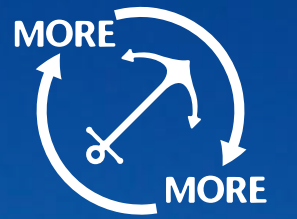


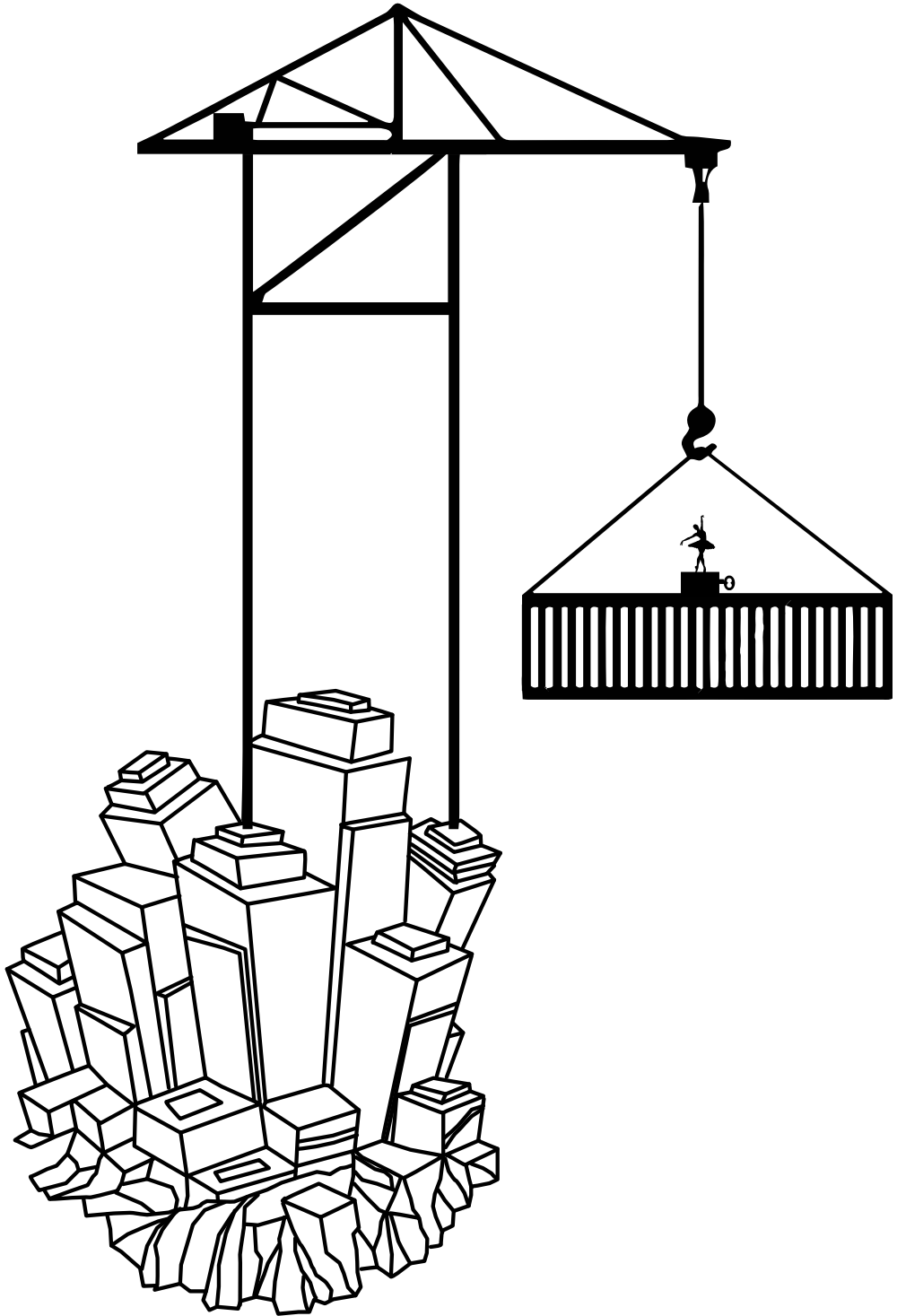
MORE&MORE

THE INVISIBLE OCEANS



A PROJECT BY MARINA ZURKOW
WITH SARAH ROTHBERG AND SURYA MATTU

ESSAY AND CONVERSATION WITH KATHLEEN FORDE
BOOK DESIGN: REBECCA LIEBERMAN EDITOR: CHRIS PIUMA
THANKS TO BITFORMS GALLERY, THE OBSERVATORY OF ECONOMIC COMPLEXITY





MORE&MORE (THE INVISIBLE OCEANS)

© 2016 Marina Zurkow



<http://creativecommons.org/licenses/by-nc-sa/4.0/>

This work carries a Creative Commons BY-NC-SA 4.0 International license, which means that you are free to copy and redistribute the material in any medium or format, and you may also remix, transform and build upon the material, as long as you clearly attribute the work to the authors (but not in a way that suggests the authors or punctum endorses you and your work), you do not use this work for commercial gain in any form whatsoever, and that for any remixing and transformation, you distribute your rebuild under the same license.

First published in 2016 by
punctum books
Earth
<http://punctumbooks.com>

punctum books is an independent, open-access publisher dedicated to radically creative modes of intellectual inquiry and writing across a whimsical para-humanities assemblage. We solicit and pimp quixotic, sagely mad engagements with textual thought-bodies. We provide shelters for intellectual vagabonds.

More&More (The Invisible Oceans)
ISBN-13: 978-0692622001
ISBN-10: 0692622004

Cover: Marina Zurkow
Book design: Rebecca Lieberman
Code and craft: Sam Brenner, Xuedi Chen, Neil Cline,
Ariana Martinez, Justin Peake

Ocean image by Tiago Fioreze, licensed under CC BY 3.0

	Six-digit
f 90% or more calculated on (duct)	290122
hydrin	291090
ers in primary forms	390230
de	290319
, 2-dihydroxypropane)	290532
medicinal, preparations, bulk	300310-90
	291020
methyloxirane)	291020
s in primary forms	392111-90
s, less than 90% pure	271129
ed, less than 90% pure	271114
	292129
preparations, bulk	300310-90
preparations, bulk	300310-90
bulk, except preparations	293500
bulk, except preparations	293711-90
de preparations, bulk	300310-90
ations, bulk	300310-90
te preparations, bulk	300310-90
ide, bulk, except preparations	293911-99
except preparations	293911-99
	330499
ent, baseball and softball	950699
ent, hockey	950699
r, rubber, with a metal toe-	640110
ts, except headwear, gloves, stics	392620
	853641
anmade fibers, over 12	591190
for dials, clock faces, etc.	701590
ng	853540
c, woven, artificial filament, dyed of varns of	

Prosthesis, joint
Proton accelerators
Protoveratrines, bulk, except preparat
Protractors
Proustite ore
Provitamin a
Provitamin a, bulk
Provoloni, not grated, powdered, or p
Proximity cards and tags
Prulose
Prune juice
Prune plums, fresh
Prunelles, dried
Prunelles, fresh
Pruners, tree, hand, not power-operat metal
Prunes, canned
Prunes, dried
Prunes, prepared or preserved, n.e.s.o.
Prunes, uncooked or cooked by steami boiling in water, frozen
Prunicodeine
Prussian blue
Prussic acid
Prydon
Pseudocumene, chemically defined com
Pseudoephedrine and its salts
Psilomelane ore
Psittaciformes (including parrots, parake macaws and cockatoos)
Psophometers
Psychotherapeutic agents, dosage
Psychrometers, electric
Ptfe resin
Public address systems



