

Stages #7

Design & Empire

Liverpool
Biennial

Notes on Design & Empire



Graphic identity for Design & Empire [working title] using the typeface 'media police' by Société Réaliste, 2017. Courtesy Wkshps, New York.

"Empire is materialising before our very eyes."

(Hardt & Negri, *Empire*, 2000)

Liverpool established its international reputation as a pre-eminent gateway for shipping, trade and the movement of people in multiple, sometimes troubling, ways. The city created to service this exchange – dense in buildings, public spaces and infrastructure, financed with colonial profits – became a major port of the British Empire. Today, Liverpool presents an even more complex story, having undergone serious decline since the industrial period, followed by intense regeneration when it became European Capital of Culture in 1998, and now part of the 'Northern Powerhouse'.

Set against this backdrop, with Liverpool as both subject and stage, the *Design & Empire [working title]* symposium challenged some of the aspects of Liverpool's imperial legacy whilst reflecting on wider current practices within design and visual culture. How does one reflect the other? How does Empire materialise in contemporary cultural practices? How can we discuss this without becoming part of the problem?

Michael Hardt and Antonio Negri's seminal book *Empire* seems to provide some clues. To the authors, Empire is a 'decentered and deterritorializing apparatus of rule that progressively incorporates the entire global realm within its open, expanding frontiers. Empire manages hybrid identities, flexible hierarchies, and plural exchanges through modulating networks of command.' [1]

Today's Empire, then, as opposed to previous imperialist forms, develops out of changed (and changing) economic and cultural exchanges. Rather than working through nation-states, Empire takes new networked forms and requires no fixed or territorial centre of power. No nation state, not even the USA, holds such a pivotal position today as was maintained by the Roman or the British Empires, for example, and Brexit can be explained as a symptom of this perceived impotence. In this new world order, the periphery and centre are thoroughly embedded in each other. Any major city provides evidence of this, not least Liverpool.

Conceived by curators Emily King and Prem Krishnamurthy, and presented by Liverpool Biennial and

Liverpool John Moores University's School of Art and Design over three days in November 2017, *Design & Empire [working title]* brought together leading creative voices from the fields of art, design, architecture and fashion to discuss some of these paradoxes of power. Framed by guided city tours exploring Liverpool's architectural past, and the cooking and serving of a colonial-style Christmas Pudding, it featured conversations on topics ranging from national identity to the display of museum collections, postcolonial approaches to contemporary fashion, copying within creative manufacturing, the reuse and revaluation of bio-industrial materials, and the politics of computer interfaces in relation to the new networked forms of empire.



Image from *Empire Talks IV* by Grace Wales Bonner & Duro Olowu, *Design & Empire*, Liverpool John Moores University's Exhibition Research Lab, November 2017.

This volume of *Stages* presents a partial record of these conversations, some related projects and other responses from a selection of participants: **Cooking Sections, Christian Ulrik Andersen, Frederico Duarte, Paul Elliman, Emily King, Prem Krishnamurthy, Mae-ling Lokko and Christopher Kulendra Thomas.**

Taking their cue from the phrase 'every event is a rehearsal for the next event', the curators Emily King and Prem Krishnamurthy reflect on the event in their text **Learning from Liverpool: An Introduction.** Following the Liverpool event, they asked participants for their comments, as well as new texts or objects, which they used as working material several months later, in March 2018, held at *K*, in Schöneberg, Berlin. In their words, 'these contributions, ranging from graphic ephemera to magazine spreads and an immersive video, made visible the conversations that emerged during the symposium' and provided the basis for further thinking and for their contribution to this volume.

Empire Remains Christmas Pudding by artist duo Cooking Sections (Daniel Fernández Pascual & Alon Schwabe), explored the systems that organise the world through food. Much like their hybrid performance lecture and food event *Stir-up Sunday* presented in Liverpool, their short text for this volume operates between visual art, architecture and geopolitics. ‘Stir-up Sunday’ is the last Sunday before Advent. The name comes from the Book of Common Prayer’s collect for the day (‘Stir up, webeseech thee, O Lord, the wills of thy faithful people’), but it is nowmore associated with the custom of making a Christmas Pudding, a dishwith ingredients that were once sourced across the British Empire. Cooking Sections’ contribution introduced the myriad web of colonial routes and locations thatunderlie contemporary culinary fare, taking the pudding as both a case study and object for consumption.



Image of *Stir-up Sunday* session by Cooking Sections, *Design & Empire*, Liverpool John Moores University’s Exhibition Research Lab, November 2017. Photo: Jay Chow

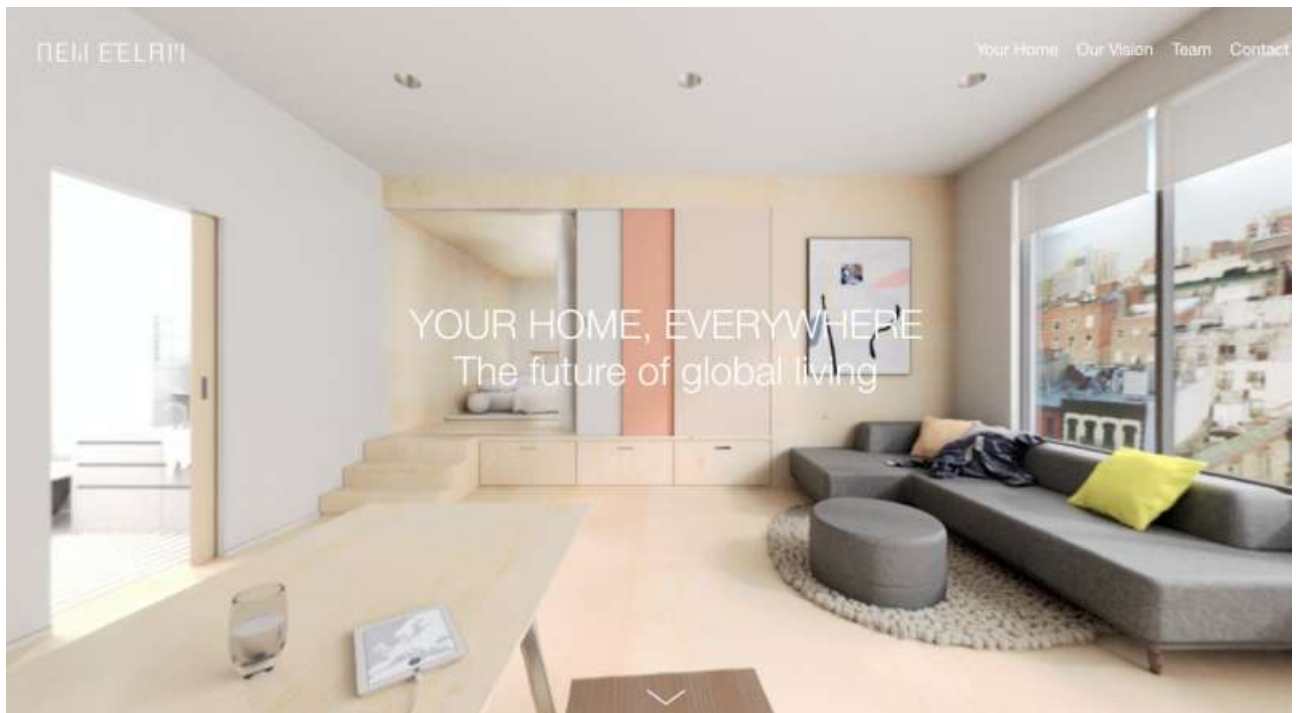
Paul Elliman takes a similar approach in his text – an idiosyncratic mixture of dense historical and poetic, visual and literary ingredients. But rather than food, his essay **Contents of Ostrich’s Stomach** focuses on the links, both historical and metaphorical, between the mistreatment of animals and colonialism. Moving from an image of the contents of an ostrich’s stomach at London Zoo through observations on historic royal menageries to reflections on the writings of Kipling, Orwell and Lawrence, he ends with an analysis of the interplay between language and power.

Architectural historian and material technologist Mae-ling Lokko presents a new visual essay **Brown is the New Green**, drawing attention to Africa’s agriculture as both ‘the bloodline for Africa’s growth, as well as its looting’. Derived from her visits to coconut-farming operations in 2014 and 2015, her essay casts light on Ghana’s diverse farming and manufacturing industry around the coconut and its husk, a resilient material with a vast number of applications. She argues that this recent awakening of large parts of the continent to the potential for activating profits from the agro-upcycling economy can serve as an engine

for positive development.

Writer and curator Frederico Duarte has recently staged an exhibition of contemporary Brazilian design, *How to Pronounce Design in Portuguese: Brazil Today* at Lisbon's MUDE –Museum of Design and Fashion. His text for this volume, **Designing Brazil Today**, an edited version of an essay first written for the catalogue (published by MUDE, Francisco Capelo Collection, June 2018), takes the exhibition as a case study to discuss the intersections between design and national identity, making reference to the collecting policies of a museum that was once at the heart of imperialism.

In the context of digital design and software studies, Christian Ulrik Andersen explores the politics of the computer interface with reference to the Scandinavian tradition of critical interface design and the labour movement. The essay for this volume, **UTOPIA and the Metainterface – Participatory Interface Design from the Print Press to Today**, draws attention to wider digital infrastructures and new technological paradigms that appear to be replacing the old global order of nation-state empires.



Christopher Kulendran Thomas, *New Eelam*, screenshot of website www.new-eelam.com, accessed 15/07/2018.

Finally, Christopher Kulendran Thomas's project New Eelam proposes a provocative model of distributed citizenship in the form of a tech start-up, to examine how the rethinking of interfaces, residences and networked systems offers opportunities for new structures to emerge. Presented at the symposium in Liverpool in the form of a sales pitch, the project is featured on this volume's contents page as a series of advertising images.

That this journal is a partial account of an event that in itself was a prototype for another possible event materialises the contingent nature of empire and design. Both fields are ripe for reinvention.

[1] Michael Hardt and Antonio Negri, *Empire* (Cambridge, MA: Harvard University Press, 2000), p. 12-13.

Joasia Krysa

Joasia Krysa is Professor of Exhibition Research and Director of Exhibition Research Lab at Liverpool John

Moore's University, with a joint appointment at Liverpool Biennial. Formerly she served as Artistic Director of Kunsthall Aarhus, Denmark, part of curatorial team for dOCUMENTA 13 (Kassel 2012), and co-curator of Liverpool Biennial 2016. Her recent publications include *Systemics, or Exhibition as a Series* (Sternberg Press 2017) and *Writing and Unwriting Media Art History* (MIT Press 2015). She is series editor of DATA Browser (Open Humanities Press) and commissioning editor of contemporary art journal *Stages* published by Liverpool Biennial.

Learning from Liverpool: An Introduction

Emily King and Prem Krishnamurthy



Learning from Liverpool at K, [K-Komma], Berlin, 16 March 2018. Photos: Dirk Dähmlow, kurtkurz.com

“Every event is a rehearsal for the next event.”

Arrival, the science-fiction blockbuster based on a novella by Ted Chiang, focuses on an encounter with a mysterious alien species that comes to Earth. Working together, a human linguist and physicist

attempt to decipher the alien's unfamiliar, grapheme-based written language, which follows categories and logic wholly different from the humans' own. What the team discovers is that, for the aliens, time is not sequential but rather simultaneous—the future, past, and present are all collapsible into a single moment, which can assume any order. This recognition catapults the humans into a new understanding of their personal and political histories and trajectories. With this film and its temporal structure as a leitmotif, let's look backwards in order to look forwards (and perhaps then back again).

In November 2017, we launched (with co-curator Joasia Krycia) an exploratory, three-day symposium, "Design & Empire [working title]", in collaboration with the Liverpool Biennial and Liverpool John Moores University. The event came together swiftly and decisively, but with little time for reflection—leaving us afterwards with ample documentation yet lingering questions. As the "[working title]" in our event moniker suggests, we knew that this symposium would be an initial starting point for further investigations, rather than a presentation of decisive conclusions. So we regrouped in March 2018 in Berlin-Schöneberg at *K*: a "workshop for exhibition making" curated by P. Krishnamurthy in cooperation with KW Institute for Contemporary Art. The mission of *K*, (pronounced "K-Komma") is to offer space and time for discussion, reflection, production, and presentation—as such, it made sense to dedicate one of its first public programs to a brief workshop for debriefing from the Liverpool symposium.

Our workshop format developed organically. The first half day responded to the physical exhibition space of *K*, itself—with its soft walls and open architecture—where we pinned up objects by each participant from Liverpool. These contributions, ranging from graphic ephemera to printed output to magazine spreads and an immersive video, made visible the conversations that emerged during our symposium; their arrangement annotated and extended the historical works already on view of East German designer and exhibition maker Klaus Wittkugel. The next morning, with these *aides de memoire* on hand, we focused on analyzing and diagramming the participants and structure of the original "Design & Empire [working title]" event to understand for ourselves the connections between the different contributors and which aspects of the topic each had addressed. The final half day lent us time to outline our thoughts for an evening public program, in which we used the objects in the space as proxies for recounting the symposium's curatorial process and individual presentations, while soliciting audience feedback on the event's structure—an in-gallery talk about a past event that then loops forwards to organize this introduction.

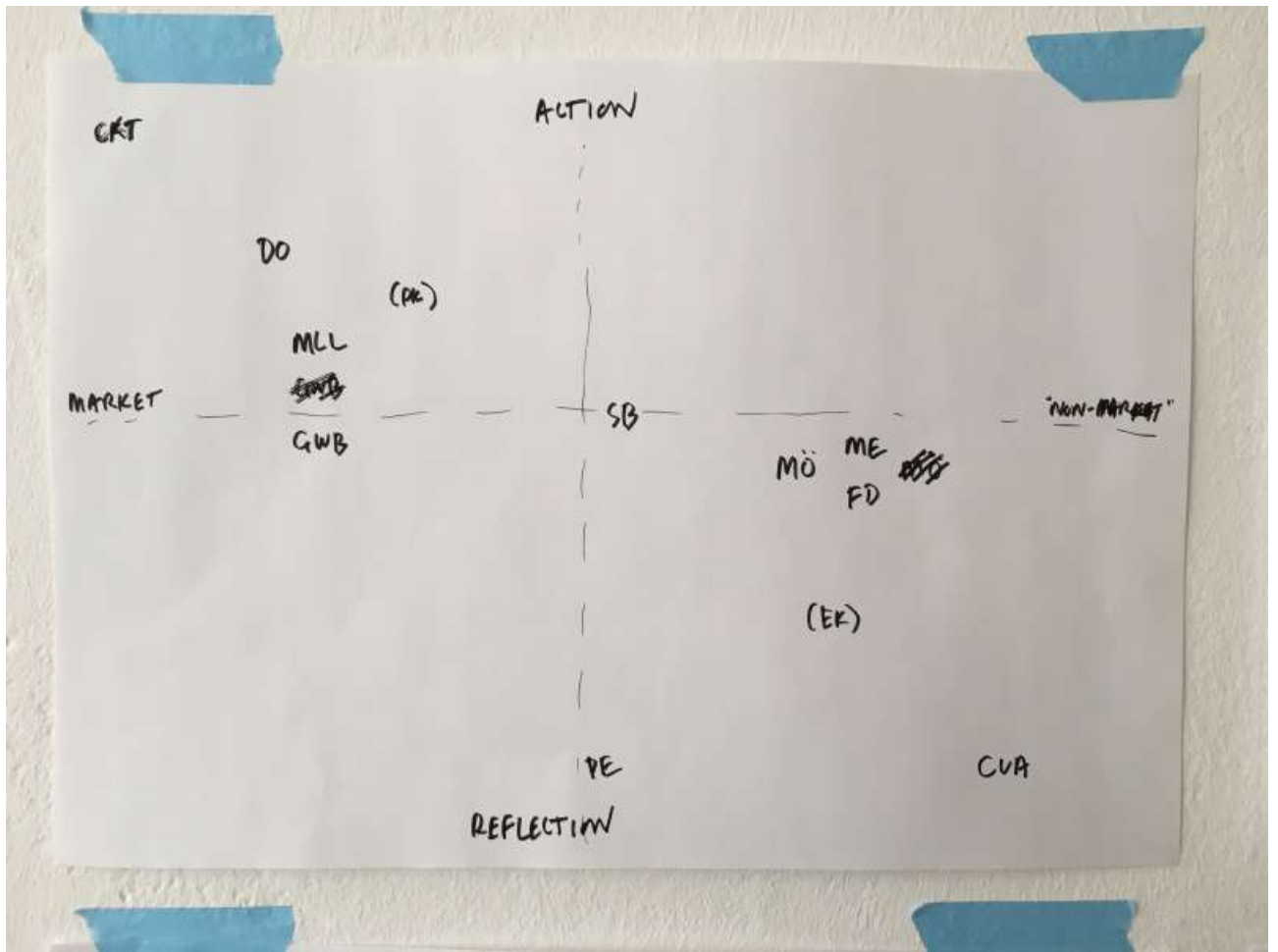
The symposium itself, *Design & Empire [working title]*, used these twin terms to consider a broader question: how different forms of historical and contemporary power are shaped and distributed through the material goods and processes that are the products of design. Recent biennials and major exhibitions of design have focused on the field's increasing influence and its humanitarian effects – shows to bolster the discipline's self-image and public acceptance. Moving away from these, we hoped to highlight a more sinister aspect of the field: how it contributes to existing and emergent power structures, participating in the systems that help to control our world. At the same time, the symposium, situated within Liverpool, a city with its own submerged colonial history – as well as a key location for the Brexit vote, with 58.1% of the city's citizens voting to remain – sought to bring this potentially educational perspective to a broader group of students and practitioners who might consider anew the field's potential. Reflecting its exploratory rather than definitive approach, the symposium took multiple formats – including a keynote lecture, a participants' dinner, presentations, conversations, lecture-performances, film screenings, guided tours, and even a culinary event. The participants themselves came from varied specializations, and included practitioners, theoreticians, and critics. Interestingly, almost none of the participants had ever met each other before, rare in a cultural gathering of this type. Such diversity also supported our structuring principle that the symposium should be multivocal rather than authoritative or monolithic.

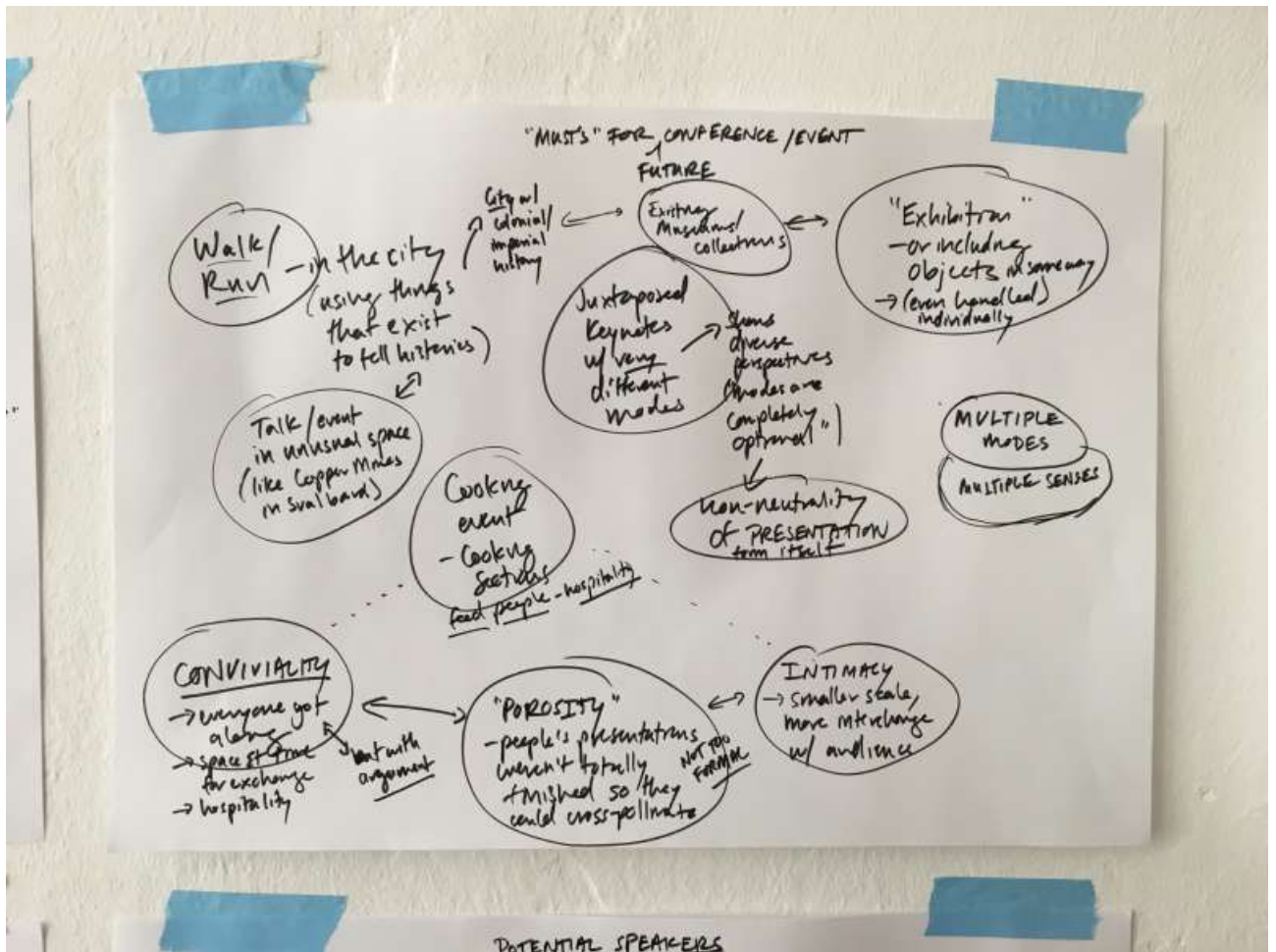
If we could go back to the event again, with our knowledge from today, how might we organize the symposium differently? On a formal level, although our multiple modes of discourse and discovery

created a mix of experiences, the inclusion of an actual exhibition – or even a presentation of objects, for observation and perhaps handling – could have helped to ground the weekend’s activities. There were also nodes of content missing from the speaker lineup. For example, “empire” was often discussed as a metaphor, but in a place like Liverpool, it’s still a lived reality – embedded in the city’s infrastructure and built environment. And, as we discovered on our walking tour through waterfront architectural sites, some residents of Liverpool still see the physical legacy of historical colonialism as a source of pride, despite the destruction wreaked elsewhere. Our symposium lacked close readings of historical design, case studies that might specifically examine the relationship of design decisions to ideology. Given our own studies and focus, we may have narrowly assumed that this understanding of the political implications of form would be obvious to the symposium’s multiple audiences. Although no symposium can be comprehensive, other themes left unmentioned included the imperializing tendencies of contemporary technology and the power structures of patriarchy.[1]

In our public program in Berlin, we opened this self-reflection up to the audience to ask for their feedback. What were their immediate associations when we mentioned the word “empire”? How could the location of a symposium relate to its contents, and what might be other places for a future conference such as this? Are there locations that look to contemporary questions of empire rather than historic ones? What topics were missing from our initial agenda? In what other ways are today’s designers implicated within emerging power structures? And is the topic of “empire” even still relevant? Why or why not?

In the spirit of the symposium itself, as well as our follow up workshop and event, we’ll leave these questions unanswered – or rather, for you, the reader, to consider as you leaf through the documentation and contributions that came out of the event. We hold out hope that, as in *Arrival*, there may still be time for the future to inform the past.





