corn, beans, and squash.

When we look at an artefact in exhibit design, we have all these things to consider - either as an interesting investigation or as a curious dead-end. One unavoidable consideration is thinking about histories and place. I have only been talking about my specific tribal practices and experiences, but there are some that overlap socially between the Pueblo communities of the region, the sedentary Navajo (aka Diné), the nomadic Utes, Mescalero, and Comanche. The crossing of nomadic paths is too complex to try and understand briefly. I understood this as I started to look at Spain's documentation of Apachean group sightings after their arrival. Through those papers you can see that there used to be greater diversity of groups, or clans, within this region, hinting at larger systems of trade and commerce (shells, feathers, beads, etc.) that lead out in all directions. I was able to better understand this complexity of clans that held certain descriptive names indicating their land base/s by turning to language. For example, our tribe has two clans in the contemporary, the Llaneros (the red clan) and the Olleros (the white clan). While I don't know when or where those names came from, I do know that we talk about them as the plains and mountain peoples. 'Ollero' belongs to Spanish etymology as a word for 'potters', with 'Llanero' meaning 'plainsman'.

In my contemporary exhibition design practice, I will often consider the additional perspectives of architecture and structure. I can imagine what it was like before colonization, with no permanent structures standing, so this knowledge isn't so far out of reach to be lost, and my reflections can be brought in to influence the project while it develops. These are sometimes the most obvious points of engagement as architectural modes are easily contrasted. The tipi differs greatly from the various Western architectural practices, which leaves a lot of room for development and exploration.

To me, visual design can work culturally, looking back through a traditional practice, or through contemporary design structures. This is something that I practice daily and challenges me to think in a variety of ways. My morning routine is a design practice, braiding my hair is my art, my morning tea is my craft, and the personal things I collect and surround myself with are an exhibition. I can have fun returning to this work daily, and it lends creativity in how I view my habits and practices.

This daily philosophy aligns with our traditional practice of fashioning micaceous wares. In Jicarilla, when you are fashioning a vessel out of clay you are encouraged to clear your mind and not project a desired outcome in the

creation process. Listening to the clay and letting it come to life is part of the beauty that offers intuition in the making and unexpected outcomes in our work. I've been told that it's like having a child – you don't want to place expectations on them beforehand, you want to love them as they become. I found this traditional philosophy growing up, and it has become a very important perspective in how I look at my own creative practice. With these roots, I approach every project in the moment, knowing that tomorrow I might easily have other thoughts on whether it is going in a good direction or not. This also aligns with my beliefs that design is based in the present – the now – maybe changing tomorrow, but it is always directed by our right to self-determination, especially as an Indigenous creative. Understanding this complex history of ours, it has helped to reveal my Indigenous design philosophy that lives through creation in the present.

Language and my design practice

First, I would like to give praise to the creator who gifted our people our language. Secondly, I acknowledge that the story of our language can only be partly understood from my perspective. I will be forever thankful for every person that has contributed to the preservation of our language, for use by future generations. I am part of this new generation and the more active I have become, the more I try to incorporate the learning of aspects that I don't understand with the current promotion and use of language in my projects. I feel that curiosity plays a big role in helping my understanding of our language which also oftentimes leads to each next design and language inquiry. One word might have multiple spellings to compare, with sample sentences needing to be examined thoroughly. When I reach out to my grandmother for further insight, it often produces additional material or leads to further detailed information such as use cases, figures of speech, or narratives. These add to etymological perspectives, helping to better understand the language space and build an approach to using certain words in the present day.

I look at our language system as an advanced technology that predates colonization. With enough research, you can start to see and understand our cultural world view. For me, this started with our dictionary. I spend time reading our dictionary, moving from words that I knew to ones I wasn't aware of. I found it interesting how words changed and how the speaking tense structure compared to Western models. For example, in Jicarilla we have another row of conjugations in our verb structure where we can speak in pairs, like 'Us two are going', or 'them (two) are working'. Our language is also very descriptive so when I think about saying things, I often must think of how I would describe it. A lot of our language also falls into a future imperfect tense, which means that things are constantly béshí (n.) English: the knife Examples: «Dáá'koh béshí ha'yeo nyí'áyihí baashínshíh. : You watch where he puts the knife.» (Hoijer text 10) «Dáá'koh diníií dáhigálé ghe'ííyáná yéé'aah dándásih béshí náidn'áná. : The man pushed right in and immediately picked up the knife.» (Hoijer text 10)

FIGURE 4.1 'Béshí' is a revival of Oldřich Menhart's typeface, Parliament (1950–1), which was designed for printing the Czech Constitution. In addition to its beautiful calligraphic character, it has unique conceptual grounds that parallel my values in Indigenous sovereignty.

going or continuous. When I say 'things are good' you can take it as 'things continue to be good' for all parties (Figure 4.1).

Our original homelands encompassed a vast part of what is now known as New Mexico, Colorado, Texas, Oklahoma, and Kansas. The dialect that we speak is an eastern dialect of the Apachean language in the south-west, which has most similarities with the Lipan and second closest to the plains Apache language (Apache Tribe of Oklahoma). It also differs from the western Apachean dialects of Navajo, on one branch, and a split branch of San Carlos on one end and White Mountain and Chiricahua on the other. These are all encompassed within the southern (Apachean) Athabaskan language family. The other two sections of this family divide into the Pacific Coast groupings (California and Oregon) and the Northern groupings (Alaska and Canada). In New Mexico the Pueblo communities contribute the Tiwa, Tewa, Towa, Keres, and Zuni (an isolate) languages. You can also assume the presence of Ute, Comanche, English, and Spanish languages.

The rich Indigenous cultures of the south-west have always been an inspiration to me. I was fortunate to work with the Pueblo communities, where I was mentored in working with oral histories and had the opportunity to help produce exhibitions at the Indian Pueblo Cultural Center. My design background helped some, but my can-do approach might have been my best characteristic during that phase. Non-profits are not well funded and the people that work for them often must wear multiple hats. I started in a position to manage a lecture series where I had some success touching on current issues, eventually able to align the public programming with exhibitions. My desire to keep designing by asking for projects helped me transition into the role of exhibition designer. My first full project was a top-to-bottom renovation of the rotating exhibit spaces: research, content development, planning, collaboration, and experience design for the first rotating exhibit, focused on the tradition of Pueblo storytelling. It was also my first publicly published project working with languages, where we curated stories and brought in Pueblo language keepers to record the stories in their native language. Exhibits come and go but moments like these are unforgettable.

Language and my typographic practice

After leaving to pursue graduate school, I delved deeper into language where I was doing research on understanding the complexities of our language while also examining the relationships with typography. My instructors did a great job at training me to work with language as a methodological framework, as well as experimenting with more advanced figures of speech. I was very reflective of my culture through this period as it was my first time away from my homelands, but it was very much these perspectives that I wanted to bring into my work.

I returned to our dictionary during this time which happened to also have a digital archive. I would log in daily to use the random word generator feature. Looking through words that I knew and having the book to reference, I noticed that some of the accents didn't match. In Jicarilla, we commonly use a 'slashed L/l' (L/l) - Unicode numbers U+0141 and U+0142. We also use vowel characters (Aa, Ee, Ii, Oo, Nn) that use both top and bottom diacritics, or accents, that are referred to as 'precomposed' diacritics. An example could look like this (i) with an accent also below the character, like this (j). I hypothesized that there was a problem with the Unicode encoding, which is managed by a consortium that works to standardize characters for digital use (Figure 4.2). (If you use a digital device, you are using Unicode in your communications.)



FIGURE 4.2 This ligature typeface was designed to simplify the orthography for Jicarilla language learners, making it easier to recognize the character pairings and reduce the number of characters in total.

But that wasn't the case with this situation. After contacting the linguist on the project, she connected me with the programmer who was tasked with building the online database. When he was building the database, he needed something that was utilizing an 8-bit coding structure. Unicode was still in the developmental phases at that point, so it didn't make sense to integrate this work in progress standard into the website. The site assumes that you have a 'custom' font installed on your computer, which you need to be able to read and write the language. The custom font was where the 'L-slash', above, and lower diacritics brought the project together. Our orthography, or writing convention, for Jicarilla doesn't utilize all the diacritical mark shortcuts on the keyboard. To allow the language to be written, he replaced the glyphs that weren't used with ones that we needed, for easy access. Upper- and lower-case tildes, rings, umlauts, and circumflexes were all replaced to make space on the keyboard for writing in this format. Navajo orthography is almost exactly like Jicarilla except for our use of the macron below diacritic versus their use of the ogonek. This is a very important detail in having a unique visual identity for a sovereign nation. Like the work of Juliet Shen (2018, 2022) with the Lushootseed nation, visual identities are a part of a system of recognition for a nation that tribes want and need. Her work was instrumental in exampling how

typography can enable visual and tribal sovereignty through its use in museums, signage, educational materials, activities, and integrated into their government.

By the time I investigated this dictionary database issue, I had already been developing a ligature font that sought to simplify the number of characters in our alphabet, wondering how I could make this easier for younger tribal members to learn. In Jicarilla we use groups of letters called digraphs (ts) and trigraphs (ts'), which make up part of our alphabet. In total, without counting vowels, the word groups add up to fifty-one characters. With the ligature font, you would be able to simplify the set down to thirty-five characters, which brings it a bit closer to the simple twenty-six Latin characters. This could ideally be implemented into a curriculum for language education. After all, tribal communities do have the final choice in how we choose to utilize this colonial system of education using written language and how we want to use orthographies. The ligature font was initially what I hoped to present as part of my master's work at SAIC, but my adviser recommended that I also implement it. I agreed and we kept pushing these ideas forward. At that point I started to bring all the focuses of art, craft, visual, and exhibition design into this project. Up to this point, I was not letting them influence each other. They had been siloed with distinct products for each path typography addressing stereotypes and representation, art and craft represented by pottery, and exhibit design examining place.

I first started working with ideas of place and history, knowing that I would have to develop and design something that would be presented in a public graduating exhibit. I was in Chicago, attending one of the only museum schools in the country, so I took that venue as the ideal place for this thesis project. Through choosing this site, my design work and I would be in conversation with the Art Institute's operations, strategic planning, collections, and history. To my knowledge, they hadn't featured any contemporary Native American artists in recent history and had no representation in their collections either. The few items that they did have were grouped into plains and south-western Native American cultures. In comparison to the Field Museum, a mile away, it felt more like an art gallery than a museum.

I next designed a digital environment that resembled the gallery setting: a white box, with other little white boxes inside it, some with Plexiglass vitrines that could encase artefacts. I reflected before I started to work by integrating pottery into this world. I remember thinking about what role technology played in this work, influenced by the history classes that I was taking at the time (Figure 4.3).

When I put the characters and pottery together, I couldn't help but think of a typewriter 'type ball': a sphere with raised letters on the surface, that strikes paper through an inked tape. The second iteration took the form of an axe, with the flat side of the head being cast with raised ligatures. Before stepping away, I even tried putting a skull within a case. I had no access to a physical space to work with and honestly, I didn't know where this was going, but I continued to explore each idea



FIGURE 4.3 The ligature font took many forms through the author's thesis explorations, including this rendering as a micaceous vessel.

using Cinema 4D to 3D model, prototype and animate each exhibit scene. This felt like a new direction: reflecting and letting these paths sit, even when they didn't continue to have an impact or sustain meaning to me.

I was also still trying to work through the concept of place in these efforts. I started talking to my mentors about trying to better understand my world view as a nomadic tribesman. I turned to mapping a cosmography to better understand my situation. My research started with interviews with family members, with whom I was able to talk about natural boundaries. Natural boundaries are developed over time and include landmarks, such as mountains, or barriers, such as rivers, that are understood through traditional narratives. These insights were supplemented by documents and other printed media in archives and books. Becoming White Clay (Eiselt 2012) was very helpful in understanding both the diversity of the Apache groups and their nomadic relationships. The infographics added to rough sketched concepts of anthropomorphism in the land, passed along to me by my maternal aunt from the researchers at the Capulin Volcano National Monument in northeastern New Mexico. Last, I surveyed older documented oral histories on creation stories. Narratives from the Myths and Tales of the Jicarilla Apache (Opler 1994) or the Jicarilla Apache Texts (Goddard 1911) were looked at comparatively in their initial raw 'field' formats and their interpreted versions, adding further insights into the stories that we told and our understandings of place and cosmography. Together these gave me an initial framework to think about nomadic movement and my presence as a guest in this new area. This research led me to examine the way I related to the earth. Our nomadic tradition has allowed us to navigate

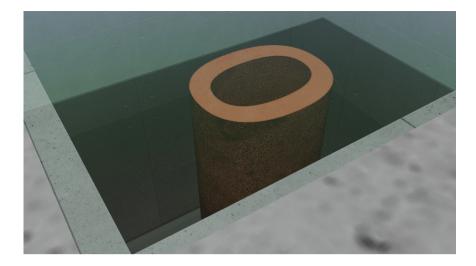


FIGURE 4.4 'ha'nas zani' (the ones who emerged), 2020.

hardships and displacement for centuries, and this graduate project was no different. I was in a new place, and I just wanted to make a genuine connection with the land. When I returned to my project with this new direction and energy, I focused on the literal foundation of the museum. I needed to create a form that connected the viewers to the earth, that connected my people to this new land.

My final proposal was to cut out a square void into the foundation of the museum floor so that the earth was revealed to the viewer. The negative form resembled the initial pedestal system with the letterform presenting as a micaceous vessel, sitting with the land. The name of the project was called *Ha'nas zani*, which means 'the ones who emerged'. It referred to one of our tribal stories. To me it signalled a re-emergence of our language, a reinforcement, a centring of our identity to language. Always connected to and alignment with our spirituality, culture, and environment. Academia was stressful because there was always a pressure to do something original when I just wanted to understand better. With this conceptual breakthrough, I was able to see that our language that I was presenting was truly original (Figure 4.4). Who knows when these ideas or words had last been spoken?

Growing my typography practice

After graduating, I restarted with experimental drawing and slowly simplified various expressions until they resembled letterforms. Sometimes I drafted compositions and other times I pushed ideas of refinement and depth with illustration. I also

realized that I wanted to learn more about typography and return to a typographic practice. I found out about the 'type@cooper' display type course at The Cooper Union that was offering scholarships to BIPOC applicants. I can't say enough how much initiatives like this can support up-and-coming designers. I worked directly with Juan Villanueva, a great instructor and full-time designer at Monotype. His course was very open with student-driven projects. All we had to do was design a typeface – what type of direction we took was up to us. Most of the students had a very experimental approach, which I can understand. I, on the other hand, was thinking more conceptually about this project because as a Native American, I had only seen typography applied in instances alongside stereotypical representations. If you drive anywhere along route 66, you are likely to see a common 'Western' aesthetic - an overuse of Clarendon-style typefaces in older examples, and more recently, a reliance on Novel Gothic (ATF) or Neuland Inline (Klingspor) type. Having lived in the south-west for my whole life, these specimens had naturally fell into the background, but I started to become more aware of cultural representation, our language, and where typography is an important visual element in this environment. Engaging with local signage was a point of entry into my community. I realized that I could encourage language learning by changing the environment to reflect the culture. I started to research a variety of typefaces that were meant to be used in signage. Having figured out my approach to Unicode, I would only have to make some decisions in the design process, and I would start designing a condensed sans serif typeface that's meant for use in highway signage. The software allowed me to design the precomposed characters so that when I brought it into Adobe programs, I could access them on the glyphs panel.

I imagine that many more tribal communities are experiencing these same challenges of not having the proper tools to produce language content. Not that their orthographies are requiring or proposing changes to Unicode, but that these precomposed characters are something that hasn't been documented well enough for communities to navigate. Community members should also be engaging in this work, but as we know, there are currently only a select number of type designers that have the experience in how to navigate this specialized process. This really shows the importance of supporting Indigenous designers who are interested in going into this area of design, while creating greater opportunities and resources to help support this development (Figure 4.5).

Tips for Indigenous or settler designers who are doing this type of work

I usually start with the community. In the end, they will make the final decision on how they will use and support this work in their own way. Each community



FIGURE 4.5 'Soundtrack to an Exhibition', 2019.

is unique so you could easily face issues of supporting an orthography while also needing to differentiate the collective character from another tribal nation's similar writing convention. Projects like these require a long-term reciprocal relationship. It takes years, even decades, to put together a language project like a book. During that time, we can ask, how can designers work to contribute to the tribal community in a design role? How can they work towards being a member or a part of the tribal and type design communities?

Also, only Indigenous designers should work with stereotypes. I have seen quite a few artists and designers who have tried to work in this space through imitation or stereotyping. By imitation, I mean copying a specific style or implementing word play tactics that reference the source. All designers imitate at some point, but it's good to develop a critical approach in this work. Jonathan Nelson's (Diné) 2017 poster *Rez World* is a good example of this, where he employs Neuland Inline to appropriate the Jurassic Park identity while reinforcing that 'YOU'RE ON STOLEN LANDS'. Stereotyping, on the other hand, mimics traditional arts practices, like bead work or pottery designs, or uses overly generalized letterforms (often geometric). When we talk about typographic stereotypes, we are likely referring to display type, or an overly animated typographic performance. In my research of the type design profession and issues of cultural imitation or stereotyping, I have found that we need to maintain a constant



FIGURE 4.6 Typographic exercises in critical imitation and stereotyping.

awareness and criticality of these approaches. My more successful exercises were straightforward presentations of curated typographic styles and direct content, such as in Figure 4.6. I must also note that even Indigenous designers aren't fully safe in this area. Angel De Cora, a recently recognized designer/illustrator,¹ can be looked at as stereotyping a culture instead of working with the community. Her 'out' is that when she was doing that work, there wasn't an accepted way to reflect and work with her culture.

Having worked towards this point, I am at a place where I want to design projects that are more inclusive. After my first experiences in type design, I only just began to think about how I can include more local native languages in the southwest. I want to teach my students to be comfortable handling a more utilitarian text type, exampled in our dictionary. When we get to the point where we can manage designing text type and understand the steps needed to support a variety of Indigenous languages, we will have real growth and innovation. We open up the possibilities to collaborative work between Unicode and tribal communities as the world becomes more connected, and resources for this work have become more accessible.

For now, I will leave this work with you, the design practitioner. When I started my design education, I didn't know half of what I know now. I have a lot of people to thank who helped me get here. Know that you are not alone in this work. But also have trust in following your own path in this very crucial work.

Note

1 Angel De Cora (1871–1919) was a Winnebago illustrator, educator, and writer (Sonneborn 2007). As a child, she was taken from her Nebraskan reservation without consent to Hampton Institute in Virginia where she learned 'non-Indian' (ibid.) art traditions. As an adult artist and teacher, she was often conflicted between her representation of Indigenous people and culture (McAnulty 2003).

References

- Eiselt, B. S. (2012). *Becoming White Clay: A History and Archaeology of Jicarilla Apache Enclavement*. Salt Lake City: University of Utah Press.
- Goddard, P. E. (1911). *Jicarilla Apache Texts*. New York: American Museum of Natural History.
- McAnulty, S. (2003). 'Angel DeCora: American Artist and Educator'. *Resource Library Magazine*, 4 August 2003. Available online: https://tfaoi.org/aa/4aa/4aa27a.htm (accessed 4 December 2022).
- Opler, M. E. (1994). *Myths and Tales of the Jicarilla Apache Indians*. Lincoln: University of Nebraska Press.
- Shen, J. (2018). [Video] Juliet Shen Lushootseed Indigenous Font Design at the San Francisco Public Library. YouTube, 21 March 2018. Available online: https://youtu.be/ 18hf1jk83HE (accessed 18 December 2022).
- Shen, J. (2022). [Website] *Typeface Design*. Personal Website, 2022. Available online: https://www.julietshen.com/typeface-design (accessed 18 December 2022).
- Sonneborn, L. (2007). 'DeCora, Angel (Angel DeCora Dietz)'. In L. Sonneborn (ed.), A-Z of American Indian Women (pp. 59–61). New York: Infobase.

5 CONVERSATIONS WITH DESIGNERS: POSITIONING ETHICS, VALUES AND EXPERIENCES WITHIN A PROFESSIONAL DESIGN PRACTICE

Mark Rutledge, Brian Johnson, Silas Munro and Bonne Zabolotney

n this chapter, Bonne Zabolotney interviews professional designers - Mark Rutledge (Canada) and Silas Munro and Brian Johnson of Polymode Studio (United States) – who have applied life experience and knowledge to the way they practice design. These designers reflect on the historical, intellectual, and emotional experiences that have developed their designer's mindset, and positioned their design practices as ones that forefront community building. Together, both conversations demonstrate the value of 'limited location and situated knowledge' (Haraway 1988: 583), constructing 'new horizons for design where knowledge and world making collide, coproduced by a particular moment and perspective' (Rosner 2018: 40). Mark Rutledge discusses his graphic design practice and how his Indigenous identity and life experiences led to an integrated approach nourished by love, humility, truth, honesty, wisdom, respect, and courage. Rutledge describes what it means to let go of lifelong fear, frustration, and hatred and instead turn to nurturing relationships with community, culture, and our natural world as sources of inspiration and deep connection. Silas Munro and Brian Johnson discuss the dynamics of ambiguous, emotional, yet productive spaces of designing at Polymode, 'a studio that leads the edge of contemporary graphic design through poetic research, learning experiences, and making cool shit for clients in the cultural sphere, innovative businesses, and communitybased organizations' (www.polymode.studio). Both Munro and Johnson describe what it means to share meaning, knowledge, and emotional feedback throughout the design process and what they have learned from their broad range of design projects.

Love and reconciliation, in practice

My name is Mark Rutledge. I'm a graphic designer with about thirty years of experience. I want to acknowledge the territory in which I live – Whitehorse, Yukon. I live, work, and play on the traditional territories of the Kwanlin Dün First Nation and the Ta'an Kwäch'än Council territories. I'm Indigenous, but I'm a visitor as well. I'm Ojibwe. I'm Anishinaabe. I grew up in Toronto, but my roots lay in northern Ontario. I was born in Red Lake, Ontario. My biological mother is from Little Grand Rapids First Nation in northern Manitoba, and my father is from Lac Seul First Nation in northern Ontario. It's a privilege for me to acknowledge my ancestors and my heritage because I didn't know who my biological family was at one point in my life. My father, Gordon Rutledge, adopted me, my twin brother, and my younger sister at a very young age.

Are you familiar with the Sixties Scoop? It followed the residential school system and was a government-mandated process in the forced removal and assimilation of Indigenous children into white culture. We were taken away from our family and removed from our culture, language, and roots at a very young age. My brother, sister, and I were placed into a children's home in Red Lake, and the physical, mental, and sexual abuses and atrocities we faced were terrible. We didn't know love; we didn't know affection - any of the things that children should experience in those years. We were eventually adopted by a family in Toronto. I pay respect to my dad because he was a source of light and hope for me. When we moved to Toronto during those formative years, we experienced culture shock, going from a small community of well under a thousand people to a city with millions. The environment was completely foreign to us. We were scared children all the time. We were fearful of everything. The hurdles that I had to overcome the racism, the discrimination – all started right at that moment. So, my existence is a form of resistance and resilience in a society that didn't want us. They wanted to 'kill the Indian in the child,' much like in the residential schools. We found ourselves in a settler environment, a colonial environment, different from how Indigenous people think and do things.

Growing up in Toronto, I was very angry. I hated the world, I hated settlers, and I hated white people. I mirrored the anger and the hatred that I felt was directed

towards me because of my Indigeneity, even when I didn't actually know that I was Indigenous. I knew I was different. I knew I was brown. Growing up was really challenging. I let that anger rage within me in a self-destructive way. I struggled with my identity and culture, but I knew that going to school was an important way to be a functioning person in society – working hard and getting into college. This is a colonial way of thinking. In high school, I loved art so much. It was an escape for me. I could dive into those pages of paper and lose myself in the creative process. But, when I graduated from high school, I went into a computer science programme at Seneca College in Toronto because I was told that was the path to success. During my first year, I realized that it was not for me. Every moment was a struggle, and I thought, how do I get out of here? When I was in that children's home, you were a target for abuse if you brought attention to yourself. If you didn't perform to their ideals of perfection, you were beaten and abused. You had to be a perfectionist to survive, and that mindset stuck with me. Even today, I struggle with that idea of perfection. I had to muster the courage to let my dad know that I wanted to change programmes. I thought I would disappoint him, that I was a failure. But, my father said, 'Do what makes you happy. That's all I've ever wanted.' To hear those words was a pivotal moment. I went into the design arts programme at Seneca College, and my mind, my world, everything just began to open up. I flourished in that programme.

I have had a lot of design experience and various design roles in my career. My first design job was as a creative director at an Indigenous magazine, called *Aboriginal Voices*. Until that point, I didn't know much about my culture. Then suddenly I was in an environment with Indigenous actors, actresses, musicians, and artists; anybody within the creative industries was there. This was a lifestyle/art magazine focused on Indigenous cultures, the first of its kind. After that, I worked for Hanger 13 in Ottawa for thirteen years. We produced amazing design work and developed our own Indigenous agency, The Thunderbird Group, solely dedicated to working with Indigenous organizations or those that work within Indigenous spaces. That was really a great experience that exposed me to the business side of design. After working for various other design studios in Ontario, I decided to look further north for new opportunities. A good friend recommended Whitehorse – a place with mountains and rivers and forests and animals and beauty. It sounded perfect to me.

I've had a range of design experiences at various studios and agencies in Whitehorse before I met Jeff Ward, the CEO and founder of Animikii. The values that the company holds, this is like coming home. Animikii is unlike any other company that I've worked with. At the core of Animikii's culture is the Seven Grandfather Teachings. I try to live by these values every single day. Jeff balances the ideas of Indigenous ways of knowing and being with a very Western business model. We evaluate potential clients before we decide to work with them, which I thought was unique and different from any other agency I knew.

- BZ: Did you learn resiliency and self-reflection from the Seven Grandfather Teachings, or is this something you developed before?
- MR: Years ago, I began my journey of reconnecting with my own culture and my birth family. Along with that came a myriad of other opportunities for me to reconnect on a much more spiritual and cultural connection. I met elders and knowledge keepers as well. I'm also a traditional dancer, which teaches me other ways of knowing that are learned alongside the Seven Grandfather Teachings – the values of respect, honesty, love, truth, humility, courage, and bravery. Being a traditional dancer allowed me to dive even deeper into that way of living. You don't just put on regalia and perform on the weekends. It is a fully immersed lifestyle that crosses over into your personal life, permeates into your work life, and informs the decisions you make.

We're all students in life, and every moment I'm learning from elders, not just from my culture, my nation, but from elders from everywhere across Turtle Island. My mind is open to many Indigenous ways of knowing and being, but it began with being Ojibwe and being that traditional dancer. When I was living in Ottawa, I also met other Sixties Scoop survivors. We formed a non-profit agency called Connecting With All My Relations, and our mandate was to help Sixties Scoop survivors reconnect with their families. We met weekly and had support and counselling services. I always felt incomplete when I was young because I didn't know my family. By the time I met my wife, I was still carrying hatred and animosity towards the government, white people, and social workers because I blamed them for my predicament. My wife said I needed to unburden myself and let go of that rage because it's not serving any purpose. It wasn't easy, but I forgave them all. As soon as I did, all those negative feelings in my heart were gone. That space made room in my heart for love. Beauty and strength found in love are strong. That's why love is represented by the eagle in the Seven Grandfather Teachings. Because the eagle is strong enough to fly the closest to the Creator. It has the strength and the courage to embody the other six grandfather teachings. So, when you fill your heart with love, the possibilities, so many other things open up to you.

- BZ: Can you tell me of a time you realized that your design or designing could be different from what you've learned? And what and how did you learn about designing?
- MR: When I graduated from design school, I was indoctrinated into a Western way of thinking about design. My first job with *Aboriginal Voices* was when my world began to change, professionally and personally. That was pivotal for me when I realized that design could be different from what I've learned. That job exposed me to a much more diverse and more beautiful way of looking at my culture and how it fits within the creative industry.

I've come full circle, working at Animikii. I find myself back at home in my Indigenous space, and I love it. As I've grown older, I'm still learning more about my culture and who I am. I'm also learning about how my identity informs my design practice.

- BZ: When I was in design school, the mindset was that if you want to be iconic and famous, your work must be original and competitive. Now I am conscious about switching our design narratives from focusing on individual iconic designers to describing communities of practice. It doesn't seem sustainable to say that we can be original, singular geniuses as designers. We need communities.
- We continue the erasure of Indigeneity by categorizing Indigenous people, MR: culture, art, and language as 'other' in our narratives. Canadian design continues to reference design from places other than here in North America. We've been here for thousands of years. Our art is older than the idea of Canada, and it's also much older than a lot of civilizations in Europe. We have a long history here in this land. We have a long history of art, language, and culture. But that can get continually ignored by the non-Indigenous population. Ownership and control - that's a very colonial construct and in direct opposition to the values of Indigenous people. For us, it's about community and the sharing of knowledge and wealth. Wealth for us is different from how wealth is considered in Western society. Wealth for us could mean button blankets, furs, or something of utilitarian purpose. In Indigenous culture, we share wealth. We share food. We hold ceremonies in which we share our successes with the community. Our celebrations are ways of giving back to the community. We have high respect for everyone in the community, young and old.

I value volunteerism and giving back to one's community. Aside from being an Indigenous designer and working at Animikii, I'm also the National President of the Design Professionals of Canada (DesCan.) I'm the first Indigenous national president in the history of the organization. I wanted to take on leadership because I knew I needed to be a role model for future generations. We have what's called the Seven Generations Prophecy. Everything that I do today – my words, my actions, my language – must have a positive impact seven generations from now. I recently came across the quote, 'You can't be what you can't see.' Before my presidency, there wasn't a person of colour in Canadian design leadership. Representation matters. Being seen matters. If Indigenous children cannot see themselves in leadership positions, how will they know the possibilities for their future? I make myself more visible so that the next generation will gain the courage to do what they dream of doing.

I'm an advocate for design in Canada. I love Canada, this place that we live in. Don't get me wrong, it's a very complex relationship, and it can sometimes be confusing. Discrimination still exists in this industry. I'm trying to fight that, and it's difficult. But I see a huge change in our industry. Design schools have become very diverse, so I know that the future of leadership in design will change. If we can get to know each other on a deeper and personal level, putting people at the centre of this human-centred design, putting sustainability first, putting community first? These are ancient values! They are just repackaged into something we think is new.

- *BZ:* Tell me about a project where you felt a shift in your knowledge about your practice, about yourself, or your methods of working.
- We recently worked on a rebranding project with an Indigenous consulting MR: company. As part of our process of getting to know the client, we asked many questions about their company, leaders, and founders. What really resonated with me was the depth of personal information they shared with us. We cultivated a space of safety and warmth where they felt compelled to share their own personal stories about how and why they became founders of their organization. Our client told us a story about orca whales and how orcas are a matriarchal society. The mothers and grandmothers are in charge of the pods. They're responsible for hunting and feeding the pod and teaching the younger generations how to hunt and play. The males are lower in the hierarchy of the pod. This company is modelled after this structure. In her business and practice, the founder teaches and brings up younger generations within her consultancy to become leaders, not only in their profession but also in their personal life. This particular project reinforced the importance of our relationships with the land and animals. It emphasized the ways we can rely on Indigenous knowledge to guide us.

- MR: I know that feeling very well. Growing up as a Sixties Scoop survivor, I felt lost every day. I was also taught one way of thinking in design practice, which sometimes felt confusing because it didn't reflect my values and ethics. Feeling lost was pretty much at the foundation and the start of my design experience. I felt this way for most of my career until I started working for Animikii.
- BZ: How do you work through your design process when you feel stuck, or are struggling, in your design process?
- MR: Sometimes I take a break from whatever it is I'm designing. I set aside the problem. I work on something else to free or distract my mind. For me, that's reading a book, maybe meditating. I often go out for a walk to get back to the land and think about anything but work. Sometimes I dream about work. I dream about problems. I let my subconscious go, and when that happens, it provides solutions and a different way of thinking or approaching a problem. Then I go back and revisit that challenge.
- *BZ:* Do you think that parallels the act of letting go of those hateful feelings that you experienced personally and making space for love?

BZ: Can you talk about the experience of feeling lost in design practice?

- MR: Exactly. You're no longer constrained by rules and regulations, the idea of success and trying to design timely solutions. We've been taught a colonial aspect of what time is and what is described as success or failure. Sometimes in our practice, we can't meet a particular timeline or deliverable, and we go back to the client with honesty and with humility and say, this part is a bit difficult for me. Can we have an extension? Most times, they understand and extend the project instead of trying to force something to happen. Let things percolate naturally sometimes, right? If you handle it with truth, humility, and honesty, your clients respect that.
- *BZ:* How is your work unlike a typical design practice, or unlike what we were told how design practices should be?
- MR: My design work, in a sense, reflects how I grew up. The power I could have had from my culture and identity was taken away from me and replaced with something entirely different. Now that I'm more aware of my culture, it has informed my design. My cultural identity and my design practice have both experienced this evolution. I'm more in touch with and more aware of the cultural underpinnings of my work, which informs everything that I do. One of the biggest challenges we face is the idea of how to conduct business or services that are traditionally based while still needing to work within this colonial construct. We can decolonize the very thinking of the design industry if we keep pushing forward with Indigenous knowledge and issues. Indigenous knowledge, Indigenous design, and digital creativity have always existed. We're just making it more visible to the rest of the world. And we are using ethics to hold other designers accountable for cultural appropriation. We're taking the blinders off and telling other designers that they have a great responsibility in designing with respect and reciprocity.
- BZ: What does a positive future look like to you?
- MR: Relationships have always informed my practice and are more important than ever. We build positive futures with relationships – learning about your experiences, how they have informed you, and how you've become who you are today. When minds from different places come together, we can see the commonality, we see our differences. We do it out of love. I love you for who you are. I love that we have this opportunity to share and come together.

Polymode: Vulnerability and radical transparency in practice

BZ: I came to know about Polymode through your excellent BIPOC design history courses (Polymode et al. 2021). I was also happy to see your work published in Extra Bold (Lupton et al., 2021). Your timeline design of queer design history included in this book – 'Gays, Queers, Fags, Dykes, Sissies, and Abstract Art' – is an excellent approach to deconstructing narratives, methods, and structures that have traditionally supported Eurocentric modernist design histories. And then, of course, I knew about Silas's work with W. E. B. Dubois's data portraits. So, I know that you continue to have essential conversations about decolonizing and pluralizing design discourse and practice.

- SM: We recently discussed the fluidity between practice and education, teaching and training, and shifting culture to connect to communities and how those practices lead back to each other. Our mentors have encouraged us to keep going, that we can have it all and can do it all.
- BZ: bell hooks suggested that students want to bring their whole selves, their personal lives, into their work (hooks 1994). It is an exciting time in design. Designers are casting off competitiveness to seek communities of practice and create more profound understandings of how we want to live in this world.
- BJ: Silas and I became good friends, I think, because of our mutual interests, recognition of our queer vulnerability, and our authenticity around truth-telling. We decided that radical transparency is equally important in our business. In practice, transparency and honesty are the opposites of those design practices that expect us to extract, dominate, take over resources, and not share. They do not go together. However, why not hold space to say: 'I'm having a bad day today,' I need help, 'I feel weak,' 'I'm feeling great,' 'How can I help you?' That act of transparency and being your true and authentic self, even if you are slobbering, emotional, having an intense moment why can't we bring that into business, design practice, teaching, and being an actual human?
- SM: So much of this conversation resonates with me - where do I start? Thank you for calling in bell hooks and their writing about theory as liberatory practice. There is a complex relationship between theory and practice, but it feels more complicated in graphic design because of the history of vocational design education. Education and practice changed after we had this hotbed moment of postmodern design education shifting practices starting in the 1990s. I would equate that revolution with a time that design embraced Praxis, a term from Paulo Freire and one of hook's primary influences (Freire 2005). Praxis called for critical reflection in a cycle of experimental practice. This liberated design practice and education for some time. However, something flipped with the rise of corporatization and design thinking. Design practices became even more in service to business and capitalism, rather than the other way around. Our BIPOC design history class became an amazing and unique way where we experienced a shift in how the class came together in a practice-like space, in how publicly accessible it was, and how it was governed by market factors, even as we were trying to decolonize it. We were feeling lost because of not seeing this

kind of material in our own education, and this became a way to fill those gaps. It became a liberatory space where people could speak their truth and where they felt heard and seen and could learn together.

- BZ: I also think about hooks' simple statement in Theory as Liberatory Practice, 'I came to theory because I was hurting ... I saw in theory a location for healing' (hooks 1994). If we consider design practices as wounded hurt by capitalism or the kind of colonialism that accompanies modernism, can we position your BIPOC design history spaces as equally nourishing or healing for designers and design practices? The ongoing dialogue in your zoom chat alone was so generative, positive, and energetic.
- BJ: Some people didn't like it. But, if you watch some of the videos, you might see that in some of the more difficult conversations, the room polices itself.
- SM: Yeah, it was interesting it wasn't policing. It was a regulation. The collective held space for people to question what we were talking about or not understanding, and I thought it was so beautiful.
- BJ: Yeah, because we didn't just chase people away. We unpacked the issue. Participants challenged each other and actively brought up ways to reconsider differing points of view. We also used humour to diffuse situations. Sometimes, humour and humility are a great way of handling difficult issues in those very intense moments.
- BZ: How was that humour received, then, in that deregulated space?
- BJ: We had some participants who challenged the topics during presentations and conversations. They would often ask very broad questions that were difficult to answer simply, and their questions were typically accusatory and coming from a privileged position. These moments were rough, but we used humour to deflect, learn, and grow from that point. Eventually, we had recurring and ongoing jokes that our group would lean on when the conversations became challenging. If you watch our videos closely, you can notice this humour running throughout the classes – we don't cut that out of the video. It was also revealing that the participants who initiated these uncomfortable moments continued to attend all the remaining live classes. Our humour developed a resilience and an openness even for those who didn't entirely agree with us. There were still issues behind the curtain, though. There was a lot of background stuff happening.
- SM: I'm with you, Brian. It wasn't always elegant. I've been starting to watch some of the videos again, though, and we were a lot more organized than we thought we were! What I have learned is that vulnerability is a big asset. Giving ourselves permission to be vulnerable with ourselves, with clients, with students, and with collaborators this was part of the contagious ethos of the class. People felt like they could become vulnerable in a certain way because we were being vulnerable.

- BZ: You were alluding before about being guided by this ethos as you grow your design practice. How do you attend to difficult moments in your design process? Are you learning along the way, or do you have methods that you fall back on to get unstuck in these spaces?
- BJ: We love to use metaphor and storytelling. Sometimes I feel like we're hermits stumbling around with a little lantern trying to figure out where we are because there is no map, there is no star guide, we don't know how to do it, and half the time we are so afraid of messing up.
- It helps to be in a collective, working together through difficult moments. SM: And, sometimes, we have to intentionally and literally make the map. In her book Extra Bold (2021), Ellen Lupton, one of our mentors, asked us to construct a visual map of queer influences. Finding mentors and kindred spirits - living or not - is vital. We lost a whole generation of our mentors because of the AIDS epidemic. We've been able to re-encounter them through projects such as the map of queer lineages or the Willi Smith catalogue, exhibition, and community archive. The Willi Smith project called for aspects of practice, aesthetics, and systems - things that we've been trained to do as designers. At the same time, there was also this whole other part of the process of holding space. Willi Smith was a queer black man who died of AIDS. It was hard to find his materials and clothing designs because people were not archiving them. We had to be flexible in working with a curator who had a powerful method of uncovering things during her research. We felt vulnerable because we were working through all these emotions that emerged while developing the project. As a result, we wrote an essay in the catalogue about our process. So, we were 'stuck' somewhat during that project, but then friction and vulnerability led us to create something new, which was liberating in the way that bell hooks described.
- BJ: To ground that in more of a tangible day-to-day ethos for our studio, we have two meetings per week based on studio traffic and an open time to work together. At the beginning of our meetings, we have something called 'emotional and physical traffic' that takes up 15 minutes of a meeting, and you can talk about whatever you are going through. You are able to say, 'this is what I'm processing today. I'll still get my work done. I will still be here, but this is also here with me.' The more comfortable the team gets, the more vulnerabilities they want to share. In all honesty, that translates into how to make good work and how to make good design because you've let it go, tried to name it, or given it space. And, yeah, Silas and I were hyperemotional working on the Willi Smith project, and we had to talk about that a lot. These are our mentors, and they're dead, and we feel lonely wishing we could still speak with them and ask the hard questions, and we still get sad and cry about it sometimes. Many times! Then we realized that we

should turn that lantern light towards other individuals that we've forgotten because of AIDS, the ones that should have been our teachers, and unearth what they were trying to do when their life was taken from them. This realization led to more projects about Dan Friedman, Willi Smith, Darryl Ellis, and the queer history timeline. We have to hunt for information, but all these projects reveal knowledge about important designers who were ignored, or celebrated, died too young, or have more history waiting to be unearthed. We can make sure they won't be forgotten.

- BZ: There is a process of adapting other information to design when researching unacknowledged or undocumented designers and design. It is labour-intensive when studying works initially categorized as anthropological, or embedded within business or industry archives, to bring them respectfully into design discourse.
- SM: It's a lot more work. But as marginalized people, that's our lived experience. It's extra work to code-switch, to have to do additional emotional labour, but I think this has to be a collective endeavour. That's part of our zeitgeist – getting to this place of integration to create a new world. It shouldn't be a burden or extraneous to other design work. Design needs to be inclusive and represent the whole world and not just within a Eurocentric, CISstraight paradigm.
- BZ: You talked about being mentored while working in these difficult spaces, but how do you feel about mentoring others and ensuring your work not only transmits knowledge but also shares ways of practising design?
- BJ: I think mentoring comes naturally to the two of us. I have mentees that like to meet to talk about books, life, culture, and spirituality because they respect how direct and discerning I am and how I can easily hold space on many levels and plains. We gravitate towards each other – like attracts like. We all want to experience someone caring for us, challenging us, and educating us. It also works both ways.
- SM: I think this is also a way to pay it forward. Recently, one of my mentors told me that she asked someone to introduce her to a mentor who is Black. I was like, oh! Can you do that for me? It makes sense to want to nurture and spread this collective healing. As they say, a rising tide raises all boats. Also, being anti-capitalist means that our giving is not always in the form of money. We give attention. We listen. We hold space. We let others break down and cry without judgement.
- BZ: I'm also interested in axiological spaces in design and the ways in which we align financial and market values with our ethical and moral values. Perhaps this discourse could also lead us to anti-capitalist practices, but designers don't often have those conversations.
- BJ: I think that's because business is not taught in art school. This is my biggest complaint about the educational system for design: we have learned to make

something pretty, but we didn't learn how to make an invoice. We didn't learn print production or how to talk to a printer, salesperson, or a press foreperson. We have this strong division between design and business – there was no melding because institutions think co-creators are all right brain.

- SM: Pricing design has always been a dark art. Designers haven't easily shared how much they charge for their work. We are now questioning our financial systems and shedding light on the exploitative aspects of design. It's time to talk about the value of our work and question why we have devalued aesthetics, craft, research, and labour. Revolutions and labour are as equal parts of our design history as the design work itself.
- BZ: Based on what you describe, design practices also remain wounded due to the lack of knowledge in business, economics, and modes of production. Designers are not growing in these spaces. How do designers begin to grow to historicize, theorize, and value work in their field?
- BJ: Holding space for each other gives us a chance to encourage or push each other to express ourselves in honest and vulnerable ways. If we could engage in more 'straight-talk', we could be more disenchanting and disarming with each other and get to deeper conversations about our work and our field.
- SM: We are a collective, but we also have individual perspectives on things. Our work is a fusion of aesthetic practice, contextual practice, poetic practice, and heart practice. For us, making beautiful work is as important as the conversations around it and the community that we shape through the work. I think we can actively reconfigure design's systems to remove barriers and allow marginalized people to be a part of those systems. Our goal is to create an equitable field of design both in practice and in education and demonstrate how these two entities can be porous and more meaningfully connected.
- BJ: Marginal designers need to be seen, heard, and supported. To be seen, we have to shed light; if we want to be heard, we have to listen with intent. Through this, we learn how to support others. I'm already warmed if someone feels seen because we felt invisible for so long. The only way to move forward and make change is through education, transparency, and sharing. Or, as Silas and I love to say, just make cool shit. We want to return to that Jungian mystique to keep our magical inner child alive. Is your saboteur dominating everything, preventing you from being your whole authentic self, or are you free to play and explore?

Note

1 The Canadian government's early efforts in establishing both the reservation system and residential school system included assimilation efforts commonly referred to as

'killing the Indian in the child': https://www.facinghistory.org/stolen-lives-indigen ous-peoples-canada-and-indian-residential-schools/chapter-3/killing-indian-child.

References

- Freire, P. (2005). *Pedagogy of the Oppressed*, trans. Myra Bergman Ramos. 4th edn. New York: Continuum.
- Haraway, D. (1988). 'Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective *Author(s")*', *Feminist Studies*, 14(3): 575–99.
- hooks, b. (1994). Teaching to Transgress. New York: Routledge.
- Lupton, E., Kafei, F., Tobias, J., Halstead, J. A., Sales, K., Xia, L., and Vergara, V. (2021). Extra Bold: A Feminist Inclusive Anti-Racist Nonbinary Field Guide for Graphic Designers. Hudson, NY: Princeton Architectural Press.
- Polymode East, Inc., Bowens, P., Arceneaux-Sutton, T., and Tejada, R. (2021). BIPOC Design History Course. Available online: https://bipocdesignhistory.com/Home-Page (accessed 4 December 2022).
- Rosner, D. (2018). Critical Fabulations: Reworking the Methods and Margins of Design. Cambridge, MA: MIT Press.

SECTION 2

INTRODUCTION: PARADIGM SHIFTING

Bonne Zabolotney

This section, *Paradigm Shifting*, discusses the conceptual shifts in understanding the ways in which we practise design. Paradigm shifts come about in a way that Bowker and Star describe as 'infrastructural inversion' (2006). Infrastructural inversion means:

learning to look closely at technologies and arrangements which, by design and by habit, tend to fade into the woodwork (sometimes literally!). Infrastructural inversion foregrounds these normally invisible Lilliputian threads, and furthermore gives them causal prominence in many areas normally attributed to heroic actors, social movements or cultural mores. (ibid.)

The paradigms in the following chapters are not new inventions. In order to move away from established paradigms in design, the authors in this section have identified means of understanding design and ways of designing that may have been overlooked or undervalued previously. In some cases, these paradigms are guiding principles adapted from other fields. These shifts in concepts and frameworks allow designers to be liberated from the standards and confines of conventional practices.

In Chapter 6, Sophie Gaur proposes *InWorlding* as a way to understand 'one's embeddedness in the world [as] a reflection of the detail and richness a practitioner constructs within themselves'. In Chapter 7, 'Designing New Narratives for Untold Design Histories', I propose using literary and narrative theory as viable paradigms in assigning cultural value to objects typically excluded in Canadian design

history, asking 'How do designers reconcile their practice without a foundational knowledge of the work that has preceded our design and designing?' In 'Making a Design Fiction from the Inside-Out' (Chapter 8) Anne Burdick constructs fiction 'as a participant-observer who joins up with a world of forces in the creation of an emergent future incorporating specific configurations of people and things'. Dimeji Onafuwa's 'Design-Enabled Recommoning', in Chapter 9, stresses the importance of relational designing, 'adopting a commons-oriented mindset [which] means working outside traditional practice boundaries (and norms) to collectively resolve different resource limitation problems'. Myriam Diatta shares this approach to designing and everyday design experiences with her model-making exercises, in Chapter 10, that encourage 'explorations for being accountable to what we stand for in theory and what we make and do in the everyday'.

Paradigm shifts, or infrastructural inversions, can assist in the decolonization of design practices, the development (or redevelopment) of design narratives, the consideration of design theories or philosophies. It requires, however, 'recognizing the depths of interdependence of ... networks and standards, on the one hand, and the real work of politics and knowledge production on the other' (Bowker and Star 1999). This interdependence of standards and politics in design does not always make room for the ordinary, the common narrative, or the inner worlds of designers themselves. Paradigm shifts are a welcome lesson in demonstrating the ways in which design can open up and reconsider alternative conceptual, theoretical, narrative, and practice-based infrastructure. Working with new paradigmatic frameworks gives designers agency to: position their research meaningfully; interpret theories and contemporary criticisms, and position these works accordingly; develop ways in which to relate to research participants and collaborators; find ways to perform infrastructural inversion in dominating discourses in the field of design; and *reframe* perspectives when new information arises. With this approach, designers can prototype and iterate their methods, theories, and frames of reference, knowing that their work may shift and reframe at any point.