CHAPTER 1
Live animals



CHAPTER 2
Meat, edible meat
offal



CHAPTER 3
Fish, crustaceans
and mollusks



CHAPTER 4
Dairy produce;
birds eggs; natural
honey



CHAPTER 5
Products of
animal origin,
not elsewhere
specified or
included



CHAPTER 6
Live trees and
other plants; bulbs,
roots; cut flowers;
ornamental foliage



CHAPTER 7
Edible vegetables
and certain roots
and tubers



CHAPTER 8
Edible fruit and
nuts; peel of citrus
fruit or melons



CHAPTER 9
Coffee, tea, maté
and spices



CHAPTER 10
Cereals



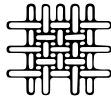
CHAPTER 11
Products of the
milling industry;
malt; starches;
wheat gluten



CHAPTER 12
Oil seeds; misc.
grains, seeds and
fruits; industrial or
medicinal plants;
straw and fodder



CHAPTER 13
Lac; gums,
resins and other
vegetable saps
and extracts



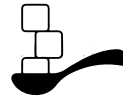
CHAPTER 14
Vegetable plaiting
materials



CHAPTER 15
Animal or
vegetable fats
and oils; animal or
vegetable waxes



CHAPTER 16
Preparations
of meat, fish,
crustaceans or
molluscs



CHAPTER 17
Sugars and sugar
confectionery



CHAPTER 18
Cocoa and cocoa
preparations



CHAPTER 19
Preparations of
cereals, flour,
starch or milk;
bakers' wares



CHAPTER 20
Preparations of
vegetables, fruit,
nuts or other parts
of plants



CHAPTER 21
Miscellaneous
edible
preparations



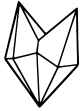
CHAPTER 22
Beverages, spirits
and vinegar



CHAPTER 23
Residues and
waste from the
food industries;
animal feed



CHAPTER 24
Tobacco and
manufactured
tobacco
substitutes



CHAPTER 25
Salt; sulfur;
earths and
stone; plastering
materials, lime and
cement



CHAPTER 26
Ores, slag and ash



CHAPTER 27
Mineral fuels,
mineral oils and
products of their
distillation



CHAPTER 28
Inorganic
chemicals;
compounds of
metals



CHAPTER 29
Organic chemicals



CHAPTER 30
Pharmaceutical
products



CHAPTER 31
Fertilizers



CHAPTER 32
Tanning or dyeing
extracts; dyes,
pigments, paints,
varnishes, putty
and mastics



CHAPTER 33
Essential oils
and resinoids;
perfumery,
cosmetic or toilet
preparations



CHAPTER 34
Soap, organic
surface-active
agents; waxes,
candles, modeling
pastes



CHAPTER 35
Albuminoidal
substances;
modified starches;
glues; enzymes



CHAPTER 36
Explosives;
pyrotechnic
products; matches



CHAPTER 37
Photographic or
cinematographic
goods



CHAPTER 38
Miscellaneous
chemical products



CHAPTER 39
Miscellaneous
chemical products



CHAPTER 40
Miscellaneous
chemical products



CHAPTER 41
Plastics and
articles thereof



CHAPTER 42
Raw hides and
skins (other than
furskins) and
leather



CHAPTER 43
Articles of leather;
travel goods,
handbags; articles
of animal gut



CHAPTER 44
Furskins and
artificial fur;
manufactures
thereof



CHAPTER 45
Wood and articles
of wood; wood
charcoal



CHAPTER 46
Cork and articles
of cork



CHAPTER 47
Manufactures of
straw or of other
plaiting materials;
basketware and
wickerwork



CHAPTER 48
Pulp of wood or
of other fibrous
material; waste
and scrap of paper



CHAPTER 49
Paper and
paperboard;
articles of paper



CHAPTER 50
Printed books,
newspaper;
manuscripts



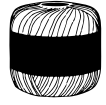
CHAPTER 51
Silk



CHAPTER 52
Wool, fine or
coarse animal hair;
yarn and woven
fabric



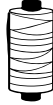
CHAPTER 53
Cotton



CHAPTER 54
Other vegetable
textile fibers



CHAPTER 55
Man-made
filaments



CHAPTER 56
Man-made staple
fibers



CHAPTER 57
Wadding, felt and
nonwovens; twine,
cordage, ropes and
cables and
articles thereof



CHAPTER 58
Carpets and
other textile floor
coverings



CHAPTER 59
Special woven
fabrics; lace,
tapestries,
trimmings



CHAPTER 60
Impregnated,
coated, covered or
laminated textile
fabrics



CHAPTER 61
Knitted or
crocheted fabrics



CHAPTER 62
Articles of
apparel and
clothing, knitted or
crocheted



CHAPTER 63
Articles of apparel
and clothing,
not knitted or
crocheted



CHAPTER 64
Other made up
textile articles;
worn clothing; rags



CHAPTER 65
Footwear, gaiters
and the like; parts
of such articles



CHAPTER 66
Headgear and
parts thereof



CHAPTER 67
Umbrellas, sun
umbrellas, walking
sticks, seatsticks,
whips, riding-crops



CHAPTER 68
Prepared feathers
and down; artificial
flowers; articles of
human hair



CHAPTER 69
Articles of stone,
plaster, cement,
asbestos, mica or
similar materials



CHAPTER 70
Ceramic products



CHAPTER 71
Glass and
glassware



CHAPTER 72
Pearls, precious
or semi-precious
stones, precious
metal; imitation
jewelry; coin



CHAPTER 73
Iron and steel



CHAPTER 74
Articles of iron or
steel



CHAPTER 75
Copper and
articles thereof



CHAPTER 76
Nickel and articles
thereof



CHAPTER 77
Aluminum and
articles thereof



CHAPTER 79
Lead and articles
thereof



CHAPTER 80
Zinc and articles
thereof



CHAPTER 81
Tin and articles
thereof



CHAPTER 82
Other base metals;
cermets; articles
thereof



CHAPTER 83
Tools, implements,
cutlery, spoons
and forks, of base
metal



CHAPTER 84
Miscellaneous
articles of base
metal



CHAPTER 85
Nuclear reactors,
boilers, machinery
and mechanical
appliances



CHAPTER 86
Electrical
machinery and
equipment



CHAPTER 87
Railway or
tramway
locomotives



CHAPTER 88
Vehicles other than
railway or tramway
rolling stock



CHAPTER 89
Aircraft,
spacecraft



CHAPTER 90
Ships, boats and
floating structures



CHAPTER 91
Optical,
photographic,
cinematographic,
instruments



CHAPTER 92
Clocks and
watches and parts
thereof



CHAPTER 93
Musical
instruments



CHAPTER 94
Arms and
ammunition



CHAPTER 95
Furniture; bedding,
mattresses,
cushions and
similar stuffed
furnishings



CHAPTER 96
Toys, games and
sports requisites



CHAPTER 97/98
Miscellaneous
manufactured
articles; works of
art, antiques

Humans know more about Mars than about the oceans.