2018-03-16
 Emily King + PK — Learning from Liverpool
 Talk / written piece notes

Life is a preview - a review of the
 today program -
 the next
 event

Every event is a rehearsal for another event

- A. Framework / contextual information
 - a. Liverpool: why situate this in Liverpool?
 - b. Why design & empire (originally proposed for another design biennial, taking apart the structure)
- B. What happened? The event
 - a. Recap: basic info of the event, walk people through the contributions / contributors, and mention key points:
 - i. 2 days, 12 participants + 3 curators
 - ii. Mix of practitioners (designers, artists), curators, academics
 - iii. Mix of activities: Walking tours, Conversations / juxtaposed talks, Cooking / Food, Performance Lectures
 - iv. Exploratory event
 - b. Our analysis: Frame vs. content, presentation vs. argument — striking how different modes of presentation
 - i. Being here at K, is what makes us think so much about the frame
 - c. Our diagrams: mapping the contributions, sorting them

Empire
 ↳ history of
 Empire
 ↳ Empire
 as
 metaphor

What do you think of
 Queen
 Ships
 Flag
 of
 Crown
 Plot of land
 Roman Empire
 Controlled
 Place
 Structure
 Globalized

Retrieved
 Crown
 Great Britain
 Empires of Contemporary
 Politicians
 Eastern Europe
 → Prime Ministers
 as Empires
 Empire State Building

- Diagram 1
 - 1. Provocation / Antagonism vs. Seduction / Consensus
 - 2. Clarity vs. Ambiguity
- Diagram 2
 - 1. Action vs. Analysis
 - 2. Market vs. Non-market
- iii. Conclusions
 - 1. We had a lot of Clarity + Consensus-building (more academic institutional mode)
 - 2. Some Clarity + Provocation
 - 3. Some Ambiguity (Fashion & Art)
- iv. Conclusions 2
 - 1. Lots of Non-Market + Analysis (also the academic institutional mode)
 - 2. Some moving towards the Market + Action (more practitioner mode, designers + artist)

- c. What would we do next?
 - Continuing from Liverpool, multiple formats / modes, multiple senses
 - 3. Walk/run — city with colonial / imperial history that can be both experienced and analyzed
 - 4. Cooking / food event
 - 5. Talk / event in unusual location (c.f. Coal Mines in Svalbard)

Empire Michael Hacht & Tony Negri
 Why is NYC the empire state?
 Paul Elliman → history of identity
 Grace Wales Bonner → 1 a/r hybrid

Design: con

map of
 ↳ Analyse
 ↳ Belgium
 ↳ Knecht
 ↳ Anne
 ↳ Quiet - c

Slavery: d
 in Liverpool
 ↳ size of
 Liverpool

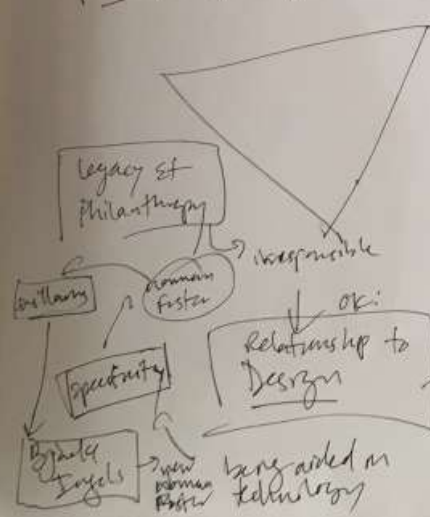
legacy of
 philanthropy
 ↳ William
 ↳ Emma
 ↳ Frederick
 ↳ Charles
 ↳ James

Design: could an academic conference

6. Juxtaposed keynotes (shows diverse perspectives, non-neutrality of presentational forms)
7. Exhibition / presentation with objects (even handed around)
- v. New things to add
 1. Last time we talked about Empire as a metaphor, but not necessarily as a reality — in Liverpool, it's still a reality — could have spent more time with this
 2. Close design historical analysis: case studies looking specifically at the relationship of design / form to ideology — took this for granted
 3. Additional themes: imperializing tendency of technology; feminism (some things that were present in Beyond Change)
 4. Closer coordination of different partners around the framework — even if disagreeing
 5. Questions:
 - a. Format / timing: Are there other formats / timeframes to continue? Faster timeframe is snappy, but less time. How long should a conference be? How long should a talk be?
 - b. We had a fast time for prep (got the funding 6 weeks before): advantage is, fast & loose — could be rapidly prototyped. How does this make sense?
 - c. Other ideas, themes, participants who we should have invited? Cities for this project? Other topics?
 - d. (Is this still a relevant topic? Why or why not?)
 - mixing the same people?
 - Biennial? CKT
 - avoid people who disagree



Knock — Casino at Knock



Emily: technology as imperial force?
 Sara: white skin → Clare Lehman
 2 filmmakers: Jessi compression
 →
Nostalgic — Contemporary site?
 → Moscow
 → Palo Alto
 if you ~~labeled~~ it in terms of historical moments, then it loses its strength → spreading influence of design — how designers are implicated in power structures?

Notes and diagrams from *Learning from Liverpool* workshop. Photograph courtesy K., Berlin.

[1] The Swiss Design Network's 2018 research summit, *Beyond Change: Questioning the role of design in times of global transformations*, addressed topics related to our own in a diversity of formats and approaches. We were lucky to have a chance to attend this before our own workshop in Berlin and reflect upon it in conjunction with our own 2017 symposium.

Emily King and Prem Krishnamurthy

Emily King is a London-based curator, writer, and design historian. She has organised several major exhibitions, including a career retrospective of Alan Fletcher for the London Design Museum, the interdisciplinary exhibition *Wouldn't it be nice: wishful thinking in art and design* for the Centre d'Art Contemporain in Geneva, special exhibitions for EXD Design Biennale in Lisbon, as well as a touring exhibition of Richard Hollis at Centre Pompidou, Paris, and Artists Space, New York. She has edited monographs on designers including M/M (Paris), Robert Brownjohn, and Peter Saville. In addition to contributing to a range of magazines, such as *Apartamento* and *Fantastic Man*, she has edited *The Gentlewoman* and *frieze*.

Prem Krishnamurthy is an exhibition maker based in Berlin and New York whose work incorporates curating, design, writing, and teaching. He established and directed the experimental exhibition space *PI* in New York's Chinatown and has curated exhibitions at institutions including Stanley Picker Gallery at Kingston University London, Para Site in Hong Kong, Austrian Cultural Forum New York, and The Jewish Museum in New York. He is a partner and director of *Wkshps*, a multidisciplinary design workshop that develops identities for the arts, culture, and beyond. As co-founder of design studio Project Projects, Prem was the recipient of the Cooper Hewitt's 2015 National Design Award for Communication Design, the USA's highest recognition in the field. He is a member of the Creative Team for the *Carnegie International, 57th Edition, 2018*, as well as co-Artistic Director of the inaugural Fikra Graphic Design Biennial in Sharjah (UAE) and co-curator of the 13th A.I.R. Biennial Exhibition at A.I.R. Gallery, New York.

Empire Remains Christmas Pudding



Empire Remains Christmas Pudding, Cooking Sections (2013-...). Image by Cooking Sections.

The Empire Remains Shop project began with the recipe for an Empire Christmas Pudding, a well-known 'gastronomic paradox': the most English of dishes made from the most un-English of ingredients.[1] Invented in 1928 by King George V's chef André Cédard, the dish is composed of seventeen ingredients from seventeen different places of origin: currants from Australia, raisins from South Africa, cinnamon from India, cloves from Zanzibar, apples from Canada... More than a recipe, the list of ingredients operates like a map. The *Empire Remains Christmas Pudding* is the first project developed for The Empire Remains Shop. It traces the changes in the postcolonial food market by exploring the economic strategies and forces at play today. Every Christmas since 2013, we have tried to source the same ingredients with the same origins from supermarkets in London. (Follow the recipe included below to make your own.)

The *Empire Remains Christmas Pudding* makes evident that if foodstuffs were once promoted according to their source, today they are rather 'packed in the UK', 'milled in the UK', 'produced in the EU' or use 'sugar from a range of countries'. New economies of origin do not promote a sense of place, but the erasure of it. In some cases, particularly for dried fruits, it is more economical to simply change the supplier according to national conflicts, weather events, etc., without telling customers. The regulatory shift in the 1990s gave supermarkets control over sourcing, distribution, packaging and marketing, allowing them to supersede traditional geographies and sovereign powers.[2] Within the context of post-Brexit anxiety over supply shortages of Southern European vegetables, big chains have reinvented the 'local/national' by disguising internationally variable bulk produce through branding for fictional, British-sounding farms.[3] The trust consumers put in brands encourages a lack of transparency, but the dissolution of origins produces a contemporary logic that has shifted from 'Made In ...' to 'Made Nowhere'.

Commercial relationships between European nations and former colonies indicate the radically different approaches to trading that exist today. French neocolonial schemes in West Africa have mobilised peasant cooperatives, while supermarket standards for exchange between East African

countries and Britain have encouraged expatriate scams.[4] In the case of Guyana (formerly British Guiana), profitable sugar-cane fields along the banks of the Demerara River are associated with uniquely sweet golden crystals. Today, however, brown sugar is branded by Tate & Lyle as 'Guyanese-inspired' instead of 'from Demerara'. Guyanese sugar is included when fluctuations in global pricing are convenient; at other times, 'Demerara-inspired' will suffice. In such cases, place is only important when it evokes a 'glorious' landscape from the past – as happens in the marketing of Caribbean rum with images of lushness, hedonism and piracy.

THE EMPIRE REMAINS CHRISTMAS PUDDING

according to the recipe supplied by the King's Chef
Mr. CEDARD with Their Majesties' Gracious Consent

1 lb Currants	Australia	PACKED IN UK
1 lb Sultanas	Australia or South Africa	PACKED IN UK
1 lb Stoned Raisins	Australia or South Africa	PACKED IN UK
5 ozs Minced Apple	United Kingdom or Canada	BRAMLEY
1 lb Bread Crumbs	United Kingdom	THE BAKERS'
1 lb Beef Suet	United Kingdom	MARQUE
6½ ozs Cut Candied Peel	South Africa	UK
8 ozs Flour	United Kingdom	MILLED IN UK
8 ozs Demerara Sugar	British West Indies or British Guiana	GUAYANESE INSPIRED
5 Eggs	United Kingdom or Irish Free State	LAI D BY BRITISH HENS
½ oz Ground Cinnamon	India or Ceylon	PRODUCED IN UK
¼ oz Ground Cloves	Zanzibar	PACKED IN UK
¼ oz Ground Nutmegs	British West Indies	NON-EU
¼ teaspoon Pudding Spice	India or British West Indies	AGRICULTURE
¼ gill Brandy	Australia S. Africa Cyprus or Palestine	NON-EU AGRICULTURE PRODUCT OF ISRAEL
¼ gill Rum	Jamaica or British Guiana	GUYANA
1 pint Beer	England Wales Scotland or Ireland	LONDON

WRITE TO THE EMPIRE MARKETING BOARD, WESTMINSTER, FOR A FREE BOOKLET
ON EMPIRE CHRISTMAS FARE GIVING THIS AND OTHER RECIPES.

COOKING SECTIONS
1928-2017

[1] Kaori O'Connor, 'The King's Christmas Pudding: Globalization, Recipes, and the Commodities of Empire', *Journal of Global History*, vol. 4, no. 1 (March 2009), pp. 127–55.

[2] Susanne Freidberg, 'Supermarkets and Imperial Knowledge', *Journal Title?*, June 2007, pp. 321–42.

[3] The 'fake farm' branding strategy uses rural, historic or natural references to reassure shoppers of the original quality of internationally sourced bulk produce: Nightingale Farms (for Spanish and Moroccan tomatoes), Suntrail Farms (for imported oranges, lemons, and avocados) or Woodside Farms (for German, Dutch or Danish pork). Indeed, Woodside Farm does exist somewhere in Britain, but its real owner is suing Tesco for appropriating the name of his farm without sourcing produce from him.

[4] Anna L. Tsing, *The Mushroom at the End of the World: On the Possibility of Life in Capitalist Ruins* (Princeton: Princeton University Press, 2015), p. 65; Susanne Freidberg, *French Beans and Food Scares: Culture and Commerce in an Anxious Age* (Oxford: Oxford University Press, 2004).

Cooking Sections

Cooking Sections (Daniel Fernández Pascual, Spain & Alon Schwabe, Israel) live and work in London. A duo of spatial practitioners, Cooking Sections was founded in 2013. It was born to explore the systems that organise the world through food. Using installation, performance, mapping, and video, their research-based practice explores the overlapping boundaries between visual arts, architecture, and geopolitics. Cooking Sections was part of the exhibition at the U.S. Pavilion, Venice Architecture Biennale, Italy (2014). Their work has also been exhibited at the 13th Sharjah Biennial, United Arab Emirates (2017); Storefront for Art & Architecture New York, USA; dOCUMENTA 13, Germany (2012); Peggy Guggenheim Collection, Venice, Italy (2014); CA2M, Madrid, Spain (2015); The New Institute, Rotterdam, Netherlands (2016); UTS, Sydney, Australia (2016); and the Oslo Architecture Triennale, Norway (2016). They have been residents in The Politics of Food at Delfina Foundation, London, UK, and currently lead a studio unit at RCA, London, UK. In 2016 they opened The Empire Remains Shop.

Contents of Ostrich's Stomach



F. W. Bond, Contents of an Ostrich's Stomach, 1930.

*No imperialist,
not one of us, in taking what we
pleased – in colonizing as the
saying is – has been a synonym for mercy.*

Marianne Moore[1]

Golden Days

I first saw Frederick William Bond's photograph in the book *Golden Days, Historic Photographs of the London Zoo*, [2] a selection of images from the Zoological Society of London's archive of 15,000 glass negatives. The black and white photographs of the collection date back to 1864, with images of many rare animals, some of which have become extinct in the time since they were photographed. A feature of the archive is the growing register of ghost fauna: creatures discarded at the same rate as the ageing media formats that record them. Our own human species can be characterised by the preference to preserve a record of itself over anything more environmentally beneficial to the world around it. Among animals in the archive that have been photographed and lost – and that means never to be recalled – are the thylacine, a sleek wolf-like Tasmanian marsupial with the stripes of a tiger, and the mysterious quagga. Resembling a zebra-headed horse, the last recorded quagga died in Amsterdam Zoo in 1883.

Published in 1976, *Golden Days* mainly includes photographs from the years between the two world wars. The 'golden days' of the title and the sepia-toned images reflect the imperial fantasy of a sun that never sets – despite casting some of its coldest shadows over a visit to the zoo. The ostrich photograph is a particularly bleak one, but few in the book are any less sad or disconcerting. An elephant being walked past Kings Cross station on its way from East London docks, a camel pulling a lawnmower, a polar bear begging for food. The book portrays the sedated life of caged animals trapped in a human wilderness of boredom, or in the case of the absent ostrich, only its death. As the caption tells us, Bond photographed *A collection of objects in the stomach of an ostrich at post mortem in 1927 – coins, staples, screws, nuts,*

rope, and even shirts. Before feeding of animals by the public was stopped, deaths quite often occurred. Laid out on a board like the forensic remains of a pathologist or a taxidermist, or even a hardware-store fire sale, the collection of relics is a *memento mori* for a specimen of our planet's largest bird, killed in captivity after being fed on a diet of human debris. The carefully assembled shrine includes metal tokens and folded fabric, a lace handkerchief, a glove, a pencil, and near the centre of the collection, the fatal four-inch nail that killed the ostrich.



Ostrich dissection from *Mémoires pour servir à l'histoire naturelle des animaux* (Paris: De l'Imprimerie royale, 1671). Edited by Claude Perrault and first published in 1671, with accounts of the natural history, including the dissection, of 13 different species of exotic animals, An elephant folio published on fine paper, it included full-page engravings of each of the animals, most of them drawn by Sébastien Leclerc, one of a stable of artists and engravers supported by the crown. The animals had come to the Paris Academy from the royal menageries at Vincennes and Versailles, following a programme that had begun in the spring of 1667.

A document published in 1864 provides a meticulous account of the dissection of an ostrich undertaken and authored by Alexander Macalister, Demonstrator of Anatomy at the Royal College of Surgeons. In the introduction Macalister writes:

though the subject of this memoir has been examined very frequently, there does not exist, to my knowledge, a complete account of its structural peculiarities. M. Perrault has left on record the dissection of eight of these birds; but many interesting facts regarding the visceral anatomy are not mentioned. During the past year the splendid pair of ostriches belonging to the Zoological Society of Dublin died – the female in June, 1863; the male in January, 1864: both have been dissected with great care, and many novel points of anatomical and physiological importance have been ascertained.[3]

The notes fill a 24-page document covering every detail of each creature's body. A passage describing the contents of their stomachs includes the following:

All the substances contained in the stomach were of a dark green colour; as also was its epithelial coat; its contents were vegetable matters and stones in large quantities – the latter were rounded and worn. In the outer coat of the stomach of the female, and in contact with the gastric artery, a pin was found, enclosed in a cyst.[4]

'OSTRICH Can digest stones'[5]

Bond's photograph is a picture of desolation. But not all ostriches are on the extinct list yet. A mythical and dreamlike creature to ancient cultures, the ostrich is uniquely geared for survival, a spectacular composite of physical and behavioural adaptations. Ostriches have the largest eye of any land vertebrate: 50 mm in diameter, or two-thirds of the volume of its head, giving it exceptional vision and shaded from the sun by a thatch of exceptionally long black eyelashes. Birds usually have four toes, the ostrich has only two, but they are seven inches long and with a giant black hoof-like nail on each inner toe. Macalister's dissection notes contain an extended description of the bones and sole of the foot, 'where the surface of the skin presents a series of closely-set bristle-like processes'.[6] The body of the bird is visible only as a mass of feathers – ounce for ounce more valuable than gold in the late nineteenth century – with a wingspan of two metres. Ostrich anatomy, however, lacks the 'keel' that attaches to the sternum or breastbone of flying birds. Making up for this structural oversight are two kneecaps on each leg, also exceptional for bird or beast. The upper kneecap or patella allows the ostrich to straighten its leg more quickly and forcefully. With its razor-sharp obsidian-black toenail and double-jointed leg, the ostrich is perfectly placed to disembowel a human with a single sudden forward thrust. More importantly, the hoof-like feet and double patellae are the key to its incredible pace, covering five metres in a single stride and sustaining over long distances speeds of up to 70 km/h (43 m/h). Predators have little chance of catching a flightless bird that has invented its own form of flight.

A scene in the eleventh-century Bayeux Tapestry shows an ostrich beneath a star rising in the June night sky. The ostrich was thought to lay its eggs only after checking for the arrival of the Pleiades constellation. Such speculation is not easily disproved: in the natural habitat of the ostrich, timing is critical, since the chicks must hatch just as the rains arrive.

The ostrich is the only living member of the ratite order of Struthioniformes. Others, including Madagascar's aepyornis or elephant bird, and New Zealand's moa (once placed in the ratite group), are gone. Known to have inhabited areas around the Mediterranean Sea in the west, China in the east and

Mongolia in the north 20–60 million years ago, ostriches migrated south across Africa as recently as a million years ago. Still native to the African savannahs and the Sahel, the bird has a preference for open semi-desert landscape. This has allowed farmed ostriches in Australia and southern Africa to thrive in large feral populations, while free ostrich numbers are in serious decline. Of five subspecies, the Arabian ostrich became extinct around 1966, and the North African ostrich is on the critically endangered list.

The ostrich has long been an object of our misperception. Believed to feed on stones and metal objects, and to bury its head in the ground, the ostrich is synonymous with a refusal to face reality or accept facts. In a famous line of *Henry VI* (1591), Shakespeare exploits the tragicomedy of the creature's ungainly appearance and eating habits when the rebel leader Jack Cade threatens his foe Alexander Iden: 'I'll make thee eat iron like the ostridge, and swallow my sword like a great pin.' [7] Visitors to London Zoo may have laughed like Elizabethan theatregoers at the impractical-looking creature's willingness to eat everything thrown at it, including that great pin. It was part of a popular folklore, whose origins are attributed to the Greek scholar Pliny. He wrote, in *Naturalis historia*, that the ostrich has a habit of hiding in bushes and an ability to eat and digest anything. [8] For this reason the ostrich takes its place in Flaubert's satirical *Dictionary of Received Ideas*. It cannot digest stones or metal objects, and neither does it bury its head in the sand to avoid danger. It does, however, lay its eggs in the ground, using its beak to rotate them during incubation. The black-feathered male takes his parental shift under cover of the night. In daylight, the scrub brown-feathered female can seem to drop invisibly into the ground as a defensive measure, perfectly resembling in the heat haze just another mound of earth. Ostriches also poke around in the sand looking for small hard objects. The ostrich has no teeth and one of its adaptive instincts is to outsource the mechanism for its digestive system to a collection of stones, bones and lumps of metal and glass. Never excreted, they wear slowly away and are replaced. Without this collection of hard objects, the ostrich would die. Ostriches are resourceful, not foolish – a truth conveyed in Shakespeare's play, with its focus on alimentary issues of resilience, survival and diet. In 1450, during a time of economic and moral collapse after a costly unresolved war with France, Jack Cade led a powerful Kent rebellion against the English Government prompted by a severe national food shortage. Shakespeare connects the impoverished malfunctioning body to social disorder when, at Cade's death, his final words are 'Famine and no other hath slain me.' [9]

The American poet Marianne Moore celebrates the ostrich in her poem 'He "Digesteth Harde Yron"' (1941). Her title is borrowed from English writer John Lyly's *Euphues: The Anatomy of Wit* (1579), where he writes: 'the estrich digesteth harde yron to preserve his health', referring to the discovery by French anatomist Joseph-Guichard Du Verney of a collection of seventy coins in the craw of an ostrich he was dissecting. Moore's poem was partly inspired by a magazine article on the ostrich, which states: 'Its fondness for the metals ... has obtained for it the epithet of the "iron-eating ostrich".' [10]

Critic Harold Bloom salutes Moore as a 'visionary of natural creatures'. [11] So many of them inhabit her poems: frogs, elephants, race horses, snails, the 'frigate pelican', the pangolin, the chameleon, the jellyfish and the giraffe. Moore once translated a collection of Fontaine's *Fables*, though her own poems were already an updating of the form, fable-like in their own way but featuring creatures that are not in or under the possession of human language. Bloom also wrote that Moore's best poems are from somewhere 'at the opposite edge of consciousness'. [12] 'He "Digesteth Harde Yron"' is one of these, with its fragmented image of an ostrich as a flickering continuum alive across the passage of time. Freely quoting from Lyly as well as the magazine feature that may have suggested the poem, Moore balances lucid thought against a world of never fully knowable things, or certainly no better known because they can be named. Impressions of reality are instead gleaned from their attributes, and in 'He "Digesteth Harde Yron"' Moore largely resists directly naming the subject of her poem. It is 'the camel-sparrow', 'the large sparrow Xenophon saw walking by a stream' and 'the bird, quadruped-like bird, and alert gargantuan / little-winged, magnificently speedy running-bird'. There is a difference, says Wallace Stevens in a short

essay on Moore, between the creature that she wants to think freely about and the ostrich contained by her encyclopedia.[13] 'Never known to hide his / head in sand', Moore writes, in defiance of the language of atrophied facts.

The poem is an admiring account of a creature surviving the stages of evolution and the pages of history, having been a prized object of imperial realms from Egypt, Greece and Rome to more recent empires of Europe and America. Maat, Egyptian goddess of law, is characterised by her 'feather of truth' – an ostrich feather; in Egyptian writing the hieroglyph for justice, it marks the bird as a symbol of integrity. In a recent study of Raphael's painting of an ostrich, made as part of a fresco for the Vatican (1519–24), historian Una Roman De'Elia, imagines Raphael's attraction to a curiously formed creature that 'evoked so many disparate associations – a modern hieroglyph'[14] with its contradictory range of meanings, alternately signifying, among other things, heresy and stupidity or strength and perseverance. In Western culture of the Middle Ages, Raphael's ostrich would have been particularly ambiguous, partly because its image was so uncommon. Sharing certain affinities with Moore and her ostrich, De'Elia likens the unconventional bird, as depicted by the Renaissance painter, to a 'rare word, not easily interpreted'.[15]

Other echoes of the past resonate in Moore's poem, including the biblical *Book of Job*, with the ostrich prominent among its procession of beasts, lions, ravens, unicorns, horses, eagles and peacocks, and celebrated there for its speed: 'When she lifts herself on high, she scorns the horse and its rider'.[16] '[T]he best of the unflaying / pegasi ... he feigns flight', says Moore, though Baraq Baba, a twelfth-century Sufi dervish, is said to have encouraged an ostrich he was riding to leave the ground and fly a short distance.