References

- Bowker, G., and Star, S. L. (1999). Sorting Things Out: Classification and Its Consequences. Cambridge, MA: MIT Press.
- Bowker, G., and Star, S. L. (2006). 'How to Infrastructure'. In Leah A. Lievrouw and Sonia Livingstone (eds), *Handbook of New Media: Social Shaping and Social Consequences of ICTS*. London: SAGE, 230–45.

6 INWORLDING: DESIGN PRACTICE AND PERSONHOOD

Sophie Gaur

esign practice embodies a range of intersecting capabilities, skills, and knowledge bases. It is distinctive in the ways in which individual practitioners each accrue and develop a unique assemblage of abilities, alignments, and methods. In this, the designer is a conjurer of sorts - contriving possibilities and directions in the absence of an established design epistêmê upon which they can fall back. This chapter speaks to the ways and imperatives that contrive to construct a diverse and complex inner-verse that scaffolds and drives individual practice. It describes how a practitioner reflects on and recursively reconstructs the knowledge in the world through an InWorlding process, its conception derived from an active reflection in, and on, practice. InWorlding is a camel-cased, gerundive, and processual neologism that invites deliberate elaboration and reframing of ideas by catalysing interaction with knowledge from within one's own context. It turns the eye inwards and gives invitation to collaborate. It advocates intentional curiosity and learning, and directs practice to forge itself from the crucible of our practical and observational engagement with the world around us.

The theoretical framework

In Worlding as a conceptual framework sits within the larger theoretical premise of reflective practice. 'We do not learn from an experience ... we learn from reflecting on an experience' – while this quote is often spuriously attributed to Dewey, and

its authorship is uncertain, it does serve as a foundational maxim for reflection being essential to learning and, as an extension, essential to practice. Five distinct steps in reflection (Dewey 1909), Kolb's reflective model for the transformation of information into knowledge (2014), reflection in, and on, action (Schön 1983), and Brookfield's four complementary lenses (1998) are some examples on how this may be effected. Reflection in action, in particular, is the intentional and informed practice through which professionals become aware of their implicit knowledge base and learn from their experience. It emphasizes a practitioner's ability to use active reflection to recognize and name these tacit elements, and address their capacities, to enhance their professional practice. For designers this 'implicit knowledge' encompasses messy collections of both tacit and explicit knowledge bases. In design, these frameworks resist classical structuring and develop into unpredictable and often random knowledge structures. Within the sciences, knowledge is most often relational, and its structures have consequential pathways. Equally, the humanities have multitudes of competing premises that are curated and enriched through academic consensus. Design, however, has resisted a unified knowledge model (Thoring et al. 2022). It is, and continues to be more often than not, incidental, and has grown rhizomatically, often with no single or universal foundational premise. Practitioners of design have in conjunction with academics sought ways and means to construct robust knowledge bases, and these sit as a disparate collection of insights and framings that contribute to a colourful and continually shifting discourse around what design is and how it practices engine functions. Most of these ideas come from active reflections on practice and models and frameworks drawn from these insights. Reflection in these cases demands an 'attitude of suspended conclusion' (Dewey 1909). This reflexively feeds the practitioner and, in its explication, a broader design knowledge. The conceptual premise of InWorlding within this forms the basis for this chapter.

InWorlding: The conceptual framework

InWorlding offers a processual approach towards a directed and conscious integration of personhood into practice. For this to be accessible, meaningful, or useful, however, one needs to articulate and structure into some relatable form both one's practice as well as one's personhood. To do this, I suggest a phenomenological approach, centred on the defining trait of intentionality, approached explicitly 'in the first person' (Husserl 1962). The process can be serialized for clarity into parts, although these may be exercised concurrently. The first is an exploration and structuring of practice – interrogating *what do I do/how do I do it /why do I do it this way*. This later question intersects with the exploration of the self through questions such as *how do I see myself/how do I experience myself/what do I know/*

what are my values/how do I exercise my knowledge and my values in my practice. This may at first seem like a straightforward and deterministic method to arrive at a rationalized clarified set of responses; however, the phenomenological approach decelerates the certainty impulse, and as a natural function of its process leads one to the 'attitude of suspended conclusion'. Vague intuitions, when confronted, reveal deep epistemic or ontological fingerprints that begin to be unravelled, and the structure of one's own epistêmê starts becoming more apparent. Organizing the particulars of one's practice can, therefore, proceed by abstracting its metaphors, values, and pathways, as well as seeking to define the ineffable quality that sustains their dynamic. These when organized into an iteratively constructed form constitute a structural model of the more nuanced phenomenological space. The recursive circularity of this reflective, sense-making, and pattern-making process is dynamic and changing, seeking a kinetic equilibrium, rather than a terminal stasis of certainty - the pattern-logic of it being useful as a blueprint for reflection, rather than its specificities. This pattern-making curates the particulars of projects, events, feelings, or values and abstracts them, allowing the system of the practitioner-self to be viewed diagrammatically and propositionally.

Seeking this congruence between elements of self and of practice is then best explored through the construction of models. It names and identifies different forms of both explicit and implicit elements of knowing. Reflection and its subsequent articulation find form and expression in the tacit, making it explicit and rendering it accessible.

Gilbert Ryle (1949) offered the distinction between 'knowing-how' and 'knowing-why' in the two kinds of knowledge – propositional and procedural. Propositional knowledge is knowledge that can be expressed in a declarative sentence or an indicative suggestion. Procedural knowledge is the 'knowing-how' to perform a task skilfully. The distinction between the propositional and procedural is in its intention. A matrix of these two propositions (Neidderer and Imani 2009) is presented in Figure 6.1. This builds on Ryle's distinction of knowledge into the two domains – propositional and non-propositional (procedural) – but speaks to the 'knowing-how', the non-propositional ways of knowing as to what is experienced and what is learned.

Non-propositional knowledge is often the main engine for creative practice. It encompasses experiential knowledge and/or procedural knowledge. This is demonstrated by the fact that robust practices can exist independent of theory. So much of knowledge exists outside language – which is why no amount of theory could teach you how to draw or to naturally provide a harmony to a tune. In terms of a design practice these tacit understandings might present as the illustrative or embodied content of narrative, or in the planning of space as a function of family, religion, or education. As a result, the levels of the tacit and the explicit may vary significantly within both the propositional and non-propositional frameworks within any practitioner.

States of Knowing	Knowing What PROPOSITIONAL KNOWELEDGE	Knowing How Non-propositional KNOWELEDGE	
		EXPERIENTIAL	PROCEDURAL KNOWLEDGE
EXPLICIT	Semantic Account, description in language	Semantic Account, description in language	Semantic Account, description in language
ТАСІТ	Comprehension	Quality of experience which gives the experience meaning & allows interpretation	Quality of experience which gives the activity meaning & allows execution of activity

FIGURE 6.1 Ways of knowing.

Within the InWorlding paradigm reflection de-tacitates elements of practice and opens them up to scrutiny and enrichment. Over time these knowings become intrinsic, well practised, and subsume again into the tacit realm. The transitive nature of the InWorlding mechanism describes a process that flows between explicit and tacit knowledge. It alternates between the two different forms of knowing, guided by four cyclical states: Cognitive>Dialogical >Illuminative>Transitive (Figure 6.2). These states are triggered by active reflection directing cognition, articulation directing a dialogical interaction, revelations as seen in the direct action in practice, and hence illuminative, and then a reassimilation into the well-practised space through a transitive process. This is modelled as a diagram that builds on the SECI model of knowledge creation (Nonaka and Takeuchi 1995). Design knowledge in this model flows through a continual process of explication and sublimation, while continually enriching the designer's epistemic frameworks, through intentional and directed action. InWorlding in its philosophical interpretation is an almost meditative commitment to a place of creative centring.

The philosophical provenances

The provenance of InWorlding as a philosophical and methodological commitment to the self is an idea adjunct to Heidegger's concept of 'Worlding', discussed in *Being and Time* (2001). Heidegger's description of the ontological being *Dasein*, as the primary conceptual unit of all experience, is central to his thesis. The meaning of life he argues is to make 'meaning', constructed through an understanding of one's 'thrownness', overcoming the 'fallenness' and seeking *befindlichkeit*, one's authentic self. Worlding is a phenomenological and hermeneutic process – to observe and to make meaning of one's own experience,



FIGURE 6.2 CDIT model: Deepening design knowledge through an InWorlding process.

and this sets up an infinite inquiry into the nature of what it is to be. In addition, one of these elements is to make meaning out of our finiteness, through an understanding of our 'ecstatic temporality'.

InWorlding acknowledges its provenance to this proposition; however, its model is a dynamic inward spiralling that signals intentional change and hence is a function of time. In addition, it also takes cue from an archaic form of world-making found in pre-Vedic Hindu cosmologies of Tantra. Tantric philosophy structures the universe as a duality of matter and energy that is interchanging constantly through concentrated thought, deep focus, or meditation. The ultimate intention is to achieve a state of 'pure consciousness' (Khanna 2003). Heidegger has a linear rather than circular model he refers to as 'being-towards-death'. *Dasein* ends at death, whereas Hindu thought holds that energy and matter are

always in flux, and all life is cyclical. The philosophical premise is then supported and explored through specific practices that allow the conceptual (knowingwhat) to become experiential (knowing-how). The intention of the practice is to achieve a state of pure consciousness (energy), where the unity of all things is at once evident and embodied. This culturally infused axiology meets Heidegger's 'Being-in-the-world' or 'Worldhood' to suggest a method, and a cosmology, for practice.

InWorlding speaks to the designer not simply as a skilled practitioner but as a 'being'. It suggests that the elaboration of one's embeddedness in the world is a reflection of the detail and richness a practitioner constructs within themselves. This again finds its seeds in multiple Hindu, Jain, and Buddhist cosmologies where the 'seen', or 'comprehensible' world, is merely a reflection of the world constellation – reconstructed, reflected, and embellished within the self.

The argument for InWorlding

All creative pursuits may be defined as or experienced as practice. The impulse for this is born from a desire to generate, construct, bring forth, express, and make manifest. The reiterative call of this forms the basis of what drives us as designers. Beyond problem-solving, or the service to industry, the essential work of a creative agent is perhaps the response to this generative need and to explore the ways in which we as practitioners interpret its call. In this we are all the archetypal homo-faber, or perhaps more cogently, homo-aestheticus (Dissanayake 1995), where the impulse to create, or make 'art', is a basic human psychological component.

Implicit in the 'becoming' of a design professional is both the skill and the content of what we do. This is the heart of what we strive to achieve as designers – a sophisticated and refined conceptual framing alongside a physical command over the expression and interpretation of idea and content. What is often unseen, however, in this translation or transformation is the palette that we work with. This is the true material that implicates, guides, and structures our creative choices. How we work metaphorically is only as rich as our internal narrative repository. Our cultural understandings are often fed by either displacement as a trigger for a recognition of self, or deliberate immersions into other cultures as initial ways to formulate a cultural awareness. The complex and the multiple, in terms of ideas, experiences, or values, fight for internal organizational clarity, through abstraction or classification. The emergent practice, as well as the depth of its experience, is framed consequently, by the commitment to the building of complex and diverse epistemic and experiential structures.

The element of recall is the primary element of the 'Depth of Knowledge' premise (Webb 2007). However, the contemporary digital zeitgeist creates a knowledge and access chimera. Access to knowledge is not the same as the weaving of what is known into an interconnected web of ideas and insights. Infinite digital access and the externalizing of knowledge displaces at some level the emphasis on a commitment to memory and the internalization of knowledge. In the wake of the rational age, we suggest that patterns of knowing can be constructed from first principles, and consequently memory becomes a mere repository of fact that may well be externalized and, as a result, more efficient and more accurate. When I reflect on my own practice and its pathways of creative ideation, I observe sparks resulting from the intersection of personal experiences and the mythologies that frame the basis of broader value systems and beliefs. We practice what we know. And while this may seem like an unnecessary tautology, it leads to the intuitive truth that one cannot separate the practice, as some form of systematized procedural activity, from the person. Even while creativity slowly finds expression through AI algorithms, the meaningmaking processes underpinning culture and society remain well located within human beings. It is then imperative that to ensure continual creativity, one has to be more than simply 'well practised' as a creative professional. Capability, skill, and a confidence of delivery alone do not ensure a meaningful practice. What is required additionally is a commitment to continual elaboration, enrichment, and enlargement of the elements of the interior self, that then find collaborative synergy with design problems or creative quests. This relationship with the content and curation of one's epistemic and experiential inner-verse provides then a provocation for an ongoing conversation around value, meaning, beauty, and pleasure. Its imagining, and its construction, formulate the creative commitment to practice, and in that it is the engine that sustains the generative, engaged, and original person.

Commitment to an InWorlding design practice demands a location and understanding of one's own points of inflection with regard to the loci of practice. It may well present as a series of concentric concerns with varying degrees of value at any one particular time.

Modelling practice

The contemplation of, and reflection on, practice is both sense-making and curatorial. It serves to suggest a structure, reveal its determinants, and clarify the desired paths of decision-making held within it. Reflections and contemplations each allow an incursion into the conflicts and mediations of design processes as revealed in its outcomes. Knowledge, we contend, comes from thinking with, from

and through things and beings, not just 'about them' (Ingold 2017). The reflections on practice are in equal measure mediated and informed by the artefacts of practice.

Reflecting on my practice through both its artefacts and its processes led me to define six elements through which to examine design itself:

- Form
- Voice
- Culture
- Labour
- Ecology
- the Feminine

Initially these present as a disparate congregation of words, but the longer I have sat with them, the more they serve as meaningful lenses through which to view the concerns, the drivers, the ethics of my practice in particular, and the larger design practice in general. They form the scaffolding that holds up my work, and endures over time and through interrogation.

Creative practices and aesthetics are a function of culture and place (Dewey 2015). This can be conflated with personhood. Personhood, on the one hand, is intrinsic to human life – **an existential/ontological personhood**. On the other hand, it is 'a conditional state, dependent upon circumstance, perception, cognition, or societal dictum – **or relational personhood**' (White 2013; emphasis in the original). While personhood is a conceptual and descriptive term, its experience is always embodied. The enactor of the associated creative energy is the body, and homo-aestheticus, both learns and creates through the body. Bringing the body into the discussion and assigning to the six design lenses offers a more inclusive acknowledgement of both these forms of personhood. Each of the six elements can be imagined to be assigned to, and accessed through, the body:

- Form Eye
- Voice Mouth
- Culture Mind/Brain
- Labour Hand
- Ecology Heart
- The Feminine Womb

The literal and simplified location of each of these serves as a recognition of the affect and agency of a creative experience. The eye serves as mnemonic for the

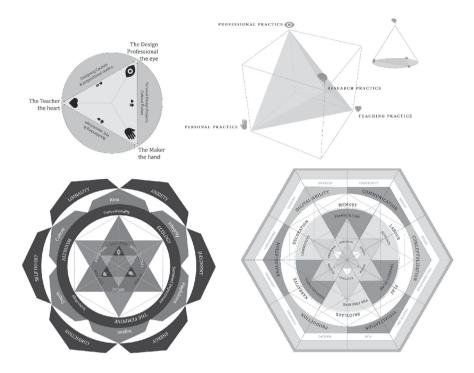


FIGURE 6.3 Initial design practice models.

perceptual – it suggests the inclusion of the five senses. The mouth speaks, and 'languages' what is felt and known. The brain remembers and recalls, and in this, it forges the continuum of culture. The hand makes, and thereby gives form and agency to material. The heart forges the web of interconnectedness with the natural world. And finally, the metaphoric womb nurtures and locates creative generation. Through this I understand practice as being both abstract and embodied, and this conflation enables its particular positioning.

These elements of practice determine a portal for a particular method of InWorlding. Each responds to the spectrum of interpretation, of how each of these contemplative elements throws up a world of creative flux, and paradox. Based on how a practitioner is inclined, they may then serve and feed one or more of these elements.

Research may be understood as a process of drifting, and a model enables one to iteratively map and locate activities as a conversation between hypothesis construction, experimentation, and evaluation (Krogh and Koskinen 2020). In the modelling of my own practice that assisted this understanding, I created a series of diagrams (Figures 6.3 and 6.4) that illustrated this idea of practice. It

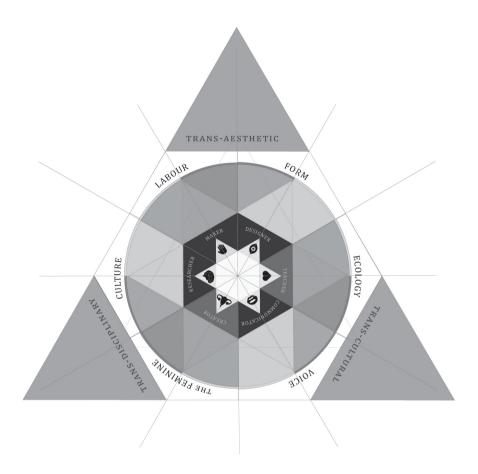


FIGURE 6.4 Design practice model.

allows a practitioner to adopt its basic structure and re-interpret it with the critical elements of their own personhood and practice.

Designerly ways of InWorlding

Six 'Designerly ways of InWorlding' are informed by the modelling of my practice, and the phrasing of *Designerly ways of doing* (Cross 1982) and *Designerly ways of worlding* (Petrina & designerly ways 2012). These are a set of triangulated actions and methods

- through Form and the eye collecting/classifying/curating
- through Voice and the mouth dialoguing/delivering/performing

- through Culture and the mind remembering/reflecting/reframing
- through Labour and the hand making/thing-ing/playing
- through Ecology and the heart ecocentring/naturing/re-wildering
- through the Feminine and the metaphorical womb embodying/nurturing/ emoting

The specificity of these triangulated design methods invites collaborative reframing for each individual. In their evident simplicity is an invitation to self-interpret – to find the resonant actions of doing that affirm the immersion into one's own practice matrix. Each method integrates the other, their separation more an act of organization than one of differentiation.

Immersion into each of these methods sensitizes and expands the complexities of each of the elements. Formal collections throw up questions around the representative and the abstracted. Multitudes allow an understanding of how these are expressed in different ways, thereby expanding and enriching a formal lexicon. How one designs a form is fed by an understanding of the outcome based on the degrees of interpretation one allows in the audience. The more abstracted forms lead to a greater ambiguity of the interpretation, perhaps one that is more intellectually challenging and demanding a meaning-making engagement by the viewer. A representative form might offer a greater emotive response, based on recognition and association. The designer is then faced with the task of mediating between the two ends of this spectrum to deliver a carefully crafted outcome, while being aware of its implicit implications. Classification and curation are an unavoidable consequence of collecting, and these in turn interrogate our own mental processes, prejudices, and compulsions. They allow and develop the indigenous muscle for meaning-making rather than align themselves blindly to universal principles of good taste and judgement (Robins 2018). They offer spaces for contemplation and are part of what Beth Fowkes Tobin in her study of the Duchess of Portland's Shell Collecting (2014) refers to as a 'Praxis' or the engagement of research and creative processes.

Directing an immersive practice through Voice shifts the ways in which the same idea may be tempered and altered by language. Voice may be parsed into the poetic and the prosaic – each of these framing an affect and cognitive response that determines and colours the approach to design. The same design project when contemplated through the two voices allows for very different approaches. In the curation of one's inner voice, language becomes the catalyst for a specific design response. This discourse with the self or with collaborators reveals the profound impact voice has in framing the approach to a design problem. So much of rich and meaningful design then sits in a sweet spot, between these two ways of communicating – one specific, deterministic, and accurate, and the other diffuse, evocative, and emotive. In my practice and my teaching, I encourage the use of

these different voices as a way to understand and gauge one's own susceptibility to the contextual determinism of voice. One might use the analogy of Carl Jung, in his conversations with Salome and Philemon, or Persig's conversations with Phaedrus as an example (Pirsig 1974/2014), where this indulgence or activity allows one to become aware of, and alive to, the contents of one's own rich inner world. InWorlding one's practice through voice persuades a practitioner to play with these expressive options – through dialogues with the self, disciplined writing, and expressive poetic imaginings – and watch how they implicate their own design responses.

Culture similarly situates the designer between temporal and contextual coordinates. How one sees oneself in the continuum of culture, or indeed at the centre or periphery of a cultural context, affords access to its currency. Culture itself may be intrinsic or inherited, and as a designer, one's associations with it may also parse between a universal human cultural context or a specific located one. Locating the connections to culture facilitates creative interpretations or reiterations of meaning and value. Activated and intentionally enriched memories of one's own cultural experience generate a stream of coherent and potentially creative thought, which recursively form a cascade of new thinking (Gabora 2002). In the act of remembering, reflecting, and reframing is an active InWorlding – of inverting the process of materializing, to de-materializing, and this is the opposite of the design process, where ideas and memories become the artefacts, ones that feed the design mind, their very inversion.

InWorlding through labour emphasizes the body's connection to action, rather than the intention of outcome alone. A critical element of this lies in the engrossment it affords. This is evocatively explored in the figurative clay modelling and calligraphy crafts undertaken by Peter Dormer, in his attempt to experience this often unrecognized, or undervalued knowledge, involved in making and in designing (Dormer 1994). Making informs a multiplicity of considerations. At one level, it encompasses a designer's tacit knowing of material and material-body interactions, as Dormer, along with Sennett (2009) suggests. At another level, it invokes a singular psychological affect. Even if one is not a skilled artisan, this slow tempo of working with material, of the body-mind synergy, of the steadying of the eye and the breath, has a profoundly stabilizing effect on individuals (Sennett 2009). The labour and engrossment assigned to material offer an alternative to our cultures of serial consumption. It generates both immersive action and its own audience of the self.

The lens shifts then to ecology. Rather than disparate elements, each of these distinctions offers a shift in emphasis, while acknowledging their essential overlapping. InWorlding through the lens of ecology brings our connection to the natural world front and centre. Studies show how experiences of awe, often as a result of viewing nature, are associated with an epistemological openness – a willingness to take on new ways of looking at the world (Krogh-Jespersen et al.

2020). Contrary to the assumption that this requires tracts of wilderness, or the extraordinary scenic vista, it is more of an attitude rather than a consumption. To look deeply into tiny microcosms as well as the large ecosystem provides an endless capacity for wonderment, and inspiration, as well as a desire to know and learn. Besides the obvious formal riches, or the extravagances of pattern, colour, and texture, this contemplation and questioning feed a bonding we are in urgent need of fostering and rediscovering. In this context, biotic aesthetics effect a positive, multi-sensorial effect on the response mechanism of an individual. This biophilia hypothesis (Wilson 2003) suggests a longing for a deep, meaningful, and sustained connection to nature and all forms of life. The inclusion of it into the processes of practice re-frames and contextualizes our moral and ethical frameworks around daily design choices and decisions.

Lastly, the Feminine is a call to include the complex emotional frameworks that sustain life, into the everyday practice of design. Emotions are seen as inconstant and unreliable; however, they construct and determine the experience of what it is to be human. Approached from a phenomenological perspective they clarify the value of experience and are then the subject of deeper reflection. Recognition of this implicit fluidity of one's lived condition through an emotional vector directs reflection towards the design of harmony (Dewey 1934). Paying attention to emotions and their expressions as feelings establishes an enduring congruence between the practice and the practitioner. InWorlding through the lens of the Feminine acknowledges and values the emotional coordinates of design and its associated ethical and moral implications on both the practitioner and the practice.

InWorlding as a pedagogical device

InWorlding offers a proposition for how one might 'be' a designer. Consequently, it provokes the question of how it might feed into the ways in which one structures a design pedagogy, to inform a teaching practice.

My teaching practice is embedded in an industrial design programme which itself presents a fascinating challenge to its own instruction. The phrase 'design is what designers do' (Swann 2010) fragments its practice into a complex skill set that defies classification. A brief scan through a compendium of industrial designers reveals a significant number working within the manufacturing milieu, while an equally large number work as artisanal makers, tinkerers, teachers, writers, podcasters, chefs, and so on (Yang et al. 2009). This suggests the acquisition of a skill set defined by a range of capabilities beyond simply design for making and manufacture. Many of these require capabilities for developing propositional frameworks for change, in which one enacts and performs the design process. Within this, a critical element is the deliberate and intentional process of cultivating curiosity, wonder, and learning - it is driven by an epistemic imperative, rather than the search for a response to a question. Curiosity as an impetus to practice disrupts the banality of process, creating a temporary disorder through a studied way of engaging with the unknown or the fantastic (De Certeau 1984). Serial curiosities create a Wunderkammer of the mind and feed a reiterative relationship with the world – this may be in relation to ideas, events, artefacts, or the natural world. To take what is learnt and then convert the learning into an artefact makes it come alive as new knowledge in the world. To deliberate on its shape and form stimulates a broad visual lexicon that draws inspiration from multiple themes and sources, all that form part of one's inner imaginarium. Teaching for this type of interiority through practice suggests an absence of distinction between the subject and subjectivity, a blurring of the corporeal and intellectual boundaries (Cesare 2014). This helps to establish curiosity, through active intent and action, as a physical way of being. As an example, I see evidence of this in the collation and creation of multiple timelines that informed part of my course, ThingSpeak (Figure 6.5). Timelines act as chronological devices and feed the understanding of a technological discourse, becoming both knowledge and artefact. Students actively learn to inform and position themselves within a temporal and cultural history, and extract from this particular technological, epistemic, and cultural alignments.

As an example, in a design studio course, I re-explored this through the imperative of the Wonder-Cabinet, where students were invited to examine and explore things they were deeply curious about. However, finding those pathways themselves was initially a challenge, as curiosity itself has been lost to the ubiquitous ways in which the world is expressed today: wonder itself is, I discovered, an archaic concept (Robins 2018). For the studio we drew on methods from 'hauntology, and the specter', a notion offered by Jacques Derrida (2011) focused on the atemporal nature of Marxism, and its continued relevance to any current design, cultural or political milieu – to haunt the vestiges of imagination, from beyond the grave (BBC archive 2013). The student responses framed an extensive interpretation driven by different curiosity pathways. One response was a curation of the propositions of Utopia (Figure 6.6) developed over history, as visions and ideas that informed humanity. Another, a project titled Monster cabinet (Figure 6.7), created a collection of fearful illusions, examining the ways in which perceptions feed particular kinds of fear. Both these illustrate the absence of a precedent, and the capacity to think generatively, once the processes of curiosity, collection, and curation are enacted. Exploring the methods of InWorlding allowed students to experience wonder and be driven by the curiosity it exerted, to explore many responses, rather than simply provide an answer, to the questions it threw up. From this they could then construct a new knowing, and visualize and make this, as an object with no precedent.



FIGURE 6.5 Teaching prompt: Timelines and events cards, ThingSpeak, Design Studies course, delivered from 2009 to 2019.

Conclusion

This emergence of the non-linear methodologies of generating design knowledge has seen a paradigm shift over the last couple of decades. This is fed in no small part by the postmodern imperative for challenging meta-narratives and exposing and celebrating the vernacular, the small, and the overlooked. It is characterized in part by extreme self-reflexivity, the use of irony and parody, a breakdown between high and low cultural forms, new social bonds, a questioning of grand narratives, visuality and the simulacrum versus temporality, late capitalism, disorientation,

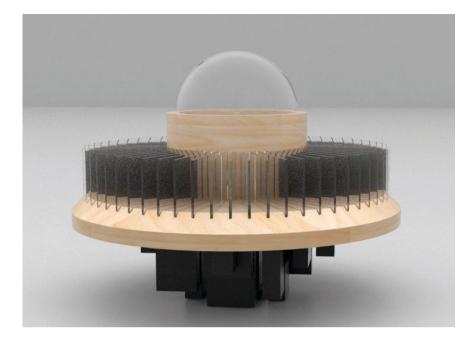


FIGURE 6.6 Utopian Visions, a curated collection of utopias – concepts, visions, and ideas, Cyville Castro, 3rd year design student, ECUAD. Wonder Cabinet Studio outcome, 2020. Image © C. Castro reproduced with permission.

and secondary orality (Lyotard 1979). This has had significant impact on most aspects of culture and society, changing the way we relate, communicate, and generate knowledge (Gray 1998). The associated pluralist thinking has encouraged and celebrated new ways of doing, thinking, and questioning that were previously untenable. Contemporary design methods reveal both the knowledge about design - the conditions for design to operate and produce outcome, and design knowledge – an explication of the tacit knowing involved in the processes of doing design (Dilnot 2015). Through this, the individual remains the critical agent of cultural continuum and creative alchemy. The responsibility to shift the way we operate, from responsive modes to more generative ones, rests on the way we educate and fire the imaginations and agency afforded to individual designers. This asks designers and creative professionals to interrogate and formalize a coherent epistemic framework, underpinned by moral and ethical imperatives. To it, one brings one's personhood, one's immediacy, and, through this, attempts to forge an authentic change to the dominant narratives of design. InWorlding offers one such methodological paradigm.



FIGURE 6.7 Monster cabinet, a collection of fearful illusions, Yanan Guo, 3rd year design student, ECUAD. Wonder Cabinet Studio outcome, 2020. Image © Y. Guo reproduced with permission.

References

- BBC archive. (2013). What Is Hauntology? And Why Is It All Around Us? Retrieved from Bbc.co.uk website: https://www.bbc.co.uk/ideas/videos/what-is-hauntol ogy-and-whyis-it-all-around-us/p0729knv.
- Brookfield, S. (1998). 'Critically Reflective Practice', Journal of Continuing Education in the Health Professions, 18(4): 197–205. https://doi.org/10.1002/chp.1340180402.
- Cesare, C. (2014). 'The Habit of Curiosity', *Agathos: An International Review of the Humanities and Social Sciences*, 5(1): 83–99. Retrieved from Directory of Open Access Journals.
- Cross, N. (1982). 'Designerly Ways of Knowing', *Design Studies*, 3(4): 221–7. https://doi. org/10.1016/0142-694x(82)90040-0.
- De Certeau, M. (1984). *The Practice of Everyday Life*. Berkeley: University of California Press.
- Derrida, J. (2011). Specters of Marx: The State of the Debt, the Work of Mourning, and the New International. London: Routledge.
- Dewey, J. (1909). How We Think. London: Heath.
- Dewey, J. (1934). Art as Experience. New-York: Minton, Balch and Co. (S.D.).
- Dewey, J. (2015). *Experience and Education*. New York: Free Press. (Original work published 1963.)
- Dilnot, C. (2015). 'The Matter of Design', Design Philosophy Papers, 13(2): 115–23. https:// doi.org/10.1080/14487136.2015.1133137.
- Dissanayake, E. (1995). *Homo Aestheticus: Where Art Comes from and Why*. Seattle, WA: University of Washington Press.
- Dormer, P. (1994). The Art of the Maker. London: Thames and Hudson.
- Gabora, L. (2002). 'Cognitive Mechanisms Underlying the Creative Process'. In T. Hewett and Y. Kavanagh (eds), *Proceedings of the Fourth International Conference on Creativity and Cognition* (pp. 126–33).
- Gray, C. (1998). 'Inquiry through Practice: Developing Appropriate Research Strategies'. In P. Strandman (ed.), *No Guru, No Method?: Discussion on Art and Design Research* (pp. 82–95). Helsinki: UIAH.
- Heidegger, M. (2001). Being and Time, trans. J. Macquarrie and E. Robinson. Retrieved from http://pdf-objects.com/files/Heidegger-Martin-Being-and-Time-trans.-Macquar rie-Robinson-Blackwell-1962.pdf (Original work published 1927.)

Husserl, E. (1962). *Ideas: General Introduction to Pure Phenomenology*, trans. W. R. Boyce Gibson. Collier, Macmillan. https://archive.org/details/IdeasPartI/page/n13/mode/2up.

- Ingold, T. (2017). 'Home Knowing from the Inside'. Retrieved 13 July 2020, from www. knowingfromtheinside.org website: http://knowingfromtheinside.org.
- Khanna, M. (2003). *Yantra, the Tantric Symbol of Cosmic Unity*. Rochester, VT: Inner Traditions.
- Kolb, D. A. (2014). Experiential Learning: Experience as the Source of Learning and Development. 2nd edn. New York: Pearson Education, Inc. (Original work published 1984.)
- Krogh, P. G., and Koskinen, I. (2020). *Drifting by Intention: Four Epistemic Traditions from Within Constructive Design Research*. New York: Springer.
- Krogh-Jespersen, S., Quinn, K. A., Krenzer, W. L. D., Nguyen, C., Greenslit, J., and Price, C. A. (2020). Exploring the Awe-Some: Mobile Eye-Tracking Insights into Awe in

a Science Museum. *PLOS ONE*, 15(9), e0239204. https://doi.org/10.1371/journal. pone.0239204.

- Lyotard, J.-F. (1979). *The Postmodern Condition: A Report on Knowledge*, trans. G. Bennington and B. Massumi. Manchester: Manchester University Press.
- Niedderer, K., and Imani, Y. (2009). 'Developing a Framework for Managing Tacit Knowledge in Research Using Knowledge Management Models'. Presented at the Undisciplined! Design Research Society Conference 2008, Sheffield Hallam University, Sheffield, UK.
- Nonaka, I., and Takeuchi, H. (1995). *The Knowledge-Creating Company: How Japanese Companies Create the Dynamics of Innovation*. New York: Oxford University Press.
- Petrina, S., and designerlyways. (2012, 9 September). 'Ways of Worlding' from How We Learn Media & Technology (Across the Lifespan) website: https://blogs.ubc.ca/ hwlmt/2012/09/09/ways-of-worlding/. Retrieved 8 July 2020.
- Pirsig, R. M. (2014). Zen and the Art of Motorcycle Maintenance: An Inquiry into Values. London: Vintage Books, [], Cop. (Original work published 1974.)
- Robins, L. (2018). 'Objects of Strange Change'. In G. Mitman, M. Armiero, and R. Emmett (eds), Anthropocene Cabinets of Curiosity (pp. 205–18). Chicago: University of Chicago Press.
- Ryle, G. (1949). The Concept of Mind. New York: Barnes & Noble.
- Schön, D. A. (1983). *The Reflective Practitioner: How Professionals Think in Action*. Farnham: Ashgate, Cop.
- Sennett, R. (2009). The Craftsman. London: Penguin.
- Swann, G. M. P. (2010). 'The Economic Rationale for a National Design Policy'. Department for Business, Innovation and Skills. https://assets.publishing.service.gov. uk/government/uploads/system/uploads/attachment_data/file/32096/10-1112-bisocc asional-paper-02.pdf.
- Thoring, K., Mueller, R. M., Desmet, P., and Badke-Schaub, P. (2022). 'Toward a Unified Model of Design Knowledge'. *Design Issues*, 38(2): 17–32. https://doi.org/10.1162/desi_a_00679.
- Tobin, B. F. (2014). *The Duchess's Shells: Natural History Collecting in the Age of Cook's Voyages*. New Haven, CT: Yale University Press.
- Webb, S. (2007). 'The Effects of Repetition on Vocabulary Knowledge', Applied Linguistics, 28(1): 46–65. https://doi.org/10.1093/applin/aml048.
- White, F. J. (2013). 'Personhood: An Essential Characteristic of the Human Species', *The Linacre Quarterly*, 80(1): 74–97. https://doi.org/10.1179/0024363912z.00000000010.
- Wilson, E. O. (2003). Biophilia. Cambridge, MA: Harvard University Press.
- Yang, M.-Y., You, M., Guo, C.-Y., and Chou, Y.-P. (2009). 'A Survey of Industrial Design Graduates' Employment'. Design Principles and Practices: An International Journal – Annual Review, 3(4): 1–14. https://doi.org/10.18848/1833-1874/cgp/v03i04/37720.

7 DESIGNING NEW NARRATIVES FOR UNTOLD DESIGN HISTORIES

Bonne Zabolotney

write this chapter¹ in my home office situated in Vancouver, Canada, on Coast Salish Territory in a province named after an empire (British) and a colonizer (Columbia). As a communication designer and design academic, I have spent a great deal of my practice contemplating what design studies means in a country where design histories have not been recorded, contextualized as design, or situated along with the anthropological categorizations of Indigenous art, design, and media. Designers in Canada are left with a European and/or American model of crafting design histories in the same mode and manner as art histories - where authorship, aesthetic form, categorization, and so-called iconic works are critical factors in building 'authentic' historical narratives. We designers have not dealt with the messy issues of settler colonialism: the cultural contributions brought by waves of settlers across Canada, entering from both the Pacific and Atlantic sides of the country; the racism and social inequity within settlements and new immigrant communities; and the resourcefulness and ingenuity of individuals who were designing without an understanding that designing exists as its own entity. In Canada, the prolific amounts of anonymous and unacknowledged works of design remain hidden in anthropology museums or second-hand shops. Design works are misrepresented in business archives, histories of material culture, and histories of invention and manufacturing. Canada's official stance on multiculturalism, the 'mosaic',² gave permission to ignore the displacement of Indigenous peoples and cultures through violence, appropriation, resource extraction, and through a collective acceptance of a kind of consumer culture which reinforced the settler narrative of hard-working immigrants located within an empty frontier of possibilities. How might one build up a body of design histories when such conflicts

and complications do not fit into the European model of design history canons? How do designers reconcile their practice without a foundational knowledge of the work that has preceded our design and designing?

My research remains influenced by Judith Attfield who stated that 'the problems of defining an object of study appropriate to design history has been fraught by precedents set by art history' (Walker and Attfield 1989) where art is traditionally seen as meaningfully separate and unrelated to the everyday and the common. Attfield stressed that 'a feminist perspective reveals just how relevant it is to consider how objects form subjectivity' (ibid.) and that 'it is vital to relate objects to subjects by placing the "things" into the world of people, i.e., the context which gives them meaning' (ibid.). The feminist principles of respecting the everyday object and the contexts and meanings in which we consider and reconsider these objects led Attfield to suggest that design historians and curators must understand a shifting, dynamic, and fluid landscape of material objects and artefacts: 'Unless we can go beyond a static, object-based approach based on an aesthetic analysis, it is not possible to see that there is a dynamic dimension of symbolic representation in artifacts with is more akin to language and which can be used to articulate a material world' (ibid.). This 'dynamic dimension of symbolic representation in artifacts' is dialogic, vocal, emphatic (exclamations, questions/provocations, statements), and has different meanings within different contexts. Attfield was also equally astute in bridging everyday life with design studies, stating:

The spotlight of academic or critical interest appears mainly to focus on the object as celebrity and spectacle, when it is 'new', popular, highly acclaimed, sensational and above all – visible; or at the moment of its downfall from grace when, for example, it is exposed as inauthentic. But what doesn't seem to attract much attention is that the larger part of the designed object's biography when it is no longer sacred, when it forms part of the disordered everyday clutter of the mundane, and joined the disarray of wild thing that don't quite fit anywhere – the undisciplined. (2000)

Attfield's insights have encouraged me to develop ways in which to assist in developing and understanding design artefacts and how they can contribute to a larger and more flexible framework. These approaches include: the role of narratives; theories of narratology, including adaptations and folk tales; the contributions of material autobiographies; theories and assertions of authenticity and anonymity; the tensions created by the structure of political economy of design; and the narratives of displacements and colonial violence. In investigating these approaches, I have found that material autobiographies possess the ability to contribute narratives and cultural value to design history; theories from literature and narratology are more often useful than the paradigms of art history to investigate the contributions of ordinary and anonymous design to histories

and canons; and the political economy of design is a dominant force in cultural valuing (or not valuing) design. These assertions remain helpful and instructive as lenses through which to critique design work to uncover knowledge and cultural value, and as ways and means in which to describe, speculate, refute, and build a narrative for each topic.

Role of narratives and material autobiographies

Personal collections are a form of material autobiography (Begiato 2018), with the ability to contribute narratives and cultural value to design history. '[Collections] not only demonstrate that the most powerful things are those which have some emotional resonance and reveals that objects make emotions manifest, visible, or substantive; it also takes the lead in a new and exciting field of history, which has enormous potential to explore imaginatively and better understand societies and cultures' (ibid.). The challenge in building design history resides in bridging the knowledge and understanding that is recorded through material biographies and autobiographies, with a desire to include anonymous, everyday, mass-produced, and often mundane design in a recorded history that contemporary designers understand and see a way in which to contribute.

This requires a departure from the privileged spaces of art historical concepts such as originality, location, pedigree, and authorship in design history in order to refute 'how Westerners have distinguished, named, sorted, grouped, gathered, and subsequently deployed material things in order to make knowledge claims about both them and the emergent concepts their users have associated with them' (Ulrich et al. 2015). In my case studies, my material autobiography was always a starting point of inquiry (Figure 7.1).

Using items from my personal collection, I attempted to suspend a critique on the formal qualities of any artefact to avoid transferring these opinions into cultural values and endeavoured to expand my observations to larger or more general ideas about the work at hand. Personal context – emotions, relationships, and identities (Attfield 2000) – became critical junctures of investigation that could be weighed against larger general paradigms. Within this approach, design can be critiqued and placed within an inclusive and equitable canon of work.

An artefact within any material autobiography can be considered as a single node in a network of material possessions. A series of artefacts can also be considered as a series of nodes that move in endless directions in terms of individual meanings of artefacts, patterns of consumption, and personal relationships, and they may connect into a larger network that is defined by place, theoretic spaces, historical events, patterns of use, and so on. Material autobiographies reflect Attfield's

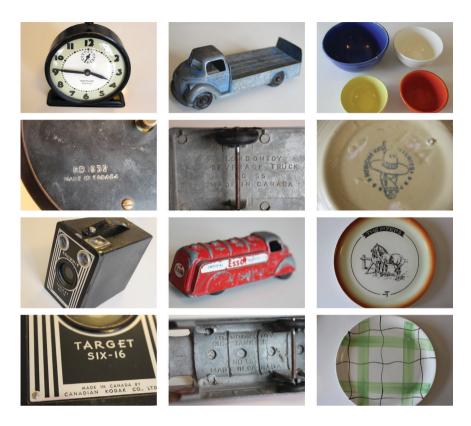


FIGURE 7.1 Personal collection, Bonne Zabolotney. *Source*: Author's photographs.

assertion that 'a more critical awareness of the process of historical research also brings with it a greater consciousness of the kind of questions that can be tackled in the pursuit of an understanding of the process of design, the nature of things produced by that process and its role in the making of human world' (2000).

Anonymous and unacknowledged

Anonymous design must also be considered as valid contributions to design culture histories. The term 'authenticity' itself is problematic for designers. It is rooted in the notion of singular authorship – a named creator – which directly conflicts with attempts to authenticate anonymous or commonly produced works. This was noted by Attfield as the separation of 'the "good" from the bad and the ordinary, and the disciplined from the wild' (2000). In this case, so-called 'good'

design retains authorship, a singular design 'hero' (ibid.), without the designation of credit towards other designers, producers, and manufacturers involved in the process of creating design artefacts. While 'authenticity can be ratified by experts who prove provenance and origin, or by the evocation of feelings that are immediate and irrefutable' (Lindholm 2008), the concept of authenticity in design history still requires an understanding of the cultural context in which the work resides. This contradiction in terms is resolved through the usage of replacement terms, discussed later in this chapter, including the requirement of the field to constitute anonymous work within the public domain as opposed to authorize the works through named works.

Moving from the particularly anonymous works towards a generalization about the formal qualities of a design, the network of design that it exists within, or the economic system it served, is one way of achieving authentication/ratification. However, this method depends on a constituted and shared system of analysis and value – a structure which must be agreed upon and shared. In the case of a nonexistent Canadian Design Studies, a shared framework remains scant and wanting.

Case study 1: Theories of adaptation and Medalta Potteries

Theories from other fields, particularly literature and narratology, can be more useful than the paradigms of art history to investigate the contributions of ordinary and anonymous design to histories and canons. These fields understand that context of the work is crucial in understanding its cultural impact. Mieke Bal describes narratology as 'a field of study [that is] the ensemble of theories of narratives, narrative texts, images, spectacles, events – of cultural artefacts that tell a story' (2017). Narratologies possess flexibility and an ability to accept multiple interpretations of texts. Theories of adaptation, borrowed from narratology and media studies, specifically provide a useful typology to position design within a historical context. '[Mobilizing] a wide vocabulary of active terms [including] version, variation, interpretation, continuation, transformation, imitation, pastiche, parody, forgery, travesty, transposition, revaluation, revision, rewriting, echo' (Sanders 2006) allows the much needed conceptual space to discuss the contributions of Canadian design in its own way, within its own cultural context.

Adaptations have been referred to as 'unfinished cultural business', which recognizes its predecessors (Hutcheon 2006) without erasing them. An example of this is the dinerware³ from Medalta Potteries (Figure 7.2).

We know from local histories and documentation that Medalta spent many years improving their line of restaurantware to compete with English pottery, which enabled them to step in and fill the market need for English vitrified pottery during



FIGURE 7.2 Medalta dinerware alongside its English counterpart, Bonne Zabolotney. *Source*: Author's photographs.

and directly after the Second World War (Antonelli and Forbes 1978). Medalta was also receiving samples from American potteries with requests to copy them in order to gain greater control of the Canadian market (ibid.). The complicated relationship between the design and production of these cups and the political economy of a resource-based, craft-based industry guides the aesthetic qualities of this cup. Medalta used local clay and spent years experimenting with combinations of clay, glazes, and firing temperatures. Its similar appearance was based on market demand and competition with imported pottery, intended to benefit from its overt aesthetic similarities to its English and American predecessors.

This work required experimentation with material processes, prototypes, and an understanding of the cultural value of its appearance, yet it would not qualify as a significant piece of design history according to traditional approaches to design history because we do not or cannot identify the designer, it is not original in its appearance, and we have not measured its cultural impact. However, 'when we call a work an adaptation, we openly announce its overt relationship to another work or works' (Hutcheon 2006). Adaptations are understood to be a repetitive version of a creative work, but with levels of variation (ibid.) that make the adaptation unique or considered separately from its originator.

Adaptations occur between books and film constantly, and while viewers may critique whether a film is 'better' than its book, there is seldom criticism of whether a film should be dismissed outright as merely an adaptation. For design, an adaptation may rely on cultural context as a key component to its variation. In the case of my *particular* Medalta coffee cup, it is possible for it to attain Canadian design significance by its survival through mimicry and alignment, as a symbol of colonial or settler economy, and most significantly through the fact that it symbolizes a place of making and being. Built with local clay dug from the hills in Southern Alberta, it is literally of the Canadian earth and is shaped to conform to the expectations of mid-century colonial Canada. These coffee mugs become 'inherently "palimpsestuous" works, haunted at all times by their adapted texts' (Hutcheon 2006), which is to say that their presence among new and old household items indicates a rich and layered series of influences and reflections of design.

In its own time, Medalta struggled with authenticating their work. In 1947, a Medalta teapot was displayed by the National Gallery of Canada in an exhibition called *Design in Industry*. The director of the Industrial Design Division at that time, Donald Buchanan, wrote about it in the exhibition catalogue, stating:

Some good colours and shapes are sold [by Medalta], although much of the product is of no great interest from the point of view of design. Yet occasionally a special attempt has been made to introduce improved models. One instance is a large oversize teapot which began as an enlarged version of a normal teapot. But magnified in this way, the lines of the normal teapot became awkward and top-heavy in appearance. The new design creates a more satisfactory form, with proper proportions for a pot of this size. (1947)

Medalta, clearly meeting the definition of design in Buchanan's description, does not get the benefit of acknowledgement in their adaptation and redesign of their teapot. Buchanan goes on to praise the coffee mug and bowl developed by the Government of Quebec at Saint-Georges de Beauce, noting that 'the resulting products are sometimes excellent, particularly in utility items such as cereal bowls, cups and beer mugs'. They are excellent, in Buchanan's estimation, because they were 'designed with clarity for the purposes required, they have the grace of simplicity' (ibid.). It is worth noting here that the Beauceware mug featured in Buchanan's catalogue is suspiciously similar in form (including the shape and connection of the handle) to another mug design made approximately ten years earlier, by Hycroft China Ltd. - another Alberta-based pottery company and a direct competitor to Medalta in the early part of the twentieth century. While Buchanan stresses that everyday items such as cups and bowls are as fundamentally important as 'expensive china and elaborate tableware' (ibid.) he seems to overlook - or perhaps not understand at all - the political economy affecting the clay and pottery industries in Canada at that time, which clearly encourage copying and adapting design to suit local, individual, and industry needs.