The question at issue is...the OCEAN, that expanse of water which antiquity describes as the immense, the infinite, bounded only by the heavens, parent of all things...the ocean which, although surrounding this earth, the home of the human race, with the ebb and flow of its tides, can be neither seized nor enclosed; nay, which rather possesses the earth than is by it possessed.

– Grotius, *Mare Liberum (The Freedom of the Seas)*, 1609

The jurist and philosopher Hugo Grotius wrote this gushing passage as part of his tract, “Mare Liberum,” to assert that oceans are international territory, effectively using the ocean as a poetic conceit, in order to utilize it as a surface for trade. This was the first significant push for globalization and ocean transport.

MORE&MORE, VALENTINE’S DAY, 2016, BITFORMS GALLERY, NY

MORE&MORE (the invisible oceans) is an art and research project that explores the language and mechanics of global trade, container shipping, and the exchange of goods, questioning a mercantile structure that by necessity disallows the presence of the ocean as a real space in order to flatten the world into a Pangaea of capital.

Maritime shipping is a leviathan – opaque and illegible to the non-expert, a system of codes and loopholes in which no person has a picture of the entirety. The studio, initially driven by an impulse to picture global, local and maritime spaces, spent a year looking for legal and illegal data sources, getting a rudimentary grasp on trade, visiting the Port of NY/NJ, and digging away at the astounding scale and mechanics of maritime shipping. We found patterns, literally, as we navigated this “black box” of containerization.

The tunnel into this world lay in our discovery of the Harmonized Commodity Description and Coding System (HS Code), the internationally accepted standard of product classification, which codifies the way nations conduct import/export. All legal trade products (and illegal ones that find loopholes) are shipped using this system. The studio translated this code to

There is no ocean. There is water, and salt, and microbes, and bacteria, and container ships, and human bodies, and fish, and plants, and car parts, and lighters, and toothbrushes, and persistent organic pollutants, and sharks, and pesticides, and fertilizers, and paint, and molluscs, and corals in aqueous medium.

– Heather Davis, “320910-0000”
from More&More: A Guide to the Harmonized System

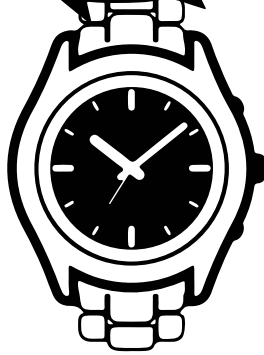
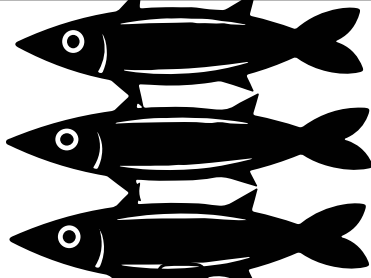
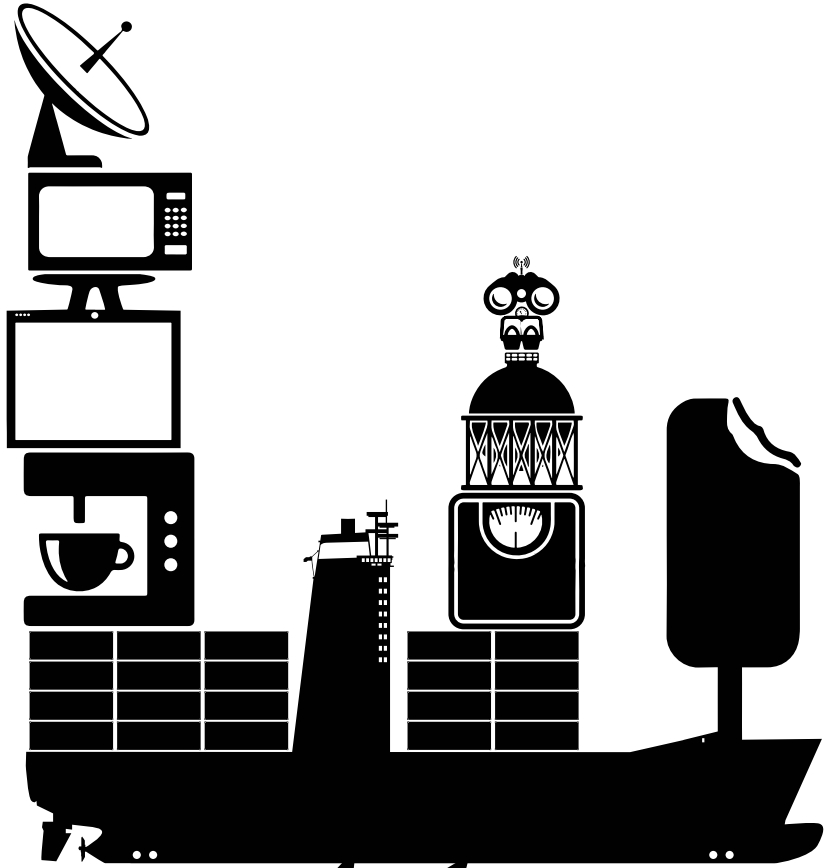
use throughout our own expressive system, scraping data and transforming it into icons and sculptures.

This claustrophobic fire-wall of HS Code generated the works that make up this first installment of More&More: hypnotic, generative animations of eight port nations’ cultural and product identities; a kiosk of top export items sculpted in fungus, chocolate, soap; unique bathing suits visualizing import/export data, a commerce web site, and the HS Code rendered as wallpaper.