After marking its instinct for survival, Moore wonders how such a creature fell from ancient reverence to being branded as somehow both foolish and an icon of imperial decadence:

Six hundred ostrich-brains served
at one banquet, the ostrich-plume-tipped tent
and desert spear, jewel-
gorgeous ugly egg-shell
goblets, eight pairs of ostriches
in harness.

The banquet was hosted by the Syrian-born Elagabalus, Roman emperor between 218 and 222, and gaining in those few years a reputation for extreme decadence. A painting by Lawrence Alma-Tadema, *The Roses of Heliogabalus* (1888), depicts another of the same emperor's excessive banquets, when guests were smothered beneath a mass of violets and rose petals released from a false ceiling, some apparently suffocating in the blizzard of flowers. Elagabalus ruled for four years and was only eighteen when assassinated, his body thrown into the Tiber. In notes for the poem, Moore cites George Jennison's book *Animals for Show and Pleasure in Ancient Rome*. [17] Clearly the ostrich is, for Moore, the opposite of flamboyant gluttony, and through the qualities that have kept it alive, offers a lesson for human behaviour, prompting thoughts, warnings even, about the excesses and prejudices of our own cultural appetites.

The Royal Hunt



Albrecht Dürer, *Deer Head Pierced by an Arrow*, 1504, brush drawing and watercolour on paper.

The first subject matter for painting was animal. Probably the first paint was animal blood. Prior to that, it is not unreasonable to suppose that the first metaphor was animal. Rousseau, in his 'Essay on the Origins of Languages', maintained that language itself began with metaphor: 'As emotions were the first motives which induced man to speak, his first utterances were tropes (metaphors). Figurative language was the first to be born, proper meanings were the last to be found.' [18]

The ostrich appears in another Marianne Moore poem, 'The Jerboa', amid scenes in an imperial Roman animal park, possibly an early menagerie, a garden with a temple for the Egyptian goddess Isis, and a giant bronze fir cone that functioned as a water fountain. The Romans, as well as those 'native of Thebes', writes Moore, knew:

how to use slaves, and kept crocodiles and put
baboons on the necks of giraffes to pick
fruit, and used serpent magic.
They had their men tie
hippopotami
and bring out dappled dog-
cats to course antelopes, dikdik, and ibex:
or used small eagles. They looked on as theirs,
impalas and onigers,
the wild ostrich herd
with hard feet and bird
necks rearing back in the
dust like a serpent preparing to strike.[19]

The earliest record of such parks, a form of private 'paradise', comes from China around 1150 BC under the Emperor Wen Wang, and evidence can also be found in the empires of Assyria and Babylonia and later in the Egyptian dynasties. The Persians created *paradeisos* – large walled parks stocked with living creatures for the pleasure of the monarch. The keeping of menageries in which animals were caged together according to classification or family groups – all the felines, for example – appeared later, more as a collection of living trophies kept on the grounds of the palace. The fifteenth-century Aztec capital of Tenochtitlan (now Mexico City) is thought to have had the grandest menagerie of this time, a zoological and botanical collection capturing the spirit of the Aztec empire.

From Mesopotamian, Persian and Hellenistic empires to our own times, animals have provided a symbolic capital for imperial power, displayed to impress an emperor's subjects as much as his enemies, and used as objects of exchange in a common language connecting Latin, Christian and Islamic worlds. The opening scene of the twelfth-century French poem *La Chanson de Roland* (The Song of Roland) involves the offer of a royal gift of a collection of animals. The scene is based on actual exchanges from the time. Historian Willene Clark pictures England's King Henry I, after victory at Caen in 1105, parading 'a young lion, a lynx, camels, and an ostrich before a populace that followed the animals with exuberant pleasure and wonder. The message is of a ruler so powerful he could acquire and control even these fearsome, wild, and expensive creatures.' [20] The royal interest in exotic animals at this time was motivated by a twelfth-century revival of Classicism, an age when animals imported for ceremonial processions and menageries were imperial Rome's most effective symbols of power.

Similarly the institution that Thomas Allsen calls the 'royal hunt' was central to every aspect of life in premodern Eurasia:

To understand the royal hunt we must take into account the myriad ways in which animals, wild and domesticated, are entwined in human cultural history: animals, after all, are foes and friends, symbols and signs; they serve as talismans, as markers of status, as commodities and presentations, as sources of entertainment; clothing, food, and medicine, and even as sources of wisdom and models of human behaviour. [21]

Over a period of nearly four millennia, different courts and cultures across Iran, North India, Turkestan and much of Eurasia, while rarely in direct contact with each other, came to share many of the same hunting practices and rituals. Stately parks and the exchange of animals were important to military preparations, trading routes and communication networks, as well as claims for political legitimacy. Birds and beasts featured as stylised courtly motifs, which, along with the possession and exchange of actual animals, became unifying elements in the medieval language and culture of empire. Elephants from India and Southeast Asia were often 'recycled' in royal exchanges across Latin Europe, as we know from Pietro Longhi's quartet of paintings of an elephant in Venice in 1774.

Allsen's study follows the imperial significance of hunting and of protected parks and menageries well into the twentieth century. In 1940, *Time* magazine ran a cover story about 'Reich Master of the Hunt' Herman Goering. Hitler's deputy lived in Schorfheide Forest, developed by him as a private 100,000-acre game preserve. Importing falcons from Iceland and commissioning a genetically engineered resurrection of the extinct auroch, a prehistoric cow depicted in cave paintings and once hunted by the Romans, Goering dressed in medieval hunting costume to practice archery and expected his guests to play with Caesar his pet lion cub. In every detail, including the sacrificial destruction of his own hunting park at the end of the war, the Reichsmarshal was observing traditional practices commonly shared by earlier imperial Eurasian powers. Identifying with imperial Rome, The British Empire also exploited the symbolic value of animals and the historical significance of the royal hunt – maintained at home in the traditional blood-letting of the fox hunt.

London Zoo was the first royal menagerie to be described as a zoological garden. A national repository dedicated to public animal display, it offered the first reptile house and the first insect house.

When, one evening in 1867, a popular music hall artist known as the Great Vance sang, 'Weekdays may do for cads, but not for me or you / The OK thing on Sundays is the walking in the zoo', the popular abbreviation was coined.[22]

Along with the British Museum and the Royal Geographical Society, London Zoo was part of a network of domestic institutions serving to extend the symbolic value of the British Empire. Echoing the assembly of animals in Noah's ark, the Zoo registered the acquisition of distant territory through its display of exotic creatures. In *Reading Zoos*, Randy Malamund considers the zoo as a domestic analogue to the colonialist literature of Rudyard Kipling, Howard Forster and others.[23] Connecting it to what Robert H MacDonald has called the 'metaphorical construction of empire',[24] Malamund describes the carefully staged 'native' scenario in which animals are figures in a text authored by those who capture, breed, administer and exhibit them. In this model of empire, visitors hold dominion over lesser species in a sociopolitical hierarchy of morally indefensible values.

Confirming London Zoo's manifestly imperialist roots, Sir Stamford Raffles, with a reputation made as an administrator of England's imperial outposts in Asia, ended his career by establishing the Zoological Society of London in 1826. His personal collection of animals, mainly from Sumatra where he was governor, formed part of the zoo's opening endowment. As both trader and administrator, Raffles embodied the link between imperialism and the collection, imprisonment and display of animals. He also extended the royal hunt to global proportions by establishing, as part of the Empire, the modern commercial legacy of the menagerie in the form of the zoo.

Regal associations with ostrich feathers may have begun a few centuries earlier with Queen Elizabeth I, but in the late nineteenth century British colonial interests in South Africa led to a hugely lucrative Cape ostrich feather industry. Queen Victoria celebrated her Diamond Jubilee of 1897 in a gown of black satin ruffled by a thousand ostrich feathers. A photograph from 1902 that seems to appear in every book about the British Empire shows the Viceroy Lord Curzon, his wife Lady Curzon, and the corpse of a Royal Bengal tiger, another creature granted imperial status through no choice of its own. The basis of imperialism is portrayed here in the visualised power structure of a tradition that attempts to keep its ideals separate from how they are achieved, or from what Joseph Conrad described as a horror ultimately impossible to conceal:

The conquest of the earth, which mostly means the taking it away from those who have a different complexion or slightly flatter noses than ourselves, is not a pretty thing when you look into it too much. What redeems it is the idea only. An idea at the back of it; not a sentimental pretence but an idea; and an unselfish belief in the idea – something you can set up, and bow down before, and offer a sacrifice to.[25]

The Viceroy and his tiger reminds me of two less triumphal animal-kill depictions, each written by a well-known subject of the British realm: 'Shooting an Elephant' by George Orwell, and 'Reflections on the Death of a Porcupine' by DH Lawrence, both dated to within a couple of years of Bond's ostrich photograph of 1927. Orwell's story, published in 1936, tells of an incident involving a young British police officer working in Burma between 1922 and 1927 (as Orwell was at this time). Lawrence wrote his account on the ranch where it happened in New Mexico in 1925. For both, the shooting of an indigenous animal triggers a rush of thoughts about nature, culture and human progress, symbolised by guns and cages, whether for herding and containing animals or people. In keeping with Conrad's *Heart of Darkness*, the plight of both elephant and porcupine reflects the irrational barbarity of the supposedly civilising imperial mission.

For Orwell, everything the imperialist cause hopes to conceal rears up in the young policeman's struggle to deal with the elephant, and in the end, simply to get it to die. The narrator's indignation at British imperialism emerges from personal discomfort at his own role in defending it:

In a job like that you see the dirty work of Empire at close quarters. The wretched prisoners huddling in the stinking cages of the lock ups ... I had to think out the problems in the utter silence that is imposed on

every Englishman in the East. I did not even know that the British Empire is dying.

The incident seems small in the scheme of things, but offers an unavoidable view of what Orwell calls 'the real nature of imperialism – the real motives for which despotic governments act'. [26] The tyranny of empire destroys even the coloniser's freedom as the young policeman finds himself on display, performing for the crowd as a puppet while carrying out the wishes of his subordinates in a public theatre of hatred.

For Lawrence, the porcupine represents the incommensurable scope of the frontier. Face to face with the animal, he contemplates the cosmic vastness of land and sky: 'The ranch is lonely, there is no sound in the night, save the innumerable noises of the night ... Cosmic noises in the far deeps of the sky, and of the earth.' Seen in the light of the moon, the porcupine has a 'lumbering, beetle's squalid motion, unpleasant'. He watches it 'squat like a great tick', the hairs and bristles forming a moonlit aureole that seems 'curiously fearsome, as if the animal were emitting itself demon-like on the air ... He made a certain squalor in the moonlight of the Rocky Mountains. As all savagery has a touch of squalor'. Yet 'the dislike of killing him was greater than the dislike of him ... never in my life had I shot at any living thing. I never wanted to. I always felt guns were repugnant: sinister, mean.' However, he heads back to the house for the 'little twenty-two rifle'. [27]

All British military police in Burma carried a gun, but as Orwell knew, it was 'an old .44 Winchester and much too small to kill an elephant'. Sending an orderly to borrow an elephant rifle raises the already excited expectations of the crowd that has gathered to watch the spectacle:

As soon as I saw the elephant I knew with perfect certainty that I ought not to shoot him. It is a serious matter to shoot a working elephant, comparable to destroying a huge and costly piece of machinery ... I watched him beating his bunch of grass against his knees, and with that pre-occupied grandmotherly air that elephants have.

Finally, both men fire rounds of shots into their doomed creatures, killing them as incompetently as you and I might, if we could carry it out, in a frenzy of mindless noise and smoke and bullets, a small-scale devastating carnage. 'One could have imagined him thousands of years old', says Orwell of the dying elephant, no longer an imperial machine but returned to the land, 'a once living rock formation now expiring its last breath'.

Neither narrator offers any sense of concern for these animals. Lawrence drifts into cosmic reverie about a natural-universal order of all creatures and kills the porcupine because, well, that's what you do to them. Orwell's reason is even worse: 'I had done it solely to avoid looking a fool'. [28] There is no sentiment here that compares with the dignity bestowed by Marianne Moore on the porcupine in her 'Apparition of Splendor': 'as when the lightning shines on thistlefine spears among/prongs in lanes above lanes of a shorter prong', [29] or the elephants in her eponymous poem:

wistaria-like, the opposing opposed
mouse-gray twined proboscises' trunk formed by two
trunks, fights itself to a spiraled inter-nosed
deadlock of dyke-enforced massiveness. [30]

Language and Empire

LETTRES FANTASTIQUES.

A B C D E

F G H I J

K L M N O P

Q R S T U

V W X

Abraham de Balmes's *Letters Fantastique* is believed to have been made in Venice in 1523. De Balmes referred to it as 'writing from beyond the river', [31] perhaps to give the impression of Mesopotamian origins, or, since it was made in Venice, discarded parts dredged from a canal. Some of the objects comprising the letters are weapons for battle – a tomahawk, an archer's bow with arrow primed – but most seem to be agricultural and gardening tools: a scythe, a hoe, a trowel, cutting blades. All of these implements are of wrought iron, and at the centre of the collection is the blacksmith's trademark, usually paired with the image of an ostrich, a horseshoe. This pairing was also present in the crest of English soldier Captain John Smith, who established a permanent colony in Virginia in 1609. Thus imperialism and the ostrich meet again in a third Marianne Moore poem, 'Virginia Britannia' (1935). Here, the poet imagines the natural features, the flowers, trees, animals and particularly the birds, of Virginia, in the days before it became North America's first permanent European settlement. Moore's notes for the poem refer to 'the ostrich and horseshoe: As crest in Captain John Smith's coat of arms, the ostrich with a horse-shoe in its beak – i.e. invincible digestion – reiterates the motto, *Vincere set vivere*'. [32]

In *Orientalism*, Edward Said evaluates the rise of philology and the nineteenth-century interest in histories and cultural implications of language. [33] Many of the first-wave Orientalists were scholars of language, including Ernest Renan, a noted Phoenician archaeologist, Silvestre de Sacy, a historian of Semitic and Arabic languages, both from France. Among the English were Edward William Lane, a translator and Arabic lexicographer, and the explorer Richard Burton, a linguist who worked as a cartographer and spy for the East India Company. Said presents the following stomach-churning passage from Lane's book *Modern Egyptians* as the epigraph for his chapter:

When the seyyid 'Omar, the Nakeeb el-Ashraf married a daughter ... there walked before the procession a young man who had made an incision in his abdomen, and drawn out a large portion of his intestines, which he carried before him on a silver tray. After the procession he restored them to their proper place and remained in bed many days before he recovered from the effects of this foolish and disgusting act. [34]

Lane admits in his book to not being present at the procession described. The scene was reported to him, along with others 'so much more singular and disgusting' that he refuses to tell of them. [35] They might have involved sex, all references to which Lane censored from his translation, the first in English, of *The Arabian Nights*. Burton made up for that with the first unexpurgated translation of *One Thousand and One Nights* (commonly called *The Arabian Nights* in English after Lane's translation, based partly on Antoine Galland's French edition) and by publishing the *Kama Sutra* in English, and a translation of al-Nafzawi's *Perfumed Garden of Sensual Delight*, a fifteenth-century Arabic sex manual and collection of erotic literature. At odds with the ethnocentrism of his peers and critical of British colonial policies, Burton relied on direct contact with other cultures. He also seemed to acquire languages easily, apparently able to communicate in twenty-nine European, Asian and African languages, with a proficiency in several Indian dialects as well as Persian and Arabic. Additionally, he kept a menagerie of tame monkeys with the intention of learning their language.

India and the Orient occupy a complicated place in European western experience. Bordering Europe it was the location of its earliest and most profitable colonies. As the site of the Biblical lands, it is the source of its civilization and languages. At the same time, for colonialism, the Orient marks a mutually exclusive distinction between two separate worlds. Said shows how the early Orientalists provided a setting for subsequent studies almost entirely congruent with the interests of imperial institutions and governments. In the years between the late eighteenth century and the end of World War I, Europe had colonized 85 percent of the world, with a dramatic effect on domestic aspects of national interest. Benedict Anderson covers the same years in his book *Imagined Communities*, a time when nationalist enterprises

of discovery and conquest 'caused a revolution in European ideas about language'.[36] The rise of nationalism across Europe between 1820 and 1920 is closely connected to the growth of literacy and national print languages. The 'nation' becomes something more clearly articulated and aspired to, but is also conceptually available for other interpretations. The convergence of capitalism and literacy on what Anderson refers to as 'the fatal diversity of human language'[37] brought newly idealised forms of national collectivity. Such concepts, shaped on the printed page in vernacular national languages, were the impetus for all kinds of imaginary citizenship, shared popular sovereignty, national flags and anthems. Print-literacy helped to establish the invented traditions that could define a new national authority. At the same time, the emergence of a humanist philology incorporated classical history and the Bible as part of a notional 'antiquity' to be juxtaposed with an emerging conception of modernity. Nations began to think of their own culture as equal to the ancients, and to impose this onto others.

By the late eighteenth century, comparative language studies brought knowledge of Sanskrit and the awareness that Indic culture was far older than Greece or Judaea. Jean-François Champollion's deciphering of the Rosetta Stone in 1822 encouraged a surge of interest in ancient languages and early writing systems. Studies of comparative grammar followed, often involving the speculative reconstructions of proto-languages. The nineteenth century was a golden age for lexicographers, grammarians and folklorists, in a Europe in which Latin had been defeated by vernacular print-capitalism. So-called languages of state were now manifest in the vernacular languages of its citizens and connected to a rapaciously expanding print market.

Canadian political economist Harold Innis, known for writing about language and empire, first produced a series of studies looking at Canada's fur, fish, timber, metal and mineral industries. Acknowledging his country's defining role as a resource for staple products, the timber was a turning point in his work. Empire propaganda was being published on pages of decimated Canadian forest. The demands for pulp and paper were directly connected to the mass-circulation of daily newspapers, and mass media made a great impact on public opinion in cities such as London and New York. In his book *Empire and Communications* (1950), Innis explores this as a feature common to all empires.[38] Conditions are made favourable to imperial interests by the efficiency of their means of communication. When the Romans conquered Egypt, supplies of papyrus became the basis of a large administration empire. The nineteenth-century growth of literacy and print technology is historically consistent with that. So is the influential force of the writer Rudyard Kipling, a propagandist for British imperialism in the form of popular fiction, songs, poetry and children's stories.

Among surviving fragments from Greco-Roman Egypt, literature – including Homer and Aristophanes – is far outweighed by contracts, tax receipts and property-sale documents. By the nineteenth century, these kinds of writing are still the bulk of what remains, but journalism and fiction have become an additional instrument of imperialism, another way to colonise ideas and social space. For Said, 'the power to narrate, or to block other narratives from forming and emerging' is an essential means of connecting the empire to its subjects at home.[39] Kipling supplied this narrative connection in book-loads and across all registers of language, from the tone of an Old Testament prophet to that of a bar- and barrack-room balladeer. He sold the adventure of Empire as a thrilling yarn, setting British expeditionary forces on a magical mission as part of a hereditary 'tribe' that he named 'The Lost Legion' – inheritors of the spirit of the Roman Empire and not only its alphabet. But his darkest and most compelling stories are a form of colonial gothic that seems to emerge from his own perversely irrepressible attraction to everything the imperialist fears most in the shadowy hostile corners of colonial life.

In his short story 'Beyond the Pale', a Hindu woman sends a message to her lover in the form of an object letter, a collection of things. The story, published as part of Kipling's first book of short fiction, *Plain Tales From the Hills* (1897), describes the forbidden relationship between a British civil servant, Trejago, and a native girl, Bisesa. In the words of the narrator, it is the cautionary tale of a man who 'stepped beyond

the safe limits of decent everyday society, and paid for it heavily'.[40] The romantic premise is a pretext. Kipling is a master of the deceptive affairs of language. Generally avoiding first-person accounts, he tends to invent fictional characters as narrators of his stories, while the protagonists, often members of the Anglo-Indian community, are self-projections based on personal experience. In 'Beyond the Pale', the nightly excursions of Trejago are drawn from Kipling's own life as a reporter living in the North Indian city of Lahore and later in Allahabad. The stories included in *Plain Tales From the Hills* were written for the Lahore-based newspaper *The Civil and Military Gazette*. In his autobiography *Something of Myself*, Kipling remembers wandering 'till dawn in all manner of odd places – liquor shops, gambling and opium dens ... the narrow gullies under the Mosque of Wasir Khan for the sheer sake of looking'.[41] It is not known if he chose to go concealed, as Trejago does, in a *boorka*, the 'sheet veil' used by Muslim women, to enable his unchecked passage into Hindu territory. But the narrator's message in the opening line of the story, 'A man should, whatever happens, keep to his own caste, race and breed. Let the White go to the White and the Black to the Black' belongs to Kipling, expressing the purpose of the tale as a premonitory warning to all.[42]

The day after Trejago encounters Bisesa, a fifteen-year-old widow, he receives a 'packet' – 'an innocent unintelligible lover's epistle' sent as a collection of objects. 'No Englishman should be able to translate object-letters', says the narrator, but Trejago, who knows 'too much about these things', is different. Spreading out the contents of the package, he begins to 'puzzle them out':

A broken glass-bangle stands for a Hindu widow all India over; because, when her husband dies, a woman's bracelets are broken on her wrists. Trejago saw the meaning of the little bit of glass. The flower of the *dhak* means diversely 'desire', 'come', 'write' or 'danger', according to the other things with it. One cardamom means 'jealousy', but when any article is duplicated in an object-letter, it loses its symbolic meaning, standing merely for one of a number indicating time, or, if incense, curds, or saffron be sent also, place. The message ran then – 'A widow – *dhak*flower and *bhusa* – at eleven o'clock'. The pinch of *bhusa* enlightened Trejago. He saw – this kind of letter leaves much to instinctive knowledge – that the *bhusa* referred to the big heap of cattle-food over which he had fallen in Amir Nath's Gully, and that the message must come from the person behind the grating; she being a widow. So the message ran then – 'A widow in the Gully in which is the heap of *bhusa* desires you to come at eleven o'clock'.[43]

Trejago begins a secretive relationship with Bisesa, and when her uncle finds out he punishes his niece. After a three-week break from visiting, Trejago is greeted by the shocking sight of the young girl's arms held out in the moonlight: 'both hands had been cut off at the wrists, and the stumps were nearly healed'. Then, 'some one in the room grunted like a wild beast and something sharp – knife, sword, or spear – thrust at Trejago in his *boorka*. The stroke missed his body, but cut into one of the muscles of the groin, and he limped slightly from the wound for the rest of his days.'[44]

Sara Suleri, in her book *The Rhetoric of English India* (1992), identifies an important key to the mass appeal of Kipling: his ideological representations of the British Raj carried the urgency and novelty of news reports and magazine articles.[45] Typically, he would add details to convey an additional sense of realism, such as the epitaph of 'Beyond The Pale', a Hindu proverb: *Love heeds not caste nor sleep a broken bed, I went in search of love and lost myself*. And whether or not the object letter was something Kipling ever encountered, the incident in his fictional story resembles one later mentioned in historian IJ Gelb's *A Study of Writing* (1952). Gelb refers to a package sent from a young woman in Eastern Turkestan to her lover. It contained a message in the form of a lump of tea, a leaf of grass, a red fruit, a dried apricot, a piece of coal, a flower, some sugar, a pebble, a falcon's feather and a nut. It was intended, says Gelb, to be read as follows: 'I can no longer drink tea, I'm as pale as grass without you, I blush to think of you, my heart burns as coal, you are beautiful as a flower, and sweet as sugar, but is your heart of stone? I'd fly to you if I had wings, I am yours like a nut in your hand.'[46]

The term 'object language' also refers to language as a thing, an object in itself and something that

can be broken into many other constitutive parts. All language exists in relation to physical objects, from a body's first messages of love and pain, to an acceptance of the material world around us as something processed and parcelled up in a typography of weights, measures and formats. The study of language in the 1800s is characterised by a historical comparative method, an evolutionist search for origins with a clear preference for language that can't talk back. By the twentieth century, the focus shifts to language as a living system, the human implications of its social uses and the relationship between language and thinking. The Swiss linguist Ferdinand de Saussure provides a stimulating connection between the old and the new. As a nineteenth century student of philology, he proposed a theory of ghost phonemes surviving in the recesses of the human mouth. Reaching back to its fossilised origins he discovers a live signal. Yet in his influential *Course in General Linguistics* (1916), de Saussure talks about language as an imperialist might describe the wordless wastes of the colonial world – 'thought is like a swirling cloud', he says, 'where no shape is intrinsically determined. No ideas are established in advance, and nothing is distinct before the introduction of linguistic structure'.[47]

If this was a relationship that Saussure took for granted, others after him have investigated what it means to be thought by language, focusing on the system itself. Edward Sapir and Benjamin Lee Whorf, students of Franz Boas and therefore associated with the rise of the anthropologist-linguist, followed language through its functional basis – a socially contextualised use of language that begins with discourse. The object letter of Kipling's story is language slowed down to reveal many of its registers and stages occurring together: linguistic and non-linguistic, textual and contextual, ideational and interpersonal. This is language in its indexical mode, mapping out bodies, places and time as components of the exchange: a package of things, a collection of objects transferred between persons, symbolic and with equivalence-based associations, making connections both physical and illicit. The loss or absence of a referent in what we might think of more conventionally as writing is also marked here – in the devastating cruelty of Bisesa's punishment, and directed to the story's intended, and predominantly white male, audience by Trejago's emasculating wound.