Ironically, the Medalta dinerware mugs are explicitly defined through a U.S. patent dated from 1954, entitled *Method and Apparatus for Forming Pottery Cup Handles.*⁴ The design of the mug itself is not recognized, but the method of forming a 'sanitary' handle, along with the equipment required to perform this

task, is recognized as original and proprietary. This patent not only satisfies the 'originality' requirement for design historians, but it also reveals the very designed systems, process, and specialized equipment required to complete the production of a ceramic mug. This mug, then, is not merely a designed object, it is evidence of a complex and intentionally designed system. Its design may have started out as an imitation but evolved into an adaptation – a variant of an earlier designed version, better suited to Canadian culture. Using the theory of adaptation, and the terms that can accompany this theory, extends the possibilities of critiquing and discussing this design within a cultural and temporal context. Importantly, the terms used in relation to this theory indicate an ongoing and active contribution to a body of work, further enabling the design in question to adopt an equally active space as adaptations of other design work.

Case study 2: Folklore and Eaton's catalogues

Another way of adopting frameworks from narratology is to consider anonymous works in the same way as folklore or folk tales. 'Folklore works ... never have an author' (Propp 1997) yet are significant in the transmission of everyday values. Propp states that 'a literary historian interested in the origin of a work looks for its author. The folklorist ... discovers the conditions that brought forth a plot' (ibid.). Similarly, rather than look for individual designers in order to better understand works of design, the design folklorist discovers, or uncovers, the context in which the design was created. Folklore also accounts for – or acknowledges – the readers' or listeners' agency: the ability to shift and guide the context to produce more meaning and value from the content.

Considering anonymous design or mass-produced design as folklore allows us to consider the design's contribution to history in terms of context and impact. Variation, impact, changeability, and adaptability are qualities of both folklore and anonymous design. Adopting the underlying concepts and cultural contributions of folk tales or folklore to critique design can also open up dialogue and interpretations of design. Designed artefacts become a part of the narratives of lived lives and take on the voices of common, everyday people. It is possible, in this sense, to consider Eaton's catalogue as a folk tale in its time. It has no single author and accounts for the viewers' agency in interpreting the catalogue or shifting the context in which the catalogue is valued or devalued by other viewers. Like folklore, this catalogue also asserts its relationship to place and is built around a shared identity of language, rituals, economics, and politics (ibid.). It provides 'a way of seeing another culture from the inside out instead of from the outside in' (Dundes and Bronner 2007) to those willing to analyse design through the lens of folklore. Variation, impact, changeability, and adaptability are qualities of both folklore and anonymous design. In some cases, images and pages were intentionally cut out of the catalogues, indicating that the viewer has engaged, adapted, and repurposed design for their own use. Folklore acknowledges its readers' ability to shift the context to make deeper connections with their readers, storytellers, or viewers. The folkloric Eaton's catalogue allows its customers to tell their own stories with products and images of products.

Eaton's mail order catalogues, as a whole designed system, contributed to twentieth-century colonial folklore of modern progress and citizenship through consumerism. In her book *Retail Nation*, Donica Belisle connects the rise of mass retail enterprise and a new attitude towards consumerism to the early formation of Canada as a modern nation. Here she asserts that department stores such as Eaton's

experimented successfully with aggressive capitalist accumulation, bureaucratization, the employment of women, the creation of feminine consumer spaces, bulk buying, and low prices. These characteristics made them symbols of Canadian modernity, as did the stores' assertions that their goods and services would enhance democratic life, strengthen the Canadian nation, and create citizen fulfillment. (2011)

This folkloric approach to conflating consumption with citizenship is particularly evident in the 1955 Spring/Summer edition of Eaton's catalogue, featuring the town of Eatonia on its cover (Figure 7.3).

The town was named by the Canadian Pacific Railway in honour of Eaton's, when the railway first established a station in 1919. This specific catalogue perpetuated a folk tale that emphasized the Doctrine of Discovery, completely disregarding Indigenous and place-based knowledge, and instead reinforced the colonial notion that the consumption of geographic space relates directly to the acquisition of material wealth. This mail order catalogue was not the first time it directly related consumption with citizenship, colonialism, and modern progress through industry. The consistent seasonal delivery of Eaton's catalogues provided a cultural rhythm that reinforced primarily white, European, colonial values such as citizenship, modernization through technology, and progress through consumer activity. Even more egregious is imagery from a 1934 catalogue cover, erroneously depicting first nations people from the plains among other first nations people in an image of Cartier's first contact in Eastern Canada. This image, evidently designed to undermine Indigenous culture and reinforce Europeans as physically, technically, and culturally superior, serves a purpose of asserting and maintaining colonial power - 'the capability to determine principal strategies ... to master and develop social space' (Berland 2009) - in the same ways and means that folklore also develops social space (Figure 7.4).

Eaton's catalogues do not reflect Canadian culture; they transmit their ideas about what Canada could or should be, projecting or mapping these concepts on

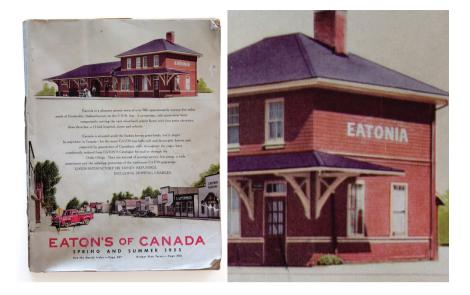


FIGURE 7.3 Eaton's catalogue from 1955, Bonne Zabolotney. *Source*: Author's photographs.

to their viewers, using variations of archetypes and tropes in the same manner as folklore. Understanding Eaton's as colonial, folkloric, anonymous, and intently designed is essential to place it within Canadian design history. From a design studies perspective, it's necessary to understand how Canadians assumed identity through consumption of anonymously designed goods in order to place the catalogue, the contents of the catalogue, and its corresponding systems of production and distribution within a recorded history of design.

As with material autobiographies, the concept of design artefacts as a metaphorical narrated text can be nested within the notion of particular/general, figure/ground relationship, or nodes within a network. As Marie-Laure Ryan states, 'texts are finite, but the propositions that describe a full world [are] infinite in number' (2016). This flexibility in narration allows for a retelling or repurposing of narrative about design as its context shifts over time.

Case study 3: Narratives of displacement and the Hudson Bay Blanket

Personal, folkloric, literary, and political paradigms shift our thinking and create conceptual spaces to explore infrastructural inversions – upending socially practised

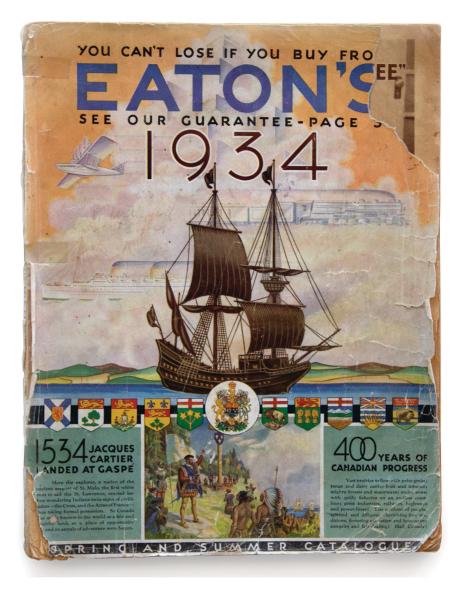


FIGURE 7.4 1934 Eaton's catalogue cover.

structures to challenge and grow our practices (Zabolotney 2021). In addition to these paradigms, we can also apply Dan Hicks's work in museum studies using his concept of *necrographies*. In this approach, Hicks inverses the object story towards what he characterizes as 'a kind of forensic death-writing, or autopsy of an object' (2021). Necrographies are histories of theft, displacement, violence, and colonial brutality. In Canada, we are confronted with the contradictory and complicated

history of the Hudson Bay Blanket. From many Indigenous perspectives, this blanket is a direct reminder of colonial oppression and genocide. However, as Chelsea Vowel teaches us (2017), Métis culture established a complex relationship between their people and the Hudson's Bay Company, with the Point Blanket at the centre of many cultural events.

We can also see how the complexity of displacement grows with the constant reproduction of design items. In October 2020, Hudson's Bay announced a new creative collaboration with Moschino's creative director to produce luxury handbags, jackets, and other high-priced accessories all using the Hudson's Bay's 'signature stripes' (PR Newswire 2020). These reproductions experience regimes of value, or the paths and diversions that Arjun Appadurai tells us 'are examples of what we might call commoditization by diversion, where value ... is accelerated or enhanced by placing objects and things in unlikely contexts' (1986). The stripes blanket remains a boundary object (Bowker and Star 1999) with multiple points of narrative reference – some culturally coded while others remain unreconciled as a symbol of colonial force. As objects that both inhabit several communities of practice and satisfy the informational requirements of each of them, boundary objects are thus both plastic enough to adapt to local needs and constraints of the several parties employing them, yet robust enough to maintain a common identity across sites (ibid.).

Shifting lexicons to create future possibilities

In order to disrupt structures used to critique design, it is essential to understand where power within the political economy of design resides and how it might be affected. This begins with utilizing vocabulary that made space for alternate theories and perspectives in design studies, moving from using words that support exclusive and proprietary qualities of design within a private domain (original, authorship, authenticity) towards a lexicon inclusive of diverse perspectives and the plurality of contributions towards the production of design (compelling, recognition, constitute, acknowledge, common). Breaking free of conventions also means building alternate paradigms in which to consider the contribution of design works. By simply acknowledging that much of the design work on which I have focused is indeed not aesthetically 'original' yet constitutes cultural value, I open up the possibility of dialogue about design, avoiding the foreclosure of critique and discussion of unacknowledged works.

The expression 'contending with what we have made' (Fry, Dilnot, and Stewart 2015) is often confined by licences, patents, non-disclosure agreements with powerful clients, and other political and economic forces that keep design history

under control of private interests. These private interests and concerns rule out the possibility of marginalized works moving closer to the centre focus of design studies. Design studies practitioners can build a scholarly field that is flexible, open to interpretations or new contributions, inclusive of Indigenous or non-European settler contributions, and expands knowledge mobilization beyond designers to non-designers and other fields of study by utilizing a vocabulary that supports and proliferates public and common interests. The current language and terminology in design history is imprecise and creates an innate contradiction in terms:

Terms of Private Interests		Terms of Public Interests	
Private domain	VS	Public domain	
Belonging, or licenced, to an author or owner; a formal authorization (a licence makes design 'licit', which also guides its moral or ethical standing)		Belonging to many; removes the constraints of licences, patents, or trademarks in order to critique and culturally value design	
Utilizes words: original, beginning, source, birth		Can utilize words such as: compel/compelling, prevail, influential, persuasive	
Recognizes authors, authority, authenticity, which connotes ownership and singularity	VS	Recognizes knowledge and understanding of a design occurrence Constitutes or develops a constitution, which contextualizes design as one part of a networked system of design Acknowledges by admitting or showing the knowledge about design, including its cultural, political, economic context	
Creates a historical canon	VS	Creates historical ecologies, discussing boundary objects and unfinished events	

An art historical approach in design history continues to enforce a kind of authorship which leads to or reinforces single and exclusive ownership, while a proposed design studies approach reinforces the strength of public domain: design work that belongs to all, includes all, and is plurally critiqued and valued in differing ways and forms. This reasoning forms a new vocabulary for design studies: common, public domain, constitutional, recognized. These terms have flexibility, usefulness, and can be used within inclusive and diverse critique frameworks. They begin to equip the much needed 'active and emancipatory cultural practices' with ways of understanding design works from a variety of viewpoints.

The idea of private domains versus public domains lies at the centre of the struggle to move design history away from art historical frameworks towards plural frameworks and opens up the possibilities of new and inclusive practices to acknowledge anonymous, mass-produced, and adapted-for-use design. It's also possible to adopt a public domains approach to include the contributions of Indigenous works throughout history that have been intentionally excluded from both art and design histories, and that may include creative and cultural works that belong to an entire community of people, rather than a single designer claiming authorship. The design culture critiques that are expressed through the constraints of the private domain represent the aims and goals of the designer or intellectual property holder. The public domain is inclusive of the public who interacts with the design and takes this interaction into account when critiquing it and determining its cultural impact. A public domain of design works acknowledges the participation of anyone who interacts with the design; anyone who adapts, repairs, or modifies the design; and accepts how the design shifts, breaks, or persists over time in expressing its cultural impact and importance in history.

Creating design culture narratives with a goal of a definitive canon of Canadian design is a project with diminishing returns. A true 'canon' requires a dominant force, tied to the political economy of design, which dictates what works are iconic and why, which designers are important, and what practices are distinct and dominating. Building a network with nodes of information that can be evaluated from multiple points of view and contexts allows for an inclusive framework that can include Indigenous works, mass-produced design, reproduced design, anonymous works, and even banal reflections of everyday life.

Notes

- 1 These concepts and ideas have been explored in various forms in my 2019 dissertation (Zabolotney 2019), *Attending to Futures* conference at Köln International School of Design in November 2021, and Design History Society's *Memory Full*? Conference, in Fall 2021.
- **2** Canadian identity, as ambiguous as ever, relies on the rhetoric of multiculturalism, the notion of 'many Canadas', or a mosaic of cultures.

- 3 Although not commonly used worldwide, I've used the vernacular term 'dinerware' as a label for the English coffee mugs and the Medalta adaptation. Medalta originally called these mugs and their corresponding plates, 'restaurantware' or 'hotelware'. For my social media posts, and subsequent essays, I've adopted the retroactive term 'dinerware' used by vintage and antique shops, as well as websites such as Etsy and eBay, to categorize pottery intended for use in diners, prairie cafés, local restaurants, and truck stops. The term 'dinerware' aligns these mugs with the ordinary and un-authored culture in which they thrived. The terms 'restaurantware' and 'hotelware' continue to reference pottery in sets which are typically more expensive and made with materials beyond that of Medalta's vitrified pottery.
- 4 https://patents.google.com/patent/US2691806

References

- Antonelli, M., and Forbes, J. (1978). *Pottery in Alberta: The Long Tradition*. Edmonton: University of Alberta.
- Appadurai, A. (1986). *The Social Life of Things: Commodities in Cultural Perspective*. Cambridge: Cambridge University Press.
- Attfield, J. (2000). Wild Things: The Material Culture of Everyday Life. Oxford: Berg.
- Bal, M. (2017). Narratology: Introduction to the Theory of Narrative. 4th edn. Toronto: University of Toronto Press.
- Belisle, D. (2011). *Retail Nation: Department Stores and the Making of Modern Canada*. Vancouver: UBC Press.
- Begiato, J. (2018). 'Moving On: An Afterword on Future Research Directions'. In S. Downes and S. Holloway (eds), *Feeling Things: Objects and Emotions through History*. Oxford: Oxford University Press.
- Berland, J. (2009). North of Empire: Essays on the Cultural Technologies of Space. Durham, NC: Duke University Press.
- Bowker, G. C., and Star, S. L. (1999). Sorting Things Out: Classification and Its Consequences. Cambridge, MA: MIT Press.
- Buchanan, D. (1947) Design for Use: A Survey of Design in Canada of Manufactured Goods for the Home and Office, for Sports and Outdoors: Including Photographs from the Exhibition Design In Industry. National Gallery of Canada.
- Dundes, A., and Bronner, S. J. (2007). *The Meaning of Folklore: The Analytical Essays of Alan Dundes*. Logan: Utah State University Press.
- Fry, T., Dilnot, C., and Stewart, S. C. (2015). *Design and the Question of History*. London: Bloomsbury.
- Hicks, D. (2021). 'Necrography: Death-Writing in the Colonial Museum', *British Art Studies* (19), https://dx.doi.org/10.17658/issn.2058-5462/issue-19/conversation (accessed 29 September 2021).
- Hutcheon, L. (2006). A Theory of Adaptation. New York: Taylor and Francis.
- Lindholm, C. (2008). Culture and Authenticity. Malden, MA: Blackwell.
- PR Newswire (2020). Hudson's Bay Taps Moschino Creative Director Jeremy Scott to Design Limited Edition Collaboration. 6 October 2020. https://www.prnewswire.com/newsreleases/hudsons-bay-taps-moschino-creative-director-jeremy-scott-to-design-limi ted-edition-collaboration-301146024.html.

- Propp, V. (1997). Theory and History of Folklore, ed. A. Liberman; trans. A. Martin and R. Martin. Minneapolis: University of Minnesota Press.
- Ryan, M.-L. (2016). 'Texts, Worlds, Stories: Narrative Worlds as Cognitive and Ontological Concept'. In M. Hatavara, Hyvärinen Matti, Mäkelä Maria, and Mäyrä Frans (eds), *Narrative Theory, Literature, and New Media: Narrative Minds and Virtual Worlds* (pp. 11–28). New York: Routledge.
- Sanders, J. (2006). Adaptation and Appropriation. New York: Routledge.
- Ulrich, L. T., Carter, S. A., Gaskell, I., Schechner, S. J., and Van Gerbig, S. (2015). *Tangible Things: Making History through Objects*. Oxford: Oxford University Press.
- Vowel, Chelsea. 2017. 'Blanket Statement', *Canadian Art Magazine*, 3 July 2017. https:// canadianart.ca/features/blanket-statement-chelsea-vowel/.
- Walker, J. A., and Attfield, J. (1989). *Design History and the History of Design*. London: Pluto Press.
- Zabolotney, B. (2019). *Discontented: Actions and Tactics of a Design Studies Practice*. Melbourne: RMIT University.
- Zabolotney, B. (2021). 'Points of Inversion: Upending Structural Narratives in Design History'. In Memory Full? Reimagining the Relations between Design and History. 2021 Design History Society Annual Conference. FHNW Academy of Art and Design, Basel, Switzerland.

8 MAKING A DESIGN FICTION FROM THE INSIDE-OUT¹

Anne Burdick

n 2021, I published *Trina: A Design Fiction* that I created in collaboration with short story writer Janet Sarbanes (2021). Our project combined the tangible and visual dimensions of design with the inner lives of literary figuring to explore the implications of speculative software in a near future world. This chapter will look at an unexpected outcome of our making process: creating a narrative-based design fiction in which storyworld, prototypes, characters, and plot emerged in a holistic assemblage allowed me to experience a future 'from the inside'. Accessing futures through a subjective lens can be challenging given the speculative and sometimes abstract nature of futures, and the impossibility of a first-hand future experience. But designing a narrative-based design fiction allowed me to assume the role of what Tim Ingold would call a participant-observer, joining up with a world of forces in the creation of an emergent future (Ingold 2013).

Trina's plot follows the compromises, risks, and hacks that the titular character undertakes on a day-to-day basis as she negotiates with the infrastructural realities and next-generation technologies that shape her livelihood, from the sensors embedded in her body to the knowledge management system of her employer. Bringing *Trina* into being allowed me to consider how individual agency intersects with histories, environmental conditions, technological capacities, and social, political, and economic networks. My experiential understanding of this entanglement resulted from an open-ended creative process, an 'art of inquiry' (Ingold 2013) that provided a close-to-first-hand experience of a first-person world. Examining how the process unfolded has allowed me to surface new questions and areas of exploration for Futures practitioners, design researchers, and technology developers who aim to:

- explore the impact and viability of future technologies within particular future situations
- interact with forces that might affect agency for specific actors within particular future conditions
- test how specific individual motivations might give rise to new practices and social configurations within distinct future conditions
- adopt perspectives other than one's own
- enrich one's own 'futures literacy'

The fluxes and flows of making Trina

Trina combines showing (design) and telling (literary fiction). Its primary medium is a live performance comprised of a slide show with spoken narration and live electronic sound, but the 2021 version has since been remediated for the web, with interaction and sound design provided by Erik Loyer. The story's format intermingles the visible and invisible forces that give shape to the protagonist's world and actions. A sequence of sixty composite images shows *Trina's* first-person perspective above a third-person panoramic image while an omniscient narrator with access to Trina's thoughts tells the story (Figure 8.1). The project began as design research into yet-to-be-invented software for digital humanities scholars. The story was intended to provide a use context for a speculative research tool built upon core humanities' values, such as subjectivity, contingency, and ambiguity, enabled by the affordances of 3-D virtual space. The resulting application was called the Commons; a prototype showing the 'Reader View' can be seen in the top panel of Figure 8.1.

Trina, herself, is an underemployed literary scholar who lives alone in the desert sometime in the near future. She is connected to others through an always-on virtual world that she accesses through eye, ear, and finger implants with which she performs human intelligence tasks (HITs) for a security research firm called Humanitas, Inc. In the story, we see Trina working with several speculative software applications, in addition to the Commons, in between dealing with daily life in an off-the-grid RV that is powered and connected through solar and satellite.

To demonstrate the core functionality of the Commons, I needed to show how multiple interpretations of a single document might appear. Figure 8.2 shows a moment in the story when several documents are displayed, each with numerous versions centred on a 'spindle' that Trina manipulates as she reads. Thus, the plot's action happens through the prototype's use, and is set in motion when Trina is assigned a historical document of ambiguous provenance thought to have been created on a code-generating typewriter in the early 1900s. Although it is a low-stakes





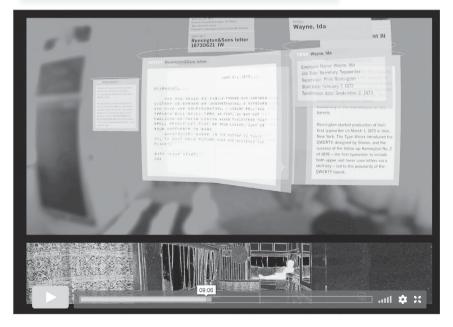


FIGURE 8.1 A moment in the *Trina* story in three different media, clockwise from top left: live performance with slide show, spoken narration and live electronic sound; movie with voiceover narration and recorded electronic sound; graphic novel/script.

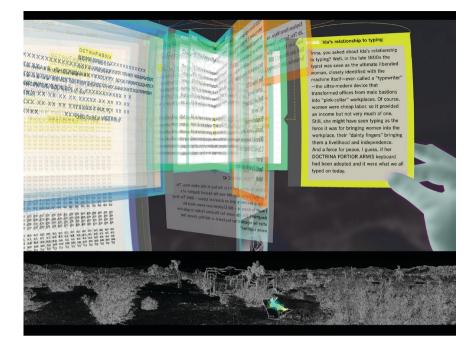


FIGURE 8.2 Slide 52. A single moment captured from two different points of view: above, Trina's first-person perspective and the spindle interface of the Commons as seen through her embedded eyewear; below, a third-person panorama shows Trina in her environs – a La-Z-Boy recliner in the desert.

assignment compared to Trina's work in the War on Terror, the human-technology relationships it exposes stir something within her and she chooses to abandon the systems that define her work and worth. It is meant to be a plausible, if complicated, future – rather than a preferable one – and Trina is a complicated woman.

Though Trina is physically alone, the narrative is populated with other figures she encounters while doing research in her online environment; she communicates with amateur historians, academic scholars, and an 'outdated' AI therapist called NANCY. She deduces that there may be two possible authors of the document as she pieces together parts of their lost histories: Ida Wayne was a secretary at the rifle manufacturer Remington & Sons in the late 1800s during the time that one of the first typewriters was being prototyped; Doctrina Fortior was a concrete poet who was part of the American expat literary community in Paris in the early 1900s and may be Ida's bastard daughter. Like Trina, each character's relationship with her writing technology is conflicted, shaped by gender, class, education, occupation, historical context, and personal biography. The tensions give rise to new practices and acts of resistance, driven by individual personalities and motivations, in response to the pressures of each character's unique situation.

Tim Ingold describes designers and other makers as 'participants in amongst a world of active materials ... bringing them together or splitting them apart, synthesising and distilling in anticipation of what might emerge' (Ingold 2013). In this sense, Janet and I might be seen as 'joining forces' in a process that was not entirely under our control. Ingold brings the interactions of making to life in a vivid description of students learning to weave baskets with willow reeds on a beach in Aberdeen. Beginning with tall lengths of willow stuck in a circular pattern in the sand and tied together at the top, the students wove horizontal pieces while kneeling in a cold wind. The baskets that resulted were shaped through a combination of the flexibility of the willow; the length, strength, and dexterity of the students' hands and arms; their tolerance for the weather; and the direction of the wind, in correspondence with – not determined by – the students' own intentions (Ingold 2013). Trina similarly emerged from our designerly and authorly negotiations with a 'field of forces', resulting in a holistic assemblage of biographies, infrastructures, economic and social configurations, environmental conditions, technology concepts, and nascent practices that would be difficult to divide discretely into the prototypes, storyworld, characters, and plot that comprise design fictions. We were performing Ingold's 'art of inquiry', whereby:

the conduct of thought goes along with, and continually answers to, the fluxes and flows of the materials with which we work. These materials think in us, as we think through them. Here, every work is an experiment: not in the natural scientific sense of testing a preconceived hypothesis, or of engineering a confrontation between ideas 'in the head' and facts 'on the ground', but in the sense of prising an opening and following where it leads. You try things out and see what happens. Thus the art of inquiry moves forward in real time, along with the lives of those who are touched by it, and with the world to which both it and they belong. (Ingold 2013)

Janet and I collaborated on the story one section at a time, over email. I would send her notes, she would return bits of backstory and a narrative outline. From these I would develop sequential imagery, flesh out the prototypes and how they worked, add more historical research, and put all the pieces together, modifying according to the demands of the story as it grew. I would send a composed draft back to Janet, she would modify it, return it, and the cycle would continue.

Two years passed between the creation of Part 1 and Parts 2 and 3. In the interim, the technologies I was imagining were becoming accessible and I had the opportunity to create actual working prototypes to test my ideas for Trina's tech (Figure 8.3). This allowed me to craft Trina's first-person perspective, to see what she would see when looking with and through the software, because I was able to do so myself. The open-endedness of the collaborative process allowed us to follow new trajectories as they came into view. The openings could come from

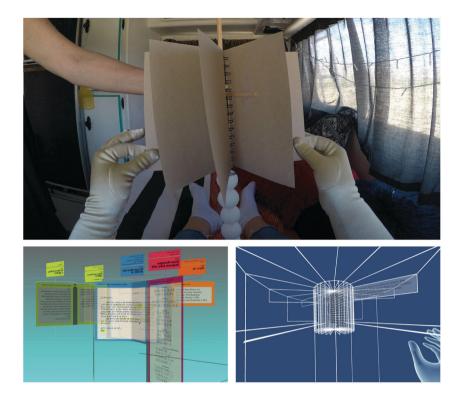


FIGURE 8.3 Prototypes created during the story's development, clockwise from top: a paper prototype; a VR prototype made in Unity; and a 3-D model made in Rhino.

anywhere in the project: a technological affordance, an animal, a business letter, an artificial intelligence, a newly discovered snippet of history, or from Trina herself. Through an art of inquiry, in which designing and storytelling were conceived in a dynamic, emergent interplay, my 'insider's' understanding of Trina's future started to emerge. I was weaving together storyworld, prototypes, characters, and plot, and it was getting harder to determine which was which.

An attempt to disentangle storyworlds, prototypes, characters, and plots

Though it is nearly impossible now for me to consider any one of them in isolation, I want to take a moment to theorize storyworld, prototypes, characters, and plot in an attempt to understand what each contributed to the design fiction as a whole. The first two, storyworld and prototype, figure prominently in Lindley and Coulton's 'definitive definition' of design fiction:

Design fiction is (1) something that creates a story world, (2) has something being prototyped within that story world, (3) does so in order to create a discursive space.² (Lindley and Coulton 2015)

The first component - 'something that creates a story world' - gives designers wide berth regarding narrative: a storyworld is not necessarily a story. A storyworld defines the spatial and temporal situation of a narrative, including environmental, social, cultural, political, economic, and other systemic attributes, and should have a degree of internal coherence. In film studies and narrative theory, the plot of a story gives rise to a storyworld in an audience's mind as they attempt to make sense of what they see and hear (Herman 2010: 569). In the case of design fiction, an artefact may be enough to evoke a world of which the object is imagined to be a part (Malpass 2013). Storyworlds can also exist on their own. McDowell and von Stackelberg propose creating coherent storyworlds prior to the generation of specific stories through 'worldbuilding', in which a world's attributes - its systems, physical environments, and artefacts - are built by collaborative and interdisciplinary teams. Once created, the worlds can be used as a space for thought experiments and stories to be tried and tested in order to communicate and explore futures. The worldbuilding process allows for the creation of rich narratives as well as insight and foresight relating to near-future technologies (McDowell and von Stackelberg 2015). McDowell shares how he came to the practice through his experience of working in a non-linear process with Stephen Spielberg and others on the film Minority Report. In filmmaking, a script is typically written first, then a production designer works with a director to develop the look and feel of the sets and props. But with Minority Report, the production design had to begin before the script was ready, resulting in what McDowell describes as a back-and-forth creation of storyworld and script. The process involved in-depth research into the design of a future world through work with experts from science, technology, urban planning, and other fields, creating a 'valuable creative tension' between traditional futurist approaches and storytelling demands. 'At three broad scales the world scale ... , the community scale ..., and the individual scale ... - the world begins to fill in with connective rules that develop a holistic logic-driven world space' (McDowell and von Stackelberg 2015). As a form of futures practice, the result was not 'an individual series of foresights from futurists', rather it was 'an organic evolutionary process centered in storytelling that allowed the emergence of a holistic fictional world' (McDowell and von Stackelberg 2015), a description that resonates with the integrated process that led to Trina.

The second design fiction component – 'something being prototyped within that story world' – could be read as a diegetic prototype, arguably the best

developed and most unique aspect of design fiction practice. As Kirby reminds us, it is the 'visual element that is at the heart of a diegetic prototype' (2010). The imagined future technologies of Minority Report, particularly Jonathan Underkoffler's gestural computer interface, serve as one of Kirby's primary examples of the rhetorical power of a diegetic prototype in which an extraordinary technology is made plausible and even benevolent through its use in ordinary circumstances. But to be convincing, Underkoffler recounts, the prototype needed to be designed as a 'self-consistent technological entity' that 'adhered not only to the rules of the diegetic world but also to its own internal logic and the constraints of real-world computer technologies' (Kirby 2010). But not all prototypes are set in filmic contexts. Design fictions are realized in diverse media and many take the form of imaginary artefacts or promotions for future products and services. The narratives can be understood as an effect of the design fiction itself, and are seen as either embedded or external (Malpass 2013). An embedded narrative is one that is extrapolated from specific attributes of an artefact whose design subverts expectations in a manner that is legible to a viewing audience (the story/ world is deduced from clues communicated by the artefact). When an artefact is strange and unfamiliar, an external narrative may need to be conjured through additional media, such as writing or photography, to situate it in a specific use context in order to be understood (the story/world is derived from an artefact in situ) (Malpass 2013). As enunciative objects, artefacts could also be seen to create subject positions, implicit users who are a kind of human complement to the artefact. In either case, the narrative is conjured in the mind of an interpreter.

Kirby's concept of diegetic prototypes was informed by the 'performative prototypes' identified by Suchman, Trigg, and Blomberg (2002) in the context of science and technology studies. In their ethnomethodological account of information technology development practices in a large corporation – admittedly different conditions for futuring than science fiction filmmaking - they identify how a prototype's meaning evolves through interactions among an assemblage of actors that can include people, a physical environment, management systems, the prototype itself, and more. Placed in a use context, the prototype is a working tool, a mock-up of a proposed future technology produced as part of a design process. The prototype acts as a 'tangible, but also provisional, apparatus' and a 'reflexive probe' (Suchman, Trigg, and Blomberg 2002). The prototypes of Trina operated similarly. Through the design fiction's holistic creation, I experienced what Such an et al. observed in their study: 'Like any technology, the prototype does not work on its own, but as part of a dynamic assemblage of interests, fantasies and practical actions, out of which new socio-material arrangements arise' (Suchman, Trigg, and Blomberg 2002).

The new socio-material arrangements of *Trina* took the form of new practices, shifting our attention away from 'discrete, intrinsically meaningful objects' and onto relations and actors (Suchman 2003). A character's narrative voice can

provide an inside-out perspective on how relationships are made meaningful while a character's interactions remind us of the uniqueness of embodied experience. In his investigations into proximal futures, researcher Andrew Morrison has centred his design fictions around personas as a way to project identity, present a point of view by proxy, and articulate subjective and contextualized perspectives (Morrison and Chisin 2017). But, as Mark Blythe (2014) points out, 'creating a vivid and non-stereotypical character each time a scenario becomes necessary in the design process is a bit of a tall order' (Blythe 2014). Therefore, Blythe and his collaborators created 'Pastiche Scenarios' that use personas with the 'depth, personality, history and cultural context' of expertly drawn characters from literature and popular fiction, such as Ebenezer Scrooge, Bridget Jones, or Bart Simpson. These characters bring distinctive voices and personal foibles to the imagined 'felt-life' experience (McCarthy and Wright 2005) of a fictitious user. The team's goal is not to create generic users or use scenarios; rather, it is to use idiosyncratic characters for the reflexive engagement they require as established characters that already have 'a mind of their own', one that may be misaligned with a designer's goals. Pastiche Scenarios exploit the ambiguity that results to explore the emotional, social, and political values related to prospective technologies in imagined futures (Blythe 2014; Blythe and Wright 2006).

Social histories and individual biographies exert force on a story. Ursula Le Guin describes composition as 'a special condition. While writing, I may yield to my characters, trust them wholly to do and say what is right for the story' (2004). Blythe notes similar comments from Tolstoy and Pushkin who have expressed being surprised by the choices and actions their characters have taken (Blythe and Wright 2006).

When you construct or reconstruct a world that never existed, a wholly fictional history, the research is of a somewhat different order, but the basic impulse and techniques are the same. You look at what happens and try to see why it happens, you listen to what the people there tell you and watch what they do, you think about it seriously, and you try to tell it honestly, so that the story will have weight and make sense. (Le Guin 2001)

The story is one among the field of forces. And it is these exchanges and transformations, between storyworld, prototypes, and characters, that constitute the events of a plot.

Design practitioners who rely upon Sterling's assertion that design fiction 'tells *worlds* rather than *stories*' (Bosch 2012),³ (RTD Conference, Coultonet al. 2017) (emphasis mine) risk missing an important dimension of sociological and technological futures: the new practices that concern Suchman and the consequences that Kirby champions. To get at the messy subjectivity and embodied specificity of people in action, especially when they are meant to be

someone other than one's self, we can return to the literary figuring of narrative fiction which brings the diegetic prototype into use by specific people. Imagining what happens when individuals make moves helps us to contemplate more than just a set of objects and conditions and asks us to consider: in such a world and with such prototypes, what might happen? What might people do and what new conditions will their choices give rise to? The answer, of course, depends on the particular people in their particular conditions, or as Le Guin says, 'you listen to what the people there tell you'. Janet and I listened to Trina, Ida, Doctrina, and even Humanitas, Inc.

It may be helpful here to return to diegesis, a notion similar to literary theory's 'plot' – the arrangement of people, things, and events as they unfold in a narrative's telling. Though plot is seldom discussed in the context of design fiction, from narrative theory we know that it is the plot that gives rise to a storyworld in a reader's mind. Narrative theory also asserts that the plot shapes the story, which in theoretical terms takes place in the space and time of a storyworld and functions according to a coherent chronology and logic (Eagleton 2008). While it is possible to map the plot of *Trina* to a simple plot diagram (Figure 8.4), its telling hinges upon moments of conflict, ethical dilemmas, risk-taking, inspiration, curiosity, discovery, and sacrifice. These moments happen as Trina takes action, bumping up against systems of power, revealing very human reactions to a designed future, but also reshaping that future through the moves she makes. Thus, we could say that for futures inquiry and design fictions, characters and plot can have as much

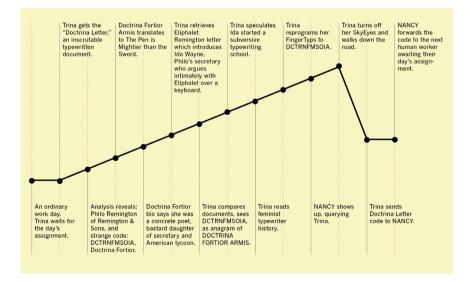


FIGURE 8.4 *Trina*'s storyworld, from left to right: a neoliberal knowledge economy; a desolate landscape; daily subsistence supported by virtual human intelligence tasks.

impact, if not more, than storyworlds and prototypes, on the kinds of futures that get imagined.

The narrative-based design fiction as a holistic assemblage

Attempting to independently define the attributes of a narrative-based design fiction's storyworld, prototypes, characters, and plot confirmed what I learned through Trina's making:

- Individual components cannot work on their own.
- Tension between components can be productive.
- Boundaries between components can be fugitive.
- A story is shaped by who tells it and how.
- Specific biographies for people and things necessitate seeing a future world through distinct perspectives.
- A prototype's meaning is manifested in actions, practices, and consequences.

To demonstrate, I will quickly recount elements of the final scene of *Trina* as a holistic assemblage in which a prototype – the AI therapist called NANCY – is simultaneously a development tool, a character, the touchpoint of a larger system, and a plot device.

Initially conceived as a human therapist in early drafts, NANCY became a therapy bot in response to the demands of the storyworld. Indeed, her role multiplied as soon as she was inserted into the narrative: more than a character, she was a technological prototype with all that entails. When the NANCY software 'enters', it appears to be a clumsy liability management tool from corporate HR, a benign interruption. But as the story proceeds, it becomes apparent that NANCY is yet another surveillance technique employed by Humanitas, Inc. Trina's experience of NANCY's 'curtain of text that hangs just beyond the brim of her hat', a 'live transcript' that records Trina and NANCY's inane exchanges, also infects Trina's dreams. Trina could sense NANCY's threat to her own agency and at first she tolerates and ignores NANCY, then she toys with her, and finally, she actively resists NANCY's 'insistent cursor'.

Inspired by her research into Ida Wayne, who tried to encode pacifist ideals into the keyboard of the first-ever typewriter, Trina reprogrammes her own embedded 'FingerTyps'. After NANCY's pleasant queries take on an ominous tone, Trina types out what appears to be gibberish, tricking NANCY into sending an encoded message to another human reader at Humanitas, Inc., setting off a chain reaction. Then she disconnects from the tech and exiles herself from the network. As a bot with a conversational user interface, NANCY may have been easy to personify but each of the forces that gave shape to the design fiction was an actor, whether they were human or not. Thus, when Trina decided to abandon not only Humanitas but also the Commons, it took me by surprise. I had designed the Commons and its world of readers specifically for her – and yet the push and pull of external forces entwined with subjective experience and personal history mattered more.

Conclusion

This chapter has looked at how creating a narrative-based design fiction can offer a way for Futures practitioners, design researchers, and technology developers to get a feel for the interior lives and everyday texture of human-scaled futures. We saw how the experience of creating a first-person future combines the tangibility of design with the interior access of literary fiction, a situation that provides a palpable engagement that can enrich one's futures literacy, particularly when approached as an art of inquiry. But how else might it be used and who is it best used by?

The point of working with an idiosyncratic individual with a specific biography in a specific place and time is not to create generalizable conclusions about functions and uses of technology or to predict human reactions to future conditions. Rather it is to better understand the forces at play that give shape to the action of any world or any story. It is a process best used to explore imagined actions, practices, and consequences that arise in relation to distinct conditions, for example, how technologies might be repurposed, how agency might be negotiated, how individual motivations might give rise to new practices and social configurations, how people with different biographies and histories might react, and so forth.

But questions remain. How in-depth does the process need to be to achieve its effects? Is it best practised in groups or alone? Are professional authors and designers necessary? What other forms of disciplinary expertise would be helpful? How open do the process and parameters need to be and where are the limits?

Ingold's art of inquiry helps address issues of agency and emergence through the making of first-person futures. The designer who is intimately entangled in a web of materials and forces, human and nonhuman, each pushing and pulling on the action as it advances a story, can achieve surprising and insightful results. As we saw in Ingold's example of weaving a basket, the outcome will be only partially in the creator's control, and the final shape will tell you something about the forces of the world of which it is a part. In practical terms, this means that prototypes, storyworld, characters, and plot should be created in concert with one another and in correspondence with their creators. As participant-observers, Janet and I did not sit on the outside of our design fiction as it was coming into being; we were an integral part of it. Designing *Trina* was my own experiential future, one in which I could feel the effects of the forces of an imaginary future through the process of making. Working with the specificity of a unique individual and her life at a particular time and in a particular place allowed me to see that while I could have designed a near-perfect technology (the Commons) for Trina, her ability to make use of it was not defined by the (visible) affordances of the designed prototype but by the (invisible) economic, social, political, and ecological forces at play. Seeing a world through Trina's eyes, developing a world in tandem with Trina and Janet and Ida and the RV and the Commons, gave me a first-hand experience of the interdependencies, the fields and forces of a particular future, Trina's complicated every day. I was a participantobserver, investigating a world from the inside.

Notes

- 1 This chapter has been modified from the essay 'Designing Futures from the Inside', which was published in the *Journal of Futures Studies* as part of a special collection on Design and Futures edited by Stuart Candy and Cher Potter. It was created with support from the University of Technology Sydney and ArtCenter College of Design.
- **2** As this chapter is concerned with the creation of a narrative-based design fiction rather than its outcomes, we will set aside the much-debated notion of opening debate and discursive space, a topic covered elsewhere (Auger 2013; Tonkinwise 2015).
- **3** In the same interview Sterling responds to the question of what makes design fictions work well: 'Talking about a future gadget' which he implies is intrinsically fascinating, in contrast to 'talking about a future government or women's rights in the future or other hot-button problems'.

References

- Auger, J. (2013). 'Speculative Design: Crafting the Speculation', *Digital Creativity*, 24(1): 11–35. https://doi.org/10.1080/14626268.2013.767276.
- Blythe, M. A. (2014). 'Pastiche Scenarios', Interactions, 11(5): 51-3.
- Blythe, M. A., and Wright, P. C. (2006). 'Pastiche Scenarios: Fiction as a Resource for User Cen-tred Design', *Interacting with Computers*, 18(5): 1139–64. https://doi.org/10.1016/j. int- com.2006.02.001.
- Bosch, T. (2012, March 2). 'Sci-fi Writer Bruce Sterling Explains the Intriguing New Concept of Design Fiction'. *Slate Magazine*. Retrieved from https://slate.com/technol ogy/2012/03/bruce-sterling- on-design-fictions.html.
- Burdick, A. (2019, March). 'Designing Futures from the Inside', *Journal of Futures Studies*, 23(3): 75–92. doi: 10.6531/JFS.201903_23(3).0006.

- Coulton, P., Lindley, J., Sturdee, M., and Stead, M. (2017). Design Fiction as World Building. *RTD Conference*. https://doi.org/10.6084/m9.figshare.4746964.
- Eagleton, T. (2008). *Literary Theory, an Introduction*. Anniversary ed. Minneapolis: University of Minnesota Press.
- Herman, D. (ed.) (2010). *Routledge Encyclopedia of Narrative Theory*. Repr. London: Routledge.
- Ingold, T. (2013). *Making: Anthropology, Archaeology, Art and Architecture*. London: Routledge.
- Kirby, D. (2010). 'The Future Is Now: Diegetic Prototypes and the Role of Popular Films in Generating Real-World Technological Development', *Social Studies of Science*, 40(1): 41–70. https://doi. org/10.1177/0306312709338325.
- Le Guin, U. K. (2001). Tales from Earthsea. 1st ed. New York: Harcourt.
- Le Guin, U. K. (2004). *The Wave in the Mind: Talks and Essays on the Writer, the Reader, and the Imagination.* 1st ed. Boulder, CO: Shambhala.
- Lindley, J., and Coulton, P. (2015). 'Back to the Future: 10 Years of Design Fiction' (pp. 210–11). ACM Press. https://doi.org/10.1145/2783446.2783592.
- Malpass, M. (2013). 'Between Wit and Reason: Defining Associative, Speculative, and Critical Design in Practice', *Design and Culture*, 5(3): 333–56. https://doi. org/10.2752/17547081 3X13705953612200.
- McCarthy, J., and Wright, P. C. (2005). 'Putting "Felt-Life" at the Centre of Human-Computer Interaction (HCI)', *Cognition Technology and Work*, 7(4): 262–71.
- Mcdowell, A., and von Stackelberg, P. (2015). 'What in the World? Storyworlds, Science Fiction, and Futures Studies', *Journal of Futures Studies*, 20(2): 25–46.
- Morrison, A., and Chisin, A. (2017). 'Design Fiction, Culture and Climate Change.
 Weaving Together Personas, Collaboration and Fabulous Futures', *The Design Journal*, 20(supp1): \$146–\$159. https://doi.org/10.1080/14606925.2017.1352704.
- Suchman, L. (2003). Located Accountabilities in Technology Production. Centre for Science Studies, Lancaster University, Lancaster LA1 4YN, UK. Retrieved from http://www. lancaster.ac.uk/fass/resources/sociology-online-papers/papers/suchman-located-accou ntabilities.pdf.
- Suchman, L., Trigg, R., and Blomberg, J. (2002). 'Working Artefacts: Ethnomethods of the Prototype', *British Journal of Sociology*, 53(2): 163–79. https://doi.org/10.1080/000713 10220133287.
- Tonkinwise, C. (2015, 2 March). 'Design Fictions about Critical Design', *Modes of Criticism*. Retrieved from http://modesofcriticism.org/design-fictions-about-critical-design/.

9 DESIGN-ENABLED RECOMMONING

Dimeji Onafuwa

To live together in the world means essentially that a world of things is between those who have it in common, as a table is located between those who sit around it; the world, like every in-between, relates and separates men at the same time.

HANNAH ARENDT (1958)

How we live together in the world

Our relationship to things leads designers to assume that they can best influence human behaviour through interaction (Verbeek 2015: 26). But, in considering multiple modes of knowledge production – from communication pieces that increase engagement, processes that transform services and build platforms, and technologies that help us tackle some real-world problems – we see a more robust story around the role of design in everyday life. We not only interact with things (which, of course, are a crucial part of what makes us human), but we also form relationships – with other humans, with technology, with materiality, and with what constitutes our natural and artificial environments. We do this to understand our world. In a sense, all design is relational, and relationships reveal (emerge, re-emerge) in practice. Yet, we continue to fixate on things and how these things orient us towards interacting with them. To reorient us back to design as a relational practice, we must redefine what we mean when we say 'design' and reinvestigate the notion of the designer as a problem-solver. Let us start with Laurent Thévenot's

description of social science as 'a science of life together in the world' (Thévenot 2007: 233–4). Thévenot borrowed this phrase in part from Hannah Arendt, who in her work referred to living together with a world of things (Arendt 1958: 52). In the same vein, good designers seek to understand how we enable life together. Such designers move beyond designing for interaction alone and work to foster a different relationship (with things, artefacts, nature, humans, technology, etc.); this is a paradigm shift that leads designers to reconsider how they show up in the world and how they acknowledge and support the multiple lived experiences it represents.

This understanding of design as a relational practice fundamentally challenges us to negotiate with the world around us constantly. Negotiation (through relationship, communication, and interaction) is also an essential part of commoning, which involves the practice of radical inter-existence (Escobar 2018: 144). When we intersect commoning with design, we see that they are cross-referencing two ways. First, communities have historically found ways to share resources through commoning practices. According to Silke Helfrich and Jörg Haas (2009: 1-15), commons occupy the space between privately held property and public goods. Commons are not only resource systems whose over-exploitation leads to depletion but also include the communities using these resources and the social practices that define how the resources are used. And it is between these spaces that resources are negotiated and that designers can enable commoning. Second, commoning is performative and emerges in tension and negotiation. Commoners organize around a shared purpose to solve a resource problem. When small groups informally gather around a core purpose as well as common enemies, they form 'collectives'. In contrast with communities, the emphasis on collectives is not increasing individual core membership but advancing that core purpose. Shifting the design paradigm means different collectives are forming new relationships with the material world - a relation revealed in the ways we share (objects, things, and resources) with the world around us.