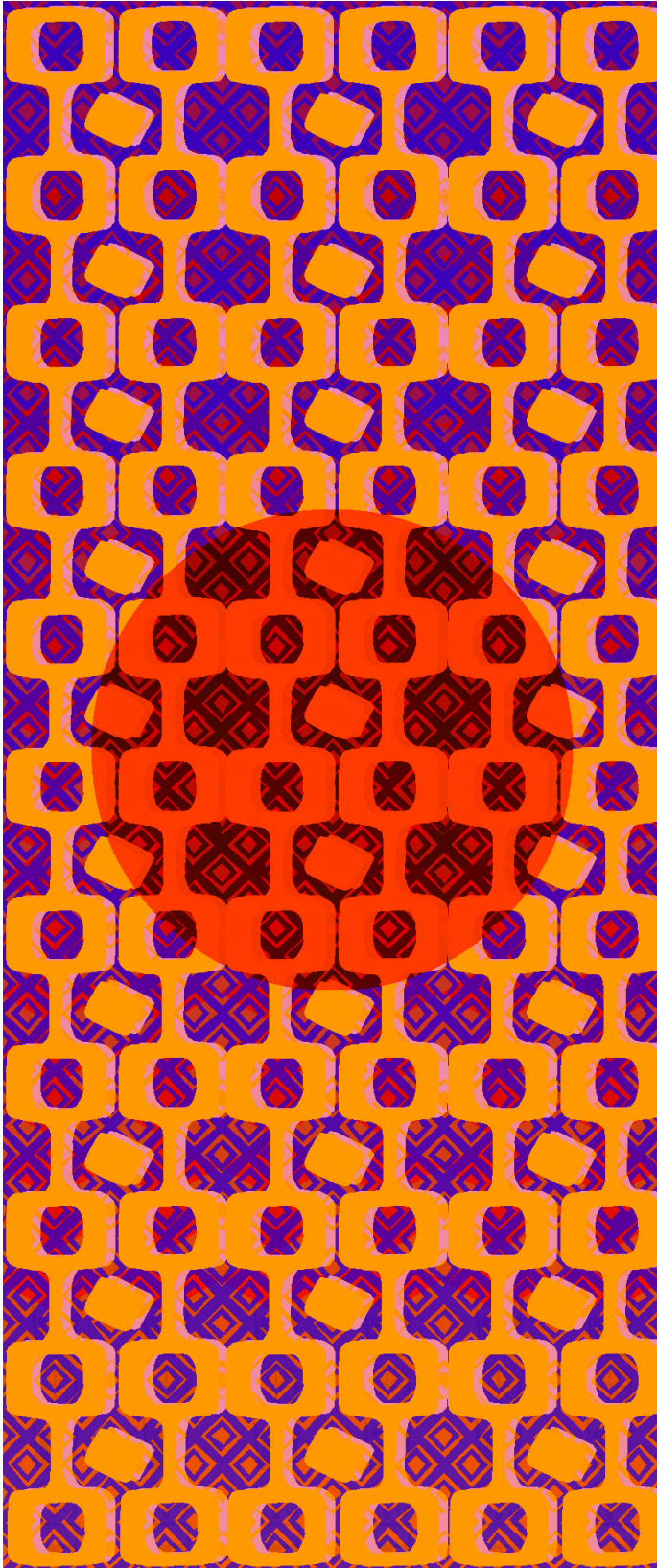
With this work, the ocean’s absence is amplified – there is little sense of the sea in this work, yet there are ships, weather, waves. We uneasily connect to the “ever more and more” feedback loop of commerce, and its indifference to relational and natural systems. There are always chickens in the supermarket and t-shirts on the rack. This “ocean in the room” is the space outside the HS Code, outside the products, the 24/7 maritime shipping apparatus, and outside the relentless imperative to produce what’s called “Productive Knowledge.” Our impulse was to magnify this hidden and labyrinthine world – overwhelming, illegible, and absurd – as a starting point for what will doubtlessly be a long course of work and discovery.

There is a twin book to this catalogue: More&More (A Guide to the Harmonized System), an experimental “brick” of a book intervening in the Harmonized System code, with contributions by scholars, theorists and poets.