Uniforms that haunt us while we sleep



Christina Broom, Kit of an Irish Guardsman laid out for inspection, c. 1914, Imperial War Museum.

For kit-inspection, British soldiers are required to make a precise formal presentation of their uniforms, equipment and bedding. These have often been photographed for reference, appearing in manuals or on the wall of a barrack block. I first saw this photograph by Christina Broom in Val Williams' significant book *Women Photographers*.^[48] Born in London, Broom was Britain's first female press photographer and from 1904 until her death in 1939 the official photographer to the Royal Household Guards. Williams responds to the photograph's uncanny sense of presence: 'the ends of a cane laid beneath each thumb of a pair of gloves and the exact positioning of a pair of boots'.^[49] A ghostliness, along with the careful assembly of fabric and tools, and the great pin-like cane, that reminds me of Bond's ostrich photo. It also makes me think of the episode in HG Wells' *Invisible Man* (1897) when Griffin falls asleep in the bedding section of a department store after draping his invisible self in gloves and socks, trousers, vest, jacket and hat.

For many years, Broom was assisted by her daughter Winifred. In a 1971 memoir about her mother's work, Winifred Broom recalls their first meeting with Lord Roberts, a former British Army commander-in-chief and a colonel of the Irish Guards. Roberts commended Broom for her postcard prints, which soldiers bought to send home to their families: 'I have prayed for recruits for the 3rd Scots and the Irish Guards [and] these two women have shown us the way – I shall tell the King!'^[50] When his son John failed the medical examinations with poor eyesight, Kipling wrote to his friend, the same Lord Roberts, and John was accepted into the Irish Guards. He died on the second day of the Battle of Loos, September 1915.

The Irish Guards were founded in 1900 by order of Queen Victoria to commemorate the Irishmen who fought in the Boer War on the side of the Empire. After World War I, Kipling wrote a two-volume history of his son's regiment and their service in the war. His most successful and popular novel *Kim*, published in 1901, is focused around the son of an Irish soldier from a fictional Irish Regiment known as The Mavericks, Her Majesty's Royal Loyal Musketeers.

Kipling was the historian of those now forgotten Irish who were loyal to the Empire, articulating in his writing a dream of empire, almost a masterful dream-work of condensation, with its colonies, different from each other in history, culture and language, threaded together into one vision, solely by virtue of their belonging to the Empire.^[51]

At the centre of this dream is Kim 'an imperial boy who is at once Irish and Indian', a metaphor for imperial unity. 'The dream was a chimera, masking the violence and abuses of the empire, but Kipling, in his day and after, was its most effective propagandist.'^[52]

Kipling's fascination for language provides a theme in his work that achieves exceptional focus in *Kim*. Influenced by Mark Twain's *Huckleberry Finn*, the novel centres on a pair of characters traveling across a large country in an atmosphere of youthful adventure. But written as an intricate web of literary double-agency it is also a cold-war spy thriller. It tells the story of British military intelligence gathering in Tibet and India in a colonial bid to resist Indian nationalists and the rival imperialism of Russia. The novel features a spectacular diversity of language, mainly because Kim is being trained to think of language as a bodily medium through which intelligence is gathered. Like Kipling, Kim is born in India in 1865. An Irish regimental son, he lives on the street and prefers the look and language of a low-caste Hindu boy. Using other dialects and costumes, he is able to switch identity across the spectrum of Indian social life. From Mohammedan oilman to Oudh landholder, he carefully perfects the nuanced ways of each caste, how they 'talked, or walked, or coughed or spat, or sneezed'.^[53] In *Midnight's Children* (1981), Salman Rushdie seems to wink at Kim through the character of Saleem Padma. An ancient prostitute, she claims to be 512, and possesses 'a mastery over her glands so total that she could alter her bodily odours to match those of anyone on earth'.^[54]

By the end of his story, Kim has reached the weather-beaten age of seventeen, and is already beyond the art of disguises. Under the shape-shifting sign of language, he is also a master of identities. In various ways, so are his teachers and fellow spies. All of the prominent characters in *Kim* are British agents

involved in the so-called Great Game, a political and diplomatic confrontation, a cold war that prevailed for most of the nineteenth century between Britain and Russia.

Kim memorises whole chapters of the Koran by heart, 'till he could deliver them with the very role and cadence of a mullah'. [55] At the same time he is trained as a pundit in the art and science of mensuration – the geometry of lengths and volumes, acquired by 'marching over a country with a compass, a level and a straight eye [...] a boy would do well to know the precise length of his foot pace and to keep count of thousands of paces [using] nothing more valuable than a rosary of eighty one or a hundred and eight beads'. [56] Mimicking the body movements of others, including animals, he is described variously as moving 'silently as a cat' and as 'softly as a bat', when, 'being lithe and inconspicuous, he carried out commissions by night on the crowded housetops.' [57] He encounters 'a talking Mynah [...] which has picked up the very tone of the family priest' [58] and later, in the mountains, Kim listens to 'the trackers and *shikarris* of the Northern valleys', Himalayan hill-folk who cry messages to each other as they move with their animals: 'from the edge of the sheep-pasture, fifteen hundred feet above, floated a shrill kite-like trill. A child tending cattle had picked it up from a brother or sister on the far side of the slope that commanded Chini valley.' [59]

Historical figures whose reputations and work in India are built into the context and storyline of *Kim*, include Colonel Thomas Holdich (1843–1929), author of *Political Frontiers and Boundary Making*, and better known as Superintendent of Frontier Surveys in British India, as well as Lieutenant-Colonel Thomas Montgomerie (1830–1878), the Royal Engineers officer who disguised his surveyors as monks after becoming aware that Indian natives were able to pass freely across the Tibetan border. In 1862, he trained the first of a series of Hindu pundits carrying concealed equipment in robes lined with secret pockets, adapting local practices, and using modified Buddhist rosary beads as decimal abacuses. Montgomerie's programme of covert surveillance was conducted under the joint auspices of the India Survey and the British Museum, and culminated in Britain's occupation of Tibet in 1903. A third figure is Arthur Conolly (1807–1842), a British intelligence officer who coined the term 'The Great Game'. Conolly was executed in 1842 by the Emir of Bukhara on charges of spying for the British Empire.

Thomas Richards, author of *The Imperial Archive* (1993) shows how an Orientalist obsession with language and comprehensive knowledge joined other science-based fields – biology, geography and geology – to help manage and organise Britain's imperial deposits. An Empire that seems to have gained its momentum from what Richards describes as the 'peculiarly Victorian confidence that knowledge could be controlled and controlling' [60] was now an immense and failing administrative challenge. Knowledge-producing institutions like the British Museum, The Royal Geographical Society, the India Survey and the universities were enlisted to establish a fantasy model for an empire maintained not by force but information. Surveying, mapping, gathering statistics and data, organising it across ledgers, charts and archives as if that could somehow hold the fragmented parts together. As an accumulative fiction, however, the British Empire was far more easily managed in the form of a novel such as *Kim*.

As self-appointed allegorist of Empire, Kipling's writing serves his own purposes, whether taking the form of a fable, a mythical saga, or a novel-length children's adventure story. His Indian stories are inflected with phrases from local languages and dialects. Gujarati language poet Harish Trivedi describes how Kipling's reputation as a writer with exceptional insider knowledge about India was made more convincing by his casually deceptive and often incorrect use of vernacular terms and phrases. Kipling follows a similar approach with British dialects, though these are based in his own first language of English. The following example, an Irish soldier Mulvaney speaking in the short story 'The Three Musketeers', is a combination of both, turning, as Trivedi observes, Kipling's limited stock of misunderstood Hindustani 'into a comic virtue':

I purshued a hekka, an' I sez to the dhriver-divil, I sez, 'Ye black limb, there's a Sahib comin' for this hekka. He wants to go jildi to the Padsahi Jhil' – 'twas about tu moiles away – 'to shoot snipe–chirria. You

dhrove Jehannum ke marfik, mallum-like Hell? 'Tis no manner av use bukkin' to the Sahib, bekaze he doesn't samjao your talk. Av he bolos anything, just you choop and chel. Dekker? Go arsty for the first arder-mile from cantonmints. Thin chel, Shaitan ke marfik, an' the chooper you choops an' the jildier you chels the better kooshy will that Sahib be; an' here's a rupee for ye?'[61]

To some, Kipling's mimicry of languages seems vulgar and populist, to others it shows an inventiveness that anticipates the modernism of Joyce and Eliot. For Jan Montefiore, the approximation to ordinary speech, in both 'the imagined language of Indians' and the actual demotic of a coarsely accentuated Irish soldier – 'allows his fiction to handle racial and class difference with a degree of ease and intimacy'.[62] Yet Kipling's relationship to Ireland was as ideological as his feelings about India. Aggressively opposed to Irish Home Rule, by 1914 he was calling for civil war and channelling his language skills into writing songs for the volunteers.

In Kipling's *Just So Stories*, written for his daughter Josephine, we learn 'How The First Letter Was Written', and 'How The Alphabet Was Made'. Combining foundational myths with a colonial British sense of manifest destiny, the Roman alphabet emerges fully formed in rune-like letters derived from the shape of objects and living creatures (a carp's mouth for an A, a fish tail for a Y, a snake for an S), scratched into bark with a shark's tooth by Taffy and her father Tegumai.

'Shu-ya-las-ya-maru,' said Taffy, reading it out sound by sound. 'That's enough for today,' said Tegumai ... 'We'll finish it tomorrow, and then we'll be remembered for years and years after the biggest trees you can see are all chopped up for firewood.'[63]

Later, after the completion of 'the fine old easy, understandable Alphabet – A, B, C, D, E, and the rest of 'em', Taffy and her father spend 'five whole years' on a magic Alphabet-necklace of black-mussel pearls, beads of amber, clay, glass, silver and gold, rough lumps of copper, turquoise, stone, soft iron and flat pieces of ivory all strung together on a length of reindeer sinew. Between each bead or material specimen is a letter, either scratched into a clay token or improvised from an object: 'E is a twist of silver wire ... O is a piece of oyster shell with a hole in the middle ... T is the end of a small bone.'[64]

How was the first letter written? It is now generally agreed that writing was invented in Mesopotamia, present-day Iraq, in the late fourth millennium BC, and spread from there to Egypt, Elam and the Indus Valley. The idea that Mesopotamian writing emerged from collections of objects is new. For thousands of years the origin of writing was the subject of myths crediting heroic gods and fabulous creatures with its invention. By the eighteenth century it was believed to have begun with picture writing. But the immediate precursor of cuneiform writing was a system of tokens: small clay objects of many shapes – cones, spheres, disks, cylinders – that served as counters and can be traced to the Neolithic period, starting around 8000 BC. They evolved to meet the needs of the economy, at first keeping track of the products of farming. Excavated in the 1920s from Nuzi in Northern Iraq, a hollow tablet together with a flat tablet bearing an account of the same transaction were discovered in the family archive of a sheep owner named Puhisenni. The cuneiform inscription on the hollow tablet read as follows: 'Counters representing small cattle: 21 ewes that lamb; 6 female lambs, 8 full grown male sheep; 4 male lambs; 6 she-goats that kid; 1 he-goat; 3 female kids',[65] and was signed with the seal of a shepherd named Ziqarru. When opening the hollow tablet, the excavators found it to hold forty-nine counters, which, as stipulated in the text, corresponded to the number of animals listed.[66]

The first letter may have been a clay counter. Listing, a frequent trope of Kipling's stories, is also an object language; a form of metonymic realism that conveys the world through the itemizing of things in it, as when the character Morrowbie Jukes makes his methodical inventory of the contents of a mummified English soldier's pockets. "The list suggests meaning even if it withholds it" writes Nora Crook in her assessment of Kipling's story.[67] Like the objects in Bond's ostrich photograph, the collection of personal effects pulled from the soldier's body are broken, worn out and indecipherable fragments:

I give the full list in the hope that it may lead to the identification of the unfortunate man: 1. Bowl of a

briarwood pipe, serrated at the edge; much worn and blackened; bound with string at the crew. 2. Two patent-lever keys; wards of both broken. 3. Tortoise-shell-handled penknife, silver or nickel, name-plate, marked with monogram "B.K." 4. Envelope, postmark undecipherable, bearing a Victorian stamp, addressed to "Miss Mon —" (rest illegible)—"ham" — "nt." 5. Imitation crocodile-skin notebook with pencil. First forty-five pages blank; four and a half illegible; fifteen others filled with private memoranda relating chiefly to three persons—a Mrs. L Singleton, abbreviated several times to "Lot Single," "Mrs. S. May," and "Garmison," referred to in places as "Jerry" or "Jack." 6. Handle of small-sized hunting-knife. Blade snapped short. Buck's horn, diamond cut, with swivel and ring on the butt; fragment of cotton cord attached.[68]

Language mediated as a collection of objects features early in Kipling's autobiography. 'When my father sent me a *Robinson Crusoe* with steel engravings I set up a business alone as a trader with savages (...). My apparatus was a coconut shell strung on a red cord, a tin trunk and piece of packing-case which kept off any other world.' In other words it also conjured a private zone of reality: 'Thus fenced about, everything inside the fence was quite real, but mixed with the smell of damp cupboards.' [69]

Another book that impacted on Kipling's childhood reading is Robert Louis Stevenson's *Treasure Island* (1883), a tale of adventure that merges early colonial voyages with the anarchy of piracy. In a famous passage Billy Bones' sea chest holds a tantalising message of exotic plunder when Jim Hawkins breaks it open and takes stock:

"...a quadrant, a tin canikin, several sticks of tobacco, two brace of very handsome pistols, a piece of bar silver, an old Spanish watch and some other trinkets of little value and mostly of foreign make, a pair of compasses mounted with brass, and five or six curious West Indian shells (...) and a canvas bag, that gave forth, at a touch, the jingle of gold." [70]

Above all, Empire is about financial profit and the establishing or claiming of value. In F. W. Bond's ostrich photograph, the worthless looking objects are clearly one half of an unequal trading deal. Reminiscent of stories like that of the Tierra del Fuegian boy Jemmy Button, bought, and so named in 1830 by Captain Robert Fitzroy for a handful of mother-of-pearl buttons. F. W. Bond, a Fellow of the Royal Photographic Society, was born in 1887 and died in 1942. The RPS Journal's obituary for Bond, celebrating his work as a photographer, reminds the reader that for many years "Mr Bond occupied the responsible post of Assistant Treasurer to the Zoological Society of London." Bond was employed at the zoo as an accountant. It was in the service of accountancy that writing was invented. Appropriately then, Bond has arranged the ostrich tokens as cleanly as printing forms in a sixteenth century typesetter's case. Lead castings of Roman capitals, ligatures, fleurons and punctuation have been replaced with symbols of a lower status: bent hooks, torn fabrics, a few copper coins and some old rope. Like the alphabet, they still mirror the collective form of society, but unlike typographical letters, the pieces don't match up or form a collective whole. The only working part of the puzzle is the deadly function of the nail. Such signs of excess and collapse, essential to any understanding of how our world attempts to function, could not have been lost on F. W. Bond. What could express the accumulations of an imperial nation better than a few tired examples of its debris? In this case spelling out the grim memento of a once regal bird with a typography of rubble.[71]

The Jungle Book (1893) and *Just So Stories* (1912) are written as animal fables. In 'Mowgli's Brothers' Kipling turns the wild animals into 'Jungle People', granting them speech, individuality, the conversation of men. The earliest fables are believed to be Mesopotamian, and the tradition is that animal life is replaced by an index of human characteristics, offering moral guidance indirectly to individuals, family and community. The stomach of Bond's ostrich has also been replaced by parts of clothing, tools, coins and other human effects. Both Aesop and the Roman fable writer Phaedrus were former slaves, and Greco-Roman fables are often interpreted as the voice of oppressed human classes. Marianne Moore's animal vision is similarly focused on unpopular or disregarded species, the hedge sparrow, for example, in

'Virginia Britannica', 'that wakes up seven minutes sooner than the lark' – or it did in 1934, when wake-up times were recorded across Britain during an all-night ramble of the British Empire Naturalists' Association (BENA). Moore may have included this poem as a nudge to Shelley's grand skylark. It also offers a glimpse of a nation's post-imperial imagination, keeping a check on its migrant avian workforce. BENA had been founded in 1905 by Edward Kay Robinson, who, as editor of the Civil and Military Gazette in Lahore, supported Kipling's earliest published writing. The son of an East India Company chaplain, Kay Robinson, was born in Naini Tal, a Kumaon hill station in the outer Himalayas. Kay Robinson championed the photography of animals over their collection for museums and zoos, at least partly connecting his interests to those of FW Bond, whose photographs he would have been aware of.

Moore wrote at least 40 poems featuring animal subjects from 'A Jelly-fish' in 1909 to 'Tippoo's Tiger' in 1967 and referred to them as her 'animiles', 'pertaining to animals ... an echo of something like "Anglophiles." The form of affinity'. If her poems are fable-like without the animals speaking as humans, there is one unforgettable exception in a poem called 'The Monkeys'. It is the only occasion on which Moore invokes a visit to the zoo, where the animals appear faded, humdrum and abnormal. Fed in their cages, they are like prisoners in a concentration camp. Suddenly a cat, with resolute tail, 'that Gilgamesh among the hairy carnivore', addresses both visitor and reader. It is a startling moment, equivalent in pathos and acerbic anger to the creature's monologue in Mary Shelley's *Frankenstein*. The cat declares the ultimate indignity of being imprisoned by a society

strict with tension, malignant
in its power over us and deeper
than the sea when it proffers flattery in exchange for hemp,
rye, flax, horses, platinum, timber and fur.[72]

The cataloguing of natural features of the world – minerals, plants and animals – is a recurring motif in Moore's poetry. But here the poem ends as a list of materials – the plunder of empire – and the final word, fur, reducing the creature to a commodity listed among other by-products of industrial/commercial human culture as mere items on an inventory sheet.

[1] Marianne Moore, "He "Digesteth Harde Yron", in *What Are Years* (New York: Macmillan, 1941).

[2] *Golden Days, Historic Photographs of the London Zoo* (London: Gerald Duckworth & Co Ltd 1976).

[3] Alexander Macalister, 'On the Anatomy of the Ostrich (*Struthio camelus*)', *Proceedings of the Royal Irish Academy (1836-1869)*, Vol. 9 (Dublin: Royal Irish Academy, 1864-66), pp. 1-24.

[4] Macalister, 'On the Anatomy', p. 3.

[5] Gustave Flaubert, *Dictionary of Accepted Ideas* (New York New Directions, 1968).

[6] Macalister 'On the Anatomy', p. 2.

[7] William Shakespeare, *King Henry VI*, Second Part, Act IV, Scene X.

[8] Pliny, *Naturalis historia* (Ancient Rome AD77-79).

[9] *Henry VI*, Act IV, scene X.

[10] *The Family Magazine*, Vol. 1, 1835, p. 210.

[11] Harold Bloom, 'Marianne Moore, 1887-1972', in *Bloom's Literary Criticism, 20th Anniversary Collection, Poets and Poems* (Philadelphia: Chelsea House Publishers, 2005), p. 286.

[12] Harold Bloom, *Marianne Moore* (New York: Chelsea House, 1987), p. 3.

[13] 'About One of Marianne Moore's Poems', in Wallace Stevens, *The Necessary Angel* (New York: Alfred A Knopf, 1951), p. 94.

[14] Una Roman De'Elia, *Raphael's Ostrich* (Philadelphia: Pennsylvania State University Press, 2015).

- [15] Ibid.
- [16] *Job* 39:13–19.
- [17] George Jennison, *Animals for Show and Pleasure in Ancient Rome* (Manchester University Press, 1937).
- [18] John Berger, 'Why Look at Animals?', in *Selected Essays* (New York: Vintage International, 2003), p. 261.
- [19] Marianne Moore, 'The Jerboa', first published in 1932.
- [20] Willene B. Clark, *A Medieval Book of Beasts* (Woodbridge, Suffolk: Boydell Press, 2013), p. 18.
- [21] Thomas Allsen, *The Royal Hunt in Eurasian History* (Philadelphia: University of Pennsylvania Press, 2006), p. 10.
- [22] David Hancocks, 'So Long, Old Zoo', in *BBC Wildlife*, June 1991, p. 424.
- [23] Randy Malamund, *Reading Zoos* (New York: NYU Press, 1998).
- [24] Robert H MacDonald, *The Language of Empire: Myths and Metaphors of Popular Imperialism* (Manchester: Manchester University Press, 1994), p. 3.
- [25] Joseph Conrad, *Heart of Darkness* (1902) (London: Penguin, 1973).
- [26] George Orwell, *Shooting an Elephant* (1936) in *The Penguin Essays of George Orwell* (London: Penguin, 1994), pp. 18–25.
- [27] DH Lawrence, 'Reflections on the Death of a Porcupine' (1925), in *Reflections on the Death of a Porcupine and Other Essays* (Cambridge, MA: Cambridge University Press, 1988) pp. 349–63.
- [28] Orwell, 1936.
- [29] Marianne Moore, 'Apparition of Splendor' (first published in *The Nation* 175, October 1952).
- [30] Marianne Moore, 'Elephants' (first published in *The New Republic* 109, 23 August 1943).
- [31] See Massin, *Letter and Image* (Van Nostrand Reinhold Company, 1970), p. 67.
- [32] Marianne Moore, 'Virginia Britannia', first published in *Life and Letters Today*, 13 December 1935.
- [33] Edward Said, *Orientalism* (London: Routledge & Kegan Paul, 1978).
- [34] Edward William Lane, *An Account of the Manners and Customs of the Modern Egyptians* (London: William Clowes and Sons, 1860), p. 213.
- [35] Ibid, p. 325.
- [36] Benedict Anderson, *Imagined Communities* (London: Verso, 1983), p. 70.
- [37] Ibid, p. 46.
- [38] Harold Innis, *Empire and Communications* (Toronto: University of Toronto Press, 1950).
- [39] Edward Said, *Culture and Imperialism* (London: Vintage, 1994), p. xiii.
- [40] Rudyard Kipling, 'Beyond the Pale', in *Plain Tales From the Hills* (Calcutta: Thacker, Spink and Company, 1888).
- [41] Rudyard Kipling, *Something of Myself* (1937) (Cambridge MA: Cambridge University Press, 1990), p. 33.
- [42] Kipling, 'Beyond the Pale'.
- [43] Ibid.
- [44] Ibid.
- [45] Sara Suleri, *The Rhetoric of English India* (Chicago: University of Chicago Press, 1992), p. 112.
- [46] IJ Gelb, *A Study of Writing* (Chicago: University of Chicago Press, 1969).
- [47] Ferdinand de Saussure, *Course in General Linguistics* (New York: Columbia University Press,

2011), p. 110.