Designing commoners (designers who adopt a commons-oriented mindset to understand their relationship with the world around them) are aware that commoning is often messy. For one, commons are challenging to identify since some resources do not fit into this neat definition shared earlier but are nonetheless crucial to our collective well-being. Also, designing commoners must identify resources to be negotiated based on whether they are essential and shared and not necessarily how they are owned or controlled. Adopting a commons-oriented mindset means working outside traditional practice boundaries (and norms) to collectively resolve different resource limitation problems. Rooted in the notion that resources outside these conventional boundaries are ripe for reclaiming is design-enabled recommoning.

Reconstituting a new design knowledge

Design-enabled recommoning (Onafuwa 2018: 14-23) allows designers to work with collectives to reconstitute a livelihood based on radical interdependence by drawing insights (and challenges) from existing (and past) commoning practices. Recommoning happens in different contexts: in between different roles embodied by commoners in resource sharing, in the relationships through which these resources are shared, and in the 'micro acts' visible in everyday sharing practices. Designers who adopt recommoning work with non-experts within emerging design cultures (where the complexity of the problem necessitates the application of several approaches and no one solution is feasible). The new design culture that emerges in effect changes the role of the expert designer. For one, the focus of the expertise shifts from individuals to communities/ collectives. Also, grassroots organizations play a more pivotal role to ensure that the interventions are neither technocratic nor culturally insensitive. The role of the expert designer shifts to that of identifying common threads and loose networks between local communities and creating the mechanism for sharing knowledge and best practices. This process is called 'amplification' (Manzini 2015: 121).

There is an element of scale to the amplification model – interconnected, diminutive, and short-term 'local projects' banding together and extended by larger initiatives called 'framework projects' to lead to large-scale, longer-term transformations (Manzini and Rizzo 2011: 210). The amplification model is one theory out of many that address how the sustainable gains within a community might be emphasized. What makes the amplification model particularly relevant to community-based design is its emphasis on achieving synergies through small, local gains. Designers are familiar with this mode of working, that is, small-scale interventions at the level of interaction. This mode of working overlaps well with the understanding that commoning activities are held in 'layers of nested enterprises', which means that common-pool resources are components that integrate into larger systems (Anderies and Janssen 2013).

Why design-enabled recommoning matters

Social complexity makes recommoning a problematic proposition. While the designer brings unique expertise to recommoning, their mandate must be to serve a more participative function, ensuring that their agenda is subservient to the needs of the collective. A designer working in a recommoning space is invited.

Therefore, when working with collectives, they must serve the combined roles of facilitator, co-collaborator, and a meta-practitioner. In other words, they must balance a participatory approach with periods of self-reflection to ensure that they bring collective needs to the fore. They also must be aware of their politics as they work from within – that is, they are lending their expertise to build platforms that are fair, and they enable stakeholders to challenge their assumptions and see problems through multiple frames.

Shifting designer roles

Designer as a platform builder

Designing the platform for commoning is a particularly daunting task since the process bears no tested and true algorithm or step-by-step guide (Kollock and Smith 1996: 109–28) but instead involves a combination of skill, social collaboration, reflection in, and on, action. Donald Schön unpacks the theoretical space defining this type of work that attempts to tackle messy, confusing problems defying technical solutions as the 'swampy lowland' (Schön 1987: 3). These problems exemplify challenges for social designers who work within communities and with socio-technical systems. Tackling social problems requires not just a mastery of skills but also a recognition of the contribution from wide-ranging fields including policy, business, design, anthropology, and sociology. Working in this mode requires a collaborative posture – one that acknowledges that each stakeholder brings their expertise to a collaborative problem-solving process.

Schön distinguishes between this knowledge-in-action (high-level expertise and spontaneous anticipation), reflection-in-action (felt-knowing, or ability of the professional to think on their feet and on decisions and research experiments), and reflection-on-action (practitioners' analyses of the consequences of their design decisions), describing reflection-in-action as how the design researcher makes decisions in research experiments, while describing reflection-on-action as a means of discussing how the programme informs the overall experiment and vice versa (Schön 1987: 25–30). Exploring the design angle for recommoning involves combining investigative speculation, with a series of co-designed moves with commoners, and reflection. As Anna Seravalli writes, 'it is in the dialectic relationship between the program and the engagements/experiments that the answers to research questions emerge' (Seravalli 2014: 30). In essence, the research question emerges at the intersections of collaborative practice, reflection, and action.

Designer as a facilitator

In an attempt to scope the meaning of community (which they define as sub-groups gathered around a common cause), Yoko Akama and Tania Ivanka (2010: 11-20) reflect on how participatory design methods might be used to build groups around mutual causes through 'scaffolding'. In the traditional sense, scaffolds are temporary, movable platforms that workers sit or stand on, or occasionally use to support toolboxes and workbenches (Sanders 2002: 5-18). With origins in education (Wood, Bruner and Ross 1976) and cognitive psychology (Vygostsky 1978: 34-41), scaffolds are used to temporarily unveil experiences for the user through the construction of temporary learning structures that provide alternative solution paths for problems (Akama and Ivanka 2010: 12). Through their work, Akama and Ivanka share their challenges with unpacking the most appropriate definition of 'community'. They claim that the 'romantic notions of community' essentially limit its meaning to small groups, formed based on geographical locations, cultural similarities, and political identifications, that identify an ideology, sense of belonging, or even a utopia. However, they acknowledge that the meaning of community extends beyond the definitions to a more 'symbolic' sense of belonging to social interactions extending beyond 'lived spaces' to 'more emphasis on shared culture and meaning'. This broader definition underlines the difficulty in community-driven engagements since more symbolic forms of identification lead to more selfish motivations (11).

By the same token, Elizabeth Sanders's work underlines the importance of the participation of the non-expert 'expert' in a co-design process. Sanders uses the term 'collective generativity' to emphasize the interchange of knowledge that takes place as experts (designers) and non-experts (local participants) form new experiences built out of scaffolds that serve as a form of bricolage, that is, using available tools as the ingredients for a new product. As a result, there's an implied mutual respect for individual expertise brought into the design exercise (Sanders 2002: 1–6). This form of generative design implies agreement on the end product and its intended user. However, when the end product isn't an artefact but is instead an understanding of a particularly divisive social dilemma, it does question the viability of generative design as a strategy.

Commoners negotiate their differences as peers with little emphasis on position or status. They operate in a mostly flat hierarchy in decision-making. That said, the objective is not always to agree. But instead, the identification of conflict allows commoners to re-establish rules of engagement. Drawing from John Rawls, Chantal Mouffe (2000: 26–32) rejects the idea of the liberal principle of neutrality in democratic decision-making by claiming that conflict and strife are core to democratic governance. Mouffe diverges from Rawls by arguing that no social actor can attribute to themselves the representation of the totality. But an indeed pluralist democracy, instead of dwelling in an environment where hegemony is mostly ignored, works to reduce its effects. Along those lines, we might need to ask, 'how then do commoners negotiate differences within the commons without erroneously assuming that there is a "pure" or "objective" version of fairness?' Perhaps there are other models for deriving at a consensus beyond conflict resolution. Some of these models might exist in social and religious practice.

For example, the Quakers seek consensus to their shared ideology (in their case, what they call 'the spirit of God') as opposed to consensus with a community of participants. During this process, conflicting participants are given access to more information to be able to make what they think to be the best decision in the interest of the group. These meetings include periods of debate, silence, and individual reflection. If conflict remains, the conflict-causing variable is removed from the deliberations to be inserted later in a much more manageable period (Gentry 1982: 9–233).

Designer as a collaborator

Pelle Ehn (2008) puts the 'object-oriented politics of things' in the centre of the participatory design process, meaning that the participation of non-humans as well as where and how they assemble with humans are now critical components of the design process. Drawing from Mouffe, Ehn believes more in agonistic public spaces 'giving space to multiple, marginalized publics to raise their issue' instead of consensual decision-making. Agonistic democracy does not assume that consensus and rational conflict resolution will naturally occur. Instead, the hegemony of dominant authority is through forceful but tolerant disputes among passionately engaged publics. According to Ehn, what design does best is anticipating or envisioning use before it happens (Ehn 2008: 2).

Ehn also highlights 'collectives' as a conceptive framework for 'communitiesof-practice'. Learning within collectives, according to Jean Lave and Etienne Wegner, is done through practice and participation (Lave and Wegner 1991). Overlapping within these 'communities of practice', Ehn sees participatory design as a performative entanglement of different 'design games'. These games are ways collectives can learn to 'design by doing' (4). The non-human participants in these games are the different design artefacts such as prototypes, models, and sketches (Ehn 2008).

Designer as a meta-practitioner (working to amplify commoning acts)

Ezio Manzini distinguishes between 'diffuse design' and 'expert design' by calling diffuse design the skill of designing and expert design the professional practice of design (2015: 37). Design experts have the knowledge, skill, culture, and critical

means to find new ways of approaching a problem and make sense of complex realities. As an example, design for social innovation (where problems are increasing in complexity) is the expert designer's contribution to the collaborative process aiming at tackling social change (Manzini 2015: 38). Transferability of knowledge is, therefore, key to expertise. According to Manzini (ibid.: 63), for collaborative design to occupy the messy middle between 'expert' and 'diffuse' design, it must follow the following guidelines: first, it must draw from both design culture and practice tools. Secondly, designers must avoid what Manzini terms as 'big-ego' and 'Post-it' forms of design. Big-ego design is a remnant from last century's ideas that designers must impose their will on artefacts and environments, and that the designer is omniscient. Manzini claims that it is dangerous to think of the designer in this manner when addressing social problems. The challenge with Post-it design is that it starts with the premise of countering big-ego design experts into administrative actors with nothing to offer but pleasing visualizations.

Making recommoning work

It is essential then that practice-based design should not only enable us to understand how design may influence collectives but also to know when to flip the research inquiry to how collectives affect design. The practice-based design approach allows a designer/researcher to explore tacit forms of knowing through moves, countermoves, and improvisational decisions (Schön 1987: 14). One of the ways to examine this form of research is by negotiating design-oriented scenarios. The idea of a scenario carries different interpretations. Design-oriented scenarios represent artefacts and interactive tools that allow the conveyance of visions of futures that present new spaces for commoning. Ezio Manzini defines designoriented scenarios as 'a set of motivated, structured visions that aim to catalyze the energy of the various actors involved in the design process, generate a common vision, and hopefully cause their actions to converge in the same direction' (Manzini 2015: 130). These scenarios cause us to explore 'what if' questions around collaborative contribution.

Carl DiSalvo (2009: 48–63) addresses the question of the role of design in the construction of the publics by situating design as a political activity that enables collective action through the making of things (49). He draws his arguments from Dewey's theories on the emergence of the publics, 'the Deweyan Public', from mutual identification with specific issues needing to be addressed. From Dewey's perspective, publics are not pre-existing but are instead constructed through issues relating to the realization of the current state and anticipation of the future implications of these issues (49b). DiSalvo goes on to claim that the act of communicating the issues is where the problems arise as well as the space where

design interventions occur (51). In other words, when publics do not exist around an issue, it means that the issue was neither identified nor properly articulated. According to Dewey, different publics may arise from the same issue (50). For example, in Portland, Oregon, groups that primarily serve the needs of minority renters such as the Community Alliance for Tenants may respond differently to the injustice of exponential rental price increases to a majority-white Portland Tenants United (PTU). According to DiSalvo, a designer might be able to aid the emergence of the publics by creating things around which political actors can gather.

Erling Björgvinsson, Pelle Ehn, and Per-Anders Hillgren (Björgvinsson, Ehn, and Hillgren 2012: 127–44) research what they call 'agonistic participatory design' - bottom-up approaches to innovation practice. Agonistic participatory design focuses on collaboration by participants as opposed to consensus building and 'Thinging' (with the first letter emphasis by the authors) and infrastructuring as opposed to projects. The concept of 'Things', or 'Thinging', has etymological origins in ancient Nordic and Germanic languages, and originally describes assemblies, or gatherings around rituals, particularly places where disputes are publicly aired. According to Björgvinsson, Ehn, and Hillgren, Things are not derived from human interactions alone, but they also describe socio-material 'collectives of humans and non-humans' where 'matters of concerns' are addressed (42). Regarding participation in socio-material assemblies, using Bruno Latour's term, 'collectives of humans and non-humans', Ehn characterizes the Thing as a material assembly of human and non-human participants (Ehn 2008: 1). Infrastructures allow collaborative engagements to stretch beyond a one-time project. They reveal 'networks of working relationships' that keep a project continuing (Suchman 2007: 92).

In *Aeging* [sic] *Together: Steps Towards Evolutionary Co-design in Everyday Practices*, Andrea Botero and Sampsa Hyysalo detail the evolution of design from a process purely separate from the public or user(s) to one that has adapted to include not only the user's input but also their participation and collaboration throughout the entire process (Botero and Hyysalo 2013: 37–8). Somewhere in this spectrum is co-design, which once thought of as a stand-alone project is now an essential component of the research and development phase for many generative design processes (Sanders and Stappers 2008: 5–18).

By 'construction of publics', DiSalvo refers to the role of design (broadly defined) in 'increasing societal awareness and motivating and enabling public action' (DiSalvo 2009: 49). Another characteristic property of the Dewey public that DiSalvo highlights is that it is not tied to any specific social class. The challenge of these publics is one of coming into being. For Dewey, the inability to form a public relates to issues of articulation or identification. In other words, DiSalvo believes that the issue to be addressed exhibits no agency for the construction of the publics, but it is the communication of the specific issue and its ramifications.

that lead to the emergence of the publics. It is also within this space of enabling the articulation or identification that design occurs (51).

Drawing from Michel de Certeau's discussion of tactics in his book *The Practice* of Everyday Life, DiSalvo's perspective on design's contribution to the publics is what he calls Design Tactics (52). Tactics are means of accomplishing strategies and goals. They are particularly useful since they can extend beyond the realm of design. Two tactics DiSalvo highlights are the tactics of 'projection' and 'tracing'. The tactic of projection is the representation of a likely set of ramifications connected to an issue. The purpose of design for projection is to make consequences explicit. Design for projection is based on the practice of scenario building. DiSalvo draws on the speculative/critical design work of Dunne, Raby, and Singh as examples of design for projection. DiSalvo describes the tactic of tracing as the activity of tracking back to reveal the underlying structures, assumptions, and arguments that make up the origins of an issue. It is also the designerly mode of communicating and revealing the tactics that shape an issue over time.

Design-enabled recommoning shows that when humans participate with other humans as well as with non-humans, their deliberation/negotiation around resource use shifts from the tactics of argumentation that yield the publics to the space where differences might be aired, and where consensus is not necessarily the expected result. This form of participation is evidenced in the work of Pers-Anders Hillgren, Anna Seravalli, and Anders Emilsson (2011) who draw from the participatory design traditions of prototyping and infrastructuring relating to design for social innovation. They also consider the concept of 'thing' and 'agnostic spaces' as important components of participatory design. Drawing from Sarah Schulman's rebuttal in the article Design Thinking for Social Innovation (Schulman 2010), the authors point to prototyping in social innovation that moves beyond rapid testing and instead focuses on prototypes that are co-created with communities. Prototypes may also be perceived as things (objects) or Things (sociomaterial assemblies) where 'matters of concerns' may be addressed (Björgvinsson, Ehn, and Hillgren 2012: 42). A prototype is a means of highlighting controversies and dilemmas, allowing them to co-exist instead of insisting on consensus as the driver for negotiation. Chantal Mouffe calls the spaces where these controversies are highlighted 'agonistic spaces' (Mouffe 2000).

According to Björgvinsson, Ehn, and Hillgren, agonistic democracy does not assume consensus and rational conflict resolution as its core goals. Instead, the 'politics of the passionate disputes' present a flat hierarchy for engaging participants (Björgvinsson, Ehn, and Hillgren 2012). When it comes to interventions, this distinction mirrors DiSalvo's differentiation between design for politics which is design that enables political discourse, and political design which shifts power differentials and raises additional queries and themes (DiSalvo 2009: 2012). The example of the Malmö living labs as a 'platform for participatory design interventions' (128) shows how different forms of experimental collaboration with several individuals (in this case with more than five hundred participants) are community driven and are often long term in their outlook.

When thinking about long-term community engagements, the term 'infrastructuring' is used to define the organic process that involves the building of relationships with diverse actors using a flexible time allotment (Hillgren, Seravalli, and Emilson 2011: 180). With infrastructuring, short-term gains are downplayed in favour of long-term commitment. It is a more 'open-ended approach' with 'longer timespans'. The authors also indicate that the long-term commitment characteristic of infrastructures enables the fostering of trust within the community of participants. It provides the groundwork for building what Ezio Manzini and Francois Jégou refer to as 'relational qualities', or a sense of mutual reliance that breeds respect (Jégou and Manzini 2008). Infrastructuring allows designers to focus more on the social value calculations that involve challenging the market economy paradigms through political acts. However, one disadvantage of infrastructure is that the flexibility of the process also results in inconsistencies. The process is never linear, and approaches need to be continuously refined. There is also the issue of the longer-term commitment necessary for infrastructuring, which is a mode of working with which designers are not too familiar.

Recommoning in practice: Tenancy in Portland, Oregon

Beyond shelter as a basic human need, there is also a need to find one's place in the world, to be able to contribute to a community, to build roots and to find a sense of permanence. In much of the United States, access to housing is increasingly becoming very difficult, especially as wages have failed to keep up with the steady increase in rental prices. In Portland, Oregon, for example, rents have seen an increase of over 10 per cent in the past year (compared to the US average of 4 per cent) while wages have only increased by about 4 per cent (Hammill 2016). These problems are not unique to Portland; they are global. A recent United Nations report on housing details a massive shift of global investments that leaves many homes empty while many people remain homeless. The shift is the result of increasing enclosure tactics and privatization of property which makes housing ever less accessible. Housing is no longer valued based on the social benefits to communities. Instead, its value is based on profitability, leading to what Michael Heller calls the Tragedy of the Anticommons (1998). The anticommons property theory mirrors the commons property theory. With the commons, multiple stewards are granted the privilege to access and use a resource. Their use might lead to overuse and eventual depletion. The inverse happens with the anticommons: the existence of multiple owners who are endowed to exclude others from use of a scarce resource leads to underuse even in times of desperate need. Melbourne,

Australia, for example, has more than 80,000 properties. Yet, many residents find it extremely difficult to find housing. This problem is fuelling racial and social inequalities that are hard to surmount (Foster 2017). Large and mid-sized cities in the United States are facing similar tragedies, including New York City; Charlotte, North Carolina; Los Angeles, California; Pittsburgh, Pennsylvania; and Portland, Oregon. The effects of rent increases and housing inaccessibility are by and large affecting communities. They are spiking rates of homelessness, reducing safety, and leading to underperforming schools.

PTU is a local collective made up of tenants and landlords agitating for housing policy changes and attempting to redefine the relationship between landlords and tenants by creating better mechanisms for negotiation. They are a disparate group – while their actions and agendas affect over fifty thousand of Portland tenants, the core group boasts of less than three hundred members. PTU also has a majority-white racial make-up in its membership. Their charge is to intervene at different levels of the landlord-tenant relationship. PTU asserts that housing is a fundamental human right. Members mobilize to build a counter-power to the 'landlord lobby'.

PTU has enjoyed a few successes. An amendment to Portland's Relocation Ordinance (Ordinance 188219), which was passed on 3 February 2017, provides protection for tenants facing no-cause evictions. The amendment mandates relocation assistance when tenants are involuntarily displaced (Portland Auditor's Office 2017). While modest, these additions have quickly become a legislative template for other laws in Washington State as well as other parts of Oregon. Through recommoning workshops, PTU members looked at different strategies of converting these laws into permanent cultural shifts. For example, they investigated ways to reward positive deviance with 'tenant-approved' seals that indicate landlord commitments to tenant rights. At the point of completion of this dissertation, these laws were ratified and made permanent, affecting the over fifty thousand renters in the Portland, Oregon, metro area.

PTU members often struggle to get their message across to neighbours and others in the community. They have problems engaging with willing landlords, homeowners, and even some tenants to advocate for change and see tenancy as a fundamental human right. They created a mission statement as well as eight (8) points of unity for all tenants residing in Portland. They have also tried tactics such as door knocking strategies to overcome this shortcoming, and frequently distribute flyers in neighbourhoods as a means of direct action for tenant emergencies that need an immediate response.

PTU also struggles with issues of minority representation as well as racial disparities with their effort. The collective's leader, Margot Black, expressed in interviews that some lower-income African American tenants may struggle with participating in the activism because of a fear of being more susceptible to racially motivated blowback (Black, pers. comm.). As a result, they might be

more reluctant to join a public protest. Lower-income minority tenants might have more difficulty finding rental housing if they were to be evicted. Also, Black and other PTU leaders have recently faced charges of racism (Whitten 2018). In this regard, members of PTU are often confronted with their privilege, as they continue to struggle with finding ways to engage other renters much unlike them to participate in ensuring that tenancy is a right for all.

Shifting the paradigm with recommoning

The realities of this age cost us to reconsider the role design plays in our lives. No longer must designers work with the 'big-ego' mindset which situates them at the centre of the problem space, they must instead shift their gaze from designing for interactions alone to working with stakeholders to create the platform and processes for negotiation of collectively vital resources. This form of design is messy, since there are warring interests between responsible parties on how such resources might be shared. It is within this messiness that design-enabled recommoning happens. Design-enabled recommoning as a framework allows designers to work within stakeholders' different roles to address critical problems they might be facing. It considers the plurality of lived experience as well as the multiple modes of engaging to address or resolve the problem. It also expands the type and role of stakeholders, to stakeholders including those in the natural world, the artificial world, as well as the larger environment where the problem resides. In this space, the role of a designer shifts to that of a platform builder who creates the space where dilemmas are negotiated, to that of a co-collaborator and a meta-practitioner.

As technology continues to change the ways we gather, the problem-solving techniques we adopt, as well as the networks we use to build community and commons, we must use it to discover new cultures and find new ways to communicate with each other – new ways that make the process of culturalization more participative.

References

- Akama, Y., and Ivanka, T. (2010). 'What Community? Facilitating Awareness of Community through Playful Triggers'. In *Proceedings of the 11th Biennial Participatory Design Conference* (pp. 11–20).
- Anderies, J. M. and Janssen, M.A. (2013). Sustaining the Commons. Center for the Study of Institutional Diversity, Arizona State University. In *International Journal of the Commons*. 8(1): 259–60.

Arendt, H. (1958). The Human Condition. Chicago: University of Chicago Press.

Björgvinsson, E., Ehn, P., and Hillgren, P.-A. (2012). 'Agonistic Participatory

Design: Working with Marginalised Social Movements', CoDesign, 8(2-3): 127-44.

- Botero, A., and Hyysalo, S. (2013). 'Ageing Together: Steps towards Evolutionary Co-design in Everyday Practices', *CoDesign*, 9(1): 37–54.
- Chantal, M. (2000). The Democratic Paradox'. London: Verso.
- DiSalvo, C. (2009). 'Design and the Construction of Publics', Design Issues, 25(1): 48-63.
- Ehn, P. (2008). 'Participation in Design Things'. In *Participatory Design Conference (PDC), Bloomington, Indiana, USA (2008)* (pp. 92–101). ACM Digital Library.
- Escobar, A. (2018). Designs for the Pluriverse. Durham, NC: Duke University Press.
- Foster, D. (2017). 'UN Report Lays Bare the Waste of Treating Homes as Commodities', *The Guardian*, 28 February.
- Gentry, M. E. (1982). 'Consensus as a Form of Decision Making', *Journal of Sociology and Social Welfare*, 9: 233.
- Hammill, L. (2016). 'Hourly Wage Needed for Oregon 2-Bedroom Apartments Rose to \$3 in a Year: Study', *The Oregonian*, 25 May.
- Helfrich, S., and Haas, J. (2009). 'The Commons: A New Narrative for Our Times'. In Genes, Bytes and Emissions: To Whom Does the World Belong (pp. 1–15). Helfrich, S. (ed.), Berlin: Heinrich Boell Foundation
- Heller, M. A. (1998). 'The Tragedy of the Anticommons: Property in the Transition from Marx to Markets', *Harvard Law Review*: 111(3): 621–88.
- Hillgren, P.-A., Seravalli, A., and Emilson, A. (2011). 'Prototyping and Infrastructuring in Design for Social Innovation', *CoDesign*, 7(3–4): 169–83.
- Jégou, F., and Manzini, E. (2008). *Collaborative Services. Social Innovation and Design for Sustainability*. Vol. 1. Milan, IT: Polidesign.
- Kollock, P., and Smith, M. (1996). 'Managing the Virtual Commons'. In *Computer-Mediated Communication: Linguistic, Social, and Cross-Cultural Perspectives*. Herring, S. (ed.). Philadelphia, PA: John Benjamins Publishing. (pp. 109–28).
- Lave, J., and Wenger, E. (1991). *Situated Learning: Legitimate Peripheral Participation*. Cambridge: Cambridge University Press.
- Manzini, E. (2015). Design, When Everybody Designs: An Introduction to Design for Social Innovation. Cambridge, MA: MIT Press, 2015.
- Manzini, E. and Rizzo, F. (2011) 'Small Projects/Large Changes: Participatory Design as an Open Participated Process'. CoDesign, 7(3–4): 199–215.
- Onafuwa, D. (2018). 'Design-enabled Recommoning: Understanding the Impact of Platforms on Contributing to the New Commons'. Unpublished PhD diss., Carnegie Mellon University, School of Design.
- Portland Auditor's Office (2017) Ordinance 188219: Amendment to the Affordable Housing Preservation and Portland Renter Protections. The City of Portland.
- Sanders, E. B. (2002). 'Scaffolds for Experiencing in the New Design Space', In *Information Design*: Institute for Information Design Japan (eds), Tokyo: Graphic-Sha Publishing, 1–6.
- Sanders, E. B.-N., and Stappers, P. J. (2008). 'Co-creation and the New Landscapes of Design', *Co-design*, 4(1): 5–18.
- Schön, D. A. (1987). Educating the Reflective Practitioner: Toward a New Design for Teaching and Learning in the Professions. New York: Jossey-Bass.
- Schulman, S., (2010.) *Design thinking is not enough* [online]. Available from: http://www. inwithfor.org/2010/01/design-thinking-is-not-enough/ (Accessed 1 May 2017).
- Seravalli, A. (2014) *Making Commons (attempts at composing prospects in the opening of production)*. PhD Diss. Malmö University, Malmö, Sweden.
- Suchman, L. (2007). *Human-Machine Reconfigurations: Plans and Situated Actions*. Cambridge: Cambridge University Press.

- Thévenot, L. (2007). 'A Science of Life Together in the World', *European Journal of Social Theory*, 10(2): 233–44.
- Verbeek, P.-P. (2015). 'COVER STORY Beyond Interaction: A Short Introduction to Mediation Theory', *Interactions*, 22(3): 26–31.
- Vygotsky, L. (1978). 'Interaction between Learning and Development', *Readings on the Development of Children*, 23(3): 34–41.
- Whitten, C. (2018). 'Portland Tenants United: A Radical Org with a Serious Race Problem'. *Medium* blog.
- Wood, D. J., Bruner, J. S., & Ross, G. (1976). 'The Role of Tutoring in Problem Solving'. *Journal of Child Psychiatry and Psychology*, 17: 89–100. http://dx.doi. org/10.1111/j.1469-7610.1976.tb00381.x

10 TURNING THE BODY INSIDE-OUT: MODEL-MAKING, CRITICAL THEORY AND SELF-ACCOUNTABILITY

Myriam D. Diatta

t the intersection of design and politics, we find discourse from politicized theorists, historians, and critics speaking on the work of design practitioners. This includes discourse on the field of design and designed things spanning from a piece of furniture to machines to a city block. Also at this juncture are traditionally trained designers such as industrial designers or communication designers whose practices are situated in a politicized context; for instance, in a neighbourhood or courtroom, making the social process and outputs of the work political. Further, designers contribute more explicitly with facilitation and workshop tools for participants to teach them how to be more critical of the social structures we live in. These are politicized discussions and interventions made on others; theorists speaking on creative practitioners, designers working in external contexts, and designers teaching others. Distinctly, this chapter presents a method by and for creative practitioners to critically examine their own practice. I write for creative practitioners and practitioners well into their explorations of critical theory – in other words, theory that takes a critical approach to understanding social life.

Contributing to the intersection of creative practice and politics, I invite you to consider how you might expose and intensify the relationships between critical theory and making in your own practice. Where might what you value in *theory* and what you do in *practice* be in deep conflict? Rather than take a didactic or instructional approach, I suggest taking a conceptual, lateral approach that asks

us to revisit our own past experiences in practice. From this reflexive action, I take what is inwards in each moment, that is, the turmoil, the inner conflicts, and so on, and turn it outwards so I might see how I make and move in the world. I take what I have 'made' visible in order to find and think with written theory. This brings everyday practice and what we may value in theory closer and closer together.

The method I present is based in the model-making exercises commonplace and fundamental in undergraduate industrial design, architecture, and interior design programmes. We are taught to take abstract concepts like 'movement' or the ethos of a moment in history, for instance, and materialize it in Bristol paper models. I take this model-making exercise out of its original aims of training students for functionalism, aesthetics, and innovation,¹ and instead, reconfigure the making knowledge we develop from the exercise towards asking, 'How can making material forms make visible relationships between theory and practice?' I illustrate a material, tangible practice for material-based practitioners to make visible their own critical concerns, values, and commitments in order to be accountable to them.

I begin this introductory section of this chapter by defining fundamental core terms I use throughout this chapter: 'making', 'theory', and 'reflection'. What am I referring to with the term 'making'? What kind of 'theory' is relevant to this framework? and What does 'reflection' look like here? I outline the conversations and debates that surround this practice. These terms lead up to the theoretical concepts and practical methods discussed later in this chapter.

Defining 'reflection'

Influential figure Donald Schön has given many designers language to discuss reflection in their practice since the 1980s and established the notion that a practitioner reflects while they do their professional and creative practice. Fine artists and designers who do their work within academic institutions reflect on their making practice to capture experiential knowledge about themes and influences as they make (Mäkelä and Nimkulrat 2018). However, here, making in my practice in its entirety is repurposed to reflect and think (Grocott 2010) with theory. Cutting, gluing, and reshaping paper into small models is how I reflect on past events and the ways it comes together with theory in my work. It is Stuart Hall who makes the case that the moment past events and theories are intentionally brought together is 'the beginning of a new stage of self-consciousness, of self-reflexivity' (2003: 89). The revisiting can be taken as a 'detour through theory'. The detour is a remembering, a temporalization (i.e. before, after, first, second, never, again) and a repeating in relation to an event (Pollock 2005: 1).

Defining 'making'

As a former student of interior design and industrial design, I was less interested in the commercial or decorative aspects of design but more in the social, intimate, and emotional experience people have with things and spaces. Years later, I looked even further inwards at how 'making' works. Beyond the sequential steps to making a thing, I came to appreciate the negotiations that go on when a creative practitioner can bring together what is abstract - values, critique, a person's immaterial needs, for instance - and what is concrete - physical, material forms. I use the term 'practitioner' here to describe the repeated, informed application of an idea or method. Broadly, I draw on the notion that 'art, design and craft practices may be seen as a part of the making disciplines' (Groth 2017: 2). Bypassing the various value judgments made between these disciplines, here, I stick to the understanding that there is thinking involved in making (Mäkelä 2007; Grocott 2010). I take an interest in the ineffable goings on when visual, material things are made. As we make, matters are negotiated, concretized, reflected on, speculated, destroyed, made visible, externalized, repaired, undone, reified, and more. I assert that these matters illustrate the much wider implications of personal, politicized investigations of and through visual, material form.

Defining 'theory'

In academic research, 'theory' refers to static ideas and abstract argumentations that are thought about, written, and published in and through academic institutions. Normally, theories tend to be read and thought about. And experience tends to be lived elsewhere. I turn to Black critical scholarship that sheds light on the ways in which theory (i.e. knowing) and practice (i.e. doing and being) are mutually influential (Hall 2003). E. Patrick Johnson argues, 'Although people of color may not have theorized our lives in Foucault's terms, we have used discourse in subversive ways because it was necessary for our survival' (2001: 12).

Also in line with black scholarship, I engage with critical theory for the politicized understandings of material and immaterial violence it offers – as artist Sam Gilliam notes, it is rife with potential for messing with our world views (Louisiana Channel 2020). Throughout the past two or three decades, black philosophy has made use of critical theory – a branch of French philosophy – to critique and magnify arguments about social life and death (Douglass and Wilderson 2013). The criticality of critical theory invites us to know through the everyday ways that our lives rub up against dominating ideologies and structures – not only by didactic study of published texts.

At the core of this chapter, I illustrate a practical paper model-making method I developed to investigate my own inner experience. Following this practical undertaking, I define a politic for our 'interiorities'. I situate fragments of ideas drawn from Elaine Scarry, Hortense Spillers, Dionne Brand, Tapji Garba, and Sara-Maria Sorentino together as the theoretical footing on which I built my practice. I close this chapter by exposing the affordances of Reflexive Model-Making for critical creative practitioners and researchers. I name its implications as we continue to make and be in the world.

A method for turning the body inside out: Reflexive Model-Making

In this section, I interweave 'theory', 'making', and 'reflection' to demonstrate how I bring theory and practice closer and closer together. Below, I describe how I use the method I developed: Reflexive Model-Making.

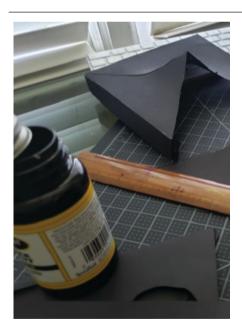


FIGURE 10.1 Reflexive Model-Making process and material outcome. Top image shows a moment in the making process. Bottom image shows the final model. Whenever I sat down to make a model (see Figure 10.1), I began by recalling how my body felt out of alignment. I continued by sitting with the sensations. I gave shape to that feeling – the aches and heaviness on my shoulders or the distorting and splitting on my back, for instance. Making the splits, masses, or empty spaces in the model itself was how I externalized and made visible my blackness and black ways of knowing in each past experience. I did this with an understanding and trust that, because of my positionality in the world, there in that confronting situation lies a dissonance from or alignment with blackness. The models were not replicas of physical rooms or objects, nor were they an interpretation of previously written theory. I did not make any of them with the outside viewer in mind or try to incorporate common symbols so their meaning could be interpreted by others. Reflexive Model-Making lets me tangibly trace critical theories and the ways I live theory in the everyday.

The methods call for me to attend at once to a specific past experience and critical theory. I could think with the visual form. I used the methods to think, reflect-in-action, and later to reflect back on what had taken place (Schön 1983). I approach making with an iterative, prototyping spirit, assuming my recollection of the past experience with which I am working and my interpretations of theories are not fixed or stable (Jones 2016; Hall 2003). The design practitioner can be said to have a particular multi-modal way of knowing and, as Grocott argues, 'iteratively negotiates the understandings that emerge from the practice' (2010: 51). As opposed to more involved processes – like manufacturing an object or processing rare materials in a lab - the malleable, low-stakes nature of working with sheets of paper allowed me to make multiple adjustments to the form as I went. Without attempting to finalize or fix anything in place, I revisit a specific bodily sensation or an impression of a particular past experience. I then illustrate it through prose and formatting or through pieces of paper. I give material form to the impression of heaviness with which I am left or the inundation I sense.

In the model itself is a 'material record' (Scarry 1985: 306) of my experience and understandings. With Reflexive Model-Making, I studied the abstract forms I was creating and interpreted the shapes in the model in front of me. The space, mass, shadows, edges, and gestures of the model suggested different understandings of the initial past experience from which I had materialized the model. The shapes I recut or creases I pressed presented different understandings and framings. In the process of making, the models and pieces of writing 'suggested', 'indicated', 'presented', and 'told me' things. Grocott describes this kind of conversation as 'not just reflecting upon material, technical and physical decisions but also a broad range of social, environmental, cultural and conceptual concerns' (2010: 18). The act of reflecting and negotiating in-the-making becomes new framings and reframings of the situation.

I intensified my blackness while I was materializing and exploring interior structures. I deepened my understanding of what my black ways of knowing entail – the many forms it takes, when I need it, how I tend to it, and how I value doing it. The methods call for me to deepen my awareness of myself through my lived experience and written theories. This is done from a subjective position. My first-hand accounts are in conversation with situations of social life.

As subjective, vulnerable, and strongly reflexive as we can be (Anderson and Glass-Coffin 2016: 73), without a commitment to the contexts in which it rests, reflexive research reinforces and holds up dominating ideologies. Where reflection leads to an insight into a past or ongoing experience, reflexivity mirrors back and asks us to question our own ethics and values (Chen 1992; Jones, Adams, and Ellis 2016: 30; Anderson and Glass-Coffin 2016: 73). I argue that no matter how well a researcher recalls details of an experience or how sensitively they express their intersubjectivity, reflexivity alone is not built to confront the practitioner with critical perspectives on social life. This process is not a functionalist endeavour that seeks to eradicate all conflicts systematically. The effort lies in leaning into the prickliest parts of what we do in practice while daring to reach for written critical theories that seem like they may have the potential to mess with us the most. This practice stays away from soothing the harm we cause others and the draw of flexing one's own knowledge and sense of ethics for others to see.

Here, I put forth a working definition that describes the lateral manner in which I worked. With the term 'lateral', I refer to an orientation from or to the side. The method involves temporalities and betweenness. They are necessary for triangulating personal history, theory, and the everyday. The made things allowed me to trace the theory in the form. They offered ways of finding theory in the form's composition. In the midst of reflexive making, I drew conceptual analogies and connected adjacencies. The process was not linear or vertical. I did not follow a sequence of pre-planned steps, nor was it funnelled upwards or downwards towards a single resolution. I stayed attentive to my personal experience and allowed for it to affect my relationships with theory and be affected by theory.

A framework for critical creative research

The previous section introduced Reflexive Model-Making as a method and discussed what goes into using the method. Here, I outline a theoretical framework that provides further support for using and critically engaging with the method. I explore the politics of the interior, what it means to make and unmake in the interiorities, and, lastly, problematize making so we might approach it, also, critically. I write from a position specific to black ways of knowing and write to those of us who have the same or adjacent relationships to oppression.

Politics of the interior

When it comes to politicized analysis and action, more readily evident are the violent systems, complexes, matrixes, pillars, structures, products, and overt actions we do and words we speak (Crenshaw 1989; Collins 1990; Davis 2003; Smith 2016). These are resisted in the public domain, on the streets with neighbours, at work, and in institutions. Some of us come to know the world by being in it, not only by didactic study or by reading published theorizations about social systems (E. P. Johnson 2001; Carrington 2017; D. Johnson 2017). I argue that oppression also happens in covert, whispery ways and I concentrate the efforts of this case study at this level. In the Mediterranean in the fifteenth century, long before colonizers' ships set sail southwards and westwards, there were first conversations being had and insinuations being made (Spillers 2003; Garba and Sorentino 2020) - each full of deadly imagination (Morrison 1992; Hartman 1997). For some, this covertness will call attention to the depths and qualities of domination. For others, it is what has us watching our backs. In a supermarket parking lot, for instance, it is not only the white woman's words or tone of voice towards you that are disturbing. It is the erotic behind her expecting you to move for her that make up intimate dimensions of domination (Holland 2012). It reaches into how you are depended on. It is in the humidity of sitting in the classroom, reading the textbooks that begin with 'Shakespeare. ... keats. ... austen' that is so scalding (Waheed 2014: 36-7). As poet Nayyirah Waheed offers, the dead authors crash 'into our young houses. Making us islands. Easy isolations' (Waheed 2014: 36). I stick to these covert and intimate understandings of what we are up against.

Making and unmaking in the interiorities

With the term 'making', I refer not to the sequential steps and technical know-how in order to make a thing but refer to what goes on when we make. I attend to the 'much more elementary task of identifying, descriptively, what it is that is taking place'

(Scarry 1985: 278) while we make. An exploration of the interior workings of what is taking place aids in exposing why model-making is particularly appropriate for what I am exploring. There are several attributes that belong to 'making', one of which is the premise that we project interiorities onto how we make. We take what we know through our bodies and materialize them in artefacts. Our understanding of our own *skin* is substituted by a gauze bandage when the skin is broken, and we project the womb in the shelters we build (emphasis original; Scarry 1985: 282). Moreover, 'the shape of the chair is not the shape of the skeleton, the shape of body weight, nor even the shape of pain-perceived, but the shape of perceived-pain-wished-gone' (1985: 290). We make based on what we know about our bodies – in other words, based on the embodied things we know through our bodies. We may then make the connection between the oppressive constitutions on social life we move through and our bodies that move through them. In creative practices that are critical, the critical theory with which we engage may serve as a partner in navigating the incoherence of social life. For critical, creative practitioners, the potential of these articulations about how we make lies in how our experience navigating oppressive structures and social contexts can be materialized and made in visible, material form.

In addition to an exploration of how we make, the study of the resulting form or artefact itself is also integral. An investigation through form is an endeavour worth taking on, as the made thing 'is sentient awareness materialized into a freestanding design' (Scarry 1985: 290). We can imagine it possible that, if we were to examine one of these freestanding made objects, we might be able to identify its interior structures and find in it attributes of the human condition. Attending to the materialized form would mean accessing the 'material record' (306) in the interior. The practice I propose here is not invested in using its methodology for the purpose of extracting others' interiorities and is grounded in the dangers of exposure under the outside gaze. It is not intended and not possible for outside viewers to infer meaning or details about past experience by looking at the forms I make. This theoretical framework supports inquiries through visual, material form as it affirms how interior structures and inner conditions of social life can be made visible for the purpose of engaging in a reflexive investigation of one's own embodied, intersubjective relationships in social life with others. Figure 10.2 shows images of the making process and a couple of the materializations produced through Reflexive Model-Making.

Problematizing making and interiorities

When theories and personal stories are built on a linear narrative, they perpetuate the illusion of coherence in social life. This is significant for creative approaches that are led by personal experience and recounting first-person experiences. The insinuations, evasions, and discourse that make up narrative are not as intangible

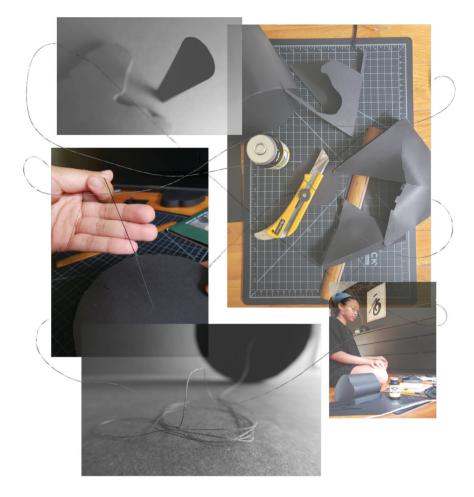


FIGURE 10.2 A cluster of snapshots from making and documenting the models. Includes photographs pertaining to four of the models and the processes involved. The grey lines represent the reflexivity and knowing through making that contribute to Reflexive Model-Making.

as they might seem: as poet Dionne Brand asserts, it 'contains our demise' (Graham Foundation 2018, 28:25). Narrative is just as material as physical pain inflicted and just as material as the political, economic (Spillers 2003, cited in Garba and Sorentino 2020: 776) world of which Scarry writes. This point about discourse is why troubling narrative and linearities in theorizations and practical processes of making and (world-)unmaking is important. Troubling it would mean engaging making not through linear narrative but through disequilibrium, instability, fragmentation, and immateriality (Hartman 1997, cited in Garba and Sorentino 2020: 775). This would triangulate making and unmaking with the instability

of social life. I argue the interiority, incoherence, instability, irresolvability, fragmentation, and immateriality contribute to a theoretical frame that can support a critical, Reflexive Model-Making process.

Entering the interiorities

The previous section briefly painted a picture of how I use the methods and what goes into using them. I also presented a theoretical framework to support the politics of the interior and making in the interiorities. Here, I concentrate on one specific past experience. I demonstrate how theory, recounted in the body of the text and in the footnotes, showed me things about this moment, and how materializing this past experience exposed the theory in my past actions.

This instance – which happened online at a design conference – raised some inner conflict for me as a facilitator. I felt torn between the dominant approach in my creative field and the kind of slower pace and attentiveness I was struggling to commit to. Regardless of how prepared or observant a facilitator might be, this context was concerned with putting myself in situations in which the professional culture is in the way of myself and others relating with one another in ways I care to.

From the position of being a facilitator of a design workshop, I had a difficult time with this hour session. I was organized and clear in my delivery, I prepared the content well beforehand, and I still stand by the process I built for participants to use; but what I had not done so thoughtfully was consider how the participants' experiences of our time together would be out of step from what I value as a facilitator. With the half-day session I had originally planned for, I could allow us to get to know one another, have time and space I need to process how things are going, make adjustments based on what the group was ready for, arrange the room in thoughtful ways, and personally check in with each person as they worked. I did not translate these needs into the truncated 1-hour version of the workshop or make enough adjustments in the plan for the workshop.

Beyond these social, logistical issues, I had put myself in a situation that replicated the kind of work I had spent years in my studio work transitioning out of: I made detailed strategic plans, scaffolded our time to reach a practical outcome, and geared myself up to lead a group of people. I positioned myself as a design facilitator; and as a facilitator, I was offering knowledge about oppressive systems and structures to a mixed audience – all things I was no longer interested in because my practice and politics had shifted dramatically.

I set out for this research to be by and for Black, Indigenous, and/or folk of colour, but I opened up my work to a notoriously white society of design researchers. I missed connecting in the workshop with the people my work is by and for. Before the workshop, I thought I had my reasoning for submitting a workshop proposal to this conference and for opening it up to an inclusive group of participants, but as soon as I sat down to start the workshop, I sensed the dissonance as a migraine headache came on. My shoulders were tense as I made myself hold these misaligned, moving components in my mind while I facilitated. I felt flimsy in the structured setting of the conference proceedings, the reputation of the conference, and the culture around design research - in all its formality. At this point, I was still struggling to find the creative home of this PhD research. I felt thin, too easily thrust by the winds and tides of design and academic research. Initially pulled by the standard of presenting at design conferences and publishing in design journals, that thinness extended, getting more and more involved - applying, being accepted, planning, replanning, scripting, designing, and facilitating. After the workshop, looking at where I had led the participants and led myself, I felt my insides drifting further and further away from the fullness I knew to be the core of my work. How flimsy was this, in contrast to the theory I know. How spare were my questions and modes of working. How thin was my relationship with each participant in the hour we had. I could feel something close but off to the side of the flimsy state I was now in. It was the lushness² I had come to know about who my work is for, the ethos of the theories I carried with me, and what I bring to the table. I pulled a long piece of thread from a spool and gauged the proportion of the lushness so that I could cut and build it. In the model, I could see what little I had managed to offer participants in comparison to what I know I can in a more intimate, one-to-one, or small group setting by and for Black, Indigenous, and/or folk of colour. The contrast in what I did in a formal setting and the way I prefer to show up was stark. Sitting with the impressions left from facilitating the design workshop and materializing it in a paper model affirmed what I was working to transition into: a practice that centers³ our ways of knowing.

Conclusion

For creative practitioners and researchers who work with critical theory, this chapter has invited explorations for being accountable to what we stand for in theory and what we make and do in the everyday. Through my time doing this work, I have added definition to the Reflexive Model-Making method. Figure 10.4 highlights how the method allows for the various facets of the framework to be enacted by a practitioner.



FIGURE 10.3 Image of finished model pertaining to facilitating a session with designers.

Within the context of this research, the connections made from doing Reflexive Model-Making have changed much of how I work. They have changed the way I position myself in interviews. They have affirmed the way I tend to listen to my body in tense situations. They changed the way I parse and digest academic literature. And they have instilled an understanding of what is not part of my practice – not to dismiss ideas or opportunities but to name how it might be situated in relation to my practice. I have come to pinpoint the ways in which it is (or is not) and to consider how my practice might continue to change. Further explorations of the method presented here might be adapted by a dancer, for instance, to their training in movement and culture. Or the methods may be adapted by a composer of music to their music theory and history. It may be a combination of reflexive writing and another creative practice.