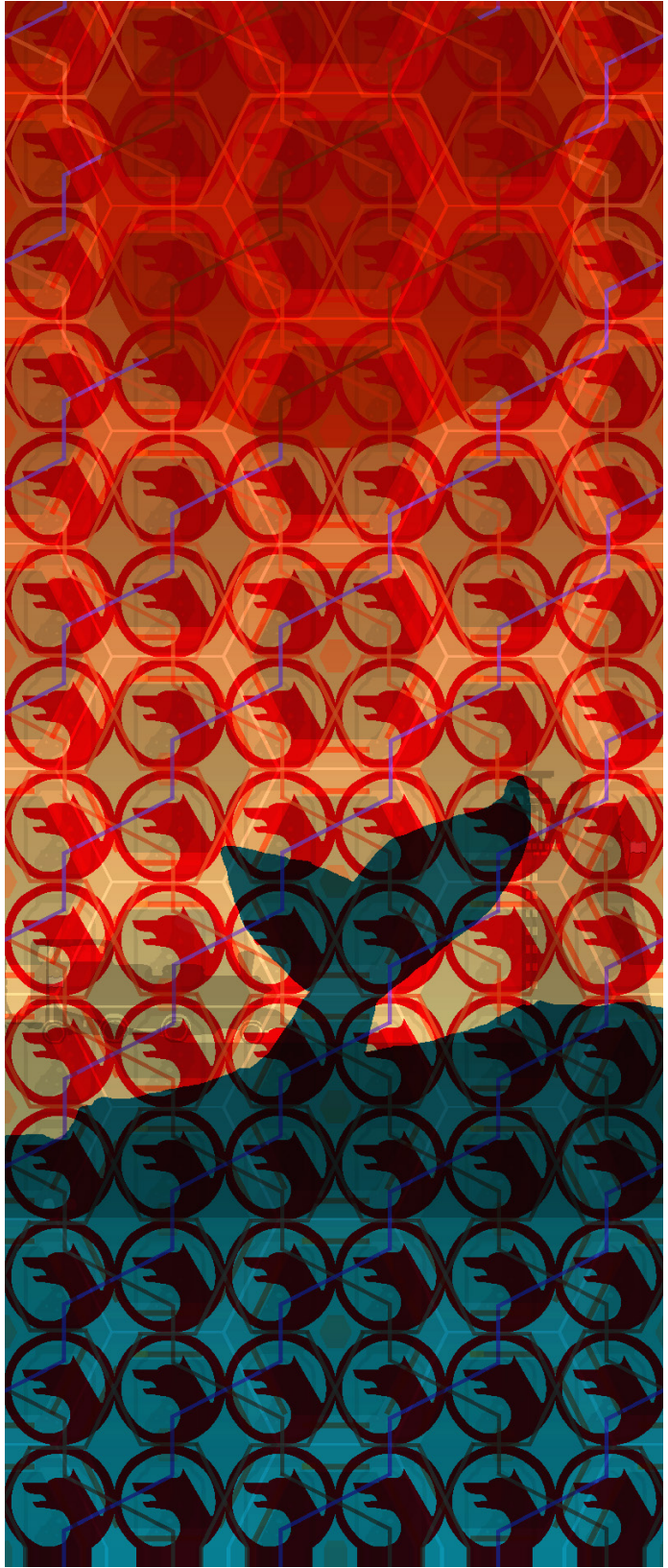
– Marina Zurkow

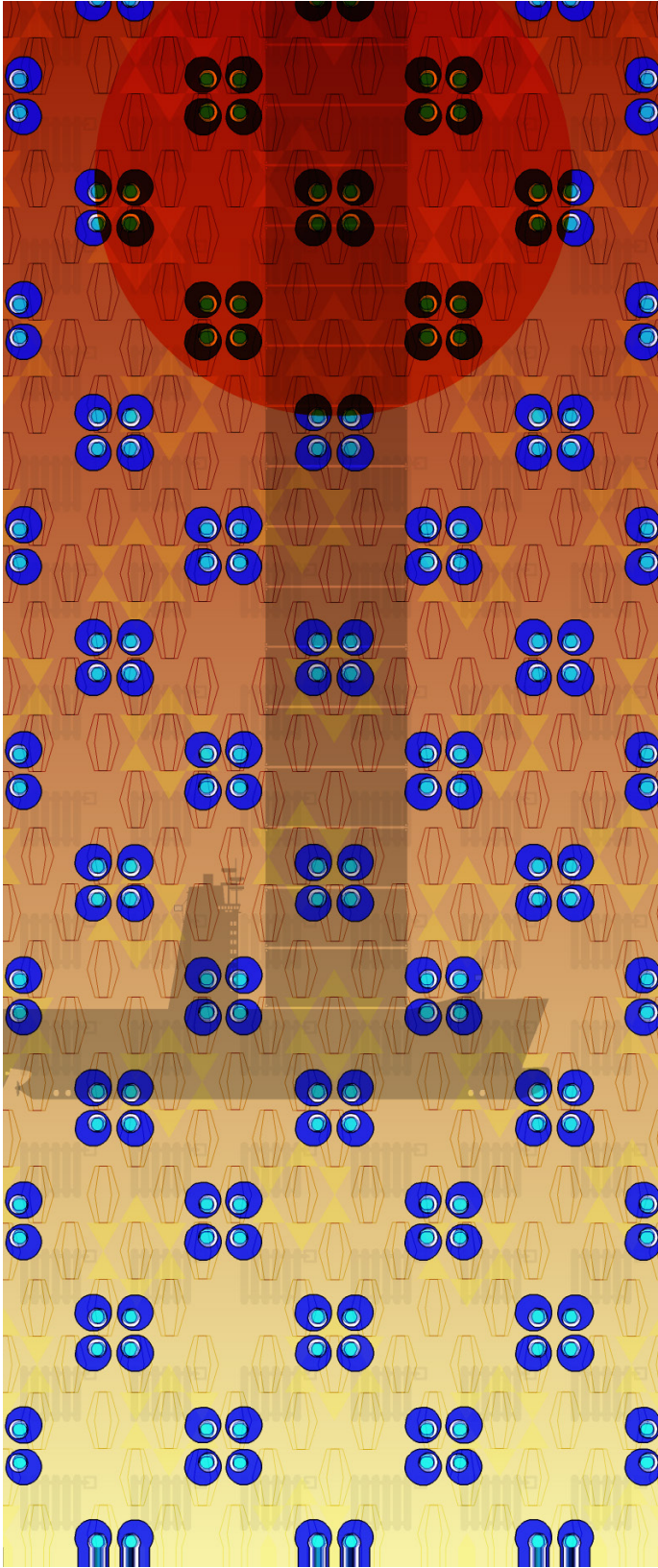


ANIMATIONS

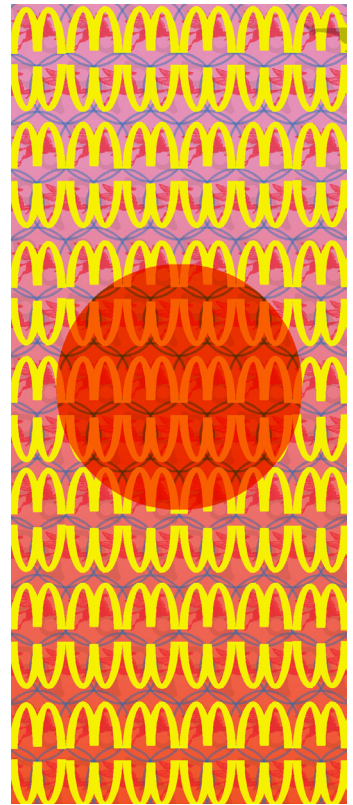
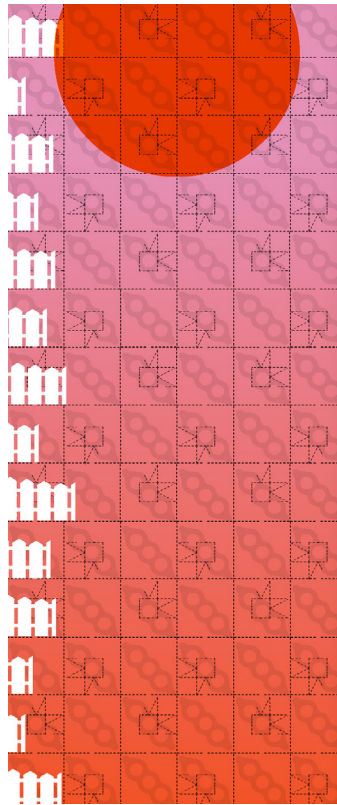
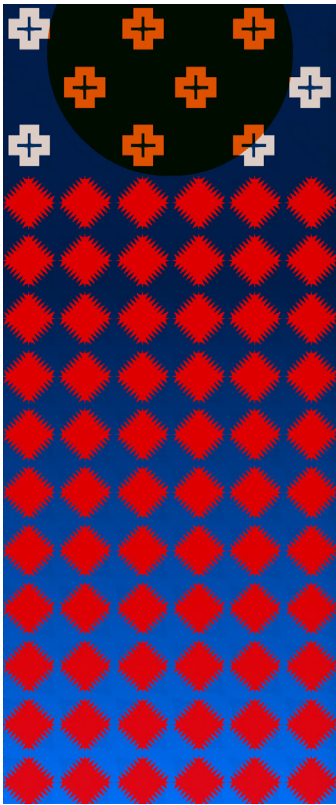
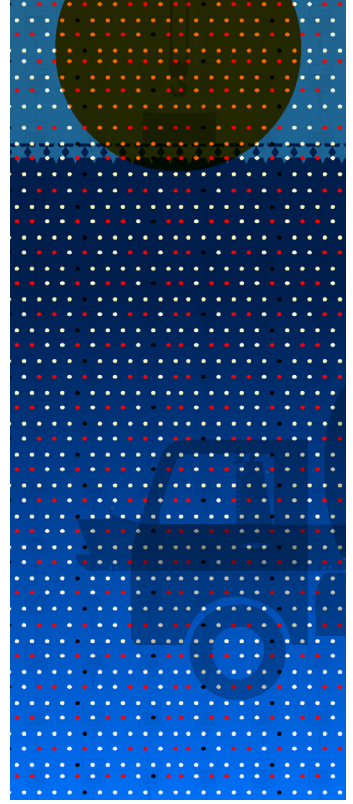
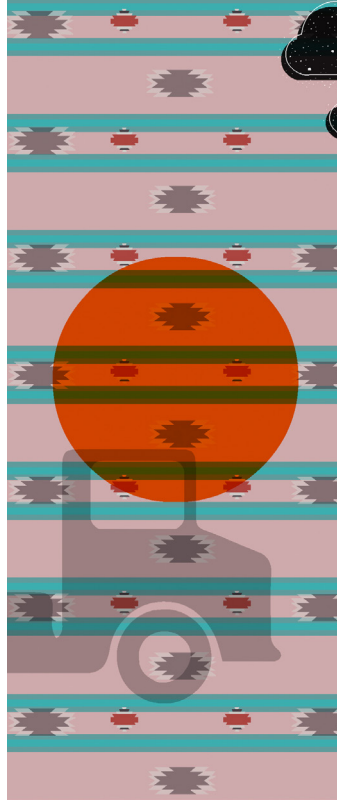
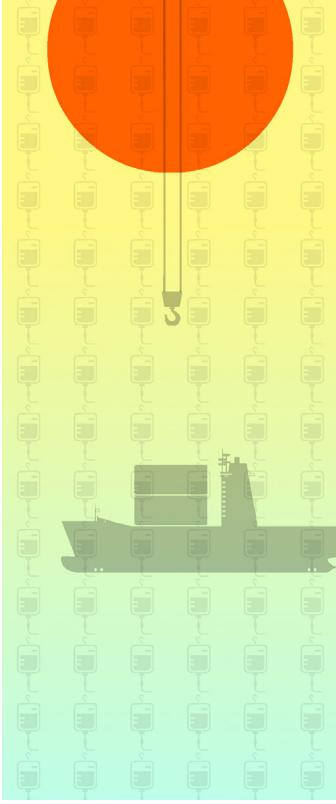