[48] Val Williams, *Women Photographers* (London: Virago 1986).

[49] Ibid.

[50] Winifred Broom's privately published 1971 memoir is quoted in Anna Sparham, *Soldiers and Suffragettes: The Photography of Christina Broom* (London: Philip Wilson, 2015), p. 87.

[51] Kaori Nagai, *Empire of Analogies: Kipling, India and Ireland* (Cork University Press, 2006).

[52] Ibid.

[53] Rudyard Kipling, *Kim* (Ann Arbor: University of Michigan Libraries), p. 252.

[54] Salman Rushdie, *Midnight's Children* (London: Vintage, 2011), p 319.

[55] Kipling, *Kim*, p. 269.

[56] Ibid., p. 258.

[57] Ibid., p. 4.

[58] Ibid., 344.

[59] Ibid., p. 409.

[60] Thomas Richards, *The Imperial Archive* (London: Verso, 1993), p. 7.

[61] <http://www.online-literature.com/kipling/3792/> (accessed July 2018).

[62] Jan Montefiore, 'Imagining a Language', in Jan Montefiore, *Rudyard Kipling* (New Delhi, North Cote House Publishers, 2007), p. 32.

[63] Rudyard Kipling, 'Just So Stories: How the First letter was Written, in *The Complete Children's Short Stories* (Herfordshire: Wordsworth Editions, 2004), p. 336.

[64] Ibid, p. 338.

[65] Rudyard Kipling, 'To be Filed for Reference', in *Plain Tales from the Hills* (Calcutta: Thacker, Spink and Company, 1888), p. 247.

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[67] Nora Crook, *Kipling's Myths of Love and Death* (London: Palgrave Macmillan, 1989), p. 103.

[68] Rudyard Kipling, 'The Strange Ride of Morrowbie Jukes', *Collected Stories* (Middlesex: Penguin 1994).

[69] Rudyard Kipling, *Something Of Myself* (Middlesex: Penguin 1987).

[70] Robert Louis Stevenson, *Treasure Island* (London: Penguin, 1999).

[71] The Photographic Journal, RPS (London, May 1942), p. 210.

[72] Marianne Moore, 'The Monkeys', first published in 1917.

Paul Elliman

Paul Elliman (UK) lives and works in London. His work follows language through many of its social and technological guises, in which typography, human voice, and bodily gestures emerge as part of a direct correspondence with other visible forms and sounds of the city. Elliman is a visiting tutor for the MFA Voice Studies programme at the Sandberg Institute in Amsterdam. He has exhibited widely in venues such as the ICA, London, UK (2014); New Museum, New York, USA (2008); Tate Modern, London, UK (2001); and MoMA, New York, USA (2012); with recent solo exhibitions at KW Institute for Contemporary Art, Berlin, Germany (2017) and La Salle de Bains, Lyon, France (2017).

Brown is the New Green



Coconut Husk Waste Piles in Urban Areas of Accra. Airport Residential, Ghana, 2014. Photo: Mae-ling Lokko

Agriculture has for centuries been the bloodline for Africa's growth, as well as its looting. Only recently have different parts of the continent awakened to the potential of activating profits from the agro-upcycling economy to serve as an engine for development. This photo essay, deriving from my visits to coconut-farming operations in 2014–15, casts light on Ghana's diverse farming and manufacturing industry around the coconut and its husk – a resilient material with a vast number of applications. Coconut farmers, who comprise about 10% of Ghana's rural population, serve as the engine of the country's coconut industry, leveraging environmental resources, shared property, political assets and their social networks and markets to sustain the production of 6,000 metric tons annually.[1] In my visits, I met two distinct groups of coconut producer groups, which engage with domestic coconut-water production and foreign coconut-oil production respectively.

Ghana's growing domestic coconut-water economy is run by small-scale coconut farmers and urban traders who move between farm and city. Coconut farmers in the Central and Eastern region typically farm on 2–3 acres, usually leased from or owned by village chiefs. The highly flexible and adaptable informal network of urban traders who buy their coconuts negotiate different modes of distribution, sale and disposal of coconuts. They often have family and community ties with small-scale farms, which they use to negotiate coconut pickups from farms and to coordinate regular drop-offs at designated spots in the city. The disposal of coconut husk waste is a significant challenge for such urban coconut traders, who are prohibited from dumping it in mainstream garbage collection points due to its high bulk density. Instead, the husks are typically burned in the open and at night, to minimise complaints about pollution from husk combustion. Husk collection therefore represents an massive opportunity for coconut traders to engage in upcycling activities.

In Ghana's Western region, 60% of the country's coconut yield is produced on a large scale for export by coconut farmers belonging to cooperatives. Studies on farming cooperative membership have shown the broadening of 'cultural capital' owned by such stakeholders, including the access of farmers to production and harvesting assets, education, health security and distribution channels.[2] Such coconut

farming cooperatives include a sophisticated circular economy for using every by-product from the coconut – the dried meat (copra) is processed for coconut-oil production and any waste is used as feed for pig-farming, also a growing industry. Large volumes of oil are sold by the barrel to urban markets in Ghana or transported by truck to larger lucrative Nigerian markets.

In both coconut food-producing groups, the husk is left behind and remains a problematic disposal challenge. The coconut husk is comprised of high-strength, high-surface-area coir fibres, bounded by hydrophilic pith dust capable of melting uniformly at relatively low heat and pressure. Relative to other agricultural waste, the coconut fibre has superior mechanical advantage due to its high-structural lignin content (38–44%), over twice that of other agricultural by-products, high strength-to-mass ratio and low energy-conversion properties into particleboard and fibreboard products.[3]

Progress in interdisciplinary and academic-industrial research globally have led to greater understanding of quality control and pre-processing of husk into superior building products. Opportunities for adding value to the husk, including open-air drying and husk milling to separate fibres to reduce transport costs, can be used to generate new revenue streams for producer groups. As awareness and appreciation of food waste-derivative products grow, not only does upcycling bring typically marginalised stakeholders to the upcycling platform, but such alliances will play a pivotal role in closing intersectional material life-cycle gaps. Brown is the new green.

[1] Everest Amponsah, 'The Vulnerability of Small-Scale Farmers in the Value Chain of Agricultural Commodities: A Case Study of Coconut Chain in Ghana', Master's Thesis, (Rotterdam: Erasmus University, 2010).

[2] Karen O'Brien, Robin Leichenko, Ulka Kelkar, Henry Venema, Guro Aandahl, Heather Tompkins, Akram Javed, Suruchi Bhadwal, Stephan Barg, Lynn Nygaard and Jennifer West, 'Mapping Vulnerability to Multiple Stressors: Climate Change and Globalization in India', *Global Environmental Change* 14 (4), 2004, pp. 303–13.

[3] S. Greer, 'Converting Coconut Husks into Binderless Particle Board', *Mechanical Engineering*(Waco, Texas: Baylor University, 2008); Jan van Dam, Martien van den Oever, Wouter Teunissen, Edwin Keijsers and Aurora Peralta, 'Process for Production of High Density/High Performance Binderless Boards from Whole Coconut Husk', Part 1: "Lignin as Intrinsic Thermosetting Binder Resin", *Industrial Crops and Products* 19 (3), 2004, pp 207–16; Mae-ling Lokko, Michael Rowell, Anna Dyson, and Alexandra Rempel "Development of Affordable Building Materials Using Agricultural Waste By-Products and Emerging Pith, Soy and Mycelium Biobinders", in Pablo La Roche and Marc Schiler, ed., *32nd International Conference on Passive and Low Energy Architecture Proceedings*(Los Angeles: PLEA, 2016), pp. 881–87.



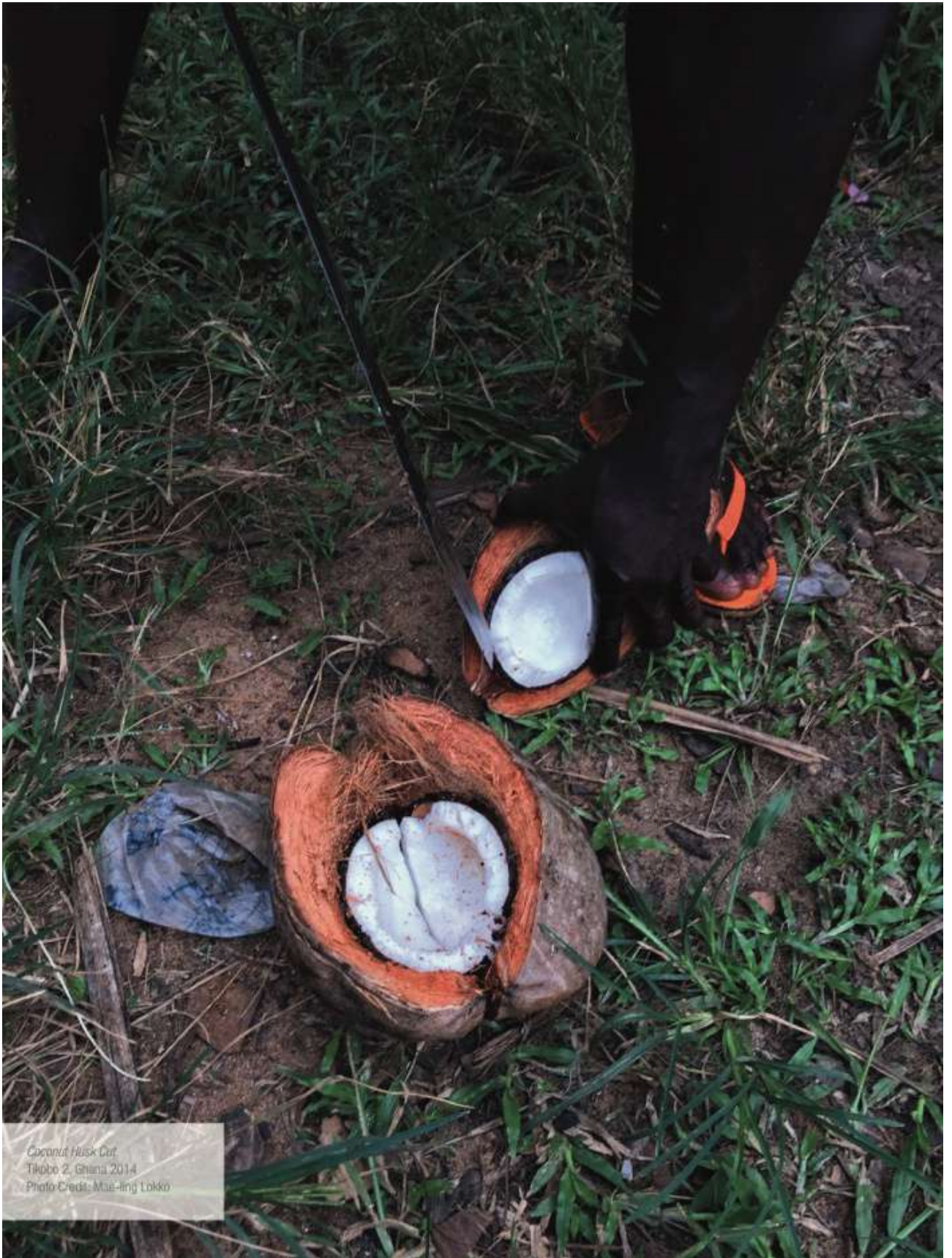
Brown is the New Green

Mae-ling Lokko



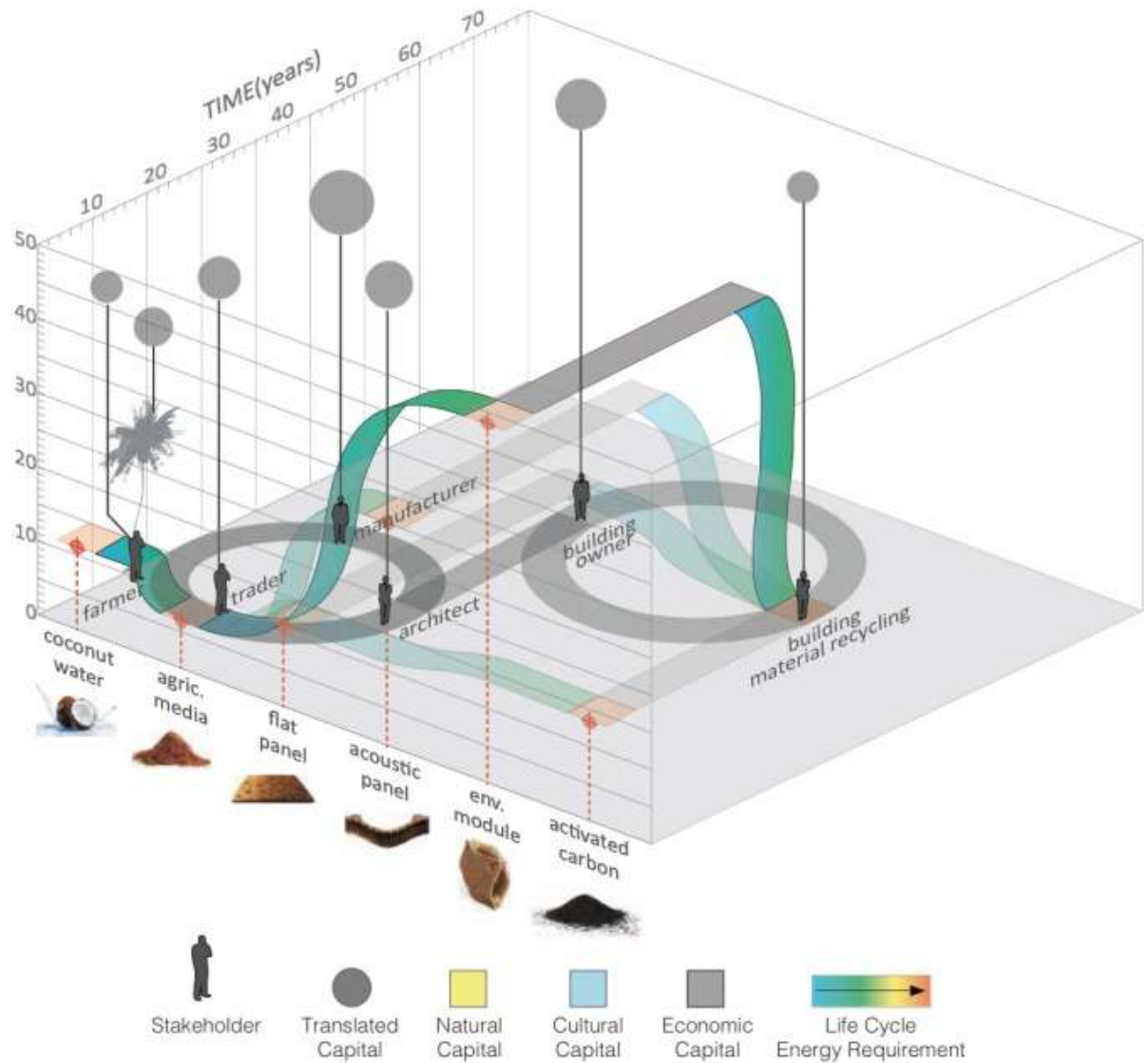


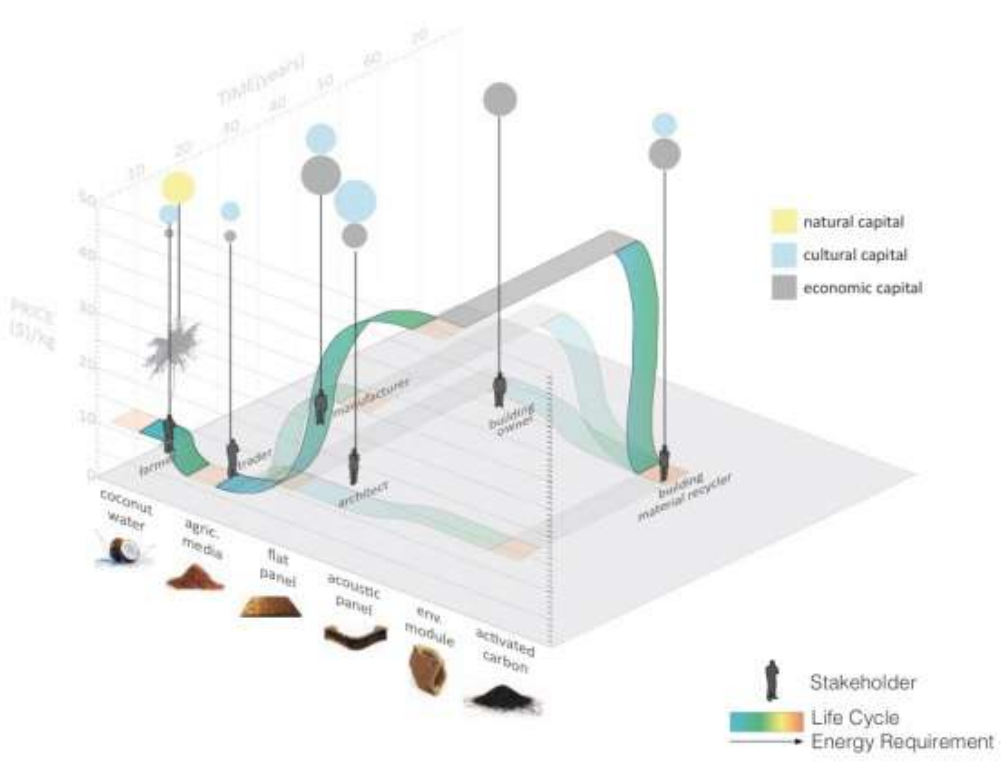
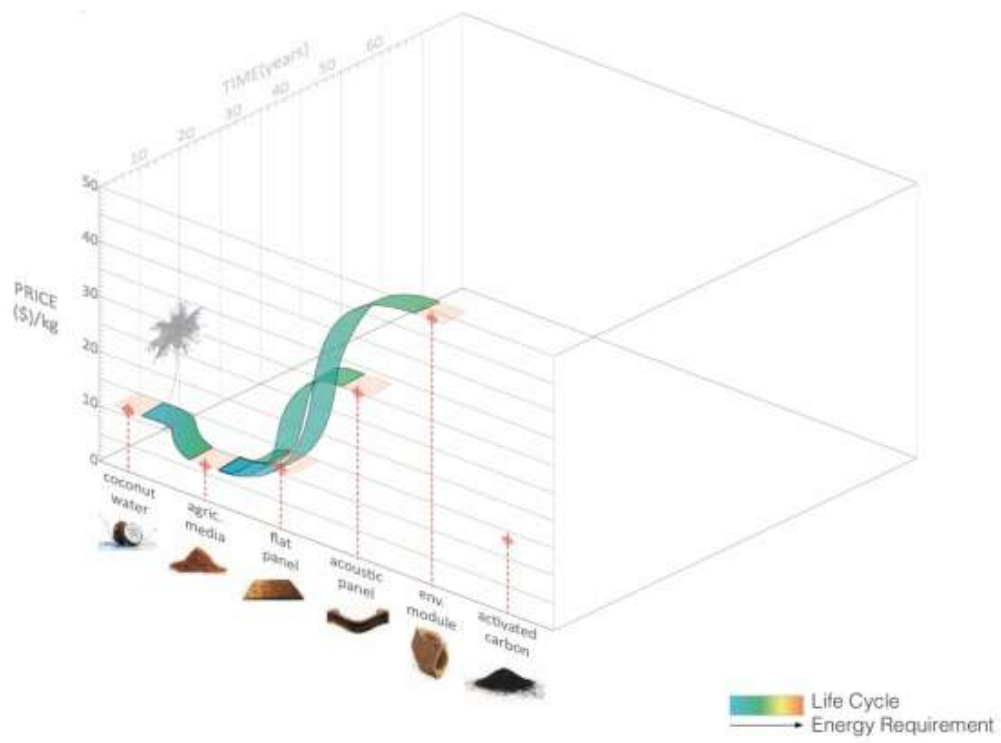
*Coconut farmer holding seedling
Asamankese, Ghana, 2014
Photo Credit: John Kamau*



Components of Integrated Value Framework

- 01 Development and Evaluation of Agrowaste Upcycling Pathways
- 02 Identification of Intersectoral Stakeholders
- 03 Allocation of Economic, Natural, Social and Cultural Capital form Stakeholders
- 04 Translation and Circulation of Different Capital Contributions by Stakeholders







Coconut Milk Processing
Tikobo 2, Ghana, 2014
Photo Credit: Mae-ling Lokko



Coconut Oil Processing
Tikobo 2, Ghana 2014
Photo Credit: Mae-ling Lokko



Urban Coconut Trader Cuts Husk to Sell Coconut Water
Airport Residential, Ghana, 2014
Photo Credit: Mae-ling Lokko



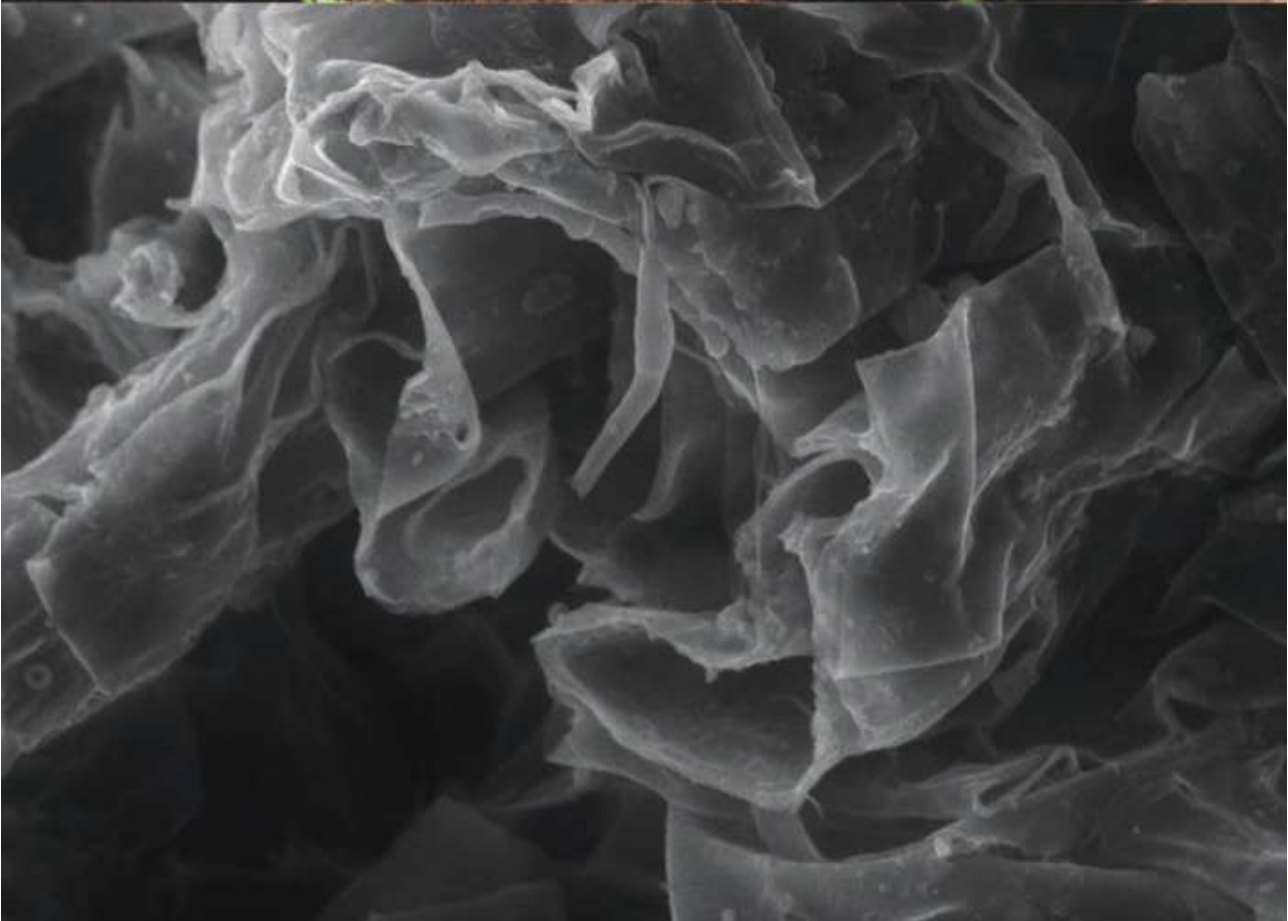
Opevi-ai: Burnt Coconut Husk
Accra, Ghana, 2014
Photo Credit: Mae-ling Lokko



Portrait of Coconut Husk Showing Fibers and Pith Dust
Accra, Ghana, 2014
Photo Credit: Mae-ling Lokko.