Whatever principles we follow become aligned with our actions in multiple ways. We may pick up a different manner of working from the communities with which we surround ourselves. Or your actions may slowly come to reflect your commitments through disorienting, private moments of introspection. It may happen through an intimate conversation. While we learn from others, the inner workings of how we do the aligning are harder to come by. This framework and method have looked into relationships between theory, scholarly theoretical texts, and creative practice to explore ways of making the relationships visible, acknowledge the false separations between them, and bring them closer and closer together.

creative practice (the making)	Works with conceptual thinking and material inquiry, forgoing written and spoken language.
thinking and doing	Both past experiences and theories are remembered in the mind's eye or in the body and expressed at once in three-dimensional form.
accessing the interior structure of the artifact (Scarry 1985)	Accessed by studying the finished model. Identifying the physical features* of the made model** and thinking through metaphor. Accessed through bodily sensations. * Distance, depth, curvature, shadows, etc. ** Models are materializations of embodied experience.
strength of reflexivity	As the final artifact is not easily legible to others, the process and its output feel private, offering opportunities to attend to delicate issues and with less at stake in "going there."

REFLEXIVE MODEL-MAKING

FIGURE 10.4 Outline of characteristics for Reflexive Model-Making.

I began exploring these questions about theory and practice because I saw how in every political action lies a tension between what is done and what is valued in theory. The ways we show up in a meeting or for a friend or respond to an emergency may be in deep conflict with the politicized commitments with which we might associate. You may cite theories that are critical of the sociopolitical implications of design but impose your cultural and institutional values on a dissenting workshop participant. You may happen to believe in the power of the social collective, but at home, you neglect taking responsibility for doing the dishes, leaving the labour to your housemates.⁴ When I was teaching, I was committed to subverting individualism in the university, but in the classroom, I judged each student's performance and gave out grades.⁵ You may ideologically value community councils, but you have not introduced yourself to your neighbours who have lived to the left and right of you for years.⁶ It is a deeply personal endeavour to recognize where we are misaligned with what we may personally care for. Furthermore, being accountable to oneself - meaning, holding oneself to one's own values - is an everchanging and ongoing endeavour. If we take this vantage point on politicized work, it can be seen that we constantly move between commitments made in theory and everyday actions in practice. I argue that slow, thick explorations of our deepest interiorities may be able to contribute to the ongoing struggle of aligning our actions and our everyday political values.

For a more comprehensive exploration of this approach – including a second method, further findings, a full methodology, and eight more cases of using reflexive methods – see *Thinking Form: A Creative Practice for Bringing Together the Everyday and Black Onto-Epistemologies*, a dissertation that can be found at myriamdiatta.com.

Notes

- First and/or second year architecture, interior, or industrial design students may first come into contact with this exercise in introductory courses titled '3D design', 'Visualization/Representation/Concept', or 'Space/Materiality', for instance.
- **2** 'Yes. yes I do. have the right to be this lush and neverending' (Waheed 2014: 27).
- **3** Angela Davis points out,

We always tend to use, as our standard, those who are at the center of the systems we want to dismantle. And so why would women want to become equal to men? Why would black people and Latinos and Muslims want to become equal to white people? Why would the LGBTQ community want to become equal in the context of heteropatriarchy? (Southbank Centre 2017, 34:38)

4 A misalignment noted by Mia Mingus, abolitionist transformative justice organizer (Barnard Center for Research on Women 2018).

- 5 A misalignment noted by Stefano Harney in 'A Conversation with Sandy Grande, Stefano Harney, Fred Moten, Jasbir Puar, and Dylan Rodriguez'. Organized by StrikeMOMA Working Group of the International Imagination of Anti-National Anti-Imperialist Feelings (IIAAF) (Strike MoMA 2021).
- 6 A misalignment noted in a conversation titled, 'Anarchism and Black Struggle: A Panel Discussion', organized by Rosa Negra – Anarchist Federation (Black Rose/Rosa Negra – Anarchist Federation 2020).

References

- Anderson, L., and Glass-Coffin, B. (2016). 'Learn by Going'. In S. Holman Jones, T. E. Adams, and C. Ellis (eds), *Handbook of Autoethnography* (pp. 57–83). New York: Routledge.
- Barnard Center for Research on Women. (2018, September 27). *What Is Self-Accountability*? [Video]. https://www.youtube.com/watch?v=6a-TfuWyYn8.
- Carrington, A. (2017). 'Mike Brown's Body: New Materialism and Black Form', ASAP Journal, 2(2): 276–83. https://doi.org/10.1353/asa.2017.0025.
- Chen, N. N. (1992). "Speaking Nearby": A Conversation with Trinh T. Minh-ha, Visual Anthropology Review, 8(1): 82–91. https://doi.org/10.1525/var.1992.8.1.82.
- Collins, P. H. (1990). Black Feminist Thought: Knowledge, Consciousness, and the Politics of *Empowerment*. London: Unwin Hyman.
- Crenshaw, K. (1989). 'Demarginalizing the Intersection of Race and Sex: A Black Feminist Critique of Antidiscrimination Doctrine, Feminist Theory and Antiracist Politics', *University of Chicago Legal Forum*, 1989(1): 139–67.
- Davis, A. Y. (2003). Are Prisons Obsolete? New York: Seven Stories Press.
- Douglass, P., and Wilderson, F. (2013). 'The Violence of Presence: Metaphysics in a Blackened World', *Black Scholar*, 43(4): 117–17. https://doi.org/10.1080/00064 246.2013.11413674.
- Garba, T., and Sorentino, S. (2020). 'Slavery Is a Metaphor: A Critical Commentary on Eve Tuck and K. Wayne Yang's "Decolonization Is Not a Metaphor", *Antipode*, 52(3): 764– 82. https://doi.org/10.1111/anti.12615.
- Graham Foundation. (2018, July 20). *Dionne Brand: The Shape of Language*. https://www.youtube.com/watch?v=r_HdOZIFEl0.
- Grocott, L. (2010). 'Design Research & Reflective Practice: The Facility of Design-Oriented Research to Translate Practitioner Insights into New Understandings of Design'. PhD thesis. RMIT University.
- Groth, C. (2017). 'Making Sense through Hands: Design and Craft Practice Analysed as Embodied Cognition'. PhD thesis. Aalto University.
- Hall, S. (2003). 'Marx's Notes on Method: A "Reading" of the "1857 Introduction", *Cultural Studies*, 17(2): 113–49. https://doi.org/10.1080/0950238032000114868.
- Hartman, S. V. (1997). Scenes of Subjection: Terror, Slavery, and Self-Making in Nineteenthcentury America. Oxford: Oxford University Press.
- Holland, S. P. (2012). The Erotic Life of Racism. Durham, NC: Duke University Press.
- Johnson, D. (2017). 'Beyond Bare Life: Onto-epistemic Archives, Precarity, and the Praxis of Being Human'. PhD thesis. University of Pittsburgh.

Johnson, E. P. (2001). "Quare" Studies, or (Almost) Everything I Know about Queer Studies I Learned from My Grandmother, *Text and Performance Quarterly*, 21(1): 1–25. https://doi.org/10.1080/10462930128119.

Jones, S. H. (2016). 'Living Bodies of Thought: The "Critical" in Critical Autoethnography', *Qualitative Inquiry*, 22(4): 228–37. https://doi.org/10.1177/1077800415622509.

Jones, S. H., Adams, T. E., and Ellis, C. (eds) (2016). *Handbook of Autoethnography*. Routledge.

Louisiana Channel. (2020, May 28). Sam Gilliam Interview: Artists Are Supposed to Change [Video]. https://www.youtube.com/watch?v=ciN6ZPDMJV4.

Mäkelä, M. (2007). 'Knowing through Making: The Role of the Artefact in Practice-Led Research', *Knowledge, Technology & Policy*, 20(3): 157–63. https://doi.org/10.1007/s12 130-007-9028-2.

Mäkelä, M., and Nimkulrat, N. (2018). 'Documentation as a Practice-led Research Tool for Reflection on Experiential Knowledge', *FormAkademisk - Forskningstidsskrift for Design Og Designdidaktikk*, 11(2), 1–16. https://doi.org/10.7577/formakademisk.1818.

Morrison, T. (1992). *Playing in the Dark: Whiteness and the Literary Imagination*. Cambridge, MA: Harvard University Press.

Pollock, D. (2005). 'Performance Trouble'. In D. S. Madison and J. Hamera (eds), *The SAGE Handbook of Performance Studies* (pp. 1–8). New York: Sage.

Scarry, E. (1985). *The Body in Pain: The Making and Unmaking of the World*. Oxford: Oxford University Press.

Schön, D. A. (1983). *The Reflective Practitioner: How Professionals Think in Action*. New York: Basic Books.

Smith, A. (2016). 'Heteropatriarchy and the Three Pillars of White Supremacy'. In INCITE! Women of Color Against Violence (eds.), Color of Violence: The INCITE! Anthology (pp. 66–73). Durham, NC: Duke University Press.

Southbank Centre. (2017, March 11). WOW: Angela Davis in Conversation [Video]. https://www.youtube.com/watch?v=lBgdzK3jfEg

Spillers, H. J. (2003). 'Changing the Letter: The Yokes, the Jokes of Discourse, or, Mrs. Stowe, Mr. Reed'. In H. J. Spillers, *Black, White, and in Color: Essays on American Literature and Culture* (pp. 176–202). Chicago: University of Chicago Press.

Waheed, N. (2014). *Nejma*. Scotts Valley, CA: CreateSpace Independent Publishing Platform.

SECTION 3

INTRODUCTION: IMMERSING

Bonne Zabolotney

Section three, *Immersing*, focuses on designers who have developed a deeper insight into their practice. Underwriting these various design practices is the desire to share transformative experiences through practice and mobilized knowledge. Transformation takes place not only in our design practices but through teaching and sharing insights while we form stronger community bonds. In her book *Transmissions*, Kat Jungnickel describes the knowledge mobilization and presentations of her research as an active part of her project. When she shares her research work, where participants actively try on the technical costumes she has recreated, she states that the knowledge and experiences that the participants shared with each other throughout the event 'produced new and unexpected data that were folded back into the project' (2021). This notion of folding resonates with the essays in this section. The practices described here are sensory, sensitive, engaged beyond typical design practices, and fold into itself creating a dense and complex practice, fused to each individual designer themselves.

Feminist theory is also helpful in making practices and their relationship to theory or conceptual thinking explicit. Catherine MacKinnon provocatively stated,

It is common to say that something is good in theory but not in practice. I always want to say, then it is not such a good theory, is it? To be good in theory but not in practice posits a relation between theory and practice that places theory prior to practice, both methodologically and normatively, as if theory is a terrain unto itself. (1996)

MacKinnon goes on to describe the ways in which feminist practices develop theory – where actions precede theorizing. Life experience, memories, physical feelings are all brought to bear on the ways in which we consider or reconsider the design we bring into the world. bell hooks reinforces this position when discussing teaching, stating that 'students want us to see them as whole human beings with complex lives and experiences rather than simply as seekers after compartmentalized bits of knowledge' (1994).

They have brought their complex lives and lived experience to the work they share in these next chapters. In Chapter 11, Kaleidoscopic Storytelling: Positionality, Indigenous Ways, and Slow Autoethnography, Lisa Grocott calls for a slowing of design practice, using autoethnography to mobilize 'practice-knowing'. Grocott tells us that that approach complicates any 'tidy narrative' about our practices and instead 'they seek to make clear that nascent ideas are oftentimes telegraphed before being fully understood'. This intensive level of knowing continues with Louise St. Pierre's Zen and Design: Cultivating Insight, in Chapter 12, which calls for an adaptation of Buddhist mindfulness to shift and rebalance our awareness as designers. As St. Pierre explains, 'Immersive reflection allowed me to question my judgements about how states of incompleteness are disparaged by the modernist ideology of sweeping narratives, linear progress, correct answers, and celebratory conclusions' Celeste Martin, in The Typographic Translations of Borges's Manuscripts (Chapter 13) demonstrates her deep knowledge of typography, translations, and transcriptions. Her work 'pull[s] the manuscript from the archive' and places the work firmly within a designed 'textual apparatus'. Terresa Moses and Lisa E. Mercer's Centring Anti-Racism in Design: From Theory to Practice discusses their Racism Untaught framework in detail, using their experiences as women of colour in academia as the basis of moving forward with their workshops. Their workshops applied generative research, qualitative inquiry, and participatory methods to iterate and refine their framework. Finally, we complete this body of work with Kate Fletcher's Chapter 15, who describes a 'process of paying attention' and offers a guide for designers to develop Naturelife writing. In It's Not Just About Mountains You Know: Nature-Clothing Writing as Design Practice, Fletcher reminds us that 'latter day design training rarely includes context-based learning about design in relationship with the living world' and presents a framework for making deeper connections between fashion design and nature.

As Catherine MacKinnon reminds us, 'we know things with our lives, and live that knowledge, beyond anything any theory has yet theorized' (1996). The designers in this section are fully immersed in their practice, where insights, collaborations, and an intimate knowledge of their craft and materials are intertwined with theories, personal histories, life, and professional experience.

References

- hooks, b. (1994). 'Engaged Pedagogy'. In *Teaching to Transgress*. New York: Routledge. 13–22.
- Jungnickel, K. (2021). Making and Wearing. In Kat Jungnickel (ed.), *Transmissions: Critical Tactics for Making and Communicating Research* (p. 80). Boston, MA: MIT Press.
- MacKinnon, C. (1996) From Practice to Theory, or What is a White Woman Anyway? In D. Bell and R. Klein (eds) *Radically Speaking: Feminism Reclaimed*. North Geelong, AU: Spinifex. 45-54

11 KALEIDOSCOPIC STORYTELLING: POSITIONALITY, INDIGENOUS WAYS AND SLOW AUTOETHNOGRAPHY

Lisa Grocott

Would it make sense to start at the beginning? Would I begin with the arrival of my Indigenous ancestors on the Takatimu waka to the Eastern shores of Aotearoa more than eight centuries ago? Because for me that story is entangled with another beginning, the arrival of my settler ancestors on HMS *Adelaide* six centuries later. Perhaps more poignantly the story begins the day my Ngati Kahugnunu great-grandmother was sent from her marae to live with a white Pakeha family. Yet that is not my story. The story for me starts in a grey panelled room with Formica tables and fluorescent lighting. I am in a Continuing Education course in a small-town New Zealand class. The room is full of Māori people. I am the whitest. The year is 1992 and I am twenty-two years old. Even as I resist going back to this room, even as I yearn to start the story someplace other than here, this story is inevitably one of erasure. At its heart, it is a story that centres around not just what is said, but what is left unspoken.

It is important to locate this story in time, to acknowledge this all happened three decades ago. Yet making space here to pause and review how I have storied the Continuing Ed experience over the decades is about more than an exploration of how ideas and practice time travel. This tale is more about an ever-shifting positionality and how lived experience reverberates through practice. The chapter is non-linear, multi-vocal, autoethnographic, and unapologetically subjective, yet the 'kaleidoscopic thinking' seeks to telescope more than narratives of my practice (Grocott 2022: 168).

Beginning at the end I find myself wondering whether the act of storying this narrative over decades seeded the evolution of my practice from a lapsed communication designer to co-design researcher. The answer surfaces easily. Yes, probably. For this is a story, told multiple times over multiple years. It is formative in defining myself as a design researcher and yet it is not about my design practice. This chapter ruminates on how practice-knowing is mobilized through narrative. Here design is a translational practice, inspired by autoethnographic performative writing, humbled by Indigenous ways of knowing, and responsive to affect theory and sensorial ways of being. An exploration of how practice-knowing is forged, packaged, received, performed, narrated, and internalized, the writing wrestles with weaving together acts of figuring, public speaking, and theorizing. What is revealed is a relational practice compelled to iteratively, continuously engage in a recursive act of sense-making my own values, beliefs, and position in the world.

Before we return to the ubiquitous setting of the Continuing Ed class let us pause to acknowledge the limitations of a reflexive turn. Wanda Pillow, wary of reflexive writing that adopts a confessional tone, asserts the need to be critical and rigorous in the process of self-scrutiny. She argues that 'a reflexivity that pushes toward an unfamiliar, towards the uncomfortable, cannot be a simple story of subjects, subjectivity, and transcendence or self-indulgent tellings' (Pillow 2003: 192). In recognizing that the act of reflexive writing can, in itself, perpetuate a colonial relationship with the subject or exaggerate unequal power relationships I turn away from any attempt to speak on behalf of others in the story. The contamination that comes with time further resists any presentation of these candid tales as a form of 'authentic' truth gathering. I own my imperfect memory and the evolving ethics ensure I can only share the story I am telling myself today. Aboriginal maker and Indigenous scholar Tyson Yunkaporta suggests that reading his book Sand Talk should be a dialogic and reflexive process, one where meaning making can be found not in the bare facts or even the words themselves but in the 'meandering paths between the words' (2019: 21). Recognizing the problematics of reflexivity as entwined with the failure of language and research methods this echoes Pillow's call for 'a positioning of reflexivity not as clarity, honesty, or humility, but as practices of confounding disruptions' (2003: 192). However, Pillow's call for more messy examples of reflexive writing in qualitative research is located in a critique of a research method that owns the positionality of the researcher in relation to the research subject(s). There are adjacent stories of how my co-learners walked away from the Continuing Ed class, but they were not my research subjects, and their stories are not mine to tell. In this chapter, the subject of the autoethnographic narratives is the intersection between my complex personhood and my practice (Gordon 1997; Yorks and Kasl 2002).

This is the time travel story I have iteratively narrated over the years.

Narrative 1: Make explicit to make visible (2015)

A declaration, some figuring, and a Medium post

I am in New York City, living in the opposite hemisphere to the place I call home. I have for more than two decades shared the well-worn story of when I enrolled in a total immersion Māori language class upon graduating with my Bachelor's degree in Design. But this week for the first time I am putting the story into writing. I have asked my Parsons graduate students to write a blog post of a time when they experienced a disorienting, yet productive shift in mindset. The students, enrolled in the MFA in Transdisciplinary Design, are working on parallel studio projects. One where they explore design's role in transforming mindsets by working with an external partner and another that positions their own beliefs and mental models as critical subjects for interrogation. Working with the ethos of the class, I am a co-learner alongside the students, and it feels only right that I engage in the assignment too. This is how I come to be in twenty-first-century New York visiting twentieth-century Aotearoa New Zealand.

The Medium post I write and diagram is titled *What if success was defined by how well we advanced the learning of others?* (Grocott 2015). The byline reads 'This small story illuminates the extent to which the pedagogical environment we cultivate greatly determines, not just the learners we are, but the citizens we become.' The confessional tone and the expository text belie both my agenda and my inexperience. Still. The post sets the scene.

- It's a Friday afternoon at the end of the first week of a total immersion Māori language course. I am sitting in a group circle with 30+ Māori peers and this is our first chance to speak English since the course began. This is our only chance to share why we are here and how the week has gone for us. My privileged self is cocky about my reason for doing the course and I'm anxious yet grateful to introduce my Māori self given all week I had been seen as the only Pakeha (non-Māori) in the room. This feeling won't last. In about 30 minutes I will realize how I have read everything wrong.
- As I sit waiting to introduce myself I am excited to share with my peers how I want to learn Māori for interviews in a book I am working on. But as the conversation moves closer to me I tune in to what my peers are saying. They are here because their children are coming home from Kohanga Reo (*Māori Language Kindergarten*) assuming they can korero (*talk*) with their parents in the te reo, the language of their ancestors. They are here because the elders who speak Māori in their communities deserve the assurance that

the language won't die with them. Suddenly, my book on the appropriation of Māori motifs sounds so academic.

As the tale continues, I foreshadow for the reader that I am about to be undone by what comes next. Before transitioning into my candid confession, I assure them I was humble when it was my turn to introduce myself. We move on around the circle.

The last person to speak is a guy in my learning team. He is the slowest learner I have ever been around. This is a challenge for me (embarrassingly) because the pedagogical approach of the course believes in moving at the speed of the slowest learner. I am young, naive and a product of a meritocratic university system that has me believing that I am wasting hours of my day waiting for this guy to get in 2 hours concepts I grasp in 20 minutes. As I wait for him I am bored, impatient and disengaged.

Seemingly cueing an argument for self-paced learning and ability groups, I declare my belief that the solution is to let me move up into the next group. When I tell this story in person, I have noted it is more powerful if I can get the people listening to complicity nod along with me. They then too can be drawn into the disorientation of what came next.

It is now the guy's turn to talk. Let's call him Tama. He is self-conscious as he stammers through the reason he found himself here. He has been out of Aotearoa New Zealand for more than a decade and in that time things have really changed. When he left, the fact he couldn't speak any Māori was okay, normal even. But things are different now. Tama is telling us that before he returns to *turangawaewae* (his spiritual home) on the East Cape he wants to learn how to respectfully greet his people in Māori. Everyone nods – because we get it. On some level, Tama's reason is why we are all here.

Tama moves on to talk about his experience in my group. I listen to him describe how he dropped out of school the day he turned 15. He shares what it feels like, for the first time in his life, to be in a learning environment that is not leaving him behind. His voice cracks as he tells us how he can see that some people in his group are frustrated by how slow he is. Then tears of gratitude come as he expresses what it means to him that we are not running ahead without him.

In 2022, I am not convinced he cried. Maybe he did and at some later point I choose to cast him as less emotional. Perhaps back then my language was too impoverished to draw an emotionally intense scene, so tears become a cheap proxy. As I write I am curious about the gauze I wrap around these memories – what I choose to shroud or surface.

Today, the memory that stays with me from the 2015 writing was the visual communication act of sharing with my student audience the teaching moment that this exquisitely disorienting experience presented. I first sat with the experience by engaging with the communication design method of figuring I discovered during my PhD. I define 'figuring' as a creative method that amplifies the backtalk of designing to evolve one's understanding of a situation (Grocott 2012). This negotiative drawing practice configures and reconfigures the concepts being wrestled with by working with intentionally ambiguous moves and interpretative gestures. More provocative than declarative, these tentative diagrams adopt a stance of figuring out an idea rather than fixing a message. It is through the design practice of figuring that I interrogated what that month-long Continuing Education class had taught me. What appeared in the Medium post was a set of diagrams that drew the audience into questioning with me the shift in mental model the learning experience prompted. The initial act of figuring made explicit what I had only tacitly absorbed. The second round of diagramming made visible to my Parsons' students the ideas I wanted to mobilizes (Figure 11.1).

Reviewing today the language in the post, I see I did more than diagram a way to understand how we might critique 'a system that privileged individual success over collective thriving' and centre the cooperative act of advancing the learning of others. I see I wrote that 'Of course, there was the personal shame I felt for the self-absorbed, competitive narrative that had run through my head while Tama was simply striving to do his best' (Grocott 2015). I also wrote about the structural shame that came with institutions that 'accept(s) failing the Tama's of

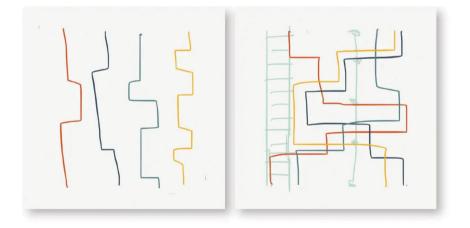


FIGURE 11.1 Individual or collective. What if we didn't frame learning as a personal quest, with each learner simply being out for him- or herself? What if students alternatively had each other's backs by working together to scaffold learning? (Original Medium Post Diagram, by Lisa Grocott).

this world to feel good about producing the likes of me' (et al.). Yet, I wonder, even as I tried to find language for the affective experience, if I critically troubled these ideas? Transformative learning literature speaks to the idea that transformation does not begin and end with the disorienting dilemma. Researchers from across the learning sciences and education recognize transformation as an integrative, repetitive process that asks of the learner to imagine new practices, rehearse new ways of showing up, and identify the steps that will activate new practices (Grabove 1997; Marsick and Mezirow 1978; Mezirow 1994; Nohl 2014). I recall translating the education-based knowledge captured in the diagrams because I had spent two decades changing my teaching practice to align with the lessons I learned that month. The memory traces of those diagrams are strongest because they were already the most robust for being retrieved and acted on the most times (Grocott 2022: 153, Roesler and McGaugh 2019). However, even though the knot of shame and privilege I felt no doubt sparked an intrinsic motivation to change, it would be years before I could reflexively sit with the words I less consciously used to narrate the day.

This Medium post sets the scene of how my mental model of learning was upended and defined my whole approach to teaching. Yet just as the diagrams packaged ideas so they might be shared with others, the experience of writing a story only previously shared as an anecdote forged new ways of seeing what was always there.

Narrative 2: Make space to make sense (2018)

A body, an invitation, and a public address

Three years into the future I am now standing in front of an audience at a design conference in Tasmania, Australia. The theme of the conference is *Materiality, Ethics and Identity* and I am again travelling back in time to sit by Tama's side. To help me connect the dots between the lessons of the class and the materials we played with decades earlier (Cuisenaire Rods), I have compact talking points on a page in front of me. On the screen behind is a photograph with twenty thousand New Zealand sports fans dressed in black to illustrate the point that not only do I not recall the name of the courageous man who spoke up that day, but I also would not be able to pick him out of a crowd (Figure 11.2).

As I stand at the lectern with only shorthand in front of me, I am unsettled. To put into practice what I am saying, I have made the vulnerable choice (for me) to stand here with the next sentence unrehearsed and unscripted. Yet I know I am broken open by more than my dot points. This Women in Design

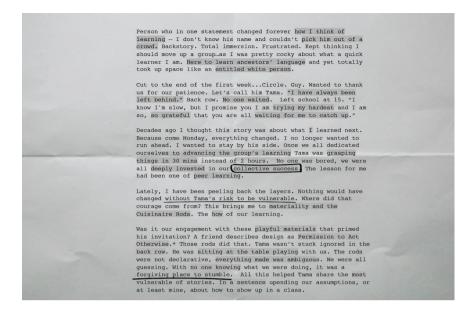


FIGURE 11.2 Talking points from the presentation in Tasmania. *Kate McEntee was the friend who helped me see the rods as granting Permission to Act Otherwise. An observation made and phrase crafted in collaboration with Stephanie Lukito and Cameron Hanson.

colloquium has made space for different perspectives and, in the moment, I feel the weight of my well-worn armour and permission to be with Tama's story in an unfamiliar way. Turning away from the audience, I pause for a second to look at the sea of faces in the photograph and I discover a new way to connect to the story of Tama. I recall his presence. I might not recognize him walking down the street, but I can go into my long-term memory and remember how his gratitude and generosity summoned a new way of being together. As I turn back to the audience I do not know what to do with the new knowing I have invited in.

As someone who giggled through my Great Uncle Ken's funeral and laughed awkwardly in the middle of my wedding vows, I know well the pull to use humour in moments of intense emotions. Even as I continue setting up the scene I am not so much thinking, but sensing in real time if I can perform this story in a way that makes space for a re-storying of this narrative. Can my immature, yet too opinionated self not be the punchline to laugh at or with? Not because I want to protect myself, but to move beyond trading in humility to explore Pillow's call for confounding disruptions. Could I be courageous enough to let myself not deflect, but to let in, the full spectrum of complex emotions that have only made the memory more robust over time? I keep talking and the words I say do not journey far from the time-worn script. And yet. This time I am in my body, not my head. I have been an academic for so long this path feels transgressive, risky, wrong. The story stays the same, yet the tone and cadence have taken a new form. I strip out the familiar nod that made people complicit in respecting a meritocratic structure. I do not offer a follow-up shamefaced smile to invite the audience to laugh at the blindness of my privilege. In this gap, Tama's statement steps in and takes up space.

I have *always* been left behind.

I pause for the significance of his statement to be felt. I reign in the impulse to fill the silence and make it okay. I resist smiling. I do not rush into theorizing about education. The space I have opened for us to stay with our feelings is foreign and uncomfortable. This is not what I do, this is not who I am. Yet, I feel liberated from a small cell I did not know I lived in. I recall emotions I did not know I had forgotten. As my body remembers Tama's vulnerable courage, my skin flushes cold, my voice quavers, my eyes glass over. Terrified I may actually cry, I panic. This embodied moment lasts less than a minute. I continue.

The talk is over. No one is lining up to pay me a compliment or ask a question. Yet there are people waiting to share with me their stories. In the line is the Indigenous person who knew in her body Tama's sense of a system that signalled he didn't belong. There stands before me someone with ADHD who intimately remembers the view from the back row. There is the educator who shifted how they taught once they let themselves see the brutality of an inequitable education system. Next is the dyslexic designer who knows the feeling of being ignored by a system and welcomed by playful nonlinguistic materials. People are sharing their lived experiences in ways that knit with Tama and my story.

In 2022, I chose this retelling of Tama because I thought it was the first time I gave him a name. I thought it was the first time I truly let him in. Yet the Medium post contests that memory. I wonder if I gave Tama a name in 2015 only to make the telling of the story easier? This time, even as I owned that I would not recognize him, I see that invoking his name helped me to recall how my body remembers that afternoon. Indigenous knowing would respect that epistemic and ontological ways of knowing and being cannot be teased apart (Martin and Mirraboopa 2003) and that yes, my relationship with Tama unfolds and is enfolded in multiple ways. Hiding behind the intellectual anecdote I had been retelling was an embodied story about his pain, my shame, his courage, my disorientation. Unwittingly, in centring Tama's vulnerability I discarded my academic armour. I attuned (apprehensive yet animated) to what my body wanted to share, and in return for that risk, the narrative aperture widened. The audience members waiting to speak with me were disinterested in an intellectual exchange, they were lining up to share the ways in which this more affect-led storytelling resonated with their lived

experiences. Decades later Tama was still teaching the room foundational lessons about vulnerability, reciprocity, and connection.

Narrative 3: Make amends to make meaning (2021)

A book, more academic literature, and autoethnographic writing

Another three years into the future I am pandemic-writing from home a book on the role of design in transformative learning. Although I have always worked with first-person vignettes in my research writing, this is the first time I am engaging with autoethnography as a research method (Adams, Holman Jones, and Ellis 2022). I begin by laying out the transformative moments in my own lived experiences that forever shifted how I make sense of learning and how I practice as a designer. I begin with Tama.

Again, the exposition of the story changes little. Yet, I am aware of how the retelling is forever shapeshifting. A critical autoethnographic practice asks of me that my story is in collaboration with critical theory. Stacy Holman Jones describes this as 'doing' theory and 'thinking' story (Holman Jones 2016). The designer in me is wary. I resist this privileging of scholarship. I wonder if in bringing a visualizing lens to storytelling, I could instead claim to be 'making' story and 'thinking' practice? However, the researcher in me is insecure. I surrender to wrapping academic literature around my practice stories.

This is how I came to choose the Tama autoethnographic story. I believed the collaboration with critical and Indigenous theory had revealed new insights to me. In this iteration of the narrative, I intend to analyse the shift in method and dissemination, yet in the present moment I note I have struggled to translate the spoken-word, embodied Tasmania insights into print: 'I have retold this story countless times, and yet, it feels more embarrassing to publish these words.' I can see how I again fall back on a retelling that casts me as the fall guy. Ignoring what I learned from the affective and embodied forging of connection in Tasmania I am back using words and assuring the reader they 'are relieved of the burden of seeing yourself in me'. I should however not be surprised that the lived lessons of Tasmania took years to settle for learning and unlearning happen not procedurally but in concert. I should acknowledge (to myself though) the virtuous loop of practice lessons that led me to the chosen literature, and the literature that in return offered language and knowing that further helped settle the same lessons.

I do notice a new form of reverie afforded by the distancing move of putting words onto a page. I can bracket the experience from the past, observing it from

(yet again) a new vantage point (Pinar 1994). I question in this chapter whether writing alone makes it more possible 'to remember what it feels like to be on the periphery, to remember the anxiety that comes with simply not getting something, of holding others back, of being left behind, of being othered' (Grocott 2022: 14). This time Tama resides within a book grounded in liberatory pedagogy, placing the onus on me to interrogate how my own positionality biases not just what I have come to know, but how I have come to be (Takacs 2003).

Back in 1992, I focused on how education systems might claim inclusion yet leave people still feeling very much alone. That Friday afternoon, through my twenty-one-year-old's lens of white guilt, I saw Tama as a person marginalized by an education system that embraced me. Yet as I sat in 2022 with Tama's message of not-belonging I allowed myself (for a moment) to feel the weight of my own grief of being othered. There are no words, no thought residue, no evidence in the chapter that I tried to reconcile the paradox of the privilege and betrayal of my skin colour. I recall my frustration, back in 1992, as I endured people pointing at me whenever they wanted to reference Pakeha (non-Māori). It pained me that when people looked at me, they only saw my colonial-settler relatives. My white-appearing self could not, did not, telegraph that my whakapapa arrived on the same waka as Tama's iwi all those centuries ago. I felt envious that Tama had people waiting to welcome him onto his marae. I felt sorrowful that what I had was a family tree splintered by my great-grandmother being sent to assimilate into settler society. Yet, I remember the warmth and apologies when I finally got to introduce my Indigenous self. I remember what it felt like to be welcomed from the outside in.

How did writing help me trace emotions I dismissed three decades earlier? Perhaps the answer lies in the insights surfaced by the non-linear foundation stories that follow from the story of Tama in the book. The second transformation narrative leaps decades ahead and dives deep into my initial disorientation, then delight, at embodied play as a mode for unsettling and settling again new ways of being. I wonder in what ways the playful use of the Cuisenaire Rods primed me to value play as an alibi for learning differently. The third narrative rewinds to the year before I sat in the class with Tama. In that narrative, I ethnographically make sense of a year of Indigenous knowing and an undergraduate journey of philosophically and culturally finding my way within an academic Māori community. In concluding this first section of the book I reflect on what emerged from threading these narratives.

I see now how I had to go back to my final year of undergraduate (otherwise known as my introduction to matauranga Māori, Māori knowledge), to define my critique of educational institutions and to get me curious about learning. My wariness of didactic knowledge seeded the idea that there was something to explore in the peer learning space. Being seduced by experiential knowing in the Māori language class further fertilised the belief that knowledge is dynamic,

contingent, integrated, subjective, situated and political. The value of stories, material metaphors and embodied knowing in turn set me up to sit with the disorientation of Roger's physical play. The realisation for me, in writing these three foundational narratives, is that the Māori perspective introduced to me in 1991 was not located in Indigenous content but in the Indigenous ways of knowing and being that gave me the permission to act otherwise when it came to designing learning encounters. (Grocott 2022: 52)

Months later I see that placing these stories beside each other revealed how abrupt a transition it was to go from an academic community where no one questioned the colour of my skin into that first week where my lack of melanin set me apart. Just as our biographic past exists in the present, I stepped into the Continuing Education class assuming I belonged (Pinar 1994). Back then I had no language for labelling my emotions (David 2016), I knew nothing of the research into belonging (Wise 2022), and I could not explain my own othering through a white Maori lens (Rogers 2020). Instead, what I heard in Tama's truth was that I too was complicit in his story, and in my quest to make amends I, with a twenty-twoyear-old's hubris and naivety committed to using 'the weeks ahead to dismantle the narratives of my educated, white and economic privilege and rehearse a new way forward' (Grocott 2022: 16). My naivety was not in the commitment to be in relation with my bias, complicity, and ignorance, more in thinking I could integrate a new mental model in the course's remaining three weeks. Three decades later I know shiftwork to be a life-long process of chasing curiosity even when it is vulnerable to do so (Grocott 2020).

Conclusion

The autoethnographic narratives opened up a space of inquiry where the past could unfold and enfold into the present. Inviting my lived experiences and knowing to be in conversation with my present self revealed what I could not tune into decades earlier. In subjectively yet rigorously considering my positionality as a white-presenting, middle-class individual and as an Indigenous, queer, feminist woman I was more able to reckon with who I am. I could allow myself to see the ways in which Tama's and my experiences of the world might paradoxically be antithetical and yet akin.

Indigenous languages often have a dual first-person pronoun, which Tyson Yunkaporta translates in English to 'us-two' (2019: 22). In the present, I wonder whether the gift of Tama's candour and vulnerability was offering up a personal, subjective yet universally experienced story. As humans, we know the chill of feeling invisible and the warmth of feeling seen. Perhaps we can all analogously relate to the penitentiary of the back row. We listen to Tama's story and think us-two.

Reciprocity is an ethic that shows up across Indigenous cultures (Simpson 2017: Loc. 1011 and Tuhiwai Smith 2012: 167). Robin Wall Kimmerer in *Braiding Sweetgrass* connects the reciprocal exchange of giving and receiving to the idea of how gifts travel in the world. Distinct from a Western notion of ownership, the virtue of the gift from a Native American Indian perspective lies in the reciprocal charge of being forever in circulation (Kimmerer 2013). In this chapter, I have looked back over months, years, and into that afternoon last century to ruminate on the reciprocal connective force of Tama's us-two story.

As much as Tama was the individual who gifted his observation into circulation, his story is not mine to tell. I can only tell my own. One might question what this story has to do with design practice or knowledge. Yet for me, a commitment to reciprocity, peer-learning, and connection charts the terrain of co-design practice. Where in our design decision-making do we ground these commitments? The Continuing Education encounter serves to map some of the entangled, multi-dimensional relations at play. The rigorous, if subjective, interrogation of my lived experience makes visible the contours of a relational co-design practice. In sitting with this story, I am troubling more than just the social and political dimensions of who I am in relation with. I note the space opened up by the playful materials as co-facilitators. I get curious about my own positionality, beliefs, and mental models through a psychological and cultural lens. I weigh the ethical and structural dimensions of systemic inequity. I negotiate a temporal perspective that critically relates how, in this story, the past inhabits in the present.

Each of the three narratives asked me to tilt the kaleidoscope a few degrees to attune to new configurations of what Elizabeth St. Pierre might call 'transgressive data' (1997). The interplay between figuring diagrams, public speaking, and autoethnographic theorizing allowed me to be in conversations with my body, contaminated memories, academic literature, and iterative storytelling. In getting curious about the different emotions these configurations surfaced over decades it is evident that I am not writing and theorizing the lives of others as much as I am my own. I understand the critique that empty gestures of acknowledgement, allyship, and reconciliation can be a transactional performance, and yet, I recognize that the embodied performance and haptic practice of co-design is what charges and changes the knowing being mobilized and received. I recognize I have been changed by the retelling of this story, for as St. Pierre describes, 'The outside folds inside and I am formed anew' (1997: 181).

One decade I wonder how I had not seen others' potential, a decade later I wonder how I had not seen my privilege. I previously believed Indigenous pedagogies to be the focus, I now see the mutually implicated relationships between knowing and being cannot be separated from the doing of making. I re/write this story to define my own kaupapa (foundational principles for future action). I share these narratives to expose that shiftwork does not so much end as evolve and to explore what design researchers might attune to when producing and mobilizing practiceknowing. The first narrative produces knowledge through figuring, by way of revealing the material data that comes with being in relation to visual form, my lived experience, and my cognitive understanding. The public speaking narrative illustrates how design knowing is mobilized from being in relation to my body, emotions, and the story-I-tell-myself liberated previously shuttered emotional data. In the book chapter narrative, I sit in relation with memories of the present/ past and haptic play to draw on imaginary data to anticipate the next move. Together these stories complicate any tidy narrative of how practice is knowing is made or disseminated. Instead, they seek to make clear that nascent ideas are oftentimes telegraphed before being fully understood, let alone internalized, which serves to remind us that residing in the potential of every design move is the invitation to learn anew if only we are disciplined enough to notice what might otherwise not be seen or forgotten.

References

- Adams, T. E, Holman Jones, S., Ellis, C., (eds) (2022). *Handbook of Autoethnography*. 2nd ed. New York: Routledge.
- David, S. A. (2016). *Emotional Agility: Get Unstuck, Embrace Change, and Thrive in Work and Life*. London: Penguin Books.
- Gordon, A. (1997). *Ghostly Matters: Haunting and the Sociological Imagination*. Minneapolis: University of Minnesota Press.
- Grabove, V. (1997). 'The Many Facets of Transformative Learning Theory and Practice'. In Patricia Cranton (ed.), *Transformative Learning in Action: Insights from Practice. New Directions for Adult and Continuing Education* (pp. 89–96). Hoboken, NJ: Jossey-Bass.
- Grocott, L. (2012). 'The Discursive Practice of Figuring Diagrams'. *TRACEY Journal: Drawing Knowledge*, 1–15. www.lboro.ac.uk/microsites/sota/tracey/journal/ edu/2012/PDF/Lisa_Grocott-TRACEY-Journal-DK-2012.pdf
- Grocott, L. (2015). 'What If Success Was Defined by How Well We Advanced the Learning of Others?' In Jack McDermott (ed.), *The Future of Education*. Medium.com Blog Post.
- Grocott, L. (2020). 'Chasing Curiosity: Inquiry-Led Practice in Communication Design'.
 In Luke Wood and Brad Haylock (eds), One and Many Mirrors: Perspectives on Graphic Design Education (pp. 136–47). London, UK: Occasional Papers.
- Grocott, L. (2022). Design for Transformative Learning: A Practical Approach to Memory-Making and Perspective-Shifting, 1st ed. New York, NY: Routledge. Design for Social Responsibility, Rachel Cooper.
- Holman Jones, S. (2016). 'Living Bodies of Thought: The "Critical" in Critical Autoethnography', *Qualitative Inquiry*, 22(4): 228–37. DOI: 10.1177/1077800415622509.
- Kimmerer, R. W. (2013). *Braiding Sweetgrass: Indigenous Wisdom, Scientific Knowledge and the Teachings of Plants.* Kindle ed., Minneapolis, MN: Milkweed Editions.
- Marsick, V., and Mezirow, J. (1978). Education for Perspective Transformation: Women's *Re-Entry Programs in Community Colleges*. New York: Columbia University Press.

Martin, K., and Mirraboopa, B. (2003). 'Ways of Knowing, Being and Doing: A Theoretical Framework and Methods for Indigenous and Indigenist Re-Search'. *Journal of Australian Studies*, 27(76), 203–14. DOI: 10.1080/14443050309387838.

Mezirow, J. (1994). 'Understanding Transformation Theory', *Adult Education Quarterly* (American Association for Adult and Continuing Education), 44(4): 222–32. DOI: 10.1177/074171369404400403.

Nohl, A.-M. (2014). 'Typical Phases of Transformative Learning: A Practice-Based Model', *Adult Education Quarterly*, 65(1): 35–49. DOI: 10.1177/0741713614558582.

Pillow, W. (2003). 'Confession, Catharsis, or Cure? Rethinking the Uses of Reflexivity as Methodological Power in Qualitative Research', *International Journal of Qualitative Studies in Education*, 16(2): 175–96. DOI: 10.1080/0951839032000060635.

Pinar, W. (1994). 'The Method of "Currere" (1975)', *Counterpoints*, 2: 19–27. http://www.jstor.org/stable/42975620.

Roesler, R. and McGaugh, J. L. (2010). 'Memory Consolidation'. In G. F. Koob, M. Le Moal, R. F. Thompson (eds), *Encyclopedia of Behavioral Neuroscience*, Cambridge, MA: Academic Press (pp. 206–14). DOI: 10.1016/B978-0-08-045396-5.00147-0.

Rogers, C. (2020). *The White Māori: An Exploration of Identity and Belonging*. RMIT Doctoral Thesis, Researchrepository.rmit.edu.au.

St. Pierre, E. A. (1997). 'Methodology in the Fold and the Irruption of Transgressive Data', *International Journal of Qualitative Studies in Education*, 10(2): 175–89. DOI: 10.1080/095183997237278.

Simpson, L. B. (2017). As We Have Always Done: Indigenous Freedom through Radical Resistance. Kindle ed., Minneapolis: University of Minnesota Press.

Smith, L. T. (2012). Decolonizing Methodologies: Research and Indigenous Peoples. 2nd edn. London: Zed Books.

Takacs, D. (2003). 'How Does Your Positionality Bias Your Epistemology?' *Thought & Action*, 19(1): 27–38, https://repository.uchastings.edu/faculty_scholarship/1264.

Wise, S. (2022). *Design for Belonging: How to Build Inclusion and Collaboration in Your Communities.* Berkeley, CA: Ten Speed Press.

Yorks, L. and Kasl, E. (2002). 'Toward a Theory and Practice for Whole-Person Learning: Reconceptualizing Experience and the Role of Affect', *Adult Education Quarterly*, 52(3): 176–92. DOI: 10.1177/07417136020523002.

Yunkaporta, T. (2019). Sand Talk: How Indigenous Thinking Can Save the World. Melbourne: The Text Publishing Company.

12 ZEN AND DESIGN: CULTIVATING INSIGHT

Louise St. Pierre

ears ago, I joined a Vietnamese Zen Buddhist group (known as a Sangha) that practises in the Tiep Hien Interbeing tradition of Thich Nhat Hanh (*What Is* n.d.). Like me, many people first encounter Buddhism when seeking the relief promised by popular understandings of mindfulness. While mindfulness is a proven approach to stress reduction (see Goldstein 2016; Kabat-Zinn 2018; Harvey 2020), it is only one aspect of the Buddhist tradition. According to Kirmayer (2015), 'in the societies where it originated, Buddhism is a system of practice that has strong ethical and moral dimensions' (447). This too had attracted me from the beginning: the ethics of care, deep ecology, mindful consumption, and consideration for all forms of life (animal, vegetable, and mineral).

In Modernity, we are conditioned to keep the spiritual and the professional separate; to fragment our realities. Spiritual Practices became artificially separated from academic pursuits at various points in history, notably since the inception of Modernity in the seventeenth century (Gunnlaughson et al. 2015: 1). I gradually came to the realization that Buddhism is, above all else, a world view in enactment or, as I would define it, a practice of an ontology. I came to see that this world view shifted my ways of being in the world. I realized that my Buddhist practice was helping me to focus and see with more clarity in all areas of my life, including what I do as a designer and as a professor in design, and that none were separate from each other. This became integrated with my way of being.

As I became increasingly embedded in the Buddhist tradition, I learned about the centuries of scholarship and more recent university degrees held by Thich Nhat Hanh (*The Life Story* n.d.). I now understand Buddhist mindfulness as a practice of facing oneself honestly, while maintaining direct and ethical engagement with the world. Over time, I felt compelled to incorporate the benefits of Buddhist mindfulness with design research (St. Pierre 2020). Mindfulness practitioners learn to consider the impact of their actions on the world, and to reflect regularly on what is genuinely important in our short lives. Given our growing understanding of design's many unintended consequences for the ecological crisis (Fry 2009; Walker 2017; Boehnert 2018), I saw rising questions about sustainable design that could be answered in the context of Buddhism. How might the Buddhist practice of mindfulness help designers choose more carefully what we pay attention to and how we give our attention? Aware of the suffering caused by intersecting issues of ecological damage, coloniality, sexism, discrimination, and racism, many call on designers to change our practices (Akama 2017; Escobar 2018; Fletcher et al. 2019). How could Buddhist contemplative practices support that change in design? And if so, what might be the entry point for designers? How might we access mindfulness practices at a deeper level than for stress reduction or creativity?

When I explained this dilemma to Bonne Zabolotney over one of our long coffee conversations, she asked, 'Hmmm ... does contemplative practice relate to reflective practice?' This question started the years of research which underlie this chapter. I weave through my understanding of Buddhism and mindfulness practice, flaws of reflective practices in design, contemporary scholarship on reflective practice, and reflective practice in the social sciences. Finally, I offer guidelines for an Immersive Reflective Practice for design, a process that follows the Four Establishments of Mindfulness: mindfulness of body; mindfulness of feelings; mindfulness of mind; and mindfulness of objects of mind (Nhat Hanh 1998). I contend that when we perceive our own thinking more clearly in relation to the world around us, we make better choices. This helps designers to move away from modernist structures of thought and opens greater engagement with other ways of being: intangible, emotive, personally situated, postcolonial, posthumanist, feminist, inclusive, pluralistic.

Cognitive dominance in design

In design pedagogy it is often taken for granted that pausing to seek insights about a design project leads to greater insight. It is assumed to be a matter of just thinking about it. Phoebe Sengers and her colleagues (2005) characterize reflective practice as cognitive and rational, 'bringing unconscious aspects of experience to conscious awareness, thereby making them available for conscious choice' (para. 9). The object of reflection can be an artefact, a concept, a set of actions, an event that has already happened, or an event that is in the process of happening. With most design reflection, the emphasis is on thinking. Some scholars imply that reflection is divergent, such as Post (2019), who says 'Reflective practice helps to focus less on the right answers' (248). This is not what I have observed. In much of my teaching career, students who attempted reflection were usually trying to prove that their project was successful. According to Tonkinwise (2004), reflection can leave the designer circling around in their own ways of knowing, in their own sphere of awareness. He describes this as 'lower order unreflective reflecting', a form of design narcissism that is 'only ever telling you what you know already' (6).