MORE&MORE (the invisible oceans):
Brazil
Software driven animation
Color, sound
Dimensions variable
Edition of 3
2016



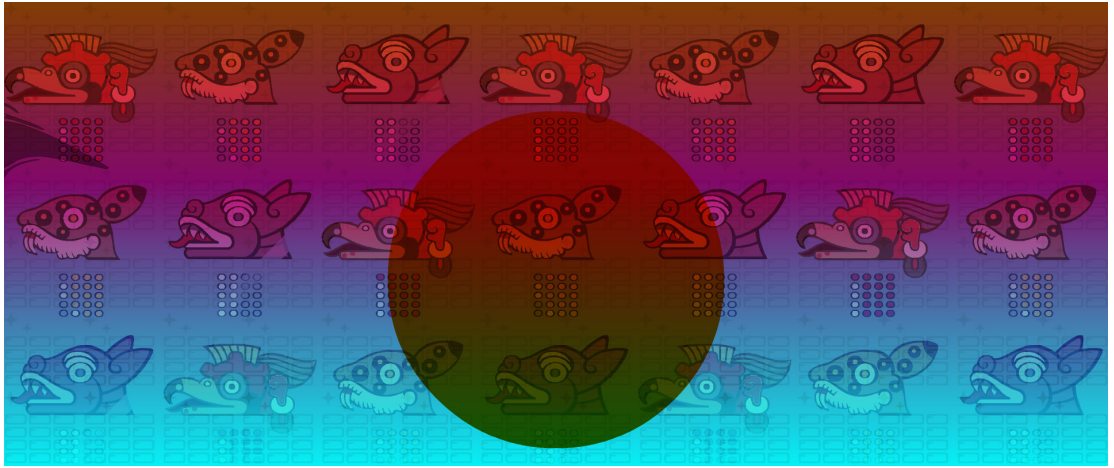


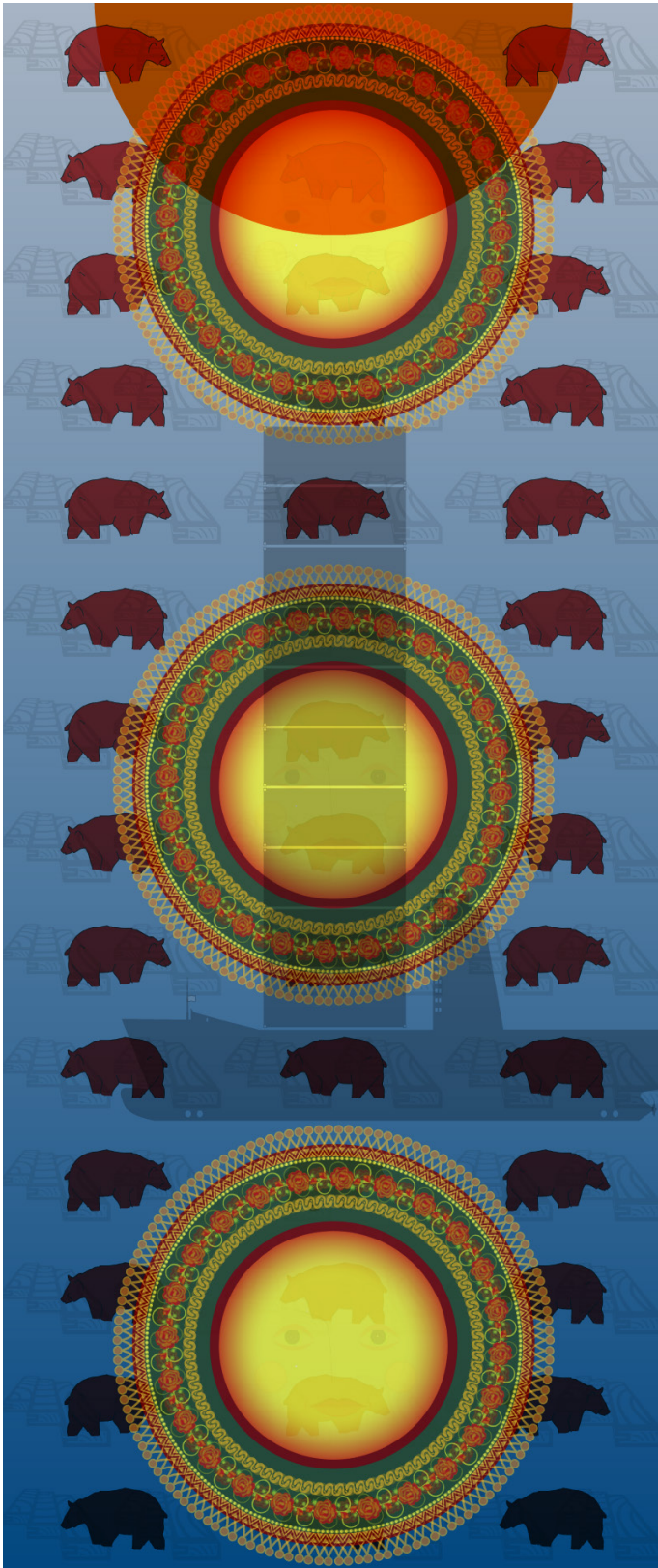
MORE&MORE (the invisible oceans):
Turkey
Software driven animation
Color, sound
Dimensions variable
Edition of 3
2016



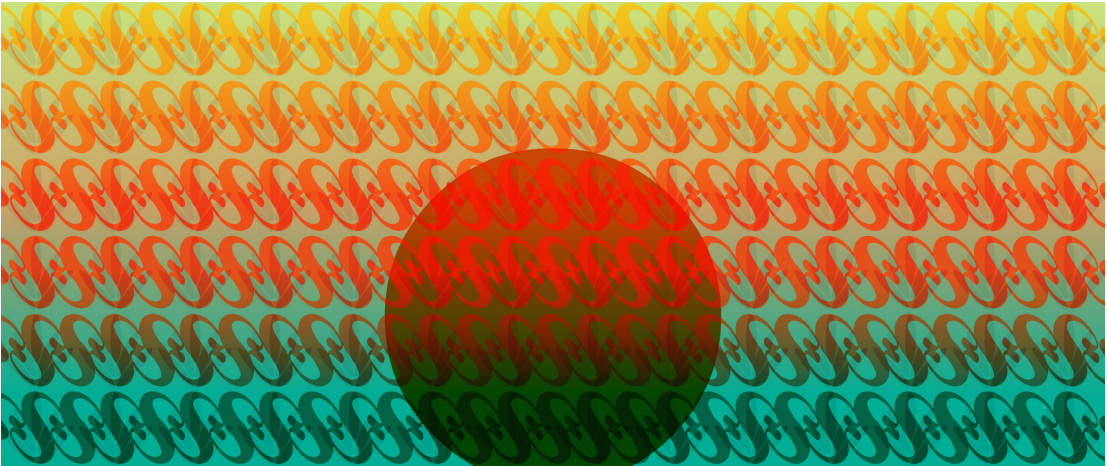
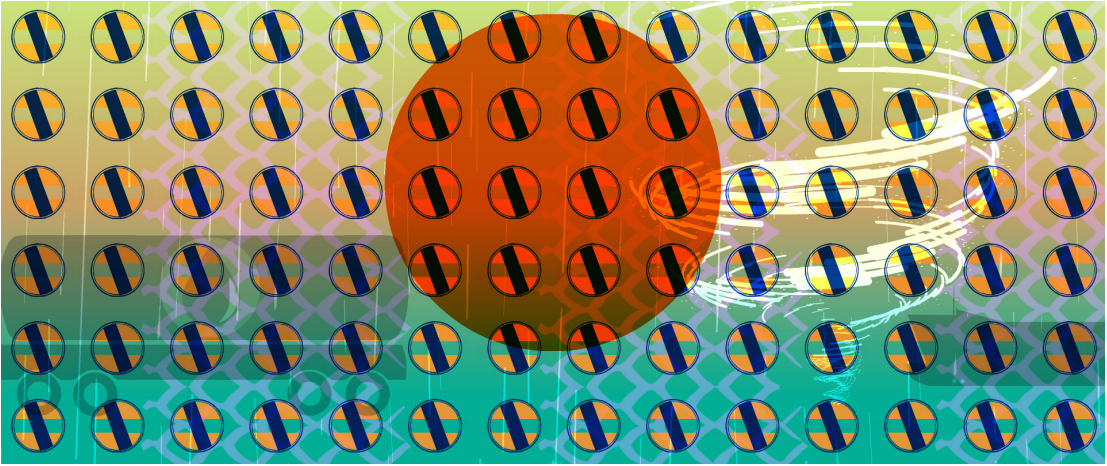