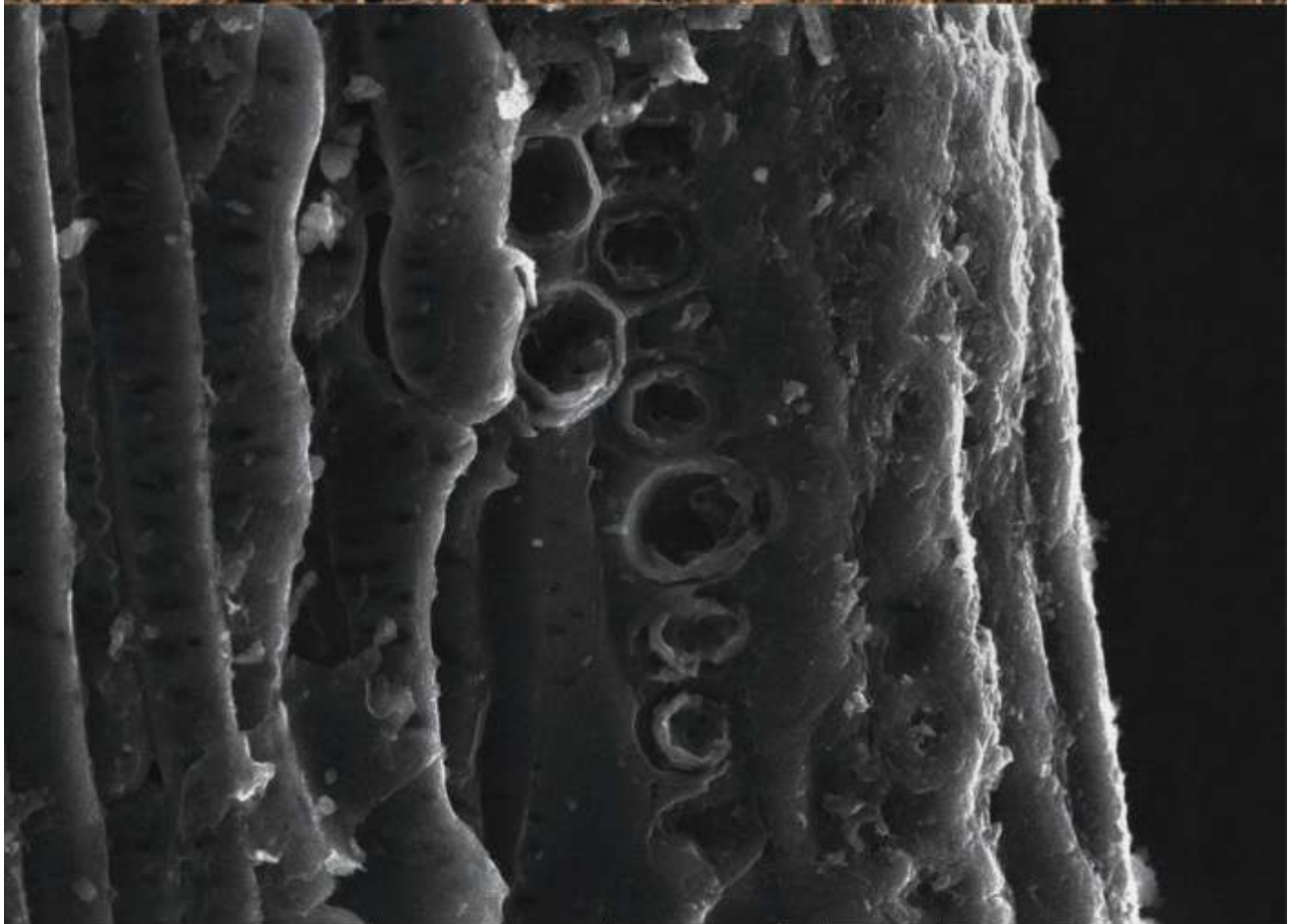
(top) Wetting of coconut husk pith, Ecofibers Factory, Tema, Ghana (2014)
 (bottom) Electron micrograph of Ghanaian coconut pith (2015)
 Photo Credits: Mae-ling Lokko



	9/30/2015	HV	WD	mag	humidity	pressure	temp	 40 µm Versa 3D - ESEM
	10:56:23 AM	20.00 kV	4.8 mm	1 200 x	34.2 %	799 Pa	20.0 °C	



*(top) Separated Husk Fibers, Ecofibers Factory, Tema, Ghana (2014)
(bottom) Electron micrograph of Ghanaian coconut fibers (2015)
Photo Credit: Mae-ling Lokko*



	10/9/2015 10:01:03 AM	HV 20.00 kV	WD 4.0 mm	mag  1 500 x	humidity 46.7 %	pressure 799 Pa	temp 15.0 °C	30 μm Versa 3D
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Coconut Husk Production Equipment in Decommissioned Factory
Tikobo 2, Ghana, 2014
Photo Credit: Mae-ling Lokko



*Coconut Fiber Mat Production Equipment in Decommissioned Factory
Tikobo 2, Ghana, 2014
Photo Credit: Mae-ling Lokko*



Mae-ling Lokko

Mae-ling Lokko (Saudi Arabia) lives between Accra and New York. Trained as an architectural historian and material technologist, Lokko is an Assistant Professor at Rensselaer Polytechnic Institute, New York, USA whose work centers on the upcycling of agro-waste and biopolymer materials into 'high' performance building material systems. Inspired by emerging multidisciplinary research on next generation bio-composite green materials, as well as Ghanaian contemporary art waste upcycling, Lokko's work often integrates a broad range of technical, environmental, political and cultural criteria that questions contemporary material-value systems and evolves material upcycling criteria. Recent exhibitions include ANO Institute of Contemporary Arts, Accra, Ghana (2017); Mmofra Foundation Climate Change Exhibition, Accra, Ghana (2017); Chale Wote Festival Accra, Ghana (2016); Rotch Golden Cube, Troy, USA (2016); and Advanced Energy Conference, New York, USA (2016).

Designing Brazil Today

Frederico Duarte



Photos of How to Pronounce Design in Portuguese: Brazil Today, an exhibition curated by Frederico Duarte and organised by MUDE at the Calheta Palace, Lisbon, 2017. Installation views. Photo: Luisa Ferreira.

In my conversation with Mohamed Elshahed and Emily King during Liverpool Biennial's Design & Empire [working title] weekend, we highlighted the underlying tensions of our respective work as curators on Egyptian and Brazilian design at the British Museum and V&A Museum. The following essay was written for a catalogue published some months after my exhibition How to Pronounce Design in Portuguese: Brazil Today for MUDE, Lisbon, 23 September to 31 December 2017.

Although they share a history and a language, the 10 million citizens of Portugal[1] and 208 million citizens of Brazil[2] know very little about each other. What we know is usually based on testimonies and stereotypes passed on by generations of immigrants and emigrants, or in fictions told in books, music, movies or *telenovelas*. [3] Except for the occasional headline, Brazilian and Portuguese media do not publish, in a sustained way, news or analysis of the political, economic, social or cultural life in the other 'sister country'. Even with the popularisation of digital media and social networks, there is currently no single periodical with transatlantic ambition, distribution or readership. The lack of a shared publishing market makes it impossible to find a Portuguese book in Brazil and vice versa. And few places can be found in Portuguese and Brazilian cities dedicated to the transmission and discussion of knowledge, in a regular, well-publicised way, about what's it like to live on the other side of the Atlantic.

Researcher-curator-researcher

In 2008, I chose Brazil as the subject of my master's thesis. I knew very little about the country beyond what any middle-class, urban and relatively well-informed Portuguese citizen knows: news stories, *telenovelas*, songs, celebrities, landscapes. I chose to know more at a time when the country was making headlines for the best reasons: the recently announced 2014 Football World Cup and the 2016 Rio de Janeiro Olympics, the discovery of large oil reserves, record GDP growth, unprecedented social mobility and a greater role in an increasingly multipolar world. I wanted to know what it's like to be a designer in Brazil today.

Even though I was living between New York and Lisbon, starting my research wasn't easy. I couldn't find many books, magazines or references about Brazilian design at the time. The information I found online was available, as always, in a scattered and fragmentary way. So in 2009, I decided to take a one-month trip to Brazil. In the seven cities to which I travelled – São Paulo, Rio de Janeiro, Belo Horizonte, Recife, Curitiba, Porto Alegre and Bento Gonçalves – I interviewed over twenty-five product and furniture designers (for this was the disciplinary scope of my research). At the time, I kept an English-language blog, where I posted short profiles of the people I met during the trip: designers, journalists, curators, students, researchers.

In 2014, I started a PhD research project at the Victoria and Albert Museum and Birkbeck, University of London. This project focuses on the contemporary challenges for Brazilian design and aims to determine a collecting policy of design from Brazil for an international design museum. This could be a museum such as the V&A, the world's oldest and largest design museum, where just over twenty objects in its collection of two million-plus items can be categorised as designed in Brazil or by Brazilian designers. Or it could be a museum like MUDE, a much more recent museum created around the Francisco Capelo collection, a small but significant collection of furniture and fashion by some of the major authors in their respective areas, some of whom are of Brazilian origin.

My research approaches design as an activity beyond its more conventional disciplines, such as posters, furniture, or *haute couture*, which are still overrepresented in histories, museum collections and in design's overall discourse, both inside and outside academia. It also aims to go beyond the formal, symbolic and discursive qualities of many of the artefacts found in most decorative arts and design histories and museum collections. Such artefacts, as the American anthropologist Keith M. Murphy describes in his ethnographic study of Swedish design, are primarily objects thought by and for an elite:

One of the chief characteristics of most scholarly treatments of design is a tendency to focus on elite designers and their work – names and images that for various reasons rise to the surface of public consciousness. While elites certainly do exert a tremendous amount of influence on the practices, discourses, and emblems of Swedish design – or of any design tradition, for that matter – there is much more going on both 'on the ground' and 'in the air' that powerfully contributes to making things mean. Indeed, examining 'design' as a sociocultural formation through a framework predominantly based on elites and the relatively restricted domains in which they operate does not capture the broad reality of designing in action.[4]

Considering that Brazil holds fifth place in world population and internal market indexes, but also the tenth in social inequality, this research addresses precisely the moment in the country's history when much more started 'going on', as Murphy would say. Thanks to economic growth, an increase in the minimum wage and social policies, Brazil saw unprecedented social mobility, an unheard of increase in consumption and also significant attainment of rights. Particularly in the period between 2004 (when the Bolsa Família conditional cash transfer program was created[5]) and 2014 (when the biggest recession ever to hit Brazil began), a new and revolutionary consumer base was created: the so-called C class, or New Middle Class (NMC).

NMC figures, titles and interpretations are multiple, even controversial. Its individuals are placed, in terms of income, below the upper (A) and middle (B) classes and above the classes of poor and destitute individuals (D, E). However, official statistics indicate that in 2015 the NMC represented over half the country's population: between 110 and 115 million citizens. Even with the recession that began in 2014, the way in which Brazilians buy, travel, communicate, find entertainment, use public space and even express themselves politically have changed considerably.

How have Brazilian designers reacted to these significant shifts in the lives not of the elite, but of most of their co-citizens? The search for answers to this question, both domestically and internationally, signals the local impact and global appeal of Brazil's consumption in three ways.

The first one emphasises how the aspirations, needs, choices and habits of the individuals that make up this consumer market play an increasingly important role in a world system of production of wealth and meaning. Knowing that, according to a 2014 prediction from research firm Euromonitor, Brazil would replace Japan as the world's second-largest beauty and personal-care market after the United States (an ambition only thwarted by the 2014–17 recession), how can we rethink the national, but also worldwide impact in the design of packaging, fragrances, brands, campaigns, as well as systems for extracting ingredients and manufacturing, distributing, marketing and consuming these products within this market?

The second highlights Brazilian designers' remarkable degree of adaptability in the face of Brazil's economic, social and ethnic heterogeneity, as well as its diverse geography, climate and gastronomy, allied to the country's persistent economic instability, infrastructural inadequacy and bureaucratic complexity. This adaptability has been seen as an added value of these designers, whether in their approach to specific issues afflicting the citizens and consumers for whom they work or, particularly in the context of multinational consumer products companies, on a global level. This is especially true at the level of countries of the so-called 'Global South', where issues such as inequality and racial/social inclusion, literacy and access to information, urban mobility and sustainability, demography and ageing are amongst their main challenges.

The third way recognises that the world in which we live today is becoming increasingly like Brazil: more miscegenated and unpredictable, but also, with the triumph of neoliberalism, more privatised and unequal. Some of the solutions found by designers in Brazil for their customers, taking into account the country's market and context, reveal strategies and tactics – from creating desire for the car to the design of urban mobility alternatives through frugal innovation – that are potentially applicable to other markets and territories.

Analysing the practice of design in all its complexity of disciplines, dimensions and applications, this research considers both the intention of designers and the impact on consumers of a set of Brazilian projects. The choice of projects and their respective analysis follows four thematic lines, applicable both to Brazil and to other nations: public space and the public good, consumption and inclusion, discourses and identities, innovation and collaboration. The aim of this research is to demonstrate, through the establishment of a collection of artefacts and projects, the local impact and global appeal of contemporary Brazilian design.

How to pronounce what in Portuguese?

In 2015, shortly after I began my PhD research, I was invited by the director of MUDE, Bárbara Coutinho, to curate the follow-up to an exhibition she had curated in 2014, a survey of Portuguese furniture design over half a century, titled *How to Pronounce Design in Portuguese?* The exhibition I was invited to curate, also dedicated to design in the Portuguese-speaking world, would approach, under the same title, the largest Portuguese-speaking country: Brazil. The exhibition was unusual, unique even, in the history of exhibitions that deal with design in the framework of a nation-state. Firstly, it was promoted by a museum outside the nation in question. Secondly, it was curated by an independent curator. Thirdly, in its conception, production and communication, it did not have any kind of institutional support nor any public or private sponsorship from Brazilian governmental entities or corporations. These characteristics make this exhibition not, as design exhibitions often are, a 'state' exhibition – such as *(P): Design de Portugal 1990–2014*, of which I was assistant curator, intended to celebrate the official visit of the President of Portugal to Italy in November 2014 – nor an 'industry and trade' exhibition – such as those promoted by entities dedicated to the dissemination and promotion of national export like the Portuguese Trade & Investment Agency (Aicep Portugal Global) and the Brazilian Trade and Investment Promotion Agency (Apex-Brasil).

It is customary for 'state' and 'industry and trade' design exhibitions to emphasise either the traces of identity or the aspects of technological innovation and commercial appeal in design, understood in both cases as 'national'. In other words, what makes design 'ours' and what will make it sell abroad. It is also common for these ideas or arguments to be attributed to artefacts of original or extraordinary appearance, rarefied existence, or high cost (the 'framework predominantly based on elites' mentioned by Murphy). These choices are also usually limited to projects whose authorship is directly and easily attributed, with considerable emphasis being placed on 'works' created by 'authors', as opposed to projects whose creation is based on a complex collective decision-making process, often shared between customer and (design) service provider, or even of unknown authorship.

However, it is these anonymous and humble things, as described by the British anthropologist Daniel Miller, that make up the life and the culture of a people:

Things, not, mind you, individual things, but the whole system of things, with their internal order, make us the people we are. And they are exemplary in their humility, never really drawing attention to what we owe them. They just get on with the job. But the lesson of material culture is that the more we fail to notice them, the more powerful and determinant of us they turn out to be. This provides a theory of material culture that gives stuff far far more significance than might have been expected. Culture comes above all from stuff.[6]

Notwithstanding the advantages of these approaches in political (propaganda) and economic (advertising) terms, they err in their disinterest in the contemporary material culture of a people, presenting a particularly conservative, not to say poor version of design practice. They err as well by demonstrating a fixation on identity discourses or even a problematic exaltation of national identity through design. A disproportionate attention is given to characteristics considered to be identifying features of a particular people or nation – formal and material elements, references to history, language or 'tradition' – without questioning what – or rather, whose – identity we speak of when designing nationhood.

In Brazil, a nation whose white-minority population still holds disproportionate access to wealth and property, education and employment, power and law, but also the practice and discourse of design, claiming and seeking national identity in a particular artefact is something that must be done with extreme sensitivity. In this appeal I call on a thought from the French philosopher Paul Ricoeur:

The term 'recognition' seems to me much more important than that of 'identity' which is the focus most of the time of the debate on multiculturalism. In the notion of identity there is only the idea of sameness, whereas recognition is a concept that directly integrates otherness and allows a dialectic of the same and the other. The demand of identity always involves something violent with respect to others. The search for recognition, on the contrary, implies reciprocity.[7]

How, then, to present in this exhibition, the first I have curated on an individual level, a more current and comprehensive version of contemporary design in a country like Brazil, in the context of a museum (and not, for example, a trade fair) and in the capital of a foreign nation that shares with Brazil a history and a language? And how to appeal, in this presentation, to the ideas of recognition and reciprocity defended by Ricoeur?

I started by responding to this challenge by proposing an exhibition that placed knowledge over contemplation. I also proposed, assuming that any design exhibition is an introduction to this activity, that this one should approach the greatest number of design disciplines and thus expose its fascinating complexity, exemplarily described here by the Brazilian design historian Rafael Cardoso:

Design is the product of three great historical processes that took place in an interconnected and concomitant way, on a world scale, between the 19th and 20th centuries. The first such process is industrialisation: the reorganisation of manufacture and distribution of goods to cover an ever larger and more diversified range of products and consumers. The second is modern urbanisation: the expansion

and reapportion of population concentrations in large metropolises, of over one million inhabitants. The third can be called globalisation: the integration of trade, transport and communication networks, as well as the financial and legal systems that regulate their operation. All three processes face the challenge of organising a large number of disparate elements – people, vehicles, homes, shops, factories, road networks, states, laws, codes and treaties – into harmonious and dynamic relations. Together, this great historical meta-process can be understood as a movement to integrate everything with everything. In the broader conception of the term ‘design,’ the various ramifications of the field arose to fill in the intervals and separations between the parts, supplying gaps with design and interstices with interfaces.[8]

This exhibition should also distant itself as much as possible from what so many design exhibitions, whether ‘state’, ‘industry and trade’ or even ‘museum’, tend to become: a sort of large furniture shop with no price tags, where visitors, given no more information about the things placed in front of them than author, title, date and materials, are effectively deprived of knowledge and left to contemplation alone. I find the so-called ‘design icon’ exhibition doubly unsatisfying as a curatorial exercise. On the one hand, being in the presence of so-called iconic design examples, which as the term suggests are valued for their image, a visitor is invited to examine, ‘in the flesh’, things already seen on a page or screen – in general, well-photographed forms shown against a white background. That examination is at best uninteresting, at worst banal. On the other hand, a gallery of three-dimensional images where the originality, aesthetic quality or other formal values of an artefact are overvalued, omits what is relevant in a specific project beyond the image of the thing that results from it. That is, the intellectual act underlying in its design. This is perhaps what a design exhibition is about. Therefore a non-iconic design exhibition that seeks to reveal this intellectual act requires an approach that shows the context and/or process involved in the design of a particular artefact, while interpreting the intentions of its proponents and/or the impact on consumers. It may not be an easy thing to do, but it's worth a try.

Finally, this exhibition should provide a significant and lasting contribution to bringing the design communities of Brazil and Portugal together through what unites us: the Portuguese language.

Whether working as a journalist, critic, researcher or curator, my main approach has always been one and the same: talk to people. Rather than drawing up a ‘shopping list’ of objects, products and projects to be brought from Brazil to Lisbon, I wanted to meet, talk and learn with some of the main protagonists in Brazilian contemporary design.

So in 2016, I went on a second research trip to Brazil. Ninety-two days, thirty-one flights, fourteen cities – São Paulo, Rio de Janeiro, João Pessoa, Campina Grande, Recife, Caruaru, Belém, Manaus, Tefé, Florianópolis, Belo Horizonte, Curitiba, Porto Alegre, Farroupilha – and the Mamirauá Sustainable Development Reserve, deep in the Amazon forest. Throughout this trip I conducted ninety-six interviews with a wide range of design professionals, students and researchers, as well as other agents such as curators, businesspeople, journalists, social scientists, consumption experts, non-governmental organisation and public-institution representatives.

The information gathered from these so-called primary sources, as well as my comings and goings between them throughout the Brazilian territory, and subsequent conversations by Skype and emails or messages, informed the selection of projects both for this exhibition and for a possible museum collection put forward by my doctoral research. It also allowed me to collect and reflect on the stories told by these people and by the things they create. When eschewing banal contemplation and aspiring to the transfer of meaningful knowledge and essential recognition, as the Nigerian writer Chimamanda Ngozi Adichie once said, ‘Stories matter. Many stories matter.’[9]

Brazil, yesterday and tomorrow

To the title of the previous exhibition I removed the question mark and added the subtitle *Brazil*

Today. Instead of elaborating a more or less exhaustive survey of a specific area of design in a particular country, market, territory, or culture, I wanted to return to my first research question: 'What is it like to live and work as a designer in Brazil today?', and confront visitors to the exhibition with answers to that question. The somewhat paradoxical use of the word 'today' for the subtitle of a design exhibition that is neither 'state,' 'industry and trade', nor a 'design icon' exhibition comes from Jamer Hunt's reflection on the tension between anthropologists and designers:

While social historians, anthropologists do build up their interpretative snapshot of a culture by grounding their narratives in a series of flashbacks to recent events, occurrences, interviews, or observations. Put another way, ethnography is rarely projective: it does not speculate on what might happen next. Its focus is the present, built upon a series of past 'present' moments.[10]

I could have taken an ethnographic approach to design practice and results in Brazil, i.e. how design shapes and is shaped by contemporary life in this country. Such an approach could, however, easily have led to an exhibition about material culture, or the things with which people live in Brazil, rather than being an exhibition about design, i.e. about the role designers in Brazil have played in commenting on, contributing to and influencing their social, economic and cultural context. Continuing with Hunt's reflection:

Design, on the other hand, is a practice of material and immaterial making, but its mode of being-i-the-world is generative, speculative, and transformational. A designer must project forward into a potential future to launch an artefact that will, if all goes right, transform a near present and rewrite the future. Whereas an ethnographer works in ever greater detail to ensure that she has got the present 'just right', the designer uses the present – and uses it often imperfectly – as a provisional leaping off point for reimagining possible futures. Designers are often quite at ease basing a project on broad assumptions about the world: for example, 'people are now nomadic, how can we design for mobility?' Social scientists, however, would want to know what is meant by nomadic, how nomadic, under what conditions, and by what criteria? Designers, by and large, use that assumption as a necessarily imperfect starting point, and getting things exactly right is not the point. The point is to move from that assumption into innovative ways of configuring future styles of living. What matters is the extent to which the project's outcome reconfigures our sense of future possibilities.[11]

As an exhibition tangential to a research project, *How to Pronounce Design in Portuguese: Brazil Today* presented projects developed in the twenty-first century by Brazilian individuals or collectives, highlighting the reflections, actions, choices and intentions of each designer in the recent past and for the near future. This is, therefore, an exhibition about Brazil and design in the twenty-first century. It is therefore about a country with a continental territory, a multi-ethnic population, the greatest biodiversity on the planet, the world's fifth largest internal market and a brutally unequal society. It is also about a century that witnessed a period of economic growth, democratising of consumption, social mobility and unprecedented attainment of rights, but also a prolonged recession and a severe political-institutional crisis. And it is about a discipline that in our century assumes such a complexity of breadth and depth that any effort to restrict it to categories such as communication, furniture, fashion or architecture would be as reductive as it was useless. Like Brazil, design today challenges any categorisation or simplification. Instead of simplifying, this exhibition explores and celebrates the current complexity of a country and an activity.