Seeking a way to challenge this, I considered the power of rationalism in design, or what Buddhists term *discursive mind*. Discursive mind theorizes, fragments, compares, and evaluates: it discriminates. According to Bai (2009), in modern Western society, our 'consciousness is dominated by the spell of the discursive' (141). As a designer practising meditation, I find that it is difficult to manage my discursive mind. Mindfulness encompasses many practices to help set aside the discursive and analytic mind, often by focusing on sensory information. When I walk mindfully, paying careful attention to the physical sensations of the moment, sensation of the footfall on the sidewalk, the air quality, the sensations in my body, I can enter a non-discursive or meditative state. I can deepen this awareness by considering what Thich Nhat Hanh entreated: 'walk as if you are kissing the earth with your feet' (1992: 28). This opens a sensibility of the grounded self, of valuing the earth. However, if I begin *assessing* the quality of the sidewalk, *planning* my route, or *evaluating* what I will say when I arrive at my meeting, then I shift towards a discursive mode. This feels familiar. We spend a great deal of time in a 'consciousness that discriminates, analyzes, and divides the world into objects' (Akama 2012: 3). It is possible to move between discursive and non-discursive states in a fluid fashion, but it is more common to be lost in discursive thought. It is the nature of the mind to think (Lloyd, pers. comm., April 2018).

Cognitive and analytical activity have tended to dominate design for the past few decades (see also Ehn and Ullmark 2017; Hrebeniak 2020). Mainstream design practice is increasingly situated in the discursive mind. The popularity of design thinking (Brown 2009; Martin 2009) which applies design processes in government and business sectors contributes to further privileging cognition and overshadowing non-discursive ways of knowing. The pressures of scientific and technological thinking within design restrict or predetermine reflective processes. Over recent decades, the push towards commercial, rational, and defendable decisions means that reflective practice in design often involves systematic and analytical reflection of data. Tools have been developed to support this analysis. Advocates of life cycle assessment, for instance, bring a precisely quantified process to bear on ecological decision-making (White et al. 2013; Faludi and Gilbert 2019). The growth of research methodologies in design such as interviews, participatory design, and ethnographic observations has generated volumes of data. This data generation is prompted by 'a desire to speak to the needs of multiple constituencies in the design process' (Sengers et al. 2005, para. 13). Budgets and schedules mean that work is usually partitioned, fragmented, and delegated according to expertise. Data is often compiled by a researcher who would hand off figures and charts to the

design team, stripped off affect or emotion (E. Sanders, personal communication, September 2007).

As a result, much of design reflection is constrained by the conceit of objectivity, bolstered by habits of compartmentalization and rational analysis. Reflective practice can unfortunately be limited as a cognitive practice that remains utilitarian, distant, and abstract. This situates design as a form of mastery; being in charge; holding an analytical distance. Before I began this research, I was a participant in this practice. I would often give brief guidance to students for reflective practice, implying that when we write and think about the tangible outcomes of our design process, we will arrive at insights. As I began to notice how constrained these reflections were, I began to revise my prompts. Even so, I soon realized that those prompts contained words like *compare, think, evaluate.* I was circling within the realm of thinking.

Buddhism and reflection

Buddhist psychology, developed centuries ago, places high value on the concrete and the experiential. In fact, the Buddha distrusted theoretical learning (Loori 2007). He advocated gaining wisdom through physical engagement with the world, through regular practices that support knowing through direct experience. In Buddhist teachings, 'When perception is direct, with no discursive mentation, you reach the realm of things-in-themselves' (Nhat Hanh 2006: 132).

Thich Nhat Hanh encourages practitioners to avoid dogma and to always test the teachings against our own insights. According to Sheila Batachayra and Renita Wong (2018), Buddhist practices offer an epistemology of the body: a way of accessing knowledge that is not conditioned by intellectual thought or shaped by the discursive tendencies of modern academic scientific intellectualism. I have often felt insights while sitting in meditation. Some were immediate, like remembering a chore. Others were profound, resituating myself in relation to other people or events, and completely reframing my sense of myself in the world. Soto Zen monk Norman Fischer (2019) says that this is a result of how the 'psychophysical practice of concentration' (142) calms and stabilizes the body and the mind. This allows transformation that is more than a thought or an understanding; it is a somatic change. I understand Fischer's description of the psychophysical practice from personal experience. There are times when I am sitting on my meditation cushion, and I feel like I am taken up or am taken over by something else. Images, ideas, and sensations come into my awareness; they may have been unbidden images, they may be surprising sensations, my body might feel completely different, in fact it often does. More than this, I often come away personally transformed.

As I practised further, I became certain a focused mindfulness practice would bring a dimension to design reflection that could balance the intellect with other ways of knowing. Yet, Buddhist mindfulness practice is a broad domain with many traditions. I wished for a systematic process that would ease designers into mindfulness practices in a way that was more meaningful than mindfulness for relaxation. Social scientists have been leaders in integrating mindfulness in the training of social workers and nurses (see Wong 2004; Johns 2009), because understanding the self in relation to others is central to these disciplines. In 2019 I heard Renita Wong speak about how she asked her social work students to meditate systematically (Bai, Scott, and Miyakawa 2019). I followed Renita's recommendation to look into the Four Establishments of Mindfulness (Nhat Hanh 1998). Experienced meditation practitioners reflect easily through these frames, but a guided and systematic practice like this could help novices cultivate insight. The Four Establishments offers a sequential focus through the lenses of the body, feelings, mind, and objects of mind. This was what I was looking for, a systematic and accessible meditation that might help designers move away from the 'dominance of [the] conceptualizing mind' (Bai 2009: 138) in reflective practice. This practice could invite non-discursive capacities of the body and the mind.

I researched and practised with the Four Establishments of Mindfulness, developing a version in design language. I tested the evolving guidelines on myself while I learned the craft of rope making from cedar and from long-leaved plants in my garden. Over several successive years, I offered Immersive Reflective Practice to graduate students and asked for their feedback. The results have shown a definite shift away from the dominance of cognitive thinking, and more questioning of what they were designing, and why.

Immersive Reflective Practice begins first with centring on the body through meditation. Several mediation sites or apps offer guided meditations, and I also attach a guided meditation. The process asks for documentation in concrete language, words that can describe what can be experienced physically through the senses: touch, taste, hearing, smell. Participants are guided through the Four Establishments of Mindfulness: Body, Feelings, Mind, Objects of Mind (Nhat Hanh 1998: 67–8).

Mindfulness of the body

In 1984, Donald Schön validated the body as a source of insight for designers in his seminal book, *The Reflective Practitioner*. He asked designers to address moments of tacit knowledge during their design process and to find ways to articulate this knowledge. He called this process of noticing 'reflection-in-action' (Schön 1984). In Schön's framing, this reflection remained largely cognitive. According to Fischer

(2019), 'Feeling-sensation is barely conscious, barely available as an experience. To access it, I need to do more than think and observe it in the usual ways' (150). This first phase of immersive reflection brings us closer to our bodies, inviting psychophysical concentration to help access insight. This begins with practices of attention.

According to Thich Nhat Hanh (1998), many people dislike and mistreat their bodies. Mindfulness practices help us reconnect with our bodies through simple processes that begin with what he describes as 'mere recognition' (69), a step-by-step practice of acknowledging our bodies. This can be a meditation on physical characteristics. I might start by saying aware that the hair on my head is brown, and pausing to breathe. Then moving on through the rest of my body, aware that my eyes are closed, pausing to breathe and so on through my entire body (see also Nhat Hanh 1997). Using a similar methodical procedure, there are also gratitude practices (e.g. *appreciation to my feet for all the work they do*) and practices about how our bodies are connected to the elements of the earth (e.g. aware of the earth ... aware of minerals of the earth in my bones). These are systematic practices of paying attention. Attention leads to acceptance and affection: 'The love and care of this meditation can do the work of healing' (Thich Nhat Hanh 1998: 69) and reconnect us positively to our bodies. The real benefit is when it is practised over and over again. Over time, we can increasingly hear the messages of our body.

When I tested early iterations of *Immersive Reflective Practice*, I was learning to make rope. At one point, I realized that my hands were folding and unkinking the rope as I went, to ease and distribute the tension more evenly along the length. My hands knew to do this before I was cognitively aware of what they were doing and why they were doing it. Releasing the tension in the rope was something that I *did not know that I knew*. I accessed this knowledge during immersive reflection after I focused on my bodily experience, using concrete language: 'Making cedar rope. The sap is sticky. I shift positions to hold one end in my teeth, the other in my hands. I can feel the sap residue on my lips.' This practice brought the observations of my body to light so that I could perceive that I was unkinking the rope as I went. I could see the reflection-in-action that Donald Schön wrote about.

Mindfulness of feelings

In design, discussions of feelings are most often in reference to the kinds of emotions our project might evoke for others, such as the person who encounters our work (Norman 2005). Schön (1984) makes a rare reference to the feelings of the designers themselves: 'We may have once been aware of our understandings but they have become internalized in feeling ... we are usually unable to describe the knowing' (54). Much as how I described with mindfulness of body, above,

immersive reflection is a practice of reconnecting with and being present with our feelings, so that we may be able to 'describe the knowing'. Bringing ourselves around to regularly noticing the pure feeling state, we practice shifting away from the discursiveness of the mind. Usually this is simple acknowledgement, like noticing 'there is anxiety in me ... this is an unpleasant feeling'. We practice acknowledging states of pleasant, unpleasant, and neutral feelings. As simple as the practice may sound, careful attention can help us notice that transient feeling states influence our ideas, thoughts, and perceptions. If I am excited about something extraneous to my design project, this will change the nature of my insights. Knowing this and being fully present to the quality of our feelings can help us to clarify our reflections. We can begin to see that we bring bias to every thinking moment. We can also tune into the messages our feelings might have for us, the tightening of the belly with anxiety when we consider a certain design decision.

When I was making rope from old fern fronds, I noted: 'Unpleasant feelings, the sensation of drippy dead stalks in my hands' (St. Pierre 2019). I realized I was worried that this would turn into something repugnant, and with this awareness I cautioned myself to be open to the possibility that there might be interesting emergent qualities in fern rope.

Mindfulness of the mind

In this phase, we practise to become aware of the agency of the mind. The mind is not neutral in any moment. We view our minds as if from outside and accept that the state of our mind has an impact on our work and our reflections. Thich Nhat Hanh (2003) lists fifty-one mental states, known as mental formations (143–6). Anger, determination, aversion, concentration, regret, and sleepiness are mental formations. Bringing awareness to mental formations and acknowledging them (*aware of my restlessness*), coming back to the breath, and so on, calms mental states in the same way that bringing awareness to feelings calms feelings. Again, this is the power of the practice of 'mere recognition'. It creates a subtle distance between ourselves and our mental states.

When I was making rope, I noted, 'I am restless and distracted' (St. Pierre 2019). Returning to the breath, I paused to look at my work afresh, without judgement. This gave me a sense of release, lightness, and motivation to keep going (Figure 12.1).

Mindfulness of objects of mind

Here we bring our awareness back to the object of our reflection, or the object of mind. As I mentioned, the object of reflection in design can be an artefact, a



FIGURE 12.1 Rope made from day lilies.

concept, a set of actions, an event that has already happened, or an event that is in the process of happening. The understanding that conception is generated between the mind and the event or artefact is well known (Barad 2014; Capra 1975, 2002; Hill 2017; Kahneman 2013). 'In every school of Buddhism, the constituents of the material world ... are considered to be objects of mind consciousness' (Nhat Hanh 2012. In design, it is commonly accepted that different people will have different experiences in their engagement with an object or event. Cher Hill (2017) picks up the term 'diffractive reflection' from Karen Barad (2014, cited in Hill 2017) to describe how interpretations of any given object or event are as if diffracted into multiple possibilities. As Jones (2015) sums up, 'the world outside our own heads is far less the objective and collectively agreed reality we might think' (1601). How do we understand this world outside our heads?

Buddhist psychology nuances this understanding that our minds interpret the world. Consciousness does not arise until there is an object to perceive (Nhat Hanh 1998). One is not there before the other. This is a deep understanding of interdependence. 'Subject and object of consciousness rely on each other and manifest together' (Nhat Hanh 2012). They co-exist or *co-arise* together. In other words, consciousness does not exist until there is an object to perceive. Consciousness is *among and within*, rather than occupying a primary position. This is a counter to the dominance of the cognitive mind in design. The object is a partner in the reflection, fully implicated in the insights: it is a dance between the two.

The Buddhist practice of *Mindfulness of Objects of Mind* implicates us fully in our subjectivity, with full awareness that the object is subjectively interpreted, and that our minds are only part of the engagement. Our ancestors, our recent past, the collective consciousness are all part of what we see in front of us. Knowing this, we try to look at the object of mind afresh, without filters or preconditions; to see it as directly and honestly as we can. In this part of the process, I looked again at the fern rope and saw a quirky crustiness that expressed a relationship to the natural world that was not sanitized or beautified, not controlled by my desires. It was as manifest as it could be in the moment, and it had something to say to me.

Closing thoughts

Immersive Reflective Practice is a systematic process of re-tuning, orienting our awareness to non-discursive ways of knowing. It adapts the Four Establishments of Mindfulness to enable a reflective practice that shifts or rebalances the emphasis from cognitive modes of reflection to the wisdom of our bodies, feelings, minds, and objects of mind.

Practising immersive reflection, I began to see my work as sincere engagement with the ongoingness and messiness of life. As we say in the Buddhist teachings, 'Incompleteness is always there' (Maitreyabandhu 2014). Immersive Reflection allowed me to question my judgements about how states of incompleteness are disparaged by the modernist ideology of sweeping narratives, linear progress, correct answers, and celebratory conclusions. In my conversations with students after they have practised immersive reflection, I have heard them say many things. They began to question being so goal-directed; they noticed how their energy gets harnessed or derailed; they found new faith in a project; they noticed they then were doing people-pleasing activities; they noticed when feelings of being overwhelmed were constraining their process; they felt empowered to stop searching for an answer; they noticed the negative voices in their heads; they realized that design is more than doing pretty things. These are very empowering realizations for young designers. These are important understandings for those of us wishing to shape an inclusive, decolonized, and ecologically healthy world.

Immersive reflection brings us to ourselves. We become aware of ourselves as implicated in the design process and the world around us. We come to understand ourselves and our bodies as fully implicated in reflecting upon and undertaking the work we do (Figure 12.2).

Immersive Reflection: The Process

The conditions of reflective process will vary, and your needs will change with time. Please use this as a guideline to begin with, and adapt this process as needed. **Do not attempt this process during times of trauma*.

- 1. Sit comfortably with notepad and paper close by. You will record rough journal notes for later reference. Bring to mind a project that you have worked on recently, then set it gently into the back of your mind.
- 2. Centre yourself, bringing your mind back to your body. This can be as simple as 5 minutes of focused breathing to the belly (about 2 cm below the navel), paying close attention to the rise and fall of the belly on the inbreath and the outbreath. On the last page of this document there is a guided meditation that you might like to follow, or you might play any guided meditation that can be found on line.
- 3. Mindfulness of the body: run your attention over your body, looking

for places that require attention. Breathe into any areas of stress. Starting with the top of your head, bring awareness to every part of your body. For example, *aware that the hair on my head is brown…* breathe three breaths… *aware that my eyes are closed…* breathe three breaths… and so on. Then bring to mind the design project that you have chosen to reflect on, and see how your body changes in response to your thoughts. Briefly note or sketch this.

What kind of physical or bodily perceptions do you remember from doing the project? Use concrete language, words that can describe what can be experienced physically through the senses: touch, taste, hearing, smell, keeping ourselves in our body.

- 4. Mindfulness of Feelings. Note the feelings of *pleasant, unpleasant,* and *neutral*. Spend about 5 minutes paying attention to your feelings, breathing with awareness as you note your feeling states. Bring your project lightly back into your awareness, and pay attention to any changes in feelings. Make a few notes about them.
- 5. Mindfulness of the mind: note the state of your mind. Is there joy, elation, worry, desire, impatience, etc.? Pay attention to your mental states for about 5 minutes, remembering to come back to your breathing regularly. Bring your project lightly back into your awareness, and pay attention to any changes in mental states. These mental states can influence your reflections. Make a few notes about them.
- 6. Mindfulness of the object of mind. Take five full breaths without thinking. Then bring your project back to awareness. Accept fully the project in its current state. Consider the filters that might be coming to bear on this object. Can you see it fresh? How many different ways can you see it? What does it say?

FIGURE 12.2 Immersive Reflection, the process.

Meditation: Our Creaturely Selves Adapted from an offering by Bethan Lloyd

I invite the reader to pause and establish themselves for guided meditation. Please hold a thing of nature (rock, stick, or seed that has not been modified by industry) lightly in your hands during meditation. You may choose to record yourself speaking this and play it back to yourself. Or you may choose to read it sentence by sentence, pausing to meditate between sentences Begin with a deep breath in. Deep breath out. Check to see that your body is comfortable. Adjust yourself as you need to. Back is straight. Head is balanced on the top of the spine. Roll your shoulders up and back. Release some energy. Open your heart. Close your eyes. Nobody is watching. Inhabit your body. Know yourself as a creature. Sense your feet, that often carry you, walking softly, jumping, springing. How are they doing? Extend gratitude to your feet. Feel your calves, knees, thighs, up into your hips. Muscles and bones all. Let's come to the belly now, breathe into the valley of your belly. Breathe out ... release. Let the belly soften, let it all sag out. Feel the vulnerability of your soft, exposed belly. The belly is the seat of a lot of emotions. For many of us, it's where anxiety lives. The belly is filled with nerve endings. Be with your tender belly, breathing into nooks and crannies that you haven't been aware of before. Find more space in there, find new places. Enjoy your belly. Breathe. Now bring your awareness slightly higher in the body. Breathing into the chest, the lung cavity. Let's explore the space around our heart. Breathe into the space around your heart. Relax any muscles around your heart. You are like all creatures who breathe, who have hearts. Explore the base of your neck. Relax all the muscles of your neck, soften. Breathe. In. Out. Now as we come up to the head, relax the muscles around your nose ... there are larger spaces there than you may be aware of. Breathe into those spaces. Soften your jaw. Let your jaw sag open. Be a creature at rest. There are no predators about. Relax all the muscles around your eyes, looking again for air spaces, feeling a new lightness throughout your face. Breathing in. Allow those spaces to breathe. Let

The last ones to let go of are the muscles in the very top of your head ... find them. Relax them. Let your entire head, all the muscles around your skull slide down with gravity With your jaw Sliding down.

The air is moving in and out. You're not in control of the flow of your breath. Your creaturely body is doing this. Your body is in charge, let it be so. Let

everything flow. Breathing in. Breathing out.

References

- Akama, Y. (2012). 'A Way of Being in Design: Zen and the Art of Being a Human-Centred Practitioner', *Design Philosophy Papsers*, 10(1): 63–80.
- Akama, Y. (2017). 'Surrendering to the Ocean: Practices of Mindfulness and Presence in Designing'. In R. B. Egenhoefer (ed.), *Routledge Handbook of Sustainable Design*. London: Routledge, 219–30.
- Bai, H. (2009). 'Re-animating the Universe: Environmental Education and Philosophical Animism'. In M. McKenzie (ed.), *Fields of Green*. Cresskill, NJ: Hampton Press. 135-151.
- Bai, H., Scott, C., and Miyakawa, M. (2019, May 31). *Canadian Contemplative Education Symposium*. Vancouver: Simon Fraser University.
- Barad, K. (2014). 'Diffracting Diffraction: Cutting Together-Apart'. *Parallax*, 20(3): 168–87. https://doi.org/10.1080/13534645.2014.927623
- Batacharya, S., and Wong, Y.-L. (eds) (2018). *Sharing Breath: Embodied Learning and Decolonization*. Edmonton Alberta: Athabasca University Press.
- Boehnert, J. (2018). Design, Ecology, Politics. London: Bloomsbury Academic.
- Brown, T. (2009). *Change by Design: How Design Thinking Transforms Organizations and Inspires Innovation*. New York: HarperBusiness.
- Capra, F. (1975). *The Tao of physics: An exploration of the parallels between modern physics and eastern mysticism.* Boulder, CO: Shambhala.
- Capra, F. (2002). *The Hidden Connections: Integrating the Biological, Cognitive, and Social Dimensions of Life into a Science of Sustainability* (1st edn). New York: Doubleday.
- Ehn, P., and Ullmark, P. (2017). 'Educating the Reflective Design Researcher'. In L. Vaughan (ed.), *Practice-Based Design Research* (pp. 77–86). New York: Bloomsbury Academic.
- Escobar, A. (2018). *Designs for the Pluriverse: Radical Interdependence, Autonomy, and the Making of Worlds.* Durham, NC: Duke University Press.
- Faludi, J., and Gilbert, C. (2019). 'Best Practices for Teaching Green Invention: Interviews on Design, Engineering, and Business Education', *Journal of Cleaner Production*, 234: 1246–61.
- Fischer, N. (2019). *The World Could Be Otherwise: Imagination and the Bodhisattva Path.* Boulder, CO: Shambhala.
- Fletcher, K., St. Pierre, L., and Tham, M. (eds) (2019). *Design and Nature: A Partnership*. London: Routledge.
- Fry, T. (2009). Design Futuring: Sustainability, Ethics, and New Practice. Oxford: Berg.
- Goldstein, J. (2016). *Mindfulness: A Practical Guide to Awakening*. Louisville, KY: Sounds True.

- Gunnlaugson, O., Sarath, E. W., Scott, C., and Bai, H. (eds) (2015). Contemplative Learning and Inquiry across Disciplines. Reprint ed. Albany, NY: State University of New York Press.
- Harvey, S. (2020). My Year of Living Mindfully. https://www.myyearoflivingmindfully.com
- Hill, C. (2017). 'Becoming a Diffractive Practitioner'. *Teacher Learning and Professional Development*, 2(1): 1–17.
- Hrebeniak, M. (2020). 'Design for the New School of the Anthropocene', Architecture and Culture, 9 (1): 1–6.
- Johns, C. (2009). Becoming a Reflective Practitioner. Somerset: John Wiley.
- Jones, D. (2015). Reflection-in-action and motivated reasoning. LearnxDesign. DRS// Cumulus//Design-ed, Chicago, Illinois.
- Kabat-Zinn, J. (2018). The Healing Power of Mindfulness: A New Way of Being. New York: Hachette Books.
- Kahneman, D. (2013). Thinking, fast and slow. Toronto, CA: Anchor Canada
- Kirmayer, L. J. (2015). 'Mindfulness in Cultural Context'. *Transcultural Psychiatry*, 52(4): 447–69.
- Loori, J. D. (2007). *Teachings of the Earth: Zen and the Environment*. Boston, MA: Shambhala; Random House.
- Maitreyabandhu. (2014). Thicker Than Blood. Cambridge: Windhorse Publications
- Martin, R. L. (2009). *Design of Business: Why Design Thinking Is the Next Competitive Advantage*. Boston, MA: Harvard Business Review Press.
- Nhat Hanh, T. (1992). *Peace Is Every Step: The Path of Mindfulness in Everyday Life.* Reissue ed. New York: Bantam.
- Nhat Hanh, T. (1997). *The Blooming of a Lotus: Guided Meditation Exercises for Healing & Transformation*, trans. A. Laity. 4th ed. Boston, MA: Beacon Press.
- Nhat Hanh, T. (1998). The Heart of the Buddha's Teaching. Berkeley, CA: Parallax Press.
- Nhat Hanh, T. (2003). Buddha Mind, Buddha Body: Walking Toward Enlightenment. Berkeley, CA: Parallax Press.
- Nhat Hanh, T. (2006). Understanding Our Mind: 50 Verses on Buddhist Psychology. Berkeley, CA: Parallax Press.
- Nhat Hanh, T. (2012). *Letter to a Young Scientist*. Plum Village Mindfulness Academy. http://www.mindfulnessacademy.org/en/manifestation-only-psychology-mop/mopteachings/39-the-science-of-the-buddha-letter-to-a-young-scientist (accessed 22 September 2019)
- Norman, D. (2005). *Emotional Design: Why We Love (or Hate) Everyday Things*. 1st ed. New York: Basic Books.
- Post, K. M. (2019). 'Reflective Practices in Sustainability Education', *Sustainability*, 12(5): 248–51.
- Schön, D. A. (1984). The Reflective Practitioner: How Professionals Think in Action. 1st ed. New York: Basic Books.
- Sengers, P., Boehner, K., David, S., and Kaye, J. 'Jofish'. (2005). Reflective design. Proceedings of the 4th Decennial Conference on Critical Computing between Sense and Sensibility – CC '05, 49.
- St.Pierre, L. (2019). Research Journal, Unpublished research, Vancouver.
- Tonkinwise, C. (2004). The Idealist Practice of Reflection: Typologies, Techniques and Ideologies for Design Researchers. *Futureground*. Design Research Society, Monash University.
- Walker, S. (2017). *Design for Life: Creating Meaning in a Distracted World*. London: Routledge.

- *What Is the Order of Interbeing Order of Interbeing | Tiep Hien.* (n.d.). Retrieved May 13, 2022, from https://orderofinterbeing.org/about/our-history/
- White, P., Pierre, L. S., and Belletire, S. (2013). *Okala Practitioner: Integrating Ecological Design*. Phoenix, AZ: Okala Team & IDSA.
- Wong, R. (2004). 'Knowing through Discomfort: A Mindfulness-Based Critical Social Work Pedagogy', *Critical Social Work*, 5(1).

13 THE TYPOGRAPHIC TRANSLATIONS OF BORGES'S MANUSCRIPTS¹

Celeste Martin

To assume that every recombination of elements is necessarily inferior to its original form is to assume that draft nine is necessarily inferior to draft H – for there can only be drafts. The concept of the definitive text corresponds only to religion or fatigue.

'THE HOMERIC VERSIONS,' J. L. BORGES

or the past five years, my design practice has focused on typographic translations of literary manuscripts. In particular, I have concentrated on transcribing the work of twentieth-century Argentinian writer Jorge Luis Borges into typographic texts as research tools and critical objects that both reproduce and extend the author's textual system. Anchored in a corpus of typographic facsimiles of a selection of Borges's poems, essays, and short stories, my work extends to include a series of design studies on hybrid texts and threedimensional printed texts that investigate the nature of graphic and typographic translation while problematizing the typographic system itself.

I am not a scholar but a reader of Borges. I first read his work in my teens, somewhere in the provincial small town of Venado Tuerto, Argentina, surrounded by the landscapes and roads, the gauchos, architectures, and frontiers that Borges had already forged with sublime precision and incomparable beauty in some of his poems and stories. My familiarity with the work and fluency in the Spanish language as a native speaker were not only conditions for accessibility but also, in a way, of returns. Returns to that known intimate struggle of translating myself

from Spanish to English and now back to Spanish as this work has been shared and socialized with Spanish-speaking and multilingual communities of practice in literary, textual, and design studies. Returns to that joyful scramble with software and letterpress as I developed a design practice around typographic expressions of language as a design student. I recognize this friction; I have done this before. These distances between languages and between texts can range from incommensurable to banal and solicit the through of a bridge or the suturing of communicating vessels, some magic, some restraint, some reconciliation, or, perhaps, the silence of more definitive gaps.

This chapter describes the theories, methods, practices, and challenges as I designed typographic translations of Borges's poetic body of work and devised a fluid system of transcription guidelines adaptable to Borges's changing writing style over a temporal span of five decades of manuscripts. This includes the detailed study of around thirty manuscripts and the typographic transcription of more than a hundred pages of poems, essays, and short stories into typographic facsimiles. I engaged with this work as a designer and typographer, and throughout this speculative and iterative process, I identified a series of tensions and challenges in creating typographic translations. These are:

- A. the tension between writing as gesture and as geometry at the level of the letter and the page;
- B. the tension between manuscript writing and the typesetting systems that guide and enact the typographic grid as expression of visual language;
- C. the tension between the original manuscript and the surrogate systems of transcription and translation.

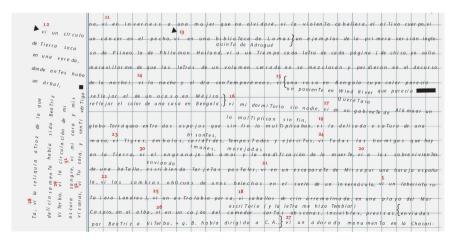


FIGURE 13.1 Typographic transcription of a page from 'The Aleph'.

It was out of necessity, that designerly constraint, that I made the first typographic transcription of a Borges manuscript and recreated a page in 'The Aleph' (Figure 13.1) from a low-quality and hard-to-read image in order to use it in a cover of *Variaciones Borges*. Unable to use the photographic image, I moved to artifice to create another plausible image, using the materials at hand, type and vectors, 'reproducing in a foreign language a preexisting book' like *Pierre Menard* (Borges 1974). The page included his famously long sentence, 430 brilliant words long, describing the narrator's experience of seeing the universe in its totality and at once. This first typographic image of that manuscript's page opened the possibility to consider this form of translation and explore what is preserved, what is changed, what is made accessible, and what is obscured in this re-presentation. Because Borges's handwriting can be diminutive, a typographic translation that maintains a spatial relationship to the original document and respects the 'spirit' of the handwriting can be useful to make the pages accessible by making it legible and enabling its study.

Years after 'The Aleph' transcription was complete, I developed a creative partnership and collaboration with Borges's scholar Daniel Balderston to work on a multiyear project around the transcription of Borges's manuscripts. Together we edited three volumes of facsimile editions of Borges's manuscripts presented with typographic translations and commentaries. *Poemas y prosas breves* was published in 2018 and included twenty poems by Borges from early in his career until after he had gone blind. In 2019 it was followed by *Ensayos*, a collection of five essay manuscripts, which includes an extensive unpublished manuscript by Borges on Flaubert. The third and final volume, *Cuentos*, was published in 2020 and included manuscripts of four short stories and a typescript. These publications not only made rare Borges's manuscripts available to a wide audience, they also provided an opportunity to explore expressive and technical possibilities in graphic translations of handwriting and complex literary compositional systems.

The selection of poems, essays, and short stories included in these volumes, from the late 1910s to the mid-1960s, exposes the range and evolution of Borges's writing, literally, graphically, and relationally through typescripts and a surrogate hand. We can identify his distinct writing hands as five independent modalities over this period, each with distinct characteristics and qualities:

Hand A. The earliest of Borges's hands has the structure of an elegant script, it is fluid and detailed, yet the individual letters only rarely connect, a characteristic of all his writing hands. Examples of this hand can be seen in the manuscripts of *Calle desconocida*, *Trincheras, Judería*, and *Nostalgia inescrutable*. These early poems show letters that are more drawn than written; strokes and the negative spaces they describe are well defined (see b d a e o), there is a preoccupation with terminals, the finishing of strokes (see f, l, q) and a very fluid quality of curved strokes in general (see t, L, Q,

and Borges's signature). This is his most graceful and well-proportioned hand in terms of the relative size of the middle section of the letters, known as x-height, and the length of ascenders and descenders.

- Hand B. The second hand appears in the mid-1920s and it follows more closely a print structure. This hand is relatively large in size and is quite legible, x-height is larger and strokes well defined. *Rusia, Intentona de Soneto, Villa Mazzini,* and *La fundación mitológica de Buenos Aires* are examples of this hand. Of them, *Rusia* can be seen as transitional from the previous hand.
- Hand C. The third style of writing is Borges's most characteristic hand, the one we have come to know him for: his 'insect-like handwriting' as Borges describes it in an allusion in 'Pierre Menard, Author of the Quixote', and which corresponds to a large number of notebooks of manuscripts. This is his microscopic handwriting, packed lines in squared notebooks look like a military parade of marching ants; in typographical terms: tiny x-height, counters and aperture, and relatively very long ascenders and descenders. A first draft in this hand will be most dense; the words appear written upright, that is, the axis of the letters is perpendicular to the baseline (equivalent to a roman style in type), fitting in every line of the square notebook up to 100 to 120 characters and, in the essays, adding copious bibliographical annotations along the margins. Second drafts in this hand appear to be written faster; the axis of the letters is diagonal to the baseline, which in typographic terms would refer to the italic style of some typefaces, and are slightly less compressed, resulting in an average of eighty to ninety characters in a complete line.
- Hand D. A fourth hand appears as Borges's vision deteriorates, it can be described as a deformation of his typical and mature hand in the occasion of blindness: it consists of sparse strokes, exaggerated ascenders and descenders while the middle section of the letterforms lose definition dramatically. In aesthetic terms this is a very moving set of ineffectual gestures of a hand searching for the strokes that describe letters and the general shapes of words.
- Hand E. The last hand included in this classification is not Borges's proper. When he became blind, he would dictate his poems to his mother Leonor and it is her handwriting as surrogate that constitutes his final hand. Leonor Acevedo's handwriting is a quick yet legible and sometimes even elegant script. It is significantly larger than any of Borges's writing and maintains an even rhythm and texture on the page.

In some manuscripts, several writing hands are present on the page at once, which evidences Borges's practice of revising and re-signing fair copies of his early works years later, when the smaller hand became prominent. This process of revision, which in Borges's manuscripts read as gentle insistence and a reminder that 'there are only drafts', aggregates sedimentary hands and collapses time on the page. In the case of *Calle desconocida, Judería*, and *Nostalgia inescrutable*, we can see two types of revisions, some contemporary to the initial writing (Hand A) in the same hand if sometimes smaller, and another round of revisions done years later in the typically small writing of Hand C.

A particularity of Borges's writing is how he structures the letter t. In the early manuscripts corresponding to Hand A, he writes a typical lowercase t, that is, he crosses the stem of t with a horizontal stroke that extends before and after the vertical one. We can also see, particularly in the larger print hand (Hand B) of manuscripts like Rusia, Villa Mazzini, and Intentona de Soneto, a tendency towards crossing the t high on the stem, in a way that it barely touches it and if so only from the stem to the right and not across proper. I consider this to be a transitional form of the lowercase t becoming an uppercase T. The most prevalent form of the T is that of an uppercase structure and it is seen primarily in the manuscripts of his main hand (Hand C). Even though grammatically Borges intends a lowercase t, the structure he writes is that of an uppercase letterform. In many cases the T is small in stature and thus blends better with the rest of the lowercase letters in a word, what in typographic terms would be a small capital, a smaller version of an uppercase letter designed to blend well in the fabric of lowercase text. In poems like the second version of Mateo XXV,30 Borges does differentiate between uppercase T and lowercase t by adding serifs to the crossbar of the T, a treatment that will be standard in his essay and short story manuscripts. In a number of cases Borges uses lowercase ts and uppercase Ts in the same document to signal a grammatical lowercase t; the first version of Mateo XXV,30 at the New York Public Library includes the three forms of the letter t, lowercase t, uppercase T as lowercase, and the grammatical uppercase T differentiated from the latter through the use of serifs.

Discerning and categorizing Borges's writing hands (Figure 13.2) in light of their typographic adaptability makes apparent that letters and words emanate from the body: 'they are not things or pictures of things, they are gestures' (Bringhurst 2011). As gestures they retain their ephemeral and unique form. Borges's writing 'Buenos Aires' in page 5 of the essay on Flaubert in 1952 is vastly different from his writing 'Buenos Aires' in the 1926 poem *La Vuelta a Buenos Aires*, yet, typographically, they are expressed in identical terms. Typographic texts speak of this tension between bodily gestures and the abstract, mechanical, and geometric systems of reproduction and encode it at different levels (Lupton 2004): the letter, the word, the page. In making the transcriptions of Borges's manuscripts it was my intention to explore and reassert the gestural nature of writing beyond letters and words to focus on the page as a compositional space and overall gesture of the text.



FIGURE 13.2 Scale reproductions of Borges's manuscripts used to discern his writing hands.

The typographic facsimile: A trace and a mirage

The transcription of literary manuscripts has been dominated by the diplomatic transcription, which records through a typesetting system the characters and words as they appear on the manuscript, with little or no editorial annotations, and heavily mediated by the technical system. Reviewing online digital archives that included diplomatic transcriptions such as The William Blake Archive, the Rossetti Archive, and the Emily Dickinson Archive, I was naively perplexed and inspired by the accumulation of referential systems arising from the tension and limitations of re-presentation. The texts are typed line by line and a remedial system is set in place, a transcription key, to refer back to the material configuration of the text in the manuscript's facsimile. Working with live HTML text in a digital archive or with an image created with word processing software naturally produces a diplomatic transcription, one where the grid of lines of type manifests itself as a regularizing spatial element that then relies on a set of symbols to signal the author's actual use of the page (Figure 13.3). The typographic grid as a regularizing spatial structure is most obvious in metal type but also and equally governing in text composition software such as Word or InDesign, where each

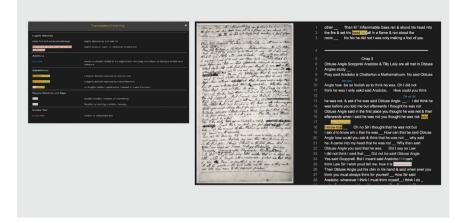


FIGURE 13.3 Diplomatic transcription example from The William Blake Archive.

character occupies an imaginary, and sometimes malleable, rectangle inscribed in the grid. This stability and general rigidity of typography reveals a profound tension with writing as a gesture and ever-changing posture, and is a product of the mechanical and digital systems that reproduce it. Advanced typesetting environments designers typically work in allow a range of technical options that can unsettle the typographic grid and use the page space as a canvas where lines of texts, words, and the basic unit of typesetting, individual characters, can be placed, painted, reproduced there where they were inscribed in the original. To evoque and let manuscript through in those 'traces (tenuous, but not indecipherable) of the "previous" writing' (Borges 1974) requires a conscious technical effort that intentionally and elegantly destabilizes the typographic grid.

As I reviewed approaches to transcription, I was particularly inspired by several projects led by Marta L. Werner on Emily Dickinson's envelope poems included in *Radical Scatters*, a digital archive of Dickinson's late fragments first published in 1999. They pursued a form of transcription that engages issues of the spatial cohesion of the text and included a range of typographic images of the manuscripts that attempt to incorporate spatial congruency in the diplomatic transcription. These transcriptions are closer in appearance to the original document than a proper diplomatic transcription would be and can be described as 'typographic facsimiles' where format and spacing (interlinear, between words, even between letters) attempt to follow the author's manuscript (Kline and Holbrook Purdue 2008).

An earlier approach by Werner's transcriptions of Dickinson's manuscripts is present in *Emily Dickinson's Open Folios: Scenes of Reading, Surfaces of Writing* – published in 1995, set in Courier, a monospaced slab serif, using a typewriter.

Punctuation, dashes, and other markings were added by hand. As Werner notes in *Open Folios*, by preserving spatial correspondence, the transcriptions 'can convey the movement of text on the page and the open and processual nature of the drafts and fragments' (Werner 1995). Placement of words plays a crucial role in indicating the structure of the fragment, yet the typographic grid of the typewriter overcomes the arrangement, imposing its own spacing, between lines and within words, and which results in diverging overall compositional gestures. In Poem A638, for example, the overall shape of the text in Dickinson's hand describes a rectangle in landscape orientation, while the typewriter version describes a rectangle in portrait orientation. In this particular manuscript, two styles in Dickinson's writing, a fair copy draft style surrounded by a smaller rough copy draft style, are undifferentiated in their typographic expression and this further complicates reflecting the specific rhythm of Dickinson's writing and overall text shape and formal attributes.

The typographic facsimiles in Radical Scatters Archive and later the ones in *The Gorgeous Nothings: Emily Dickinson Envelope Poems* continue to develop approaches to typographic transcriptions that negotiate and transact the spatial dynamics and characteristics of the manuscript. The transcription of Poem *A339* (Figure 13.4) was included in both these projects and exemplifies a range of considerations in typographic transcriptions and their technical context.

The version of Poem *A339* created for Radical Scatters goes one step further than the ones from *Open Folios* in preserving the material integrity of the poem. It includes a tracing of the contours of the paper that demarcates the compositional space by placing individual letters more precisely where they were inscribed and in a range of scales, and by drawing digitally the punctuation, lines, markings, and, most notably, the crossbar of the letter t to capture Dickinson's unique ways of handwriting. The typeface used is Rotis, a humanist design, with the styles Semi Serif for the fair copy fragments and Semi Sans for the intermediate and rough copy fragments. Of all the forms presented here, this one includes the most references and strives to maintain the greatest level of detail from the original, which is consistent with Werner's intention, at that time, of presenting the reader with the 'least mediated' version of the manuscript (Werner, 2007).

The second and later version of poem A 339 from *The Gorgeous Nothings*, published in 2013 in collaboration with designer Jen Bervin, is set in Century Gothic – a geometric sans serif, in which round large counters and short descenders and ascenders sometimes echo the open forms in Dickinson's hand. This version shows more restrain in the incorporation of detail and, as Bervin points out in her introduction 'Studies in Scale', it is meant as a key or map available to consult while reading the facsimile, a subordinate role emphasized by their reproduction at half the size of the photographic facsimile. This version abandons the digitally free-handed punctuation and markings and assigns them typographic equivalents; see, for example, the replacement of the small crosses with the + sign. The text rests

Legible Deletions to font with whit a legible deletion replaced by overwritten tex aible deletion, erasure, or overwriting illegible handwriting, inkblots, damage The Mr. Show all got one & then his had at other ____ Then M ^r Inflammable Gass ran & shovd his head into the fire & set his head hall all in a flame & ran about the room ____ No No he did not I was only making a fool of you auto Teoppiel there are a Telly delly an all mut on Other and Large and the second stridy all by an alt and a second stridy and the second stridy all by an alt and a second stridy all by an alt and a second stridy all by a second stridy all be a second stridy all be all by all Chap 5 6 Obtuse Angle Scopprell Aradobo & Tilly Lally are all met in Obtuse Angles study Pray said Aradobo is Chatterton a Mathematicum. No said Obtuse 10 Angle how be so foolish as to think he was. Oh I did not 11 think he was I only askd said Aradobo, How could you think Chrostin
 he was not. & ask if he was said Obtuse Angle._____A I did think he
 was before you told me but afterwards I thought he was not
 Obtuse Angle said in the first place you thought he was not & then
 afterwards when I said he was not you thought he was not. Way The properties and the same the large and the first set of the same the same the large and the same the large and the same the large set of the same why I k
 Interaction

 17
 Increase that

 18
 Increase that

 19
 I ask d to know wh e ther he was__How can that be said Obtuse

 20
 Angle how could you ask & think that he was not__why said

 20
 Angle how could you ask & think that he was not__Why then said

 20
 Dobuse Angle you said that he was. not__Why then said

 22
 Obtuse Angle you said that he was. Did I say so Law

 23
 I did not think i said that____Oid not he said Obtuse Angle

 24
 Yes said Scopprell. But I meant said Aradbo III cant

 25
 think I aw Sir I wish youd tell me. how it is
 why know that Oh no Sir I thought that he was not but Then Obtuse Angle put his chin in his hand & said when ever you think you must always think for yourself __ How Sir said Aradobo. whenever I think I must think myself__I think I do _

FIGURE 13.4 A339 ('Risk is the Hair. . .') facsimile from the Amherst College Library, and its transcriptions from Radical Scatters and The Gorgeous Nothings.

Transcription 1:A339 ('Risk is the Hair...'), text by Emily Dickinson, transcription by Marta Werner, from Radical Scatters: Emily Dickinson's Late Fragments and Related Texts, 1870–1886. Copyright © The University of Nebraska – Lincoln, March 2007–2010 and © The University of Michigan, 1999–May, 2007. Printed with permission of Marta Werner.

Transcription 2: A339 ('Risk is the Hair...'), text by Emily Dickinson, transcription by Jen Bervin and Marta Werner, from GORGEOUS NOTHINGS, copyright © 2013 by Jen Bervin and Marta Werner. Reprinted by permission of New Directions Publishing Corp.

on even typographic baselines and while it is generally openly spaced (tracked open), it no longer reproduces uneven spaces between letters, as is the case in the space between the letters H and a in the word 'Hair' in line four of the second column. This more systematic approach deemphasizes the representation of individual occurrences to produce a general interpretation of the characteristics of the collection of manuscripts as a whole.

Typographic facsimiles are inevitably the result of a negotiation between a guiding logic of re-presentation and the possibilities and limitations for crafting a new material version of the document. As Werner notes in *Writing in Time*, they are 'a mirage, an optical illusion, a displaced image of a distant object' (Werner 2021). Embracing this impossibility allows us to practice in the space of transcription as an enthusiastic simulacra that both reference anew and extend the author's textual system. This negotiation in the transcription of primary sources to a digital artefact doesn't strive for equivalencies or what Peter Robinson calls 'acts of substitution' but rather interpretive 'acts of translation' between semiotic systems (Robinson 1994). In the case of Borges's manuscripts, this interpretation as transcription established a dialogic, if always incomplete, relationship between handwriting and typography.

An adaptation for typography

My approach to Borges's transcriptions is strongly influenced by my experience as a typographer; reflectively, I recognize that I have always looked at these documents through their typographic potential. I have encountered them from a deep knowledge of how typographic texts function and their compositional possibilities. In this way, they can be understood as 'adaptations', texts repurposed, made suitable for typographic expression. A draft among drafts of the individual texts, connected to the photographic facsimile it arises from but aspiring to remain materially and aesthetically autonomous, formally complete.

In terms of methods, visual studies of the manuscripts, including tracings in ink, cataloguing manuscripts into related hands and mapping writing size scales, annotating facsimiles on the appearance of specific letters, and making many quick transcriptions in different typesetting systems and using different typefaces, set the space for experimentation and explorations of different approaches so that through making I could learn, distinguish, and internalize the writing hands of Borges. Similarly to 'learning' a typeface for typesetting, which requires practice, I approached learning Borges's writing and its typographic potential by 'practising' it as typography. These design studies, this knowledge of the text embodied in iterating drafts (Figure 13.5), were the basis for delineating the parameters for each of Borges's hand's typographic style as well as the overall stylistic approach guiding

FIGURE 13.5 Iterative drafts of Judería.

all the transcriptions. Following the idea that each transcription must become another version of the text, a new image with its own internal logic, I favoured the choice of an unassuming, classic typeface, a design that would call no attention to its own form, that could be any typeface, and thus would let the next level of form, the composition, become the most prominent. Sans serifs, particularly non-humanist ones, typically offer a beautiful play in contrast in relationship to handwriting. Yet, if some particular qualities of the handwriting want to be preserved, they can be difficult to integrate. A feature I wanted to preserve in the transcriptions was Borges's very small x-height and relatively very long ascenders and descenders. I chose to work with a serif typeface, Kepler, by Robert Slimbach, a modern style typeface with an echo of humanistic proportions and calligraphic detailing that works particularly well with Borges's cursive hand. Its intellectual yet simple forms (qualities so fitting to Borges's literary style) make it the kind of typeface that one doesn't look at but reads. The family comes with a set of optical sizes, including caption, which is used for Borges's most typical and challengingly small and closed writing hand; the caption style is a version of the typeface design proportioned more robustly to be reproduced at small sizes.

To each of the previously identified writing hands, I assigned a set of typographic style rules that reflected their characteristics, the variations included choice of style (italic or roman), weight and optical size masters (text regular or light, caption regular or light), and overall spacing (tracking) as well as scales of baseline shifts (1 pt or .5 pt increments). Only Hand A, the very early and flowing

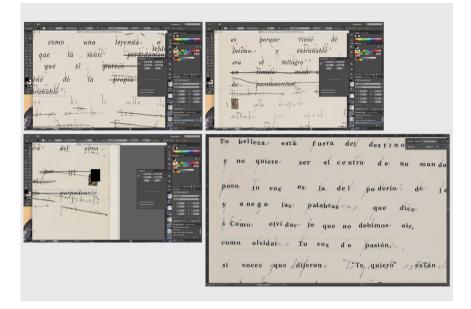


FIGURE 13.6 Layers and examples of baseline shifts in Illustrator.

writing style, is represented in italics; this style is, following Noordzij's theory of writing, 'a running construction in writing' and captures a key feature of Borges's young hand (Noordzij 2005).² All the hands are set in a light style, together with the generally open tracking of the setting, producing a delicate composition that sits well next to the facsimile as well as by itself. A particular challenge is always that of spacing and positioning of the words. Handwriting in general, and Borges's in some cases, tends to be significantly more open than the dense fabric of letters in a typographic text. Bridging that gestural distance between writing and type can be challenging as it demands the suspension of certain accepted rules of practice to maintain a correlation with the manuscript. I decided to work in Illustrator, for example, rather than InDesign, a more complex and apt typesetting software, because working against the grid was significantly more cumbersome. The texts were laid line by line, and letters positioned following their inscription in the page, and again, against all typographic wisdom, I tracked open the lowercase italic to account for the looser setting in writing (Figure 13.6).