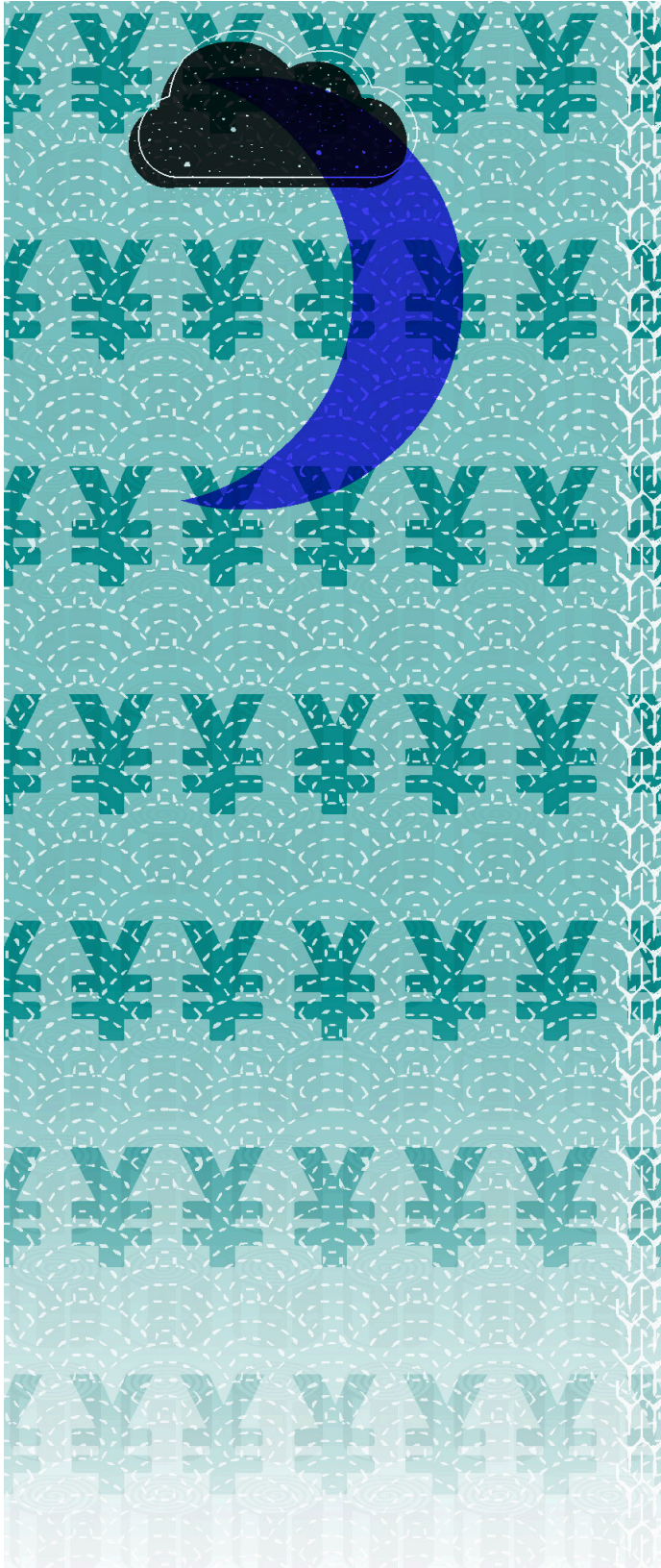
**MORE&MORE (the invisible
oceans): United States (left)
and China (right)
Software driven animation
Color, sound
Dimensions variable
Edition of 3
2016**





MORE&MORE (the invisible
oceans): Mexico (left) and
Russia (right)
Software driven animation
Color, sound
Dimensions variable
Edition of 3
2016





MORE&MORE (the invisible oceans):
India (left) and Japan (right)
Software driven animation
Color, sound
Dimensions variable
Edition of 3
2016

Nature is of course an elusive
category prone to slippage
between the material and the
divine, between substance and
essence...different kinds of
social organization produce wildly
different images of it. Nature is
for the moment then a category
without a content. It means simply
that which labor encounters.

- *McKenzie Wark, Molecular Red:
Theory for the Anthropocene*

The following conversation between Kathleen Forde, artistic director and curator of Borusan Contemporary (Istanbul), and Marina Zurkow unfolded online in the months preceding the show.



KF There is a certain invisibility of the ocean, the sea, of water in this piece. And yet bodies of water are the overarching conduits of the shipping routes that you are exploring. Given that the nature and concerns of so much of your work is rooted in the ecological, I assume this void is clearly an intentional paradox?

MZ Yes. It's the void of the ocean...it's the ocean in the room...the liquid elephant in the room. How is it we can glide across it, plough through it, and close the gap between landmasses with a desire for the Pangaea made of capital? How can we forget, ignore or gloss over 78% of the earth's biosphere? Ultimately, I want to make work

OCEAN

Nature is of course an elusive category prone to slippage between the material and the divine, between substance and essence...different kinds of social organization produce wildly different images of it. Nature is for the moment then a category without a content. It means simply that which labor encounters.

- McKenzie Wark, *Molecular Red: Theory for the Anthropocene*

There are an estimated 30 million undiscovered species in the ocean but only 1.4 million known species on land. The largest animal communities on the planet and greatest number of individuals live below three thousand feet.

- James Nestor, *Deep: Freediving, Renegade Science, and What the Ocean Tells Us About Ourselves*

If you compare the ocean to a human body, the current exploration of the ocean is the equivalent of snapping a photograph of a finger to figure out how our bodies work. The liver, the stomach, the blood, the bones, the brain, the heart of the ocean - what's in it, how it functions, how we function within it - remain a secret, much of it hidden in the dark and sunless realms.

- James Nestor, *Deep: Freediving, Renegade Science, and What the Ocean Tells Us About Ourselves*

The ocean is a paradoxical space, both "capital's favored myth-element" and a site that suggests (unrealisable) potential for transcending its striations and structures.