Perspectives

The *Brazil Today* exhibition was based on the curatorial concept of 100 design perspectives – a round number, divided into two: fifty projects and fifty books. The term 'perspective' emphasises the subject, not the object, as the protagonist of the design process. Each of the artefacts, products, interfaces, and also the

selected books for the exhibition was presented as the accomplishment of the process through which Brazilian designers – whether individual or collective – interpreted or intervened in their contexts with a particular project. Each represented designer was thus seen as an active agent in his or her nation’s design but also, in the case of designers working outside Brazil or for a foreign client, in expanding the boundaries or even questioning the relevance of national identity in design.

This approach does not seek to define or propose a ‘top-down’ national reading or identity for design, since these are often associated with modernism, national elites or totalitarian states. It seeks instead to demonstrate that this reading is today not only fruitless but undesirable, by showing projects with which Brazilian designers have questioned, ‘from the bottom up’, hegemonic discourses, contested identities and power structures within and beyond their country’s borders.

As described in the pages dedicated to these fifty achievements, we learn that each one of them resulted from a (design) service provided, an initiative created, research conducted or a position assumed by one or more designers. Through an analysis and an interpretation of their work, and their positions, we discover how Brazilian designers have promoted but also questioned ideas such as consumption and inclusion, memory and heritage, public space and citizenship, innovation and collaboration, progress and protest.

An exhibition or a book about the things that result from these acts is not limited to extolling their author’s genius, the eccentricity of their form or the virtuosity of their making. On the contrary, it shows why they exist, what they’re for and why they matter both to the Brazilian people and to us. It should also show when they fail. Not all design stories are stories of success; each of them can and should be addressed as a testimony both to the potentialities and limits of the profession.

As the British design theoretician Damon Taylor describes in his analysis of the design artefact as exhibition subject and object: ‘The essential feature of design, if the word is to have any substance at all, is that it makes an appeal to function; that to one degree or another, if something is to be categorized as design, it must have at the very least a nominal purpose beyond its status as an object of contemplation.’[12] And, more importantly, ‘what makes design *design* is the fact that it is not autonomous; it must by definition at the very least allude to a life outside of the hermetic confines of the modernist gallery’.[13]

Each perspective, or each action, was thus exhibited not as a unique, rare or precious object of contemplation, but through one of countless reproductions or multiple representations of a given design. Many of these reproductions and representations were developed especially for the exhibition by some of the more than 200 represented designers and clients. All of them were presented in the rooms of the Calheta Palace, and on the pages of this catalogue, accompanied by short and extended (150 words or so) captions. These interpretive texts allowed visitors to progress from contemplation to knowledge by offering information on the designer’s intentions and, in several cases, providing a critical reading of each project’s strengths and weaknesses. Other perspectives were exhibited alongside additional interpretive media such as videos, infographics, news clippings or Instagram feeds. In this catalogue, they can be found in the exhibition photographs and described in each project’s text.

In order to provide the appropriate experience and reading of each project in the exhibition, I worked closely with two teams of designers and friends – The Home Project (Kathi Stertzig and Álbio Nascimento) and Joana & Mariana (Joana Baptista Costa and Mariana Leão). Together, we discussed and designed ways to create an environment in the Calheta Palace – a building that in its history, architecture, interior decoration and contents is anything but a modernist design gallery – suitable for contemplation, but above all for the fruition of knowledge.

The other fifty perspectives included in the exhibition are things that visitors can not only see and thoughtfully discover, but also buy. The fifty selected books on Brazilian designers and design made up a shop thought from the first moment as the exhibition’s conceptual centre. This sort of Noah’s Ark of

knowledge generated about design in Brazil would offer for sale, for the first time in Portugal, over 1,000 books from the most diverse areas and themes. It would be a unique and unprecedented opportunity for the Portuguese design community, long deprived of books published in Brazil through the absence of an editorial market shared between the two nations, to access this knowledge.

As a curatorial gesture and a service to a local community of students and professionals, this temporary bookshop sought inspiration in the permanent, contemporary art bookshop created by curator Miguel Wandschneider at the Culturgest exhibition centre in Lisbon in 2011. By offering a thoughtful selection of titles at reduced prices, this gallery-with-a-till has functioned, even after Wandschneider's departure from the institution in 2016, as a remarkable extension of its exhibition programme. Made possible through a partnership between MUDE and Fnac Portugal, the gallery-with-a-till of the 'Brazil Today' exhibition was installed in the noblest hall of the Calheta Palace. With its seventeenth-century, hunting-themed tile panels, high ceilings and eight balconies, it was deemed ideal for this reading-room-bookshop, where visitors could sit among tropical plants, rest and enjoy the Autumn light and the view over the Tagus, but also buy a book and read it.

For logistical reasons, copies of six of the fifty selected titles did not cross the Atlantic. Only one book, *Design para um Mundo Complexo* by Rafael Cardoso, sold out. Nevertheless, this bookshop fulfilled its three main objectives. The first was to celebrate the work of each book's author and editor, raising their contributions to design studies and culture to the status of an exhibition-worthy artefact. For that reason, each of the titles placed on the 8-metre-long bookshelf had an extended caption of seventy-five words, justifying its inclusion in the exhibition.

The second objective was to turn a design exhibition from a space of passive contemplation of artefacts to a place of active acquisition of knowledge. In doing so, it critiqued the absence of an editorial market shared between the two Portuguese-speaking nations – and did something about it.

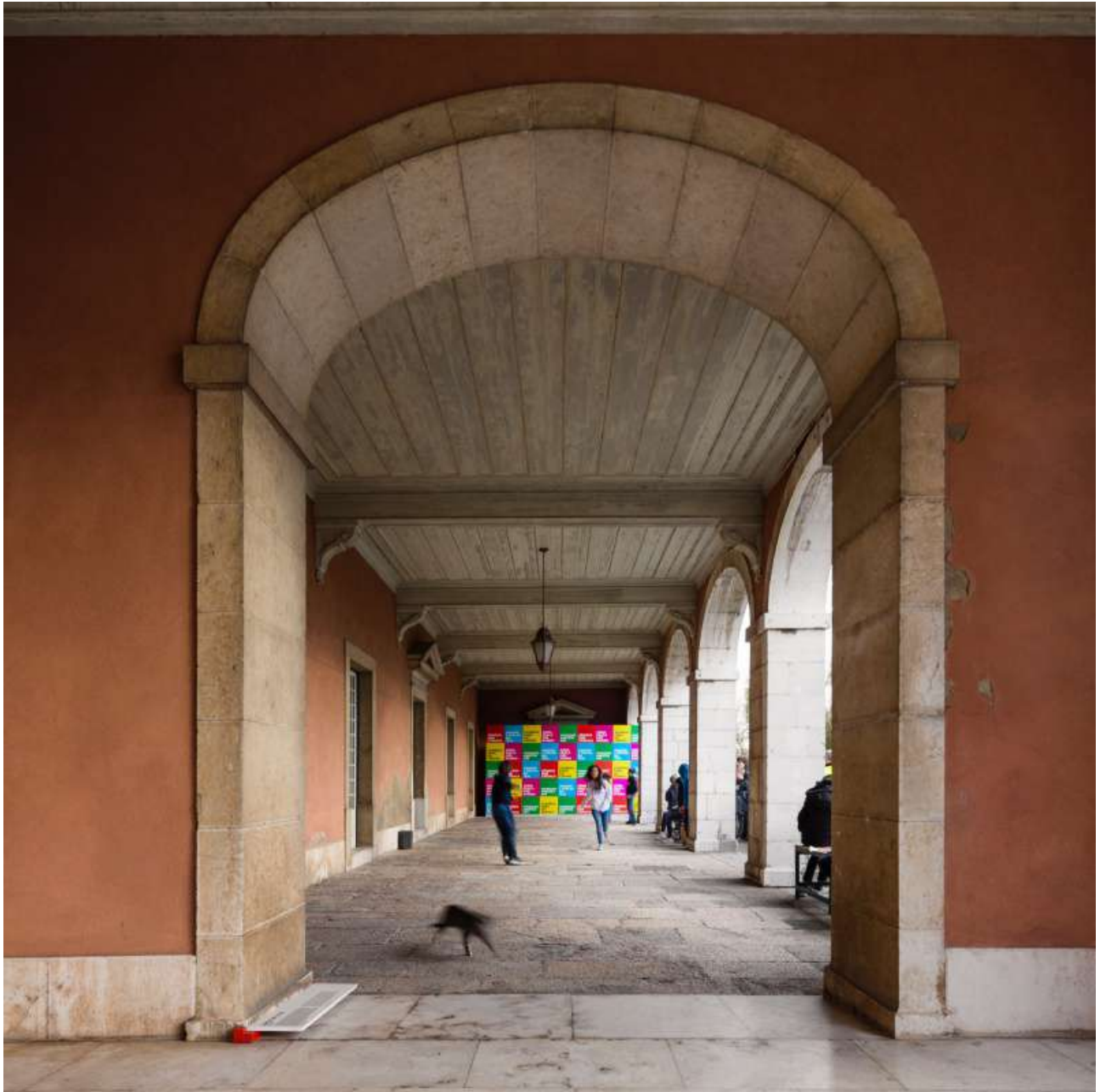
The third objective may have a less immediate but perhaps more lasting consequence: despite the overwhelming amount of information to which we have access, including the Portuguese language, whenever we want to research something, it's often difficult to know where to start, or with whom to begin a long, fruitful conversation about a subject. Perhaps a project or a book found at the Calheta Palace in the Autumn of 2017, or this one now in your hands, may have helped someone on this side of the Atlantic get started, thus creating a new bond between the two largest communities of professionals and scholars interested in pronouncing design in Portuguese, allowing us, in addition to know more about each other, to recognise each other better.

In their fascinating book *Brasil: uma biografia*,^[14] the historians Lilia Moritz Schwarcz and Heloisa Starling quote the Franciscan friar Vicente do Salvador, considered Brazil's first historian. In his 1630 opuscle *História do Brasil*, he concluded that 'No man on this land is republican, nor cares, or looks after the common good, but only their private property.'^[15] Building on his remark, Schwarcz and Starling mention that 'Since the beginning of that history of five centuries and loose change, a difficult process of building shared forms of power and care for the common good was already evident in the exploration of the lands that would later be constituted as Brazil.'^[16] The two scholars suggest a new, less fatalistic interpretation of Vicente do Salvador's damning and often-quoted words: 'Contrary to what friar Vicente supposed ... there is republican virtue among us. Creating imaginative paths in the building of public life, that is the typically Brazilian remedy to face or, better said, to short-circuit the impasse generated within a society that relies on many encounters and several mismatches.'^[17]

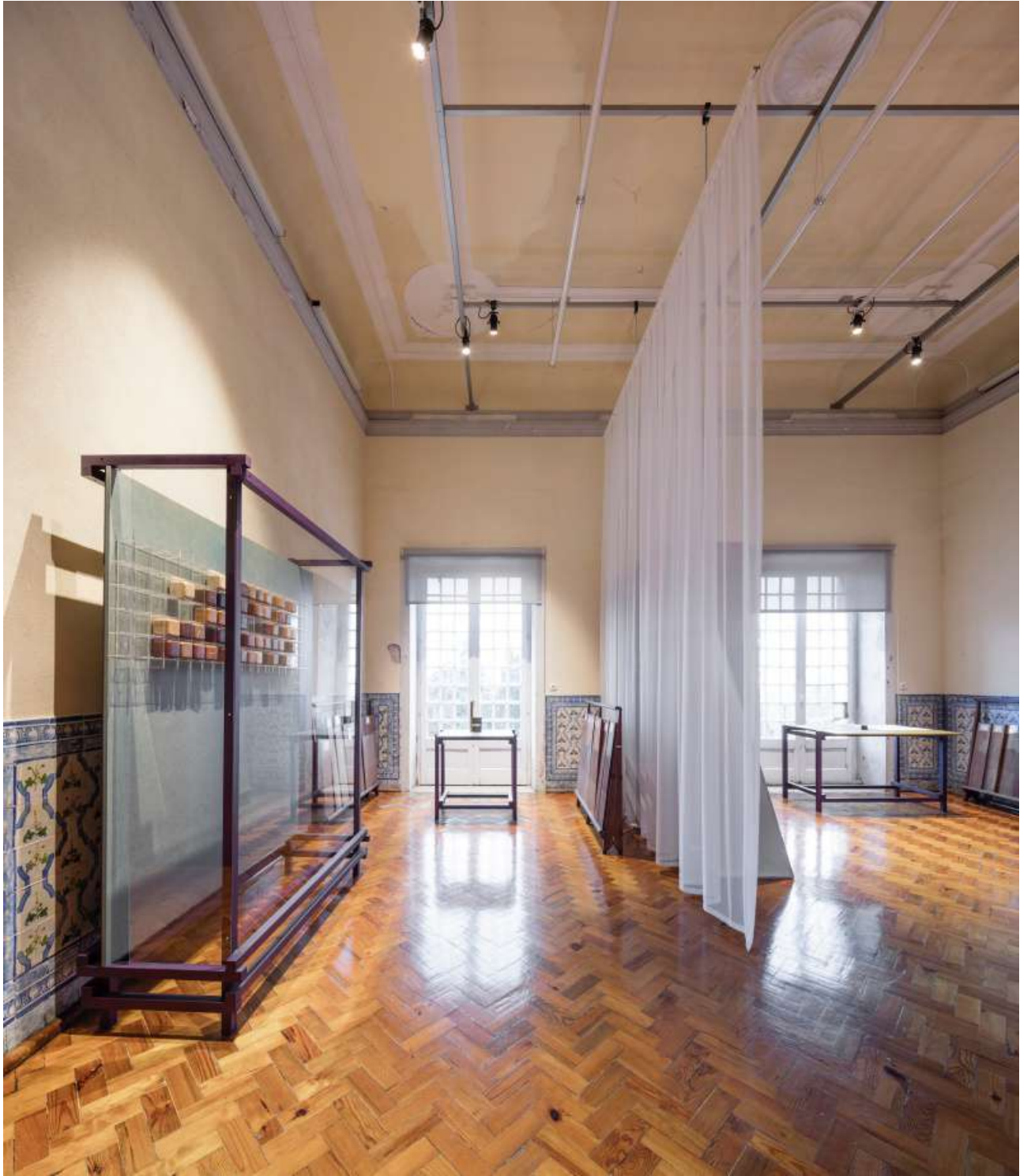
This is indeed the main goal of this exhibition organised in 2017 in Portugal, about Brazilian design in the twenty-first century: to show how, by reflecting, interpreting and reacting to the encounters and mismatches of their society, Brazilian designers have created imaginative paths in the building of public life. It also shows us how to create a future that is larger than a country.

This is an edited version of an essay originally written for the catalogue of the exhibition Brazil

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Photos of *How to Pronounce Design in Portuguese: Brazil Today*, an exhibition curated by Frederico Duarte and organised by MUDE at the Calheta Palace, Lisbon, 2017. Installation views. Photo: Fernando Guerra.













Photos of *How to Pronounce Design in Portuguese: Brazil Today*, an exhibition curated by Frederico Duarte and organised by MUDE at the Calheta Palace, Lisbon, 2017. Installation views. Photo: Luisa Ferreira.

[1] [Instituto Nacional de Estatística](#) (accessed 05.02.2018).

[2] [Instituto Brasileiro de Geografia e Estatística](#) (accessed 05.02.2018).

[3] Term for TV soap operas in Brazil.

[4] Keith M. Murphy, *Swedish Design: An Ethnography* (Ithaca, NY: Cornell University Press, 2015). p. 5.

[5] Jonathan Tepperman's article in the January/February 2016 issue of *Foreign Affairs*, '[Brazil's Antipoverty Breakthrough](#)', provides a good analysis of the Bolsa Família programme (accessed 07.02.2018).

[6] Daniel Miller, *Stuff* (Cambridge: Polity, 2010), pp. 53–54.

[7] Paul Ricoeur, *Critique and Conviction: Conversations with Francois Azouvi and Marc de Launay* (London: Wiley, 1998). p. 60.

[8] Rafael Cardoso, *Uma introdução à história do design* (São Paulo: Editora Blucher, 2008, pp. 22–23).

[9] Chimamanda Ngozi Adichie (July 1, 2009), '[Adichie, Chimamanda Ngozi, The danger of a single story](#)' (accessed on 09.02.2018).

[10] Jamer Hunt, 'Prototyping the Social: temporality and speculative futures at the intersection of design and culture' in Alison J. Clarke, ed. *Design Anthropology: Object Culture in the 21st Century* (Vienna: Springer, 2011, p. 35).

[11] Ibid.

[12] Damon Taylor, 'Exhibiting Design Art', in Liz Farrelly and Joanna Weddell, *Design Objects and*

the Museum (London: Bloomsbury, 2016), p. 94.

[13] Ibid.

[14] Lilia Moritz Schwarcza and Heloisa Starling, *Brasil: uma biografia* (Lisbon: Temas e Debates – Círculo de Leitores, 2015).

[15] Ibid., p.19.

[16] Ibid.

[17] Ibid.

Frederico Duarte

Frederico Duarte studied communication design in Lisbon and worked as a designer in Malaysia and Italy. In 2010 he completed his MFA degree in design criticism at the School of Visual Arts in New York. As a design critic and curator, since 2006 he has written articles and essays, contributed to books and catalogs, given lectures and workshops, organised events, and curated exhibitions on design, architecture, and creativity. His latest exhibition on Brazil and design in the 21st century *How to Pronounce Design in Portuguese: Brazil Today*, organised by MUDE, Lisbon's design and fashion museum, is currently on show till 31 December 2017. Concurrently he is conducting an AHRC and FCT-funded collaborative doctoral partnership research project on contemporary Brazilian design at Birkbeck College, University of London and Victoria and Albert Museum, London, UK.

UTOPIA and the Metainterface

Christian Ulrik Andersen



Graphic designers, journalists, and researchers in a 'battle over the midfield'. From the magazine Graffiti (issue 7), published by the UTOPIA project in 1985.

– Participatory Interface Design from the Print Press to Today

The computer interface today is both omnipresent and invisible, at once embedded in everyday objects and characterised by hidden exchanges of information between objects. Cloud services, smart phones, data capture and streaming services are the representatives of a new global technological paradigm that profoundly affects everyday practices – from the workplace to social interactions and cultural consumption. This is the paradigm of the 'metainterface', where the user interface is optimised to the user's needs, but simultaneously conceals hidden layers and processes of labour.[1] However, despite attempts to make the interface disappear into smooth access and smart interaction, its grammar gradually resurfaces as users realise that behind the design's benevolent smoothness and seemingly beneficial exchange of information there is a politics of the interface. How can the user be empowered in ways other than through the translucent contiguity and proximity of data feeds and media streams suggested by the global interface industry? How can interface design act in new ways – critically, politically and tactically – in this situation? These are questions that address how to cope with this new imperial interface industry, and how to seek out creative and positive alternatives.

In this article, I return to the history of user-friendly interfaces, and how the smart and cool gadgets that pervade all aspects of our lives came to be. I focus particularly on critical and politically aware interface designs created in Scandinavia during the 1970s and 80s, specifically the 'UTOPIA project' undertaken by computer-system designers and newspaper trade unions. At the time, computer system and interface design became particularly problematic with the introduction of computers into the workplace, where workers often felt alienated by the automation of labour. The Scandinavian participatory design tradition and collaboration with workers' unions presents us with a set of concerns and challenges that are well worth revisiting in today's interface culture. The intention is to reflect on what can be learned from these case studies, and how to repurpose their insights and techniques today, at a time when smooth media players, apps, custom services etc form the basis of new world views in a cultural economy of

sharing.

Apple's 1984 – the dawn of a new industry

Any design object represents a way of thinking about the world. The design as a 'thought-object' and its implied perspective on the world is often conditioned by the process leading to the design. In other words, 'design' may not only refer to the object, but also to the process: it is a verb and not just a noun. Thinking about design as a process, and how interface design objects may embed particular ideologies in their process of making, is of course not a new thing. One example is Apple's user-driven innovation and experimentation with how to meet people's needs, which was originally (in the 1980s) presented as a counter to IBM's large-scale administrative systems. This ideological aspect is particularly evident in Apple's promotional video of the first Macintosh computer in 1984. The video shows an Orwellian society where 'Big Brother' speaks through a screen to a community of users (or slaves of the machine), and ends with a young athlete smashing her sledgehammer through the screen. With voiceover and text, the advertisement reads: 'On January 24th, Apple Computer will introduce Macintosh. And you'll see why 1984 won't be like "1984".' [2]

Arguably, Apple was fuelled by an ethos of taking the user seriously and seeing computing as a potential way of revolutionising not just bureaucratic processes, but life more generally, in all its aspects. Apple was, in other words, driven not just by the quest for big business, but also by the kind of ideological critique that followed American West Coast counterculture: a critique of military computing and bureaucracy. [3] This ideological construct is fundamentally understood by considering what an interface is. Conceptually speaking, a computer interface is the point where the signal processes of the computer meet the human processes of signification – where representation meets computation, where media meets instrument. [4] As such, the interface governs the communication between the user and the computer. In this way, it is both a very specific thing – one can point to the interface and identify it – but it is also a conceptual thing. This means that the protocols of the interface – the ways in which one can do things with signs – are not innocent, but rely on cultural values and politics. When Apple introduced its Macintosh computer in 1984, the interface became what it is today: a graphic surface between user and workstation. The quest for user empowerment came about by thinking of the interface as something that paradoxically gains a presence and potency from its transparency and disappearance. It is, in the words of Gregory Ulmer, an expression of 'the twin peaks' of American idealism: realism and individualism. [5]

This is a very potent cocktail. Making the interface realist – by introducing 'windows' and 'menus' and 'desktops' – empowered the user with a brand-new tool for self-expression. The interface became not only the outcome of user studies, but also an object of consumption. It became a product carefully designed to be used, but also a product that produces its users: the inhabitants of a brand new world to come, where mankind is no longer the slave of the machine. In other words, the interface is not just the mediator of a machine, but brings with it a whole new emancipatory form of life.

However, the urge to make the interface disappear and to ignore its bureaucratic nature in order to liberate the user comes with a risk. The American hypertext author Stuart Moulthrop noted in his essay 'You Say You Want a Revolution' that the responsibility for the great changes of which Apple dreamed lay in the hands of a diverse elite of software developers, academics, legislators and others with a clear interest in intellectual property and the protection of copyright. Therefore, it would seem 'equally possible that engagement with interactive media will follow the path of reaction, not revolution'. [6] When looking at the services and platforms of Apple today, it is obvious that the emancipatory dream of a smooth interface and liberated individual user is accompanied by strict control mechanisms that even follow the schemes of military super-computer control centres, like, for instance, those provided by IBM. [7]

The Metainterface – the mechanisms of interface empires

These control mechanisms – or ‘protocols’ – are what prescribe and restrict communication with the computer at different levels. They prescribe what language can be used, what directories can be accessed, what plugs can be plugged in, and so forth. The layers of the interface, both technical and political, may be difficult to comprehend, and sealing them off is therefore often experienced as ‘user-friendliness’. It is this double bind of transparent windows and strict protocols for communication that makes the computer appear useful and persuasive, but at the same time leaves its users with the feeling that it is becoming increasingly difficult to define the exact nature of the paradoxical situation in which they are caught.

This double feeling of smoothness and opaqueness is a signature feature of the contemporary interface; it has become the imperative logic of the user’s interface experience. Once, the user interface was a confined set of relations between the different components of the computer and the user. In no way were the sealed-off mechanisms of the computer so unlimited as today. The computer devices that we carry in our pockets or are embedded in our surroundings are profoundly promiscuous and leaky. If the user streams a piece of music, or composes a post on Facebook, or even just happens to walk around with a smartphone in his or her pocket, piles of data processes are set in motion. For instance, users tend to produce and share incredible amounts of text, but it is not just meant to be read by a community of socially engaged individuals. It is generally estimated that half the reading of all text is done by machines, or ‘bots’, that monitor, search, look for system vulnerabilities, etc.[8] More generally, every behaviour of the user is captured, calculated and exchanged across an incomprehensible number of platforms. Some have malicious intentions, but mostly aim to meet commercial or service needs to make the interfaces more realist and individualistic: make better maps, better recommendations, better commercials and so forth.