For Borges's transcriptions, preserving the gesture of the page as a compositional space involved contending with a sometimes dramatically moving baseline, that is, the flow of the text upwards and/or downwards of an imaginary or existing line on which each letter and word sits. Baseline variation could be addressed either by drawing a curved path that follows the manuscript line and then flowing each line of text on it, or by maintaining the straight line of text and creating movement

Q	
T.	You have a second se
Store and a store of the store	▲ revelación de la Divina Unidad, que hará caTorce siglos aunó a los
40	Δ brevemente los rasgos diferenciales de ese destino :
0	DesTino escandinavo.
-	• modo verbal o de un modo real, ĉ sin duda hermoso,
ч Раге VI.112.	
10	Que el desTino de las naciones puede no ser menos inTeresanTe y patético q. el de los individuos, es algo que Homer
19	ignoró, que Virgilio supo y que los hebreos sinTieron profundamente.
Ta	sinTieron con intensidad los hebreos. Otro problema (el problema platónico)es indaga si las naciones .como tales, existen o son meras palabras colectivas inouiri
	•
Ta	initial de un mode teu e de un mode verbai , si son parabras colectivas e entes elernos; el necho
TA	a distante la
Pur un	nes — el utilmo de los monicanos, digamos — evidencian este patetismo de lo genérico. Versos como éste del Purgatorio
Purg. VI, 112.	Viene a veder la rua Roma che piagne
podido lamenta	rfrueban el paretismo de lo genérico, y Manuel Machado ha podido deplorar, en un poema hermoso, el melancólico desti-
de la	no de aquellos árabes. lamentar, en un poema sin duda hermoso, el melancó
d'a	lico destino de las estirpes árabes, "que Todo lo Tuvieron y Todo lo perdieron". Tal vez cabe observar aquí quedos cir
0	cunsTancias Acaso es lícito rememorar los do
-	hechos que hacía curioso ese desTino a recordar los dos ras
Deussen 396.	gos que distinguen ese destino : la fórmula Teológica No hay otro dios que Dios, que, hará catorce siglos, congregó a
10	los pastores de un desierto y los arrojó a una batalla que no ha cesado y cuyos límites fueron la Aquitania y el
10	Ganges ; la misión filosófica de los árabes
Deussen 426.	el culTo de la filosofía griega que los árabes. Tal vez sin enTenderla del Todo. TrasmiTieron al OccidenTe.
A	del el culto de Aristóteles que los árabes, tal vez sin comprenderlo <u>en</u> -todo, trasmitieron al Occidente, como quien
A	repiTe o Transcribe un mensaje cifrado, árabes enseñaron a Europa, Tal vez sin comprenderlo del Todo, como si repiTie-
A. lit. germ. 68	, ran o Transcribieran un mensaje cifrado Por lo demás, Tener y perder es la común vicisiTud de los pueblos. EsTar
	γα punτo de Tener Todo y perderlo. Todo es el Trágico. desTino alemán. Más extraño y más parecido a los sueños es el
afín a los /	desTino escandinavo , que procuraré definir. 2
Karsten 39. pj	Jordanes, a mediados del siglo VI, dijo de Escandinavia q. esta isla (por isla la Tuvieron (entonces) era como el taller o vaina de iny 1 359
S S	instollador de los godos, escribio que la isla de Escandinavia era como
Plinio VIII 16.	las naciones (Scandza insula, quasi officina genTium auT veluT vagina naTionum); las bruscas apariciones d. escandinavos carTógrafos
	en los lugares más hererogéneos del orbe debieron d. confirmar este parecer, que ha quedado Tradicional. + los cosmógrafos y los hisToria
10	dores latinos) era como el Taller o vaina de las naciones ; las bruscas tropelías escandinavas en los más heterogéneos puntos del orbe confirmaron este parecer, que ha legado a la literatura la frase
	commaron es e parecer, que na segado a la interatura la trase Lor 164, Jerrold 285, Lor 126, legó a De Quincey la frase <u>officina gentium.</u>] En el siglo IX los vikings irrumpieron en Londres, exigieron
159,160, Lot 138	d. París un tributo de siete mil libras de plata y saquearon los puertos de Lisboa, de Burdeos y de Sevilla. Hasting, merced a una estra ha.
	ha. Tagema, se apoderó de Luna, en Erruria, y pasó a cuchillo a sus habitanTes
XII, 1213.	
Oman 409, E. Br.	defensores y la incendió, porque pensó que se había apoderado de Roma. Thorgils , jefe de los Forasteros Blancos (Finn Gall), rigió el Norre de Irlanda ; los clérigos, destruidas las bibliotecas, huyeron y
XIV, 764, LoT 176	uno de los exilados fué EscoTo Erígena. Un sueco, Rurik, fundó el reino de Rusia ; la capital, antes de llamarse Novgórod, se llamó IX.840.
Lot 194 E.Br. XXV	13.840. _{Il} Holmgard. En el siglo X los escandinavos desembarcaron en Groenlandía ; hacia el año 1000, en América.
	lir. germ. 85. Hacia elaño 1001 escandinavos, bajo Leif Eiriksson, arribaron
	Holmgard. Hacia el año 1000 los escandinavos, bajo Leif Eiríksson, descubrieron a América.
	arribaron a la cosTa de América. Nadie los inquietó, pero una
(TS)	mañana (según consTa en la Saga de Erico el Rojo) muchos hombres en canoas de cuero desembarcaron y (miraron con extrañeza a
con algún X	los intrusos. + los miraron con un vago esTupor.} " Eran oscuros y muy mal parecidos y el pelo d. las cabezas era feo ; Tenían ojos
E.Br. XXVIII,99.	grandes y anchas mejillas. " Los escandinavos les dieron el nombre de skraclings , gente inferior. Ni escandinavos ni esquimales,
Olof Sagas 112,	Weinhold 61, { skraelinger , + skraelingar ,}

FIGURE 13.7 Typographic translation of a page from 'Destino Escandinavo'.

through a baseline shift. The first approach, text on a curved path, has the effect of tilting the letter's axis through a slight rotation, whereas the second approach seemed to me more in tune with Borges's actual writing, and shift up or down without rotation, and thus it became the convention of choice to incorporate the baseline movement. Though less frequent in the poems, dramatic line drops can be found in his prose, as seen in page 5 of the *Ensayo sobre Flaubert*, where tightly

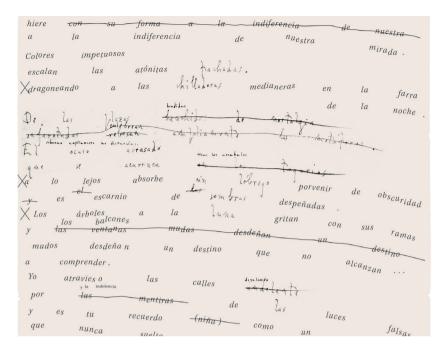


FIGURE 13.8 Hybrid texts.

packed lines start to break, words open, and letters drift away, reminiscent of a Mallarmé poem.

All the transcriptions incorporated the limits of the page, outlined with its breakages or the metal spiral of the notebooks where Borges wrote (Figure 13.7). They also include the drawings and block deletions as image elements that are intrinsic to the composition and should therefore be preserved. The final stage of translation involved placing both versions, the photographic and the typographic, side by side, and making final modifications, adjustments, and deviations from the style guides to create a series of 'accurate inaccuracies' so that the correspondence that began very strictly in terms of placement of letters and words is made less accurate to more truthfully represent and ground the compositional gesture of each document.

Typographic studies

The typographic facsimiles as tools for research in genetic criticism provided one direction for this work where the production of each manuscript contributed to the refinement of the transcribing style guidelines. The particularities and evocative

FIGURE 13.9 Texts in relief.

qualities of some manuscripts both invited and defied, sometimes overwhelmed, the typographic text's potential for manifesting language. These edge scenarios – Borges's smallest and most illegible fragments like *Mateo XXV*,30, or the young and carefully drawn poems like Ciudad, or the late fragments from a Borges who reaches to make final inscriptions on the square notebooks in large, elongated and distorted letters, almost completed blind – were points of departure to explore other forms of typographic expression and dwell on the evocative qualities of these ephemeral instantiations of language. My studies and series of images created in relation to these textual fragments play with new contexts for these translations and allow the language of typography 'to be powerfully affected by the foreign tongue', as Benjamin proposes in 'The Task of the Translator' (1968). A series of Hybrid Texts (Figure 13.8) integrated fragments of Borges's handwriting in the typographic facsimiles of early poems such as *Ciudad*, testing the degree to which the gesture of the page is echoed in the reproductions as well as the cohesiveness of the translations by blending the written and typeset drafts.

Another series explored dimensional texts: 3D printed fragments of Borges's blind hand in solid and liquid deposition reliefs that literally extend the dimensions of the text and the ways in which to encounter them in space (Figure 13.9). A final series on explorations (Figure 13.10) looks into the counter-spaces, the white of the words, mapped as vectors in Borges's tiniest writing fragments around the x-height segment of the letters; 3D printed in white filament, they appear as

FIGURE 13.10 White texts.

the most abstract and the most distanced from the manuscript text and yet, the load bearing white of the words draw a possible architecture in Borges's writing. These studies extend and obscure linguistic communication to bring forward the graphic dimension of the text and its communicative potential. In "The Wall and the Books', Borges writes: 'Music, states of happiness, mythology, faces worn by time, certain twilights and certain places, all want to tell us something, or have told us something we shouldn't have missed, or are about to tell us something; that imminence of a revelation as yet unproduced is, perhaps, the aesthetic fact' (Borges 1974).

The series of typographic transcriptions proposed a set of guidelines for transcribing Borges's manuscript and produced a corpus of typographic facsimiles that make manuscripts legible and accessible, revealing them for study, while tenaciously and enthusiastically committing to the complementary but formally autonomous and expressive nature of the translations. This aesthetic dialogue between written and typographic texts is never definitive, but an ongoing negotiation and an opportunity, always mediated by techniques and technologies. I see these adaptations and translations as boundary objects and contributions to a dynamic field of practice. They pull the manuscript from the archive, extending and enlivening the textual system while shifting design away from a purely utilitarian support for language and towards an expressive space, contributing as equal and affirming partner to the construction of the textual apparatus. For designers, they

offer insights into the potential relationships of different expressions and forms of language and typographic texts, entangling and problematizing the mechanical means and nature of typography and its constructs.

Notes

- Earlier versions of this chapter have been published in *Poemas y Prosas Breves*, by J. L. Borges, edited by Daniel Barlderston and Celeste Martin, 2018; and in *Cuentos*, by J. L. Borges, edited by Daniel Barlderston and Celeste Martin, 2020.
- 2 It is an italic style and not a script typeface because the individual letterforms don't connect to one another as is typically the case in scripts such as the one used for Acevedo's hand. Noordzij distinguishes between 'an interrupted and a running construction in writing'; Borges's later hands all follow more closely the appearance of an interrupted structure.

References

- Benjamin, W. (1968). 'The Task of the Translator', in translated by Harry Zohn, edited and introduced by Hannah Arendt, *Illuminations* (pp. 69–82). New York: Harcourt Brace Jovanovich.
- Borges, J. L. (1974). Obras Completas. Buenos Aires: Emecé.
- Borges, J. L. (2018). *Poemas y Prosas Breves*, edited by Daniel Balderston and Maria Celeste Martin. Pittsburgh, PA: Borges Center, University of Pittsburgh.
- Borges, J. L. (2019). *Ensayos*, edited by Daniel Balderston and Maria Celeste Martin. Pittsburgh, PA: Borges Center, University of Pittsburgh.
- Borges, J. L. (2020). *Cuentos*, edited by Daniel Balderston and Maria Celeste Martin. Pittsburgh, PA: Borges Center, University of Pittsburgh.
- Bringhurst, R. (2011). What Is Reading For? Rochester: RIT Press.
- Dickinson, E. Amherst Manuscript 339 (Risk is the hair that holds the tun), in Box 4, Folder 73, Emily Dickinson Collection, Archives and Special Collections, Amherst College Library. https://acdc.amherst.edu/view/asc:7989/asc:7992.
- Dickinson, E. (2013). *The Gorgeous Nothings: Emily Dickinson's Envelope Poems*, edited by Jen Bervin and Marta L. Werner. New York: New Directions.
- Kline, M.-J. and Susan Holbrook Perdue (2008). A Guide to Documentary Editing, third edition. Charlottesville: University of Virginia Press.
- Lupton, E. (2004). Thinking with Type: A Critical Guide for Designers, Writers, Editors, & Students. New York: Princeton Architectural Press.
- Noordzij, G. (2005). *The Stroke: Theory of Writing*, trans. Peter Ennenson. London: Hyphen Press.
- Robinson, P. (1994). *The Transcription of Primary Sources Using SGML*. Oxford: Office for Humanities Communications Publications.
- Werner, M. L. (1995). Emily Dickinson's Open Folios; Scenes of Reading, Surfaces of Writing. Ann Arbor: University of Michigan Press.

- Werner, M. L. (2007). "A Woe of Ecstasy": On the Electronic Editing of Emily Dickinson's Late Fragments'. *Emily Dickinson Journal*, 16(2): 25–52.
- Werner, M. L. (2021). Writing in Time: Emily Dickinson's Master Hours. Amherst, MA: Amherst College Press.
- The William Blake Archive, edited by Morris Eaves, Robert N. Essick, and Joseph Viscomi. www.blakearchive.org/ 1996-2022.

14 CENTRING ANTI-RACISM IN DESIGN: FROM THEORY TO PRACTICE

Terresa Moses and Lisa Elzey Mercer

ducators often question how to integrate topics of diversity, equity, inclusion, and access into curriculum, especially with courses whose objectives do not include these topics (McGlynn 2012). As educators, we must be actively responsible for how we define our roles with matters regarding social justice, anti-racism, and human rights (Jolviétte 2012). Racism Untaught was co-developed by Terresa Moses and Lisa Elzey Mercer as a toolkit to help participants in co-participatory spaces, workshops, and courses create antiracist approaches in academia, industry, and community. The workshops have been conducted with over 2,200 participants - over 600 hours of workshops, 12 college-level courses, and numerous national and international presentations in academia, industry, and community. The framework was initially developed for educators as a set of tools and interventions for participants to analyse and re-imagine racialized artefacts, systems, and experiences. Our industry partners were searching for ways to integrate anti-oppressive collaborative processes into the landscape of their organizations and to break down their processes long before they realized they had developed yet another artefact, system, or experience of racialized design. In this chapter we will explore the development of the framework titled Racism Untaught, and the iterative methodologies used to improve upon each intervention integrated into the framework. We will explain further the use of prompts specific to each partner and the value of identifying and analysing elements of oppression that exist from the very front end of the design process to the development and iterative end of the design research process (Figure 14.1).

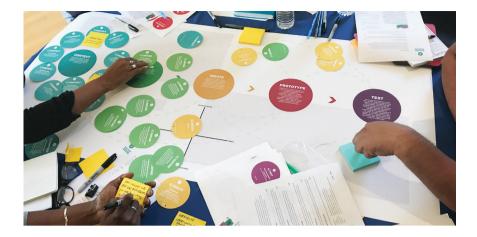


FIGURE 14.1 Participants using the Racism Untaught toolkit at the Design + Diversity conference in August 2018.

The workshops are intended to develop a collaborative co-participatory space where groups of participants are provided with a set of language to have intentional conversations on race and racism. In the workshop they utilize a series of tools and interventions integrated within the design research process. The interventions are meant to create pause for action and/or critical thinking in the design research process. The workshops also provide the co-developers with a generative research methodology, insight through observations and feedback from participants (Sanders and Stappers 2012), to iteratively develop interventions, shared language, and innovative ways of thinking to integrate within or in addition to the toolkit. We acknowledge and value the insight and experiences participants bring with them from different disciplines and industries, making it a point to state in each workshop, 'We are ALL designers of artifacts, systems, and experiences.' Using the Racism Untaught framework provides a space for people to think collectively to explore oppressive artefacts, systems, and experiences. The participants of these workshops engage in a sequence of situated actions that begin with working towards a shared context of a racialized prompt. In the 1980s anthropologist Lucy Suchman who was studying human capacities while working at Xerox PARC determined, 'nothing can be understood without first understanding its context' (Suchman 1987: 27). Suchman introduced the term situated action as a way to discuss the development of an intentional space for shared understanding (Suchman 1987). The creation of the framework and toolkit was meant to create a space for participants to work collaboratively, but it was also for facilitators of the framework to have a pedagogical tool they could integrate into any space.

Creation of the toolkit

Our experience as women of colour in academia

As a Black, Indigenous, or woman of colour in academia, we do not have the luxury of ignoring the social construct of race and how this conditioned ideology crafts a narrative about us before we have even opened our mouths. Despite this reality for racialized people in our society, academia (like many overwhelming white spaces) is not comfortable addressing racism and will instead ignore the issue of race in hopes that it will eventually go away. White people, unfortunately, take a 'colorblind approach to race result[ing] in a denial of these experiences and meanings, and prevent us from addressing the social, cultural, and historical implications of race' (Yancy et al2014). But, if there is one place where topics of uncomfortability should be woven into the cultural discourse, it is academia – institutions of higher learning. As bell hooks states in *Teaching to Transgress*, 'The classroom remains the most radical space of possibility in the academy' (hooks 2017). We made it our mission to explore issues of racism as we began our research. We wanted to discover how we might leverage design research and anthropological methods to create anti-racist design approaches.

This undertaking was not without its additional costs - a cultural taxation¹ to us as faculty of colour. Leaving issues of race up to the racialized faculty is the calling card of many organizations including the predominately white institutions (PWIs) that we teach at. This issue is seen across higher education as non-white faculty are disproportionately charged with teaching these concepts in their courses. Problematically, students and faculty begin to associate research and teaching about racial justice entirely with racialized faculty. How is it that we, in our vulnerability as non-tenured faculty of colour, are to challenge this idea all while continuing to engage students in coursework which explores their positionality in the context of race? We are inherently 'battling the exhaustion and burnout that comes from being one of the few faculty members of color and being tapped not only to mentor and sit on every committee that desires a [Black, Indigenous, or person of color's perspective but also to help students process their own experiences with microaggressions and racial traumas' (Huff 2021: 25). The fact remains that issues of race and racism should not be left up to the oppressed. We need strategic and intentional help from those who benefit from systemic racism to address these issues as well, changing the cultural narrative that this is everyone's responsibility.

Our first anti-racist research project

We began working together in 2016 to map out anti-racist movements so that we might apply design methods and processes to create effective solutions for community and police relations. Our goal was to create a dynamic interactive informational system that correlates all the data we pulled to help address and create effective solutions for police reform, training/hiring practices of law enforcement, community reform, how authority is received and given in communities, and building empathy and diversity sensitivity in the system of policing. We put together a team which consisted of four designers, a statistician, a sociologist, and a former public defender. We met on a consistent basis to keep up to date on our findings and keep us all moving forward as we used the design research process to craft approaches to these issues. In parallel, we aligned an advisory team which provided feedback in ensuring we met our goal. The advisory team consisted of a professor in communication and media, a professor in philosophy, a community activist, and even a police chief.

We worked together to eventually create this question that guided our work: *How can activist movements and their portrayal on civic/social media be unified/redefined to overcome the negative/tragic community and police interactions?* We worked on this project for almost a year gathering data, understanding systems of oppression, and creating community relationships that would guide the forthcoming actions to our design research. Then, in November of 2016, the 45th president of the United States was elected. The hope we carried in our work was deflated, and by March of 2017, we sent an email to our team and advisers that we would be halting the extensive work we were doing. We knew we would be shifting our focus, perhaps addressing the heightened racial division and institutionalized support of racism in the United States.

Shifting to racialized storytelling

For many racialized communities, storytelling is a way to keep history and remember the work of our ancestors. As we, back down to a team of two, considered ways to shift our research and use design for our anti-racist agenda, we looked back at all the data, research, and stories we had collected. Was there a way to use design to more effectively communicate the stories of Black people harmed not only by police but by institutionalized and systemic racism? In our previous work, we pulled over twenty accounts of police violence from 2012 to 2016 in conjunction with all the movements that began because of them. We also looked back historically at movements for civil rights in order to craft the full narrative – how were we going to move forward knowing the historic contexts?

It is at this point we began to think about how we move our learnings into the classroom. This more than relevant issue – or what we came to find, set of issues – could and should be used in our design courses as a means to explore race in the United States and how we as designers can approach these issues in an anti-racist way.

A three-month idea

During a lunch meeting in April 2018, we took out sticky notes and butcher paper and began brainstorming – a typical process we learned while completing our graduate degree together. Our goal was to research the art of storytelling using visual elements like photographs, illustrations, and/or videos. We were particularly interested in racialized experiences and stories of discrimination and, specifically, police brutality. We were hoping to use design to effectively communicate these narratives in order to change perspectives and positively change institutional discrimination.

We scheduled meetings the week of May 2018 during the University of Minnesota Duluth Viz/MMAD Lab Interdisciplinary Residency we had received. We were hoping to gain the foundation to start a national awareness campaign on the stories that are often left untold. We were immersed in examples of similar awareness campaigns and how these stories can change the perspectives of individuals and impact positive change in our communities. We also looked to perspectives from the social sciences to help inform design decisions and iterations. During the residency, we explored how we might use the design research process as a foundation to critically analyse racism in the classroom, more importantly, with a focus on helping other design educators use the design research process to assist them in helping students explore issues of racism. How might we improve the design curriculum by incorporating multicultural references through critical thinking tools? Essentially, *how can design positively and effectively integrate antiracist concepts into project-based learning environments*?

Before crafting the workboard, we named the project Racism Untaught. We knew that no one takes a *How to Be Racist 101* class; however, we lived in a society where racism was perpetuated every day. We did not create the toolkit to prove that racism existed; rather, how might we unteach racialized behaviours and outputs?

It was in this brainstorming phase that we leaned on our own needs as designers. First, knowing that we needed a workspace to brainstorm (first referred to as the Card Fold-Out Board and later called the Workboard) and secondly, elements to assist participants to think through each step (later referred to as the Cards). With all this in mind, and an existing design research framework in which we were quite familiar, we opened up Adobe Illustrator and created our first workboard (Figure 14.2).

As shown in Figure 14.2, we used the five steps of the design research process as the entryway to exploring topics of racism and other forms of oppression. The one adjustment that we did make is changing the first step, typically called *empathy to context*. We intentionally made this change due to our own experiences as people of colour. We like to say that 'if we wait for everyone to gain empathy around issues of racism, we would never get further than the first step'. We would essentially be waiting forever. Changing this step to context allows for participants to gain an

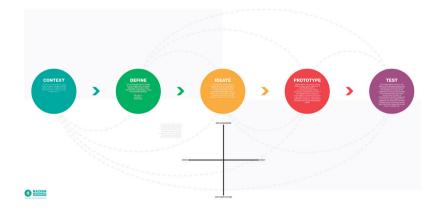


FIGURE 14.2 The first iteration of the Racism Untaught workboard.

understanding of racism even if they have not quite gotten to the empathy yet due to their own guilt, shame, or ignorance. The steps of the workboard and their descriptions are as follows:

- **Context (in teal):** Use the terms in this deck to create context around the design challenge (artefact, system, or experience) and discuss how racism shows up in the world around us.
- **Define (in green):** Use methods and theories to define how you might solve your design challenge. Next, create a thesis question ('How might design ...') using these guiding statements: We want to ... In order to ... With whom
- Ideate (in gold/yellow): Use an artefact, system, and/or experience to create something that will help in your design challenge. Incorporating qualitative and quantitative ethnographic research methods, how can you affect change or be a part of the solution? Use the quadrant map below to plot your ideas.
- Prototype (in red): Fidelity refers to the function of your artefact, system, and/ or experience. A low-fidelity ideation is non-functioning and is initially presented to communicate your idea. A mid-fidelity ideation is limited in functionality but presents interactions and possibilities of your application. A high-fidelity ideation is a pixel-perfect prototype with minimal modifications needed.
- **Test (in purple):** The student and/or instructor will define a rubric that demonstrates both a mastery in the determined artefact and the ability to incorporate the methods and processes at an advanced level of understanding. The student should be able to: Exhibit an understanding of racialized design and anti-racist concepts, Apply learned concepts in new

situations, Use critical thinking to draw connections among ideas, Justify their design choices, and Create an original idea.

In reference to the colours used on the workboard, we wanted to express an overall friendly feel as we expected participants to feel overwhelmed with the idea of looking at racialized design. We thought the teal colour used in the first step was a friendly opener (juxtaposed with the idea of breaking down, what we called at the time, symptoms of racism) and we chose purple for the last step because purple is associated with concepts of liberation. The green and red colours would flip in later iterations, which we will explain later in this chapter.

Also shown in the first model are the grey dotted lines which connect steps across one another. It is a call back to the iterative nature of design research. Although there are arrows that guide participants to the next step, we wanted the process to be thought of as both linear and nonlinear. We also wanted to keep these grey lines in the process due to the emphasis on continued learning for participants – perhaps needing to move back to *define* or *context* even if they were at the *prototype* step. When discussing issues of race and racism, continued learning is a good mindset to have.

Next, you will see the quadrant map (Sanders 2008) intervention underneath the *ideate* step. We understood quadrant maps to be a great way to break down and dissect ideas or concepts, from effective to non-effective, positive to negative. We knew that we wanted participants to work in groups and continue, throughout the whole process, questioning if their idea was moving their stakeholders from *racialized design* to *anti-racist action* and from *good intent* to *positive impact.*² We stated on the workboard near the quadrant map: 'Through discussion, use this quadrant map to help evaluate the value of each idea. On the X-Axis, consider the intent of the idea in comparison to the impact? On the Y-Axis, consider how far your idea shifts systemically racist thought(s)?'

In conjunction with the Card Fold-Out Board, we created cards with terms and definitions that were correlated to each step. The cards were meant to assist participants in each step of the process and provide opportunities for discussion. We had 89 cards in total. Context had 17 cards, *define* had 11 cards, *ideate* had 36 cards (16 artefacts, 7 experiences, 13 systems), *prototype* had 11 cards (5 low-fidelity, 3 mid-fidelity, 3 high-fidelity), and *test* had 14 cards to help participants in the creation of their rubric.

Before we had the idea to have participants create their own prompts, we created an archive of racialized design examples which participants could take through the process we had created. We even pulled examples of our own racialized experiences and created videos with recorded audio. Very early on, we decided that anonymizing the prompts and making them slightly ambiguous provided participants with the space to ask context questions. We keep to this structure to this day. We want participants to find the answers themselves. 'Leaving holes

can be used to trigger people's imaginations. Similarly, an open-ended sentence can be a very inviting way to ask a question. By having people complete the sentence, rather than provide an answer, we are likely to learn much more about the person and also get a much wider variety of responses across people' (Sanders and Stappers 2012: 45).

In June 2018, we felt like we had gotten to a place where we could easily explain our idea (i.e. a low-fidelity prototype). We put together our advisory team to consult with us and provide feedback on the path we were headed. Our initial advisory team started with four individuals: a philosopher and race theorist, an intercultural Initiatives lead, a community activist and sociologist, and a historian and researcher. From the meetings with our advisors, we learned to craft clear definitions and have clear examples for our participants.

The first term we were challenged to define was *racism*. We defined racism as 'the conscious or subconscious belief that the social construct of race is the primary determinant of human capacities, and the most predominant race is inherently superior (i.e. the White race over People of Color in the United States)'. This definition helped us define racialized design as 'design that perpetuates racism through artifacts, systems, or experiences'. Next, due to our previous research on police brutality in the United States, we used this topic as an example when we went to define racialized *experiences* as 'an observation of or participation in events'. We defined *artefacts* as an 'object showing human workmanship or modification' and *systems* as 'an organized set of doctrines, ideas, or principles usually intended to explain the arrangement or working of a systematic whole'.

We were also challenged by our advisory team to not think of our context cards as *symptoms* of racism but rather *elements* of racism. The *elements* of racism provided participants with a way to organize conversation (Suchman 1987) and create shared language around the issues of race and racism. After meeting with our advisory team and gaining additional insights into our framework, we were ready for our first workshop.

Pilot workshop study

Workshop summary

In the pilot workshop for Racism Untaught participants were all from the Design + Diversity conference and each person came from different sectors of design including academia, industry, and community (Figure 14.3). The workshop was being provided on the day prior to the conference where roughly eighty to ninety participants came together to experience a series of events. The Racism



FIGURE 14.3 Participants engaging in the first Racism Untaught workshop.

Untaught workshop was one of the forty-five-minute sessions. Participants came from multiple disciplines and industries, with different lived experiences specific to race and racism. The participants at this conference were already focused on social impact, diversity, equity, inclusion, and access to work or they were looking to learn language, tools, or ways of thinking to begin a role, committee, board, or organization with this focus.

Description of setting, analogue tools, prompt, and workshop

There were seven groups, each having four to eight participants who sat at their own table supplied with a *Racism Untaught* toolkit (Figure 14.2). The toolkit was set up with a workboard that included the design research process, and each step was visually a different colour. On the workboards participants had sticky notes, markers, and cards that corresponded with and matched with the colour of each step (Figure 14.1). Each group was prompted with the same experience before they started working on the first step, *context* (Figure 14.4).

The prompt was provided in two different formats, the first being a video that illustrated and spoke out loud the racialized lived experience; the second format was a piece of paper with the experience written out with a correlating illustration (Figures 14.4.1–14.4.6). The prompt read:

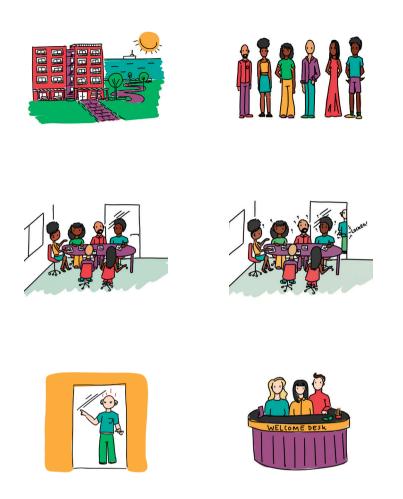
I called some fellow community members over to my apartment building for a meeting on a Sunday afternoon (Figure 14.4.1). There were six of us in total. Five

of us were African or African heritage and one was Asian (Figure 14.4.2). We were meeting in the large conference room at the front of my building. The room had a large glass door which automatically locked once you closed it (Figure 14.4.3). We had just started our meeting when an older white man came to the door and tried to open it. We all looked up, and puzzled I might add, because we weren't expecting any more guests (Figure 14.4.4). He began talking and raised his voice so that we could hear him and asked 'Can someone get my newspaper off the floor? All of the newspapers are on the floor, can someone come get these!?' (Figure 14.4.5). It was very clear that he believed one of us worked at this apartment building but since the apartment's grand opening almost two years ago, there have been no employees of colour (Figure 14.4.6).

Once the prompt was shared with participants, they were guided through the framework with an informal session script that included: the time allotted for each step, the actions participants would be prompted with, and a reaction to each step. The participants began with step one: *context*. Participants were given ten minutes to place the elements of racism around the *context* circle they all agreed were explicated in the prompt. This exercise was meant to provide participants with a way of understanding and realization of the ways racism shows up in the prompt. In step two, *define*, participants had ten minutes to make a selection from the cards that listed methods or theories and then place them around the *define* circle. Then the participants were asked to determine a thesis question or research statement that focused on helping them understand the prompt through the application of these methods and theories. In step three, *ideate*, participants had ten minutes to review the cards that gave examples of artefacts, systems, and experiences and they were asked to place the cards they could imagine applying to the factors they learned in their research to re-imagine the prompt. The workshop ended after step three but the next two steps, *prototype* and *test*, were explained to make sure participants understood the intentions for the entire process.

Iterative changes to the toolkit

During the workshop and after the workshop was complete, we received many comments and feedback on each step of the process. With the iterative nature we both placed in our research process this feedback was exactly what we wanted to make sure the participants – an audience who is engaged in the work we are also engaged with – understood our purpose in developing this toolkit. The interests of the participants in this workshop were intentional as the pilot. Due to the nature of the toolkit being action-oriented, participants were the note takers and as we walked around the room during the workshop, we were able to answer questions that helped us understand where more clarity was needed. We documented the workshop with photos of the room, the tables, and the toolkits.



FIGURES 14.4.1–14.4.6 Screenshots from the scenes of the story 'The Apartment Meeting'.

Language

Once the workshop was complete participants asked if they could take the first set of context cards – elements of racism – with them. The terms provided participants with the shared language necessary to discuss their own racialized experiences or experiences they have witnessed. The value of a shared language (Fricker, 2007) to express an idea is generative in that it allows an individual to gain even further understanding of their identity.



FIGURE 14.5 A mock-up of the context cards showing the terms 'anti-Black racism' and 'misogynoir'.

Additional elements of racism

Each group was given five blank cards in addition to each set of cards. The participants were asked to provide any additional terms they did not see represented in this toolkit. We acknowledge that culture and language change over time and still provide the blank cards to ensure participants feel open to adding their ideas to each step. As previously mentioned, the toolkit began with seventeen elements of racism and now the toolkit has seventy-four elements of racism (Figure 14.5).

Workboard layout

The workboard has always included the design research process; however, we have made changes to work towards ethical and responsible ways of analysing and re-imaging oppressive design. The last step in the design research process is normally titled *test*; however, we did not really see this as the goal we wanted participants to work towards in their understanding of the work they were creating. In a workshop we conducted two months later than this pilot workshop we changed the last step to be called *evaluate*, eventually changing what it is currently called, *impact*. We ask that participants move past good intentions and truly understand the impact of their work through this iterative framework. We have two different workboards (Figure 14.6), one for academia that includes the rubric we recommend, and the second workboard primarily for industry and community and does not include the rubric.

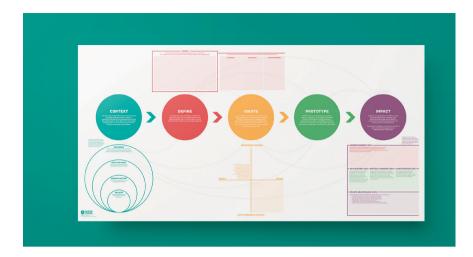


FIGURE 14.6 A mock-up of a later version of the Racism Untaught workboard.

Guidebook

We had many participants ask how they could implement Racism Untaught into the spaces they worked. This included people from each sector of academia, industry, and community. We wanted to ensure people understood how to work through the toolkit if we were not facilitating it. This prompted us to develop two guidebooks, one for academia and one for industry. The academic version included more information specific to the running of a course, that is, syllabus, rubric, readings, and group development. Eventually, we combined both versions of the guidebook because we found each sector was interested in the onboarding process we implemented.

Get started

We created two PDFs – one for academia and one for industry – that outlined the ways people could work with us to help assist in cultivating learning environments to further explore issues of race and racism. We outlined our goal as twofold: (1) to guide educators and students to utilize design research methods and processes to solve systemic problems and inspire further work in the public sector or a passion for public service; and (2) to facilitate workshops to help participants learn how to identify systems, artefacts, and experiences that perpetuate elements of racism.

Conclusion

Racism Untaught has iteratively changed due to not only the initial workshop but also the workshops and classroom experiences that followed. We have since added a community agreement and onboarding activities that help participants explore their positionality in the context of race before beginning the framework. The Covid-19 pandemic also played a role in how we moved the toolkit online and continued to safely facilitate workshops for academia, industry, and community. The workboard has gone through four major iterations which has made the exploration of racialized design accessible to a variety of industries (design, social work, real estate, etc.). We have added additional cards to all of our steps and now have the liberty of exploring different intersections of oppression including sexism and ableism (with more to come). Our fifth major change in December 2022 was made for further accessibility and also more easily package the toolkit. We essentially broke down each step and sub-steps into their own 15×15 inch workboards. We reduced the size of the associated cards (which has now grown to almost four hundred cards in total). We are excited for the future of Racism Untaught and will never cease to iteratively and critically think about its design as a means to create anti-racist approaches in academia, industry, and community.

Notes

- 1 As defined in the Racism Untaught toolkit, Cultural Taxation is a unique burden placed on Black, Indigenous, and people of colour to carry out responsibility and service as the only represented minority within an organization.
- 2 As defined in the Racism Untaught toolkit, Intent Over Impact is prioritizing wellintended actions over the negative impact they might have had on an individual who identifies as a Black, Indigenous, or person of colour.

References

Fricker, M. (2007). Epistemic Injustice. New York: Oxford University Press.

- hooks, b. (2017). *Teaching to Transgress: Education as the Practice of Freedom*. New York: Routledge.
- Huff, C. (2021, 1 November). 'Building a Better, More Diverse Faculty Many Universities Are Ramping Up Efforts to Recruit and Support BIPOC Faculty, but Inequities Persist'. 52(8): 25. https://www.apa.org/monitor/2021/11/news-diverse-faculty.
- Jolivétte, Andrew J. (2014). 'Critical Mixed Race Studies: New Directions in the Politics of Race and Representation'. *Journal of Critical Mixed Race Studies*, 1(1): 149–61. https://www.jstor.org/stable/48644989.

- McGlynn, A.P. (2016). 'Creating an Inclusive and Respectful Classroom Environment'. In M. Bart (ed.), *Diversity and Inclusion in the College Classroom. Faculty Focus: A Special Report* (pp. 21–2). Madison, WI: Magna. [accessed 23 July 2019]. Available from: https://provost.tufts.edu/celt/files/Diversity-and-Inclusion-Report.pdf
- Sanders, E. (2008). 'An Evolving Map of Design Practice and Design Research Interactions', *Interactions*. 15(6): 13–17.
- Sanders, E. B.-N., and Stappers, P. J. (2012). *Convivial Toolbox: Generative Research for the Front End of Design*. Amsterdam: BIS.
- Suchman, L. A. (1987). *Plans and Situated Actions: The Problem of Human-Machine Communication*. Cambridge [Cambridgeshire]: Cambridge University Press.
- Vera, A. H., and Simon, H. A. (1993). 'Situated Action: A Symbolic Interpretation', *Cognitive Science*, 17(1): 7–48, ISSN 0364-0213, https://doi.org/10.1016/ S0364-0213(05)80008-4.
- Yancy, D., Yancy, G., and Davidson, and del Guadalupe, M. (2014). *Exploring Race in Predominantly White Classrooms: Scholars of Color Reflect.* New York: Routledge.

15 IT'S NOT JUST ABOUT MOUNTAINS YOU KNOW: NATURE-CLOTHING WRITING AS DESIGN PRACTICE

Kate Fletcher

he first book of nature writing that I read was The Living Mountain by Nan Shepherd ([1977] 2011). It is a gloriously uninhibited account of one woman's blended sensory experience of living in the Cairngorm massif in Scotland. In it, Shepherd talks not about being on the Cairngorm mountains, climbing and walking atop of them, but about going in, into their depths and mysteries. Her account is that of relationships with living systems. She weaves together her narrative to better understand both the world that she finds in the corries and bluffs and those same elemental parts of herself. It was a stroke of huge luck that I stumbled upon The Living Mountain. For so much else in the genre is not like this. Certainly, the distinctions are subtle, but they are there nonetheless. Many other titles feature prose that is as exquisitely descriptive as Shepherd's, yet in them the world can often feel somehow distant, held on the other side of hard thinking about - and reserved access to - living relationships. Perhaps it is that the majority of nature writing is slow to recognize the writer's many privileges: their having wealth enough to fund these journeys; their being sufficiently entitled to travel to mountain ranges and wilderness. Perhaps it is also their enjoying an unquestioned sense that they will be welcome in the places they write about; their having someone at home to cook dinner and to put the children to bed while they sleep in a bivvy bag in the mountains. When looking across the nature writing catalogue, what is obvious is that much of it chronicles lone expeditions

to difficult-to-arrive-at places. It often exalts in high ground and remoteness. It sets store in naming and classifying rare features of land or creatures. It outlines pre-scheduled encounters with key (human) individuals that quietly convey the writer's substantial cultural capital. Indeed, much nature writing reports a small group of elite men's experience and their take on what it means to know about the world. Little of it is within the experience of ordinary citizens. Rarely is it about unscenic nature or the scrappy bit of waste ground behind the bus stop. Too often it is separate from everyday life.

In this chapter I explore nature writing in a different way and for a different purpose. I explore it as a practice of design for sustainability, and specifically as a practice of design and nature. I also use it to ground knowledge in everyday experiences: the challenges of caring for kids, doing the laundry, cultivating friendships, being part of a community while also practising design in a period of profound ecological change. These things cannot be separated. Certainly, nature writing is not the typical modus operandi for sustainability work in design, yet I argue that it is a powerful route to a changed relationship between self, society, and the natural environment and our experience of connectedness within it. I wish to declare my interest at the outset: I have been writing about nature connection from my life experience, using the narrative 'I' for about eight years. I use it as a design research method and also as a learning tool which I turn on myself to teach myself about the world and my place within it. I write autobiographically about the relationships between clothing, design, and nature, including in the books Wild Dress (Fletcher 2019) and Outfitting (Fletcher and Mort 2022). In my nature writing I use garments as a conduit to a bigger ecological context in which sets of human and greater-than-human nature relationships unfold. I employ life writing to teach myself about ways of knowing about design other than scientist or reductionist ones that typify industry insights about fashion design and sustainability. I write from my life not because my life is interesting (it is not) but as a necessary pretext for getting closer to the places in which I live and the many others that are also there. Often this is a goal that cannot be approached directly. I also write autobiographically about nature connection including with clothes because when I do, I see that I must take action. This chapter, and I myself, am heavily influenced by the book Life Writing and Literary Métissage as an Ethos for Our Times by Erika Hasebe-Ludt, Cynthia Chambers, and Carl Leggo (2009) and my correspondence with them.

As the ecological crisis intensifies, so does the urgency of uncovering new knowledge that enables awareness and action, including for the design disciplines. In a world of finite ecological limits, questions of what and how we know, of what we value and how we act become about survival. Such questions also extend to the hubris and destructive bias of the dominant Euro-American, anthropocentric, mechanistic approaches to designing with nature which continue established power relationships and place humans at the top of the pile and nature at



FIGURE 15.1 A footpath through Macclesfield Forest, England, near the author's home.

the bottom, where it is, at best, a means to human ends. The questioning of anthropocentrism, so essential to action around design and nature, intersects with decolonial (Escobar 2018; Jansen 2020), feminist (Haraway 2016), and anti-racist (Ahmed 2017) discourses, putting forward ideas and practices of design that respond critically to the logic of domination.

A note on terminology: in this paper I adopt the definition of nature as the 'selforiginating material/spiritual world, of which we are a part, including the powers that sustain and govern it' (Bonnett 2002: 267). This is the same definition taken up by Louise St. Pierre and more generally within the book *Design and Nature: A Partnership* (Fletcher, St. Pierre, and Tham 2019), of which I was a co-editor.

Design and nature

Latter-day design training rarely includes context-based learning about design in relationship with the living world. Instead, what is more common are educational curricula that perpetuate an approach to design rooted in Euro-American mechanistic and modernist traditions which favour rationalism, mastery, progress, and innovation, including towards natural systems. Here, in a continuation of colonial power dynamics, nature is seen in terms of extraction and conquest, as a source of 'dead' resources, primarily available for use by humans. Joanna Boehnert (2018: 57) reminds us that ecological theory finds the reductionist, mechanical paradigm insufficient: 'The case against the dominant western worldview is that it no longer constitutes an adequate reflection of reality – particularly ecological reality. The map is wrong.'

Yet as Louise St. Pierre (2019: 94) explains in her essay 'Design and Nature: A History', despite its inadequacy in reflecting ecological realities, or perhaps because of them, much design practice persists in approaching nature superficially or instrumentally or both, seeing nature as inspiration for design, a source of ideas for pattern, colour, construction possibilities, efficient ways of organizing production, and so on. Even in these situations – when nature is on design's mind – design's relationship with it is typically approached through the lens of design as master. St. Pierre continues: '[C]all[s] to design with nature had great resonance for designers, but were diminished by human-centric applications ... nature remained an "other" for mankind's pleasure or manipulation' (ibid.: 95).

Leaving behind design processes where nature is both othered and exclusively centred around human interests is an ongoing challenge. It inevitably requires a suite of more embodied forms of design in relationship with nature, including nature writing about design interactions and artefacts from life experience. This in order to seed different nature relationships within design culture, education, and system structures most obviously by diversifying ways of knowing about design.

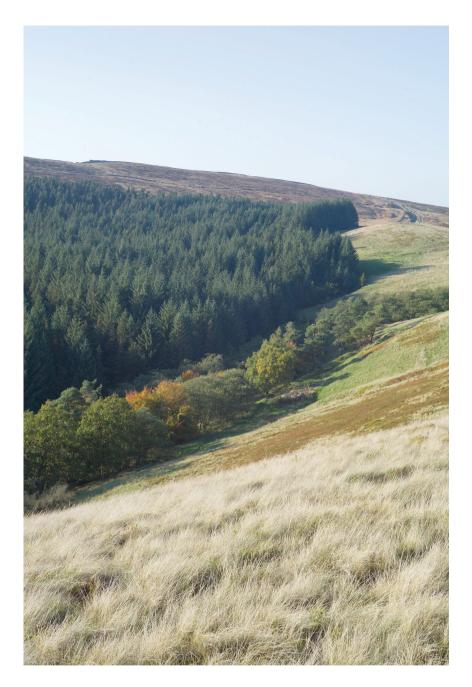


FIGURE 15.2 Moorland covered with bilberry, heather and rough grass interspersed with pockets of trees in the Peak District national park, England.

In this way, insight, such as that gleaned from sensory engagement with natural systems, forms the basis for how humans and greater-than-humans can flourish in mutually enhancing ways and becomes the starting point for design action.

Nature writing as a design practice

Nature writing that draws from direct, life experiences primarily require researchers and designers like me - and you - to craft pieces of autobiographical work in order to unveil and situate ourselves, to better understand the interdependencies that are part of our lives and work, and also to cultivate ideas of change. The form that design-nature writing from life can take is open in terms of content and genre (e.g. visual essay, historical narrative, diary entry, poetry, etc.). Yet its starting point is more targeted: privileging direct engagement with the world. Thus, nature-life writing transgresses traditional conventions and asks us to consider what design work looks like when it is reliant on direct experience; when it is explored in first person; when it takes us offline, into the streets and hills and does this repeatedly. It also asks what happens to the academy when new knowledge puts forward no grand universal ideas or theories of how to act. Design-nature-life writing transgresses a view that design is an industrial function largely embedded within the current economic system. Through reflective practices, like autobiographical experimentation and documenting, ideologies which are deeply embedded in contemporary design, such as individualism and competitive relationships, are revealed as partial. They may also be shown in exploitative association with the non-human world. It is through these practices' reporting of limited, direct experience of the world that ecological circumstances can begin to be revealed, with designers starting to interpret and analyse issues differently, revealing new partnerships and pathways for design.

Nature-life writing is a process of bringing into being different understanding and even different futures through paying attention to – and imaginatively joining – the world. Such a process seems especially critical given the imminent, existential threat of biodiversity loss (GBO 2020) and climate change, and the uncompromising deadline of less than a decade to transform our activities to prevent climate breakdown (IPCC 2018). It brings to the four questions including: how do we want to live? Who and how are we in relation with others? How ought we constitute our fields of study in these times of emergency with and alongside these others? To ask these questions requires that we turn inwards, that we first examine and research ourselves.

That nature writing from direct experience is self-reflexive is a truism and frequently a challenge. It necessitates self-awareness, that the designer opens up and, in the course of doing so, makes themselves vulnerable. Louise St. Pierre

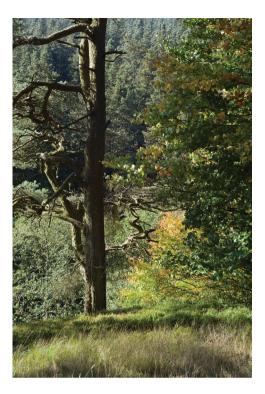


FIGURE 15.3 Goyt Valley, Peak District national park, England.

describes the process this way: 'I expose myself and my vulnerabilities to myself through writing, re-reading it later, and sharing that writing with others who might reflect my views back to me through their own lens' (2020: 9). For my part, I have felt exposed, uncomfortable, raw, and unconfident in the course of writing autobiographically. I have sometimes felt ashamed of my choices and motives. I have worried that I will be judged and dismissed. I have also worried that I might offend my family. Yet in writing like this I have also felt clear-sighted, connected, and personally powerful. I identify as a white woman raised in a working-class family in a disregarded city in the north of England who was repeatedly cautioned as a child not to contravene the gender roles or the established behaviours of the class I was born into. My grandparents warned me repeatedly not to 'get ideas above my station' and to 'know my place'. I complied, of course, not knowing what else I could do, or that I was ultimately participating in my own domination. In the UK, class does not only work as a de facto limit to status and wealth but also to curb cultural capital, opportunities, privilege, confidence, and so on. It is only as I have grown into middle age that I have found any sense of legitimacy and relevance in my lived experience, that I see that I too have a right to speak from places

other than academic learning. That this includes a right to speak about nature relationships, when I was brought up entirely surrounded by brick, slate, tarmac, and concrete, is perhaps especially surprising. That I have persisted with it as a method despite the challenges is not down to me being sure in what I create, but more, perhaps, because when I work in this way, I am sometimes gifted glimpses of something larger and intensely real, of an inner depth to our world that I only ever partly perceive – and this is electrifying.

To the best of my knowledge, writing about designed artefacts (such as clothing) and nature together is not commonplace. Yet I take this not as a reflection on its limited effectiveness as a design practice but more as evidence that it sits outside usual conventions. When attention is paid to artefacts in use in active life settings, unfolding against real-world needs and choices, design is re-found as part of a way of being present in and interacting with the world. Indeed, nature-life writing can be a route to seeing how multiple experiences and understandings combine to show how we are both diverse and interrelated. They break apart monological tendencies and provide an alternative to the single totalizing 'one world' normative framework and its claims to universality favoured within Euro-American modernist ontological and epistemological orthodoxies. Hannah Arendt puts it this way: 'It is not generality but the multiplicity of particularity that accounts for the possibility of critical understanding' (Hasebe-Ludt et al. 2009: 12). We know better when we know through the diverse, cumulative, and the particular stories of our lives. The humility this infers is central to ecological design.

What nature writing affords design

In the course of nature writing about clothes, I have come to understand something of the purpose and power of this way of working. By using my own embeddedness within the earth as the starting point for a design or research enquiry, I seek not to make this 'all about me' but rather to delve into the details and particularities of relationships between designed artefacts and the world. For it is within these specific experiences where our commonalities are revealed, and such experiences can be – and often are – about all of us. Thus, it is nestled within the autobiographical experiences of others that we also find our stories and engage with widely shared themes and build common understanding.

For me, a process of embedding myself in living systems means I describe, often quite literally, the physical places and landscapes where I am, through words, photographs, sketches, and colour palettes. These physical descriptions spill over into details of the body, emotions, and the senses. In my narrative texts I describe how my body moves in, and experiences, different settings. I write about the physicality of garments as well as the ways they restrict my body. I write about the associations a dressed body has with place and the many others who live there, layering interconnections. I also write about what clothing reveals and enables in the world, and vice versa. By describing clothes on a moving body in a landscape, social norms and fashion culture are rendered visible in new ways.

The relational focus within design-nature writing is a ready ally with feminist perspectives. It draws attention to experiential, situated knowledge and emotional intelligence, overcoming the false dichotomy between head and body, human and nature. This extends to the lived realities of power inequalities and marginalization of women and women's experience. In examining human relationships and designed artefacts within nature, not conquests over it, design-nature writing enquiry can foreground everyday life, natural wonder, domestic work, landscape, family, climate, care, and non-human species as legitimate sources of knowing. These narratives seek instead to decentre the human from a position of sole focus and to amplify other voices. Framed in Ursula Le Guin's terms, this changes the story; claiming action and heroics in new places ([1988] 2019: 28).

Finding action and heroics in new places opens up the prospect of listening across difference and of establishing new connections between and within lived experience, communities, cosmologies, species, landscapes, and even systems of garments. It brings the promise of diverse ways of fashioning the body and alternative futures for fashion and clothing design based on lived experience including of ecological limits.

I now offer my reflections developed through writing 'the clothing and the place' as a manifesto for design-in-action (Fletcher and Mort 2022). Feel free to substitute your design discipline or process for clothing/fashion here, as you see fit.

Manifesto for design and nature writing. Why work in this way?

Physical, fashion system

- To foreground the physical, sensory experience of wearing clothes as a counterpoint to the dominant story about fashion and clothes which is mainly about image, styling, and brand value. This helps diversify descriptions of fashion away from commercial agendas, the market, and the market's purpose.
- To connect with our dynamic, living world through clothes.
- To show clothes as active within the natural world.
- To reveal clothes something that we all have in common as a bridge to the greater-than-human world.
- To focus stories of change around a family of objects (garments), unravelling them in many dimensions and realms: political, practical, ecological, social, domestic, emotional, and economic. All of life is here.



FIGURE 15.4 Drystone walls still run across much of the north of England; first introduced after the Enclosures Acts of the eighteenth century, they resulted in a process of mass displacement of working people from the land, and their concentration in towns and cities contributed to the Industrial Revolution.

Feminist, relational, agential

- To lead with care.
- To offer a feminist lens, drawing attention to experiential, situated knowledge and emotional knowledge, connecting mind and body, human and nature.
- To convey the lived realities of women and women's experience.
- To give space to everyday life, natural wonder, domestic work, landscape, the senses, family, climate, care, and non-human species as legitimate sources of knowing about fashion.
- To keep objects in context. Just like you can't un-stir the coffee from the cream, you can't separate clothes from the world in which they exist. Doing so risks limiting the experience of both.
- To establish narratives of care and maintenance that move back and forth between care of clothes and care of ecological systems; building awareness and connection.
- To find agency in clothing and how it can change relationships with the natural world.

Encountering nature

- To experience something larger than ourselves and the ways it calls fashion into question.
- To encounter ecological realities in a fresh way, embedding ourselves in the ecological order.
- To show human relationships within nature, not conquests over it, as experienced through clothes.
- To intertwine stories of clothes and natural thriving with the details of different places, linking them with diversity and sufficiency.
- To enact embodied, embedded, contextualized, connected, and engaged human and non-human nature relationships.
- To make lived experience and moments of encounter with everyday objects into points of departure for exploring new nature relationships.

Ecological understanding

• To reveal ways in which clothes and their making and wearing are tied to ecological systems health and resource drawdown.

- To make visible, courtesy of changed backdrops and landscapes, the ways in which clothes are intertwined with social norms and fashion culture.
- To draw attention to relationships and multiple centres of activity, exploring clothing as part of maintaining and participating in unfolding lives.
- To describe interdependence between garments and nature as part of life and living.
- To give expression to the practices of attention that lead to better kinship with ecological systems and to duties of reciprocity to the world in which we live.
- To locate fashion and sustainability work in ecological experience. When much fashion and sustainability work is instrumentalized, reduced, and commodified, trying to 'master' nature, this gives impetus for a new, relational, life-based point of departure.

Reflections

How do we design in a changed relationship with nature? Nature writing from direct, life experience provides one route to close scrutiny of the interrelationships between design, beings, and place and also to more relational and plural understanding about how to live in a resource-constrained, climatechanging world. This chapter has examined features of nature writing to seed alternative ways of knowing about design that work beyond commercial agendas, traditional academic frameworks, or generic calls for change. I suggest it as a powerful tool to finding design's place in partnership with living systems. I now close with an excerpt of nature-clothing writing offered here as an open invitation to others to research and examine themselves as we design ecological lives together.

Walking in skirts (Fletcher 2019)

I remember that, as a teenager, my paternal grandfather once said, '[W]omen with skirts up can run faster than men with trousers down, as a sexist joke. He often liked to rehearse his views that women and men were unequal. For instance, when I talked about following my older brother to university, he told me to know my place. Working the cash register in a shop, he said, was good work for girls as he ordered me into the kitchen to wash the dishes. The 'skirts up' one-liner was, I think, the only time, directly or indirectly, he ever alluded to sex in my earshot. Perhaps that is why it stayed with me. That and because aside from the sexism, the quip belies a literal truth: speedy, easy movement in skirts is real. Legs pivot at the hips and hinge at the knees, and thus the speed of gait and fluidity of movement is massively eased by a wrap of fabric that skims the pelvis and falls loosely around the legs. That much I'll give him.

Walking, and sometimes running, in the hills in a skirt is a revelation. It is an exercise in rare freedom. I urge you to try it. Trousers can bunch and pull on the thighs, reining in the limbs and muscles; but a skirt is all space, a commodious but more modest version of a birthday suit. It seems to me that a skirt also holds promise of a different sort of natural understanding: the same stretch of land seems altered when you navigate it in a skirt; you notice different things about it. A skirt is a kaleidoscope. It brings new things into view. Isn't that what we need – to see the world more fully?

It goes without saying that not all skirts enable unencumbered stepping. Scottish clans knew this and the pleated kilt is perhaps the obvious model of an outdoor working, walking, running skirt. I don't own a kilt. But I do have other skirts and dresses and they are granting me an education in both ergonomics and natural features.

The first among them is about skirt length. For me, wearing a skirt that falls way below the knee in the hills is like wearing a blind fold: exciting but dangerous. I have fallen over and slipped and tripped many times because my boots blithely strike out over invisible ground, cloaked by the folds of my skirt. The cloaking effect happens especially when walking up hill or climbing over a wall when the distance from waist to ground shortens and the skirt's fabric pools forward, gravity acting to cascade it downwards and directly in the line of sight of the feet. To avoid this, you need a spare hand to hoick the skirt up, or a fastening of some sort to gather up the fabric length on a climb. Or just a shorter skirt. So it is that topography draws skirt length. In flat lands, long skirts are A-OK. For hills, take out the scissors and hem your dress higher.

The second is related to a skirt's fullness. It is almost impossible to walk fast and loose if stride length is curtailed. A skirt with a small circumference, as measured at the hem, forces a tottering step. Sometimes this may be desired. But its disadvantages seem to be exaggerated outside a level, paved environment of a bar, a dancefloor, or a city. All-terrain walking and running demands a skirt of a stride-length-and-a-bit as the bare minimum for fullness. Given all legs are different lengths, this measurement varies. But the bit extra is essential for the moments where a bound, not just a step, are required. I once forded a shallow river in a skirt, leaping between stones. As I shaped to jump onto the far bank, the limits of the A-line skirt's cone-shaped silhouette girdled my legs and I fell in. I needed more fabric in the flare. I probably needed pleats. That said, generous pleating is not the only precondition for easy walking. I have calculated that for me to avoid a hobbled stride, the minimum angle of flare necessary for a knee-length skirt made from a woven, non-stretch fabric is 58°. It's a reckoning contingent on many factors, not least whether a skirt has a split, and the likelihood of any route allowing for a long, languid stride. In my experience, long strides are inevitable when walking downhill. This makes the maxim, the tighter the contour lines, the looser the skirt. Or let the skirt decide. Tight skirt? Flat path.

An in-motion body is also influenced by the type of fibre that a dress or skirt is made from and by its cloth and garment construction. A knitted fabric, perhaps with added elastane, does away with much of the constricted movement of a tight skirt in a woven cloth. This opens the door to a figure-hugging but limber walking silhouette. For fabric with little give, good pattern cutting including well-placed darts and pleats are an ally of ready movement. My interest is in the clothes I already have and most of mine fall into this latter category. I look at the skirts and dresses on my hanging rail in terms of capabilities, of what they will allow me to do, of how they might expand real freedoms. I also consider them in light of the weather. Will they keep me warm enough or too hot? How will they cope in a breeze? A strong wind plays havoc with a full skirt.

At midsummer a few years ago, I walked for a week in the northernmost part of Sweden, on a route across an exquisite area of tundra inside the arctic circle. Before I left, I asked Ingun, a Norwegian friend of mine, well used to the far north, what she would recommend I wear. Smart as a whip she replied, a skirt, a silk skirt. I wasted no time and rifled through my chest of drawers for something suitable. Her thinking was that such a thing was light in rucksack, it packed down small, and silk dries fast. Besides, it meant that layers could be added or removed as the temperature dictated without fully stripping off and waterproof trousers could be pulled on quickly in a sharp shower, yet the outfit would not get too bulky or hot. In my wardrobe I found a bias-cut silk dress from the 1950s that had been my grandma's. It was a delicate beige with an orange and mid-brown irregular stripe. The fabric was thin and torn in places and I decided to cut across the bodice to make a skirt, adding a wide elasticated waistband and darts, and to shorten it a little, to sit just below the knee. On the first day of the trip, I put the skirt on over thick woollen leggings. It was an unusual get up. I looked like a babushka or an onion. Layers of hand-me-down woollen jumpers, scarf, leggings, and old silk. Karen, the friend who I was walking with, was laughing and disbelieving. What was my motivation she wanted to know? Was I trying to flirt, to pull? I insisted that the skirt was practical; practical, not sexual. She raised an eyebrow. She did not know about walking in skirts. I think she took the skirt as a sign that I wasn't serious about the trip. That my mind was elsewhere. And in some ways, she was right. I was the opposite of serious. I was easy and spacious and free. I was walking in a skirt.

References

- Ahmed, S. (2017). Living a Feminist Life. Durham, NC: Duke University Press.
- Boehnert, J. (2018). Design, Ecology, Politics: Towards the Ecocene. London: Bloomsbury.
- Bonnett, M. (2002). 'Education for Sustainability as a Frame of Mind', *Environmental Education Research*, 12: 265–76. https://doi.org/10.1080/13504620600942683.
- Escobar, A. (2018). Designs for the Pluriverse. Durham, NC: Duke University Press.
- Fletcher, K. (2019). Wild Dress: Clothing & the Natural World. Axminster: Uniform Books.
- Fletcher, K. and Mort, H. (2022). Outfitting. Cambridge: Hazel Press.
- Fletcher, K., St. Pierre, L., and Tham, M. (2019). *Design and Nature: A Partnership*. London: Earthscan.
- GBO. (2020). *Global Biodiversity Outlook 5*. [Online] https://www.cbd.int/gbo5 (accessed 9 October 2020).
- Haraway, D. J. (2016). *Staying with the Trouble: Making Kin in the Chthulucene*. Durham, NC: Duke University Press.
- Hasebe-Ludt, E., Chambers, C. M., and Leggo, C. (2009). *Life Writing and Literary Métissage as an Ethos for Our Times*. New York: Peter Lang.
- IPPC. (2018). Global Warming of 1.5C. Switzerland: IPCC.
- Jansen, M. A. (2020). Fashion and the Phantasmagoria of Modernity: An Introduction to Decolonial Fashion Discourse. Fashion Theory. doi: 10.1080/1362704X.2020.1802098.
- Le Guin, U. ([1988] 2019). The Carrier Bag Theory of Fiction. Ignota: Ignota.org.
- Shepherd, N. ([1977] 2011). The Living Mountain. Edinburgh: Canongate Books.
- St. Pierre, L. (2019). 'Design and Nature: A History'. In K. Fletcher, L. St. Pierre, and M. Tham (eds), *Design and Nature: A Partnership* (pp. 92–108). London: Earthscan. Lüneberg: Meson Press.
- St. Pierre, L. (2020). *Baskets of Offerings: Design, Nature, Animism, and Pedagogy*. PhD Diss. Canada: Simon Fraser University.

Epilogue DESIGNING IN GOOD FAITH

Bonne Zabolotney

A fter discussing how interdisciplinary design practices can contribute to design studies, and the ways in which designers express the knowledge they produce while designing, we are left with asking ourselves how to move forward in good faith as we further develop our design studies practices. What are beneficial ways to share the knowledge that is imbedded within the designer, the act of designing, and the design? Our community of design studies practitioners, designers, and scholars accept the responsibility in bridging relations and understandings with other design studies scholars and to take part in an infrastructure of accountability and support. In *Teaching Community: A Pedagogy of Hope*, bell hooks has explained that

By making the personal political, many individuals have experienced major transformations in thought that have led to changing their lives: the white people who worked to become anti-racist, the men who worked to challenge sexism and patriarchy, heterosexists who begin to truly champion sexual freedom. There have been many quiet moments of incredible shifts in thought and action that are radical and revolutionary. To honor and value these moments rightly we must name them even as we continue rigorous critique. Both exercises in recognition, naming the problem but also fully and deeply articulating what we do that works to address and resolve issues, are needed to generate anew and inspire a spirit of ongoing resistance. When we only name the problem, when we state complaint without a constructive focus on resolution, we take away hope. In this way critique can become merely an expression of profound cynicism, which then works to sustain dominator culture. (2003)

In the introduction of this book, I stated that design and designing have always contended with dichotomies of theory versus practice, professional practice versus academic or pedagogical practices, and the scientific inquiry of design versus the philosophy of design. To dismantle these binaries in design, we must recognize the structures which maintain design's complicity with corporate interests, unsustainable practices and outputs, competitive relationships, private ownership, and neglectful relationship to pollution and resource extraction. Designers must hold each other accountable to avoid replicating these toxic elements in design, but we must admit first that the way in which we critique design and build design narratives requires reform. In addition to this, we need to find more meaningful ways for theories, methods, philosophies, and histories to intersect with the dayto-day practices of the professional designer.

Design studies govern the field of design through theories, histories, methods, and dominant paradigms. This governmentality shapes the activities of designers¹ by upholding design's cultural, political, and economic systems and infrastructures. From this standpoint, it is difficult to avoid discussing the political economy of design. Political economy of design is the study of structural force social structure, economic structure, and cultural structure - which guides the way we think about and practice design. It refers to the 'interactions among social institutions, power relations, representations, structures of meaning, value systems, distribution of roles, rules of conduct, the exchange of goods and ideas, and patterns of production and consumption' (Bouchet 2011). The political economy of design finds stability by reproducing itself, encouraging conventional design practices (Zabolotney 2017). It benefits from relegating emerging practices on the periphery to be named as outsiders, using terms such as 'alternative' histories. Interrogating the power structures in design studies to remake a broader and more inclusive space begins with developing methods in which to reconsider the way we critique and categorize design. It also empowers the designer to imagine ways to practice design which do not keep design and designers beholden to capitalism and its market demands.

Design studies cannot continue to contribute towards established bodies of knowledge without challenging the power structure which reinforces knowledge in specific ways of acceptance and expression. Building relevant design culture – one that decolonizes, indigenizes, refutes ableism, and is anti-oppressive – requires more than merely expanding our subject matter. It requires practitioners to address structural power to build new and inclusive cultural networks. While many design culture scholars have expressed a concern and a willingness to address the narratives or the expression of design, including 'as a series of negotiations, as an orchestration ..., as an orientation ..., as an assemblage ..., as an arrangement' (Highmore 2008), it's important to understand that theories, philosophies, histories, and reflections are nevertheless bound by the conditions in which expressions are permissible (Mosco 2009). If knowledge is created

within boundaries of our own making, how might we develop conditions to address histories, practices, and knowledges that have otherwise been rejected or repressed? How do we pull meaningful and inclusive expressions of design knowledge from the periphery of the field closer to the centre? More importantly, what is our responsibility in inverting the infrastructures in design that uphold or amplify colonialism, ableism, and racism? Where and when is our duty to confront design that constrains, oppresses, pollutes, or defutures?

Working in good faith, within communities of practices, is one way of developing shared governance and mutually respectful expressions of design, which can expand design studies. This challenge to the limits and conventions of current practices is not intended to be divisive. As we open up to new possibilities to which a design studies practice could contribute to design – multiple standpoints, new paradigms, and immersive practices – we liberate and expand our field in exciting and boundless ways. It begins with producing and mobilizing knowledge from the standpoint of the designer, positioning experiences, reflections, emotions, and embodiments as knowledge spaces. It continues with designers understanding the value of articulating the knowledge they make when they design.

Note

1 Graham Burchell, Colin Gordon, and Peter Miller describe governmentality as 'who can govern, who is governed, but also the means by which that shaping of someone else's activities is achieved' (1991). A Foucauldian term, governmentality is evident by the way we describe, position, and replicate our design practices.

References

- Bouchet, D. (2011). 'Political Economy'. In D. Southerton (ed.), *Encyclopedia of Consumer Culture* (pp. 1102–4). Thousand Oaks, CA: Sage.
- Burchell, G., Gordon, C., and Miller, P. (eds) (1991). *The Foucault Effect: Studies in Governmental Nationality*. London: Harvester Wheatsheaf.
- Highmore, B. (2008). The Design Culture Reader. London: Routledge.
- hooks, b. (2003). Teaching Community: A Pedagogy of Hope. New York: Routledge.
- Mosco, V. (2009). *The Political Economy of Communication*. 2nd edn. Los Angeles, CA: Sage.
- Zabolotney, B. (2017). 'Locating New Knowledge in an Unacknowledged Discourse'. In L. Vaughan (ed.), *Practice-Based Design Research* (pp. 19–27). London: Bloomsbury Academic.

INDEX

abductive reasoning 10, 12, 18, 46 adapt 10, 124, 126, 199 adaptability 120-1, 209 adaptation 114, 117-20, 127, 174, 214, 220 adapted 42, 91, 121, 150, 169, 201 adapted-for-use 126 adapting 87, 119 affect 3-4, 44, 47-8, 100, 103-4, 130, 149, 153, 162, 178, 194, 228 affected 48, 124, 162, 219 affecting 41, 119, 153 affection 78, 196 affective 45, 47-8, 182, 185 affect-led 184 affectual 11 affect theory 42 agential 249 agonism 20 agonistic 20, 148, 151 agonistic participatory design 150 Ahmed, Sara 41-4, 46-8, 60 Akama, Yoko 147 ambiguity 7, 9, 19-20, 44, 103, 130, 137 ambiguous 9-10, 16, 19-20, 47, 77, 126, 130, 181, 229 ambivalence 9-10, 20 anagnorisis 3 Anishinaabe 78 anonymous xvi, 9, 17, 20, 113-17, 120-2, 126 anti-Black racism x, 234 anti-capitalist 87 anti-racism vi, 174, 223 anti-racist 223, 225-6, 228-9, 236, 242, 255

anticommons 152 Anzaldúa, Gloria 29, 34 Apache xv, 63-4, 67, 71 Apachean 8, 65, 67 Appadurai, Arjun 124 Arendt, Hannah 143-4, 246 art of inquiry 129, 133-4, 140 Attending to Futures 126 Attfield, Judith 114-16 autoethnography vi, 174, 177, 185 autoethnographic 178, 185, 187-8 axiological 3-4, 87 axiological designing 3-4 axiology 3, 26, 31, 98 Bai, Heesoon 193 Bal, Mieke 117 Balderston, Daniel 207 Barad, Karen 198 Barras, Bruno 25 Batachayra, Sheila 194 Belisle, Donica 121 Benjamin, Walter 219 Berland, Jody 9-10 Bervin, Jen 212–13 BIPOC 8, 73, 83-5 Björgvinsson, Erling 150-1 Blackness 161-2 Blomberg, Jeanette 136 Blythe, Mark 137 Boehnert, Joanna 242 Bondi, Liz 9-10 Borderlands v, 23, 29–32, 35 Borges, Jorge Luis vi, ix, xiv, 174, 205-10, 214-21

Botero, Andrea 150 Bowker, Geoffrey 24, 91 Brand, Dionne 160, 165 Brookfield, Stephen 94 Buddhism xv, 191-2, 194, 198 Buddhist 98, 174, 191-5, 198-9 Canadian design 9, 16-17, 20, 81, 117, 126 Canadian design culture xvi, 16, 19 Canadian design history xi, 10, 20, 91, 122 Canadian design studies 19, 117 Canadian syllabics 63 capitalism 3, 84-5, 107, 256 capitalist 4, 23, 25, 33, 121 cultural capital 240, 245 Chambers, Cynthia 240 Cherokee Syllabics 63 co-design xiii, 8, 40-8, 147, 150, 188 co-design researcher xiii, 178 co-designed 146 co-designing 40 Coast Salish 113 cognition 96, 100, 193 cognitive 96, 103, 147, 189, 192-5, 199 cognitive dominance 192 collaboration xiii, 16, 68, 124, 129, 146, 149-51, 174, 183, 185, 207, 212 collaborative 39-40, 48, 75, 99, 103, 133, 135, 146, 149-50, 223-4 collaboratively 16, 224 collective generativity 147 colonial 24-7, 29-31, 33-5, 79, 81, 83, 119, 121-4, 178, 186 colonial environment 78 colonial identity 24 colonial infrastructure 25, 28 colonial power 121, 242 colonial structure v, 23, 25 colonial systems 25, 70 colonial values 121 colonial violence 114 colonialisms 9, 85, 113, 121, 257 coloniality 24-5, 192 coloniality of power 25 commodification 16 commoditization 124 Common Cause Collective xiv

commons xiv, 144, 148, 152, 154 commoners 144-8 commons-oriented mindset 92, 144 designing commoners 92, 144 The Commons (a digital prototype) 130, 132, 140 - 1communities xiv, xv, 25, 32-4, 63-5, 68, 70, 73-5, 81, 84, 113, 144-6, 148, 151-3, 169, 179, 226-7, 247 communities of Practice 3-4, 81, 84, 124, 148, 206, 257 community of Practice v, xii, 5, 24 compound methods 14 consigning (tactics) 14 constituting (tactics) 15 consumer 19, 121 consumer culture 113 consumerism 121 consumption 104-5, 115, 121-2, 191, 256 co-participatory 223-4 cosmology 24, 32, 98 cosmologies 29, 35, 97-8, 247 critical imitation viii, 74-5 critical theory vi, xii, 157, 159, 161-2, 164, 167, 185 Cross, Nigel 12 curious 18, 41, 47, 65, 106, 180, 186, 188 curiosity 10, 66, 93, 106, 138, 187 de Certeau, Michel 151 De Cora, Angel 75-6 de-trashing 15 decolonial 35, 242 decolonization 2, 4, 92 decolonize 5, 83-4, 256 decolonized 199 decolonizing 27, 84 defutures 7, 257 Derrida, Jacques 106 design and nature xii, 174, 240, 242, 247 Design Fiction vi, 92, 129, 134-41 Design Fictions 133, 136-8, 140 design practice vi, vii, viii, ix, xi, 1, 3-4, 8,

16, 25, 40–1, 43, 45–7, 64–6, 75, 77, 81–4, 86, 95, 99–102, 174, 178, 181, 188, 193, 205–6, 239, 242, 244, 246

design practices 2-4, 8, 11, 42, 77, 83-5, 88, 92, 173, 256 design interventions xiv, 150-1 design research 1, 8, 39, 130, 167, 192, 225-6, 229 design research framework 227 design research methods 43, 235, 240 design research process 223-4, 226-7, 231, 234 design researcher(s) 129, 140, 146, 167, 178, 189 design research practice narrative v, 39 design research practice narratives 8, 42 DRPNs viii, 42-6, 49-60 design studies ix, xi, 1-5, 7, 9, 19, 107, 113-14, 122, 124-6, 205-6, 214, 255-7 design studies practice v, 1, 2, 16 design studies practices iii, 2, 5, 8, 10,255 design studies practitioner 9 design studies practitioners 9-10, 12, 19, 125, 255 design studies scholars 2, 5, 10, 20, 255 designerly 133, 151, 207 Designerly ways of doing 102 Designerly ways of InWorlding 102 Designerly ways of worlding 102 development discourse 34 Dewey, John 93, 149-50 Diaspora 28, 31 Diaspora Map viii, 30-2 diffractive reflection 198 digraphs 70 DiSalvo, Carl 20, 149-51 discursive mind 193 disorientation 107, 180, 184, 186-7 displacement 7, 25, 30, 72, 98, 113, 122-4,248 Dilnot, Clive 2 Dormer, Peter 104 Dubois, W. E. B. 84 Eaton's 121-2 Eaton's Catalogue ix, 15-16, 120-3 Eaton's Business Archives 16 Eaton's Mail Order Catalogues 121 Eatonia 121 ecology 100, 103-4, 191

ecological xv, 4, 7, 27, 141, 192-3, 199, 240, 242, 244, 246-7, 249-50 ecologically 199 ecologies 27, 34, 125 ecosystem 27, 34, 105 economic 4, 64, 124-5, 135, 141, 165, 187, 247 economic and social configurations 133 economic networks, 129 economic structure, 256 economic system, 117, 244, 256 economics 4, 88, 120 economy 65, 138, 152 Ehn, Pelle 148, 150-1 Ellis, Darryl 87 emancipatory cultural practices 9, 11, 126 Emmerson, Donald 17-18 emotion 31, 194 emotional and physical traffic 86-7 emotional 11, 46, 77-8, 84, 87, 105, 115, 137, 159, 180, 189, 247, 249 emotionally 180 emotions 86, 105, 115, 183-4, 186-9, 196, 201, 246, 257 emotive 103, 192 hyper-emotional 86 empathy 226-8 empathy to context 227 emplacement 7 Escobar Arturo, 26, 34, 36 ethos 85-6, 158, 167, 179, 240 eurocentric 84, 87 fashion xii, 174, 193, 240, 247, 249-50 fashion culture 247, 250 fashion localism xii fashion system 247 fashioning 65, 247 feminist practice xiii, 40, 174 feminist design practice 8 Feminist 39-40, 42, 44-5, 48, 114, 187, 192, 242, 247, 249 becoming feminist 39-40, 42 being feminist 39-40 feminism 39-43, 46 feminisms 39, 41, 43, 46 feminist pedagogy 41 feminist tendencies 41-3

feminist theory(ies) 41–2, 46–7, 173

feminist-designer 43 feminists 39, 41 Fischer, Norman 194-5 folk 167 folklore 120-2 folkloric 121-2 folklorist 120 folk tale(s) 114, 120-1 four complementary lenses 94 framework(s) xiv, 7, 10, 12, 14-16, 19, 46, 71, 91, 94, 114, 117, 120, 126, 145, 154, 158, 163, 167, 169, 174, 223-4, 230, 232, 234, 236, 246, 250 action framework(s) viii, 13 conceptual framework(s) 93-4, 148 emotional framework(s) 105 epistemic framework(s) 96, 108 ethical framework(s) 105 methodological framework(s) 68 onto-epistemic framework(s) 26 paradigmatic framework(s) 92 propositional framework(s) 95, 105 theoretical framework(s) 25, 43, 93, 163-4, 166 Frayling, Chris 1 Freire, Paulo 84 Friedman, Dan 87 Fry, Tony 7 future of work and learning xiii future(s) xiii, 33-4, 40, 83, 129, 135, 137-41, 149, 244, 247 emergent futures 33-4 feminist futures 40 futures literacy 130, 140 futures practitioners 129, 140 preferred futures 47 futuring 5, 136 Garba, Tapji 160 generative design 147, 150

generative design 147, 150 generative research, 174 generative research methodology 224 Gilliam, Sam 159 Graeber, David 25 Guaraní 24, 28–31, 33, 35 Guaraní Cosmovision 33–4

Haas, Jörg 144 Hall, Stuart 158 happy 47-8, 79, 83 happiness 33, 47-8 happy objects v, 39, 47 The Promise of Happiness 47 Hasebe-Ludt, Erika 240 hegemony 147-8 hegemonic power 25 Heidegger, Martin 34, 96-8 Helfrich, Silke 144 Heller, Michael 152 Hicks, Dan 123 Highmore, Ben 10, 11, 16 Hill, Cher 198 Hillgren, Per-Anders 150-1 Holman Jones, Stacy 42, 185 hooks, bell 84-6, 174, 225, 255 human intelligence tasks (HITs) 130, 138 Hyysalo, Sampsa 150 immersing vi, 173 immersive reflective practice 192, 195-6, 199 Indigenous vi, xiii, xv, 24-9, 31-2, 34-5, 63-4, 66, 76, 78-9, 81-2, 103, 113, 124-6, 167, 174, 177-8, 184-7, 225, 236 first nation(s) xv, 78, 121 Indigeneity 79, 81 Indigenous culture(s) 8, 24, 68, 79, 81, 121 Indigenous design 83 Indigenous designer(s) 73-5, 81 Indigenous design practitioner 63 Indigenous design philosophy 8, 66 Indigenous identity 24, 77 Indigenous knowledge xv, 26, 32, 82-3, 121 Indigenous language(s) xv, 29, 75, 187 Indigenous language preservation xv Indigenous pedagogies 188 Indigenous research methodology 26 Indigenous research paradigm 26 Indigenous sovereignty 23, 31, 35, 67 Indigenous ways of knowing 79-80, 178, 184, 186 Indigenous works 126 Native American 70, 73, 188 infrastructure 20, 25-6, 28, 92, 152, 255 infrastructural inversion 91-2, 122 infrastructural 129 infrastructures 47, 133, 150, 256-7

infrastructuring 150-2 Ingold, Tim 129, 133, 140 intersection 99, 157, 178 intersections v, xiii, 23, 27, 29-31, 33, 35, 146,236 intersectionality(ies) 29, 32 intersectional margins 23 InWorlding vi, viii, 91, 93-4, 96-9, 101-2, 104-6,108 iterative x, 2, 39, 41-2, 161, 188, 206, 215, 223, 229, 232, 234 iteratively 46, 95, 101, 161, 178, 224, 236 iterative design practices 2 Iterative methodologies 223 reiterative 98, 106 Ivanka, Tania 147 Jicarilla viii, xv, 63-6, 68-71 Jicarilla Apache Texts 71 Johnson, E. Patrick 159 Jones, Derek 198 Julier, Guy 11 Jung, Carl 104 Jungian Mystique 88 Jungnickel, Kat 173 Kendall, Stuart 1, 4 knowledge(s) xiv, 1-5, 7, 9, 12, 14, 16, 18-20, 25, 27, 31, 41, 43, 46, 65, 70, 77-8, 81-2, 87-8, 92-6, 99, 104, 106, 108, 114-15, 138, 145-9, 162, 167, 173-4, 182, 186, 188-9, 194-6, 214, 240, 244, 246, 249, 255-7 design knowledge viii, 1, 43, 94, 96-7, 107-8, 145, 257 disciplinary knowledge 10 embodied knowledge 44 experiential knowledge 95, 158 implicit knowledge 94 knowledge base(s) 93-4 knowledge design lab xii knowledge keepers 80 knowledge-making 2, 158 knowledge mobilization 1, 125, 173 knowledge model 94 knowledge production 1, 4, 12, 92, 143 knowledge structures 94 non-propositional knowledge 95-6 place-based knowledge 121

procedural knowledge 95 propositional knowledge 95 situated knowledge 77, 247, 249 tacit knowledge 96, 195 Kolb, David 94 Kwanlin Dün First Nation 78 land-bordering v, 8, 23, 26-7, 31-3, 35 Latin America 25 Latin American 24-5, 27, 31 LatinX xv, 23 Lave, Jean 148 Le Guin, Ursula 137-8, 247 Leggo, Carl 240 lived experience(s) 8, 23, 27, 31, 33, 46, 48, 87, 144, 154, 162, 174, 177, 184-5, 187-9, 231, 245, 247, 249 Lover, Erik 130 Lury, Celia 10, 14 Lushootseed nation 69 MacKinnon, Catherine 173-4 manuscripts vi, ix, xiv, 174, 205-11, 214, 219-20 Manzini, Ezio 148-9, 152 margin(s) 23, 25, 208 marginal 24, 88 marginality 27 marginalization 23, 247 marginalized xiv, 87-8, 125, 148, 186 Margolin, Victor 1-2 material autobiography(ies) 12, 20, 114-15, 122 material form 158-9, 161, 164 material record 161, 164 materiality 31-2, 34, 64, 143, 170, 182 immateriality 165-6 Medalta 117-19, 127 Medalta dinerware ix, 118-19 Medalta potteries 117 memory 3, 11, 27, 40, 44, 64, 99, 178, 181 - 4Memory Full? 126 memories 8, 23, 26-7, 30-1, 33-4, 45-7, 64, 104, 174, 180, 188-9 mentor(s) 8, 71, 84, 86-7, 225 mentored 68, 87 mentoring 87 mentorship xi, 64, 87

Mestiza/Mestizaje xv, 23-4, 27, 29, 31, 35 meta-narratives 107 meta-practitioner 146, 148, 154 method 8, 16, 27, 40-5, 49-59, 86, 95, 98, 101, 103, 117, 119, 157-60, 162-3, 169-70, 178, 181, 185, 240, 246 ethnomethodological 136 Method and Apparatus for Forming Pottery Cup Handles 119 methodical 196 methodological 96 methodological framework 68 methodological paradigm 108 methodologically 173 methodologies xiv, 26-7, 107, 193, 223 methodologists xiii methodology xiv, 20, 23, 26-7, 42, 164, 170, 224 methods xiii, 2-4, 9-10, 14, 19, 27, 40-4, 47, 82, 84, 86, 92-3, 102-3, 106, 108, 147, 158, 161-2, 166, 169-70, 174, 178, 206, 214, 225, 228, 232, 235, 256 monetary 3 micaceous pottery 64 micaceous wares 65 Miller, Daniel 11 mind scripting 43 mindfulness 174, 191-3, 195-7, 199 Mouffe, Chantal 147-8, 151 Musqueam (xwmə0kwəyvəm) 24, 35, 64 Myths and Tales of the Jicarilla Apache 71 narrative(s) vi, 2-4, 9, 33, 42-4, 46-7, 66, 71, 81, 84, 91-2, 95, 98, 107-8, 114-15, 117, 120, 122, 124, 132-3, 135-6, 138-9, 164, 165, 174, 178-9, 181-9, 199, 225-7, 239-40, 244, 246-7, 249, 256 design culture narratives 2, 126 design fiction(s) vi, 92, 129, 133-41 design narratives 7, 11, 81, 92, 256 historical narratives 113 meta-narratives 107 narration 122, 130-1 narrative theory 91, 117, 135, 138 narrative-based design fiction 129, 139 - 41retelling 122, 184-5, 188 narratology 114, 117, 120

Navajo 65, 67, 69 necrographies 123 nomadic 64-5, 71 Noordzij, Gerrit 216, 221 Ojibwe xv, 78, 80 oppression 23, 48, 124, 163, 223, 226-7,236 orientation(s) 40, 42-4, 46, 162, 212, 256 disorientation 107, 180, 184, 186-7 re-orientation 33, 41 orthography/orthographies viii, 69-70,73-4ostensive definitions 12 paradigm 11, 26, 33, 87, 96, 108, 144, 154 paradigm shift(ing) vi, 91-2, 107, 144 paradigmatic 4, 92 paradigms 3, 11-12, 20, 91-2, 114-15, 117, 122-4, 152, 242, 256-7 participant(s) x, xiv, 12, 16, 43, 47-8, 60, 85, 92, 133, 147-8, 150-2, 157, 166-7, 170, 173, 194-5, 223-4, 227, 229-36 participant-observer 92, 129, 141 participatory design 148, 150-1, 193 participatory designer 39 participatory methods xiii, 40, 42, 147, 174 particularizing 11, 16 pastiche 117 pastiche scenarios 137 pathway(s) 94-5, 99, 106, 244 pattern synthesis 10 Percy Hermant Co. 17-18 personhood vi, 93-4, 100, 102, 108, 178 Peter Austin Manufacturing Co. 17-18 piercing (tactic) 14, 17 Pillow, Wanda 178, 183 pivoting (tactic) 14 plastic 12, 16-19, 124 plasticizer 18 plastics viii, 16-18 pluriverse 26-7, 29, 34-5 political(ly) 4, 12, 20, 25, 39, 106, 122, 124-5, 129, 135, 137, 141, 147, 149-52, 157, 165, 170, 187-8, 247, 255-6 politic(s) 92, 120, 146, 148, 151, 157, 163, 166 political economy of design xi, xvi, 3, 12, 20, 114-15, 118-19, 124, 126, 256

politicized 157, 159, 163, 170 politics of ambivalence 9-10 Polymode xiii, xiv, 8, 77, 83 positionality vi, 31, 33, 161, 174, 177-8, 186-8, 225, 236 positionalities 27, 30, 33 Post, Kimberly M. 192 post-colonial xiv, 192 post-growth xii postmodern 84, 107 practitioner 9, 41, 63, 75, 91, 93-5, 98, 101-2, 104-5, 146, 148, 154, 158-9, 162, 167 design practitioner 2, 161 design studies practitioner(s) 5, 9-10, 12, 19, 125, 255 practitioner-researcher(s) xii, 157 practitioners xii, 5, 9-10, 12, 19, 41-4, 46, 48, 93-4, 98, 125, 129, 137, 140, 146, 157-8, 160, 164, 167, 192, 194-5,256 The Reflective Practitioner 195 praxis 2, 8, 84, 103 pre-colonial 8 process(es) viii, ix, xi, 9, 16, 18, 26, 33, 40, 43-4, 46, 64, 66, 73, 78-9, 82, 86-7, 93-7, 99-101, 103-6, 108, 116, 118, 135, 140, 143, 145-50, 152, 154, 157, 161-2, 164-166, 174, 178, 182, 187, 192-3, 195-6, 198-9, 200, 206, 208, 225, 227-9, 232, 235, 244-8 collaborative process(es) 133, 149, 223 collective processes 42 creative process 1-2, 79, 103, 129 design-making process 11 design process(es) 23, 73, 78, 82, 86, 99, 104-5, 136-7, 148-50, 193-5, 199, 223, 242 design research process 223-4, 226-7, 231, 234 making process 129, 160, 164 processual 93-4, 212 reflective process(es) 193 Project Naptural xiv prototype 5, 71, 92, 130, 134, 136, 139, 141, 151, 228-30, 232 diegetic prototype 135-6, 138 prototyped 132, 135

prototypes ix, 2, 18, 118, 129, 133-4, 136-40, 148, 151 prototyping 151, 161 'prototypical mode of discourse' 16 Pueblo 65, 68 queer xiii, xiv, xv, 23, 29, 46, 83-4, 86-7, 187 Quijano, Aníbal 25 racism 25, 30-1, 78, 113, 154, 192, 224-35, 257 Racism Untaught x, xiv, 223, 227-8, 230-1, 235-6 Racism Untaught framework 174, 224 Rawls, John 147 recognition 3, 69, 84, 98, 100, 103, 105, 124, 146, 255 'mere recognition' 196-7 self-recognition (see also anagnorisis) 3 recommoning vi, 92, 143-6, 149, 151-4 redirecting v, 3-4, 7 Redström, Johan 11, 12, 16 reflection in action 2, 94, 146, 195-6 reflections 2, 65, 94, 99-100, 119, 126, 194, 197, 247, 250, 256-7 reflexive 2, 9-10, 43, 136-7, 162, 164, 178, 182 reflexive model-making ix, 160-1, 163-5, 167, 169 reflexive model-making process ix, 160, 166 reflexive practices 10 self-reflexive 244 reflexivity 45, 162, 165, 178 self-reflexivity 107, 158 reframing 11, 92-3, 103-4, 162, 194 refuting (tactic) 15 relational xiii, 26, 44, 46, 48, 92, 94, 100, 143-4, 152, 178, 188, 207, 247, 249 - 50relational practice 143-4, 178 Reliable Plastics Co. Ltd 17-18 resilience (resiliency) 78, 80, 85 rhizomes 28-9, 34, 35 rhizom-ing 27 rhizomatic map viii, 30 rhizomatic 34 rhizomatically 94

Robinson, Peter 214 Rosner, Daniela 12, 25 Ryan, Marie-Laure 122 Ryle, Gilbert 95 Sanders, Elizabeth 147 Sarbanes, Janet 129, 133, 138, 141 Scarry, Elaine 160, 165 Schön, Donald 146, 158, 195-6 Schulman, Sarah 151 Segato, Rita 24, 27 self-awareness 3, 244 self-reflection 3, 80, 146 Sengers, Phoebe 192 Sennett, Richard 104 Seravalli, Anna 146, 151 settler(s) 78, 113, 125, 186 settler ancestors 177 settler colonialsm 78, 113, 186 settler designers 73 settler economy 119 settler environment 78 settler narratives 113 Seven Grandfather Teachings 79, 80 Shen, Juliet 69 Shepherd, Nan 239 situated action 224 Slimbach, Robert 215 Smith, Willi 86-7 Sorentino, Sara-Maria 160 sorting (tactic) 15 spamming (tactic) 14, 16-17 Sparke, Penny 2 Spillers, Hortense 160 Squamish (Skwxwú7mesh Úxwumixw) 24, 35, 64 St. Pierre, Elizabeth 188 Star, Susan Leigh 24 stereotypes 70, 74 non-stereotypical 137 stereotypical 73 stereotyping viii, 74-5 storytelling vi, 25, 43, 63, 68, 86, 134-5, 174, 177, 184-5, 188, 226-7 storyworld ix, 129, 133-5, 137-40 Suchman, Lucy 136-7, 224 sustainment 4, 7 sweaty concepts 41, 46 sympoiesis 23, 35

Ta'an Kwäch'än Council 78 tactical ambiguity v, 7, 9-12, 16, 19-20 teaching ix, xi, xiii, 82, 84, 103, 106-7, 157, 170, 173-4, 181-2, 185, 193, 225 educator(s) xi, xiii, xiv, xv, xvi, 76, 184, 223, 227, 235 pedagogical 3, 105, 179-80, 224, 256 pedagogy xv, 32, 41, 43, 105, 186, 192, 224 teachings 29, 194, 199 Teaching Community: A Pedagogy of *Hope* 255 teaching practice 105, 182 Teaching to Transgress 225 temporal 104, 106, 120, 135, 188, 206 temporalities 162 temporality 97, 107 temporalization 158 temporally 2, 15 textual 206, 214, 219 textual apparatus 174, 220 textual authority 5, 12, 20 textual system 205, 214, 220 Thévenot, Laurent 143-4 Thich Nhat Hanh 191, 193-4, 196, 197 thinking in action 2 Tobin, Beth Fowkes 103 Tonkinwise, Cameron 1, 193 toolkit x, 47, 223-5, 227, 231-2, 234-6 transform(s) 31, 41, 44, 143, 244 social transformation 42 transformation projects xiii transformation(s) 8, 10, 42-3, 94, 98, 117, 137, 145, 173, 182, 186, 194, 255 transformative 171, 185 transformative experiences 173 transformative learning xiii, 182, 185 transformed 33, 194 transforming 149, 179 translation vi, x, xiv, 35, 98, 174, 205-7, 214, 218-20 translational practice 178 typographic translations vi, x, 174, 205-7, 217 transmuting (tactic) 14 Trigg, Randall 136 trigraphs 70 Tsleil-Waututh (sə'lilwəta?ł) 24, 35, 64

typographic facsimiles 205-6, 211-12, 214, 218–20 typographic representations v, 8, 63 unacknowledged xvi, 9, 87, 113, 116, 124 uncomfortable Reflexivity 45 unicode 29, 68-9, 73, 75 Union of Concerned Researchers in Fashion xii Utes, Mescalero, Comanche 65, 68 value 2-4, 10, 19, 77, 81, 88, 99, 104-5, 120, 124-5, 152, 157-9, 162, 166, 170, 186-7, 194, 223-4, 229, 233, 240, 255, 257 academic value 5 aesthetic value 4 ancient values 82 brand value 247 colonial values 121 cultural value 3-4, 91, 114-15, 118, 124 market values 87 monetary value 3 political values 137, 170 regimes of value 124 social values 4, 152

value-added 3 value systems 4, 7, 11, 19, 80, 99, 117, 256 values vi, 4, 47–8, 67, 77, 79–82, 87, 95, 98, 105, 120, 130, 158–9, 162, 170, 178 Vowel, Chelsea 124

Waheed, Nayyirah 163 Wall Kimmerer, Robin 188 Wegner, Etienne 148 Wengrow, David 25 Werner, Marta L. 211–14 Willis, Anne-Marie 34 Wilson, Shawn 26 Wonderlab 42, 60 Wong, Renita 194–5 workshop(s) x, xiv, 40, 43–4, 47–8, 60, 153, 157, 166–7, 170, 174, 223–4, 230–6 writing method 42–4

Yunkaporta, Tyson 178, 187 Zapatistas 23, 35

Zen 194 Zen and design vi, 174, 191 Zen Buddhism xv, 191