- Phillip Steinberg, *Kimberley: Peters Wet Ontologies*

about the ocean, in the ocean and for the ocean. But I have to admit that I got caught in the claustrophobic wonderland of the Harmonized System, of trade, and the absurd and/or upsetting density of it. This only serves to remind me that I too am a consumer, a human, dependent on these trade lines, and perhaps ignorant of supply chains.

KF We've referenced the Harmonized System a bunch in our conversations but I think it might be helpful to define what it is here as it is such an important structure for this project but not something I think many people (at least I was not) are familiar with.

MZ The Harmonized Commodity Description and Coding System (HS Code) is an internationally accepted standard of product classification, which codifies the way nations conduct import/export. All legal trade products (and illegal ones that find loopholes) are shipped using this system.

KF Can you explain a bit more by what you mean about forgetting the ocean? How is it getting forgotten and by whom?

MZ The ocean is, as Allan Sekula poignantly titled his film, a "Forgotten Space."

In no particular order: Maritime space is vast and ungovernable. Maritime law is broken all the time. International waters were an invention of the Dutch, in order to facilitate ocean trade in the early seventeenth century. For all of Grotius' ocean poetics, it ultimately was a play for global power through trade. The ocean is a slow feedback loop, and will, as a result of anthropogenic climatological changes, warm us for the next 50 years, whether we cease emitting CO₂ or not. It is on its own time scale. Ocean ecologies are relatively unknown, especially at depths greater than 2000 feet. Oceans are scary. We'd rather not think about their vastness. Despite their earthly dominance, we think about land. The Chinese are building islands to claim sovereignty over mineral and fishing rights in the ocean.

People swim near the shore, but, just as Deep Time is inconceivable on a daily basis, ocean depths are equally

unimaginable – depths and landscapes more varied than the new mountains of Denali in Alaska, or the Himalayas.

KF How do you try to invert the invisibility of the ocean?

MZ In this installation and particularly in the animations, the ocean is in and out “there”, we just don’t see it in the animations. Ships skittering or gliding through space, as well as other means of transport like trucks, trains and planes but mostly ships and cranes placing and removing containers on ships. This is why we have bathing suits for people to buy in the space of the installation and online. So we can swim in *that* ocean.

KF In the animations we are looking at a selection of the highest volume port countries including India, USA, China, Japan, Turkey, Brazil, Russia and Mexico. The animations include representations of national identity associated with the port, the “happenings” of port life (cranes, trucks, ships), weather systems and indications of the passing of time. From what I understand, these are all being generated in real time. Are the real-time animations affected by live data? How does this strategy affect the viewer’s experience of the work as opposed to a canned animation?

MZ The combinations of elements are generated in real time. The time of the port nation is set on the computer and dictates whether it is night or day. Because ports never close, there’s not any need for marking time by month or special occasion. It is always on, always running. I could say there’s no night or day too, but I wanted elements that marked time at its simplest. There is no real-time data.

Hopefully, the primary pleasure of the piece is one of pattern and decorative delirium – the patterns randomly combine, and there are about 50 patterns for each country. These now include icons for current trade export items, gas/bank/transport/telecom logos, as well as translations of decorative tiles and textiles

KF You’ve touched on the bathing suits above, but what about some of the other useless trade items rendered in fungus and chocolate ewwaste. Can you fill me in a bit on your production and selection process?

As I’m sitting in this cramped metal sphere peering through the window at a seldom-seen habitat, I feel an emptiness in my chest that breath can’t fill. This is the real Earth, the 71 percent silent majority. And this is how it looks – gelatinous, cross-eyed, clumsy, glowing, flickering, cloaked in perpetual darkness and compressed by more than a thousand pounds per square inch.

– James Nestor, *Deep: Freediving, Renegade Science, and What the Ocean Tells Us About Ourselves*

It takes a long time to become ooze. First you need to die and be eaten, then excreted, then have another organism eat that excrement, then have yet another animal eat that organism that just ate that excrement, and so on. This cycle will repeat until all that’s left of you are a few million molecules spread out like a constellation of stars across the world’s oceans.

– James Nestor, *Deep: Freediving, Renegade Science, and What the Ocean Tells Us About Ourselves*

It began to worry me, you see, this destruction of fish, this attrition of love that we were blindly bringing about, & I imagined a world of the future as a barren sameness in which everyone had gorged so much fish that no more remained, & where Science knew absolutely every species & phylum & genus, but no-one knew love because it had disappeared along with the fish.

– Richard Flanagan, *Gould’s Book of Fish*

The sea’s uses and moods sex it
– John Fowles, *Shipwreck*

Our species-being is as builders of worlds.

– McKenzie Wark, *Molecular Red: Theory for the Anthropocene*

The sea drowns the solid outlines and protection of modern technology and society
– Rose George, *Ninety Percent of Everything*



INFRASTRUCTURE

Photographer Allan Sekula, in his book *Fish Story*, assaults our intellectual reliance upon an equivalence between information and infrastructure: "In effect, I am arguing for the continued importance of maritime space in order to counter the exaggerated importance attached to that largely metaphysical construct, "cyberspace," and the corollary myth of "instantaneous" contact between distance spaces. I am often struck by the ignorance of intellectuals in this respect: the self-congratulating conceptual aggrandizement of "information" frequently is accompanied by peculiar erroneous beliefs: among these is the widely held quasi-anthropomorphic notion that most of the world's cargo travels as people do, by air. This is an instance of the blinkered narcissism of the information specialist: a "materialism" that goes no farther than "the body."
– Adam Rothstein, *How to See Infrastructure: A Guide for Seven Billion Primates*, Rhizome.org



BLACK BOX

In science, computing, and engineering, a black box is a device, system or object which can be viewed in terms of its inputs and outputs (or transfer characteristics), without any knowledge of its internal workings. Its implementation is "opaque" (black). Almost anything might be referred to as a black box: a transistor,

MZ We (Surya Mattu and Sarah Rothberg and I) started by analyzing the trade data based on the HS code (using the Observatory of Economic Complexity API), and chose several key recognizable items that represent the top export items for a group of major port nations. For example, the t-shirt, avocado, water bottle, mineral, computer, oil can, frozen chicken, timber slice, revolution counter or diamond.

I made icons for the 1252 4-digit HS code categories, and about 25 items we identified as key icons of illegally transported and traded goods...from humans to rare artifacts, to electronic waste to drugs.

We grew many of these iconic items out of fungus. Fungus is a potential substitute for plastic – a chitinous, unlimited, polymeric resource – that also speaks of death and decay. Without fungus we'd all be miles and miles high in waste. Plus fungi have survived 5 extinctions. Seemed pretty robust.

The chocolate e-waste is still in progress. I have a lot of strange chocolate molds purchased on the open market. Computers and cell phones, edible sea life and beauty accessories and tools and handcuffs. I am not sure yet if we are going to make rarefied, anti-mass-scale commodity consumables or highly shitty ones.

KF You have described this work as a new challenge to you and a turning point in your practice, in what way?

MZ I have been critical of the fact that most of my previous work neglected to address the social or economic. With this project I have settled myself into a deep hole in which to enjoy a steep learning curve by taking this issue on directly.

KF That's interesting to hear you say that. Personally, I would not describe your previous work as neglecting social content. Do you mean being more explicit