Conversely, the piles of computing processes involved in these customisations also set the user in motion: the user sees and acts differently. She makes herself visible to data capture and does things that can be captured; as explained by Phil Agre in 1994, systems have their ‘grammars of action’.[9] For instance, when a user produces text, he or she publishes it in places where it can be measured – where it can be ‘liked’ or ‘shared’ in social media; where it can be registered and accredited by the research institution for which he or she works, and so forth. More generally, every behaviour of the user is guided by the mechanisms of the interface that constantly let the user know how well he or she is performing; or, to be more specific, how well it is monitoring and capturing the user’s behaviours.

The absurdity of the extent of this kind of user design becomes evident in the sex performance app ‘Spreadsheets’ – a now abandoned mobile app that ‘monitors your performance in bed to provide statistical and historical feedback’ by tracking ‘movement and audio levels through the accelerometer and microphone’.[10] Supposedly, such statistics empower the user and enable lovers to do better, but at the same time they prescribe the nature of making love, and also make the lovers vulnerable in the sense that they willingly let a commercial enterprise into their bedroom and provide it with the most intimate data.[11]

One could ask if the focus on the user in the design process and product has, as Apple intended, liberated us from bureaucracy or, on the contrary, has bureaucratised all aspects of our lives. Has it empowered us or has it made us more vulnerable? One may speculate that the success of user-centred interface design depends on users who have bought in to the myth of user friendliness. Perhaps, in the end, the real ingenuity of Apple’s interface design, and that of many others, is the ability to design its users.

Interface criticism by design

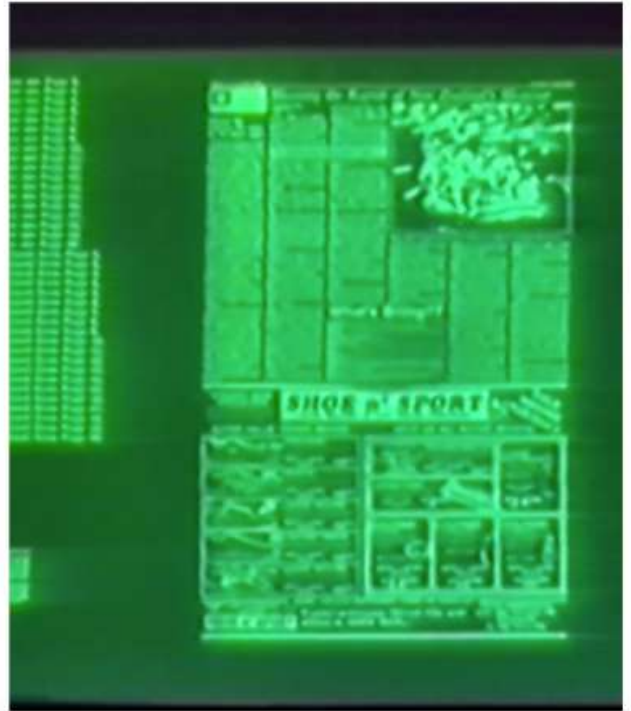
The interface is a ‘metainterface’. It is not just an interface to the networked computer, but depends on numerous hidden exchanges of signals between platforms in a global interface industry that partakes in

the formation of the contemporary user. The smart phone that fits into the user's pocket is an interface to a displaced computer. Commonly speaking, this is referred to as 'the cloud', but really, the cloud is just an expression of how technical infrastructures are displaced (out there, in the blue, not to worry about), and how this is tied to a large industry that thrives on the reading and exchange of behaviours. Such processes do not just accommodate user needs, but also design users and bring about certain grammars of action, behaviours and vulnerabilities.

Solving the double bind and uneasiness of the metainterface is not easy. The intention of this article is not to do away with the metainterface industry – arguably, it is an industry that depends on the consents of its users, and whose services can prove useful to them – but designers need to get a grip on the new kinds of vulnerabilities to which users are exposed. The mechanisms of the metainterface, its language and grammar, need to be exposed in order to make transparent phenomena such as social media, mapping, Airbnb and other services of the sharing economy. This kind of exposure commonly takes place in art projects, but as recently argued, similar critical qualities are needed within contemporary interface design: a kind of critical interface design, or 'interface criticism by design'. [12]

One could argue that Apple's user-centred design of the 1980s was critical, in that it was created in opposition to large-scale corporate and military computing systems. However, there were other, more radical approaches at the time. In Scandinavia, in particular, Apple's individual user-centred design was countered by what is commonly labelled 'participatory design'. In contrast to user-centred design that builds on an assessment of the user (e.g., his/her cognitive capabilities), participatory design encourages collective collaboration and design *with* the user. The introduction of new technologies to the workplace involved research into the larger organisation of labour of which they were a part, and into how to engage the worker in this process. Its intentions were to democratise the workplace by allowing the skilled labourer to influence the development and implementation of technologies in the workplace. At this time of the metainterface, the question is whether there is something to be learnt from the development of critical and participatory design from the 70s and 80s.

Although similar concerns of vulnerability, democratisation, empowerment and more were raised by the introduction of computers into the workplace, there are of course also substantial differences between now and then. Most notably, the scale of automated production is different today. The incorporation of new technology in the workplace is still an issue (robotics, machine learning, etc.), but the metainterface today enters all aspects of users' lives (including their bedrooms), and although some may be critical of this, it usually happens with the consent of the users. Nevertheless, a consideration of the kinds of user empowerments that were contemplated in early participatory design, as well as insights into the condition on which they relied in a larger social-technical and organisational context, may prove valuable today. [13]



Graphic newspaper design anno 1986. Still images from the documentary on Scandinavian participatory design, *Computers in Context*.

UTOPIA: The Computerisation of Newspaper Production

Early participatory design in Scandinavia dealt with all kinds of labour processes – from flight mechanics to banking – but the UTOPIA project, and its focus on the computerisation of newspaper production in the 1970s and 80s, stands out as a canonical example of how to empower workers and their labour unions in the technical implementation of new systems and interfaces in the workplace. The graphic-design field is a good example of an industry where labour processes changed considerably with the implementation of computerised automation. Before computerisation in off-set printing, an assistant editor would create a sketch of each page, and the graphic designers would then determine the exact layout of the page – with text and images – for the print plates. However, new computerised equipment made it possible to automate the graphic design. Text and images would be positioned directly by the assistant editors. The result was that graphic designers were left with jobs where they could no longer use their expertise. Many felt alienated by computer technologies and were eventually dismissed by their employers.

In many Western countries, this threat to the craft and jobs of graphic workers and typographers gave rise to immediate action. In 1975, for instance, pressmen at the *Washington Post* smashed the new computerised presses. But by 1985, Rupert Murdoch had built an automated newspaper plant in the UK that could print newspapers without skilled workers. An unskilled labour force took over production, with a final product that became very standardised and that to the trained eyes of the designers looked cheap. As noted 20 years later by Roy Greenslade, an executive at *The Sun* (one of Murdoch's four papers, which also included *News of the World*, *The Times* and *The Sunday Times*), 'Murdoch had prepared the ground well for his great revolution. 'The conservative government's Trade Union Act outlawed secondary picketing, and he had negotiated a deal with the electricians' union, the EETPU, to provide all the manual staff. Yet, Murdoch's move did not happen without violent protests, when 5,000 demonstrators tried to storm the plant, and a forceful police response – eight policemen were injured and 58 people arrested.[14]

In Scandinavia, however, graphic designers responded very differently to this usurping of their craft, predominantly because the Scandinavian system empowered them in various ways. The organisation of labour in Scandinavia is characterised by a detailed collective-bargaining system that covers large proportions of both the public and private labour markets. In addition, the practice of board-level representation for workers, or a co-determination framework, is widespread and ensured by law (as it is in a range of European countries). Companies of a certain size (in Denmark, for instance, the limit is 20 employees) are obliged to let their workers elect representatives to the board of directors; and through work councils, the workers have further mandatory rights in issues relating to the workplace and their working conditions.

In contrast to the *Washington Post* and Murdoch's newspaper plant in the UK, newspaper workers in Scandinavia had a say when technology was introduced into the workplace. The union of graphic designers contacted The Centre for Working Life (Arbetslivscentrum) – a unique Nordic government-sponsored research institution that assisted in the implementation co-determination. Together, they initiated the UTOPIA project: a collaboration between the Nordic Graphic Union and computer scientists from Aarhus University and the Royal Institute of Technology in Stockholm.[15] They engaged in a participatory research programme to explore – in a utopian way – how the workers could become lords of the machine, rather than victims of capital's legal right to lead and distribute labour. And, as stated by the chairman of the Nordic Graphic Union, Gunnar Kokaas, 'for the first time, the union has an advantage in the assessment of new technologies', and this happened without a 'conflicting interest between capital interests and demands for quality in education, work and product'.[16]

Insights from UTOPIA

The movement for workers' control and alternative production did not, of course, exist only in Scandinavia, and the UTOPIA project followed larger International Marxist trends that included The Institute for Workers Control in the UK, founded in 1968 by Tony Topham and Ken Coates (who later became a Labour Party Member of the European Parliament). Similar local initiatives at workplaces took place elsewhere in England, most notably with the aerospace workers at Lucas Industries, under the direction of trade-union activist Mike Cooley, who worked with leadership development for the engineer's trade union, and who became a well-known promoter of human-centred system design. It was to a large extent the ideas from the Lucas project that spread across Europe, and also to Scandinavia (including the Saab-Scania factory, and elsewhere).[17] According to Cooley, the insights afforded by the 'Lucas Plan' were predominantly:

- The importance of distinguishing between what a technology should do and what it actually does.
- Society's waste of its most valuable asset, the professionalism and enthusiasm of ordinary people.
- That computerisation most often liberates humans from monotonous tasks is a myth; the opposite is usually the case.
- Hostility to technology and science is great in society; it seems to be connected with failing to understand that technicians and researchers are used as errand-boys by large multi-national companies.[18]

Although Cooley's last point seems enigmatic (hostility to technology does not seem to be widespread any longer), these insights might well translate to our current time of metainterfaces that on the one hand thrive on the enthusiasm of consumers and promises of liberation from work, but on the other turn all areas of their lives into monotonous tasks (liking, sharing, monitoring, quantifying, etc.) whose production of data contributes to the value of the metainterface industry.[19] The conditions of labour have in many ways changed dramatically from the early times of computerisation of the workplace.

Most notably, there is no legally binding collective-bargaining or codetermination framework for users of apps, people whose data are tracked, etc. And further, a 'workplace' that potentially includes all aspects of life (as Apple imagined) seems out of scale compared to a relatively limited newspaper production. However, specific insights from UTOPIA have been influential in participatory system design. As noted by Yngve Sundblad in his retrospective account of the project's impact on the design discipline, the main results 'were not so much the pilot computer tool built and used at *Aftonbladet* (the Swedish newspaper that functioned as a key case study) as the experience and methods.' Sundblad highlights:

- How workers could craft technology themselves based on their use requirements (ranging from organisational requirements to working skills)
- How design could be considered a process of action (rather than an object) involving particular exercises, such as using prototypes and mock-ups involving the users
- How such processes could be studied and developed as an academic discipline
- How such 'design thinking' and practice can be brought into the design of software, 'bringing design to software'.

However, in a review of contemporary participatory design, Susanne Bødker and Morten Kyng (both with an active role in UTOPIA) criticise the legacy of early Scandinavian participatory design for its focus on the 'here-and-now co-creation', 'without much perspective', and 'with little concern for sustaining relationships and networks after the projects', its low technological ambitions, its 'do-gooding' and reduction of politics to ethics. [20]

In other words, in the age of metainterfaces and neoliberal economies of sharing and open sources, there is a need for an interpretation of the insights from the UTOPIA project that pays attention to how the design of an interface is not merely the discipline of creating user-tools that match the organisation of labour and the skills of the user in ethical ways (but with no further perspective). One should also consider how interface design is the creation of a larger techno-cultural 'apparatus'. Hence, any critical design discipline should consider not just how to design tools to interfere in reality in meaningful ways, but also how this is the design of an apparatus that also possesses the user and creates his or her (bureaucratic) reality: how it turns life into a computer system, the social and cultural conditions of this, and how to imagine individual or collective empowerment in this process.[21]

Overall, if there are lessons to be learned from UTOPIA and similar projects in this context, it is that technical and social infrastructures are intrinsically related, and – in the spirit of Worker's Control – that high levels of mobilisation and organisation are compulsory. Any technical reality is inherently also a social reality, and the collaborative and participatory development of tools, interfaces, technical workflows and more is not only a means to user-friendly functionality, but also a negotiation of existing hierarchies of power and control that demand corresponding social infrastructures. This negotiation may – as explained below – happen at two levels, the level of language (of the human and the machine), and the level of social negotiation.

To programme is to understand (object-oriented understandings of the world)

UTOPIA and early Scandinavian participatory design saw the need to develop sophisticated and accessible languages for the participants to understand and handle the grammar of action that are part of system designs. In his engagement with trade-union workers, Kristen Nygaard – one of the key figures in Scandinavian Participatory Design – made an interesting observation. He realised that when one programmes a system (like the system for graphic layout in a newspaper production setting) one depends on a particular object-oriented and procedural perspective on the world. Nygaard was one of the inventors

of Object Oriented Programming, where computer programming creates 'objects' and 'classes' such as 'articles' and 'pages' on the one side, and on the other, 'functions' and 'methods' that prescribe what to do with the objects (how to deal with 'bleeds', 'wrapping text', etc). Thus the system designer depends on a conceptual model of the world. She or he needs an ideal model of what objects or classes that world is made up of, and what behaviours or 'methods' they expose. To programme is in other words to understand the world in an object-oriented way.

The model user is not just any user interested in having useful tools around, but someone who is engaged in understanding reality. Correspondingly, the designer's role is not just to provide the tool, but to carefully guide the process by which the user can conduct critical 'object oriented' research into his or her reality. Such research does not necessarily involve a computer or programming skills, but should rather rely on materials and vocabularies that are accessible and can be shared between the participants.

For instance, reporting on the retraining programme of typographers at the Danish newspaper *Berlingske Tidende*, computer scientist Merete Bartholdy stressed how the union insisted on educating both the 200 workers who remained in the workplace after the introduction of new computer tools, as well as the 200 who were dismissed in the process. This re-schooling included not only tutorials in the new automated type-setting system, but also a more conceptual understanding of electronic text and image processing. This was seen as essential in retaining the transparency of labour. The course therefore not only introduced the participants to programming, but also to computerisation's societal effects.[22] In fact, Bartholdy concludes that an introduction to programming and the layered structure of computers is essential for a critical understanding of the technology's possibilities, but she also concludes that workers do not need to know the tedious syntax of programming, which demands a lot of effort to master.[23] They need to understand what programming means, however; they need to know the wider semantics of programming and create models that reflect the execution of the system programme as an execution of a labour process.[24] One example of how to do this, often quoted within the design field, is the use of 'mock-ups'. Pelle Ehn and Morten Kyng, for instance, when training staff for the Utopia project, used cardboard computers that allowed participants to create a conceptual template for the technology with which they would work.[25]

System design is a social process

Participatory system designers realised the need to see technical design as a social process. There is no one true way of programming the labour process into objects and methods, nor one true understanding of the world. In designing systems, understandings need to be negotiated between different stakeholders. What is an object or method for the graphic designer may be something completely different for the journalist or editor. This is why computer systems are fragile. If the worldview they represent is not shared amongst the users, or do not make sense, they are likely to break down: they are used the 'wrong way' or not used at all. Overcoming this problem is not solved by finding the right representation of reality, but by understanding that realities should be negotiated.

One example of this in the UTOPIA project is found in the division of labour between editors, journalists, graphic designers and typographers. Editorial layout was considered a natural part of editorial secretarial work, while layout that includes careful calculation and rendering of editorial sketches was considered graphic work. However, the introduction of automated text and image processing done with codes by the editorial secretaries often challenged existing labour boundaries. A collective agreement between the trade unions and the newspaper trade organisation stated that cases of disagreement were to be dealt with by a special committee of graphic workers and journalists.[26]

In a larger perspective, this observation made the system designers realize that just as important as any functionality of the system, is the need for system design to take root in the culture; meaning that it

needs to be accepted as a collective responsibility. As a consequence, in the UTOPIA project, the researchers and system designers not only programmed the systems, but also engaged in social activities such as football games with the other participants in the project. They also invented a range of more formalised 'design games' to make the worldviews explicit and negotiable.

Moving the codetermination framework outside of the factory

I have sought to bring forward some of the qualities that in my opinion are lacking in contemporary interface design: virtues of language, of influence, of mobilisation, of access to infrastructures and of strong co-determination frameworks. There is no access to infrastructures in the metainterface (how can we design our own social realities when all infrastructures are displaced in 'the cloud'?). There is no co-determination framework for the implementation of information technologies in our lives (and bedrooms), since there is no union for either Facebook users, lovers, drivers, commuters or any others whose data contributes to the metainterface industry. Finally, there is no co-determination framework for our work-life either.

This last lack seems particularly relevant. The metainterface has led to a new job market to which we commonly refer as a 'sharing economy'. This is an industry that is seemingly for the common good: innovative people can make a living out of sharing. But when sharing is automated, people who share – who have a spare car they can use as a taxi or a spare flat they can use as a hotel – potentially end up in precarious situations. A platform like Uber is not just a platform for sharing, but is heavily data driven. It collects massive amounts of data that makes it easier for any person to become a cab driver. The sharing economy not only produces a labour force with minimal rights, but also a deskilled labour force whose labour may very well be automated and replaced in the future, for instance, with self-driving cars. Uber ultimately seeks to replace rather than augment the driver.

Potentially, many other questions could be raised, based on observing the differences between participatory interface design and today's smooth and user-friendly metainterface design (how there is no co-determination framework for the inhabitants of the cities where Airbnb has drastically changed the landscape, for example). The key questions, however, remain: what could a 'Centre for Working Life' achieve today? Will a second UTOPIA be possible at the time of the metainterface?

[1] See Christian Ulrik Andersen and Søren Pold, ed., *Interface Criticism – Aesthetics Beyond Buttons* (Aarhus: Aarhus University Press, 2011).

[2] The advertisement was directed by Ridley Scott.

[3] See Fred Turner, *From Counterculture to Cyberculture: Stewart Brand, the Whole Earth Network, and the Rise of Digital Utopianism* (Chicago: University of Chicago Press, 2006).

[4] See Anderson & Pold, 2011.

[5] Gregory L. Ulmer, 'Grammatology Hypermedia', in *Postmodern Culture* 1.2 (1991).

[6] Stuart Moulthrop, 'You Say You Want a Revolution', in Nick Montfort & Noah Wardrip-Fruin, ed., *The New Media Reader* (Cambridge, Massachusetts & London, England: The MIT Press, 2003 (1991), p. 703.

[7] Anderson & Pold, 2011, p. 159.

[8] Imperva Incapsula Bot Traffic Report, 2017, www.imperva.com.

[9] See Philip E. Agre, 'Surveillance and Capture: Two Models of Privacy', in Montfort & Wardrip-Fruin, 2003, pp. 737–60.

[10] See Julie Zeilinger, 'Spreadsheets App Will Tell You If You're Good in Bed', *HuffPost, Women* (August 2013).

[11] As noted by Wendy Chun and Sarah Friedland, 'Habits of Leaking: Of Sluts and Network Cards', *Differences: A Journal of Feminist Cultural Studies* 26.2 (2015), pp. 1–28, vulnerability has come to characterise the contemporary online subject. It is easy to blame users for being 'promiscuous' or 'leaky' and not knowing how to protect themselves, but this ignores the systemic nature of the vulnerability, the so called 'slut-shaming' and 'cyber bullying' on the Internet, and how it has created a sense of entitlement to circulate what is otherwise private.

[12] Andersen & Pold, 2011, 157–82.

[13] For an insightful as well as critical account of participatory design that lays out some of its current challenges see Susanne Bødker and Morten Kyng, 'Participatory Design That Matters – Facing the Big Issues', *ACM Transactions. Computer-Human Interaction* 25.1 (2018): Article 4.

[14] See Roy Greenslade, 'The Day They Buried Hot Metal', *The Telegraph* (17 January 2006), www.telegraph.co.uk/finance/2930245/The-day-they-buried-hot-metal.html.

[15] UTOPIA stands for Training, Technology and Product in Work Quality Perspective; or in Swedish (but working in all Scandinavian languages): Utbildning, Teknik Och Produkt i Arbetskvalitetsperspektiv). UTOPIA was led by Pelle Ehn, who is considered one of the founding fathers of participatory design.

[16] Gunnar Kokaas, 'Meninger Om Utopia', *Graffiti*, 1985, p. 2.

[17] See Åke Sandberg, *Mellan alterantiv production och industriell FoU* (Stockholm: Arbetslivscentrum, UTOPIA, 1984), p. 23.

[18] See *ibid*, p. 24. An interesting addition in a British context is that UTOPIA later in the 1980s planned a collaboration with an IT company from The Greater London Enterprise Board, led by Mike Cooley. However, this project was not carried through because the Thatcher administration terminated the Greater London Council and this kind of development politics in 1986. Pelle Ehn in personal correspondence. See also http://www.wikiwand.com/en/Greater_London_Council).

[19] See Andersen & Pold, 2011, Chapter 2.

[20] See Bødker & Kyng, 2018.

[21] See Andersen & Pold, 2001, p. 165.

[22] This was done in COMAL 80, a Danish-developed programming language that resembles BASIC in that it provides a more 'procedural' and less 'object oriented' approach to the world. See Merete Bartholdy, *Omskolning På Berlingske Tidende* (Stockholm: Arbetslivscentrum, UTOPIA, 1984), p. 25.

[23] *Ibid*. p. 3.

[24] In programming, semantics is usually perceived as a model of the process that a computer follows when executing a programme, or how a programme is executed on a platform, and not the larger socio-technical execution of the programme.

[25] See Pelle Ehn and Morten Kyng, 'Cardboard Computers: Mocking-It-up or Hands-on the Future', in Joan Greenbaum and Morten Kyng, ed., *Design at Work* (Hillsdale, New Jersey: Lawrence Erlbaum Associates, Publishers, 1992), pp. 169–95.

[26] Angelika Dilschmann and Pelle Ehn, *Gränslandet – Om Arbetsorganisation Vid Integrerad Text- Och Bildbehandling (Projekt-Rapport Nr 11)* (Stockholm: Arbetslivscentrum, UTOPIA, 1985, p. 38.

Christian Ulrik Andersen

Christian Ulrik Andersen (Denmark) is Associate Professor at Aarhus University, Department of Digital Design and Information Studies. Inspired by network and software culture, his research addresses the intersection between software and cultural performativity. The outcome is found in various articles and books, including the forthcoming *The Metainterface* (MIT Press) co-authored with Søren Pold, as well as a number of projects that address issues of tactical and free research, including the online journal APRJA together with Geoff Cox, and a peer-reviewed newspaper in collaboration with transmediale festival for art and digital culture, Berlin, Germany.

Colophon

Stages #7

Design & Empire

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This volume is a partial record of the *Design & Empire [working title]* symposium that took place in Liverpool in November 2017. Conceived by Emily King and Prem Krishnamurthy, and curated with Joasia Krysa, the event was presented by Liverpool Biennial and Liverpool John Moores University's School of Art and Design, in collaboration with RIBA North (Royal Institute of British Architects) and The Serving Library. Contributors to the volume include: Emily King and Prem Krishnamurthy, Cooking Sections, Mae-ling Lokko, Christian Ulrik Andersen, Paul Elliman, Frederico Duarte, and Christopher Kulendra Thomas, introduced and edited by Joasia Krysa.

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Editor:

Joasia Krysa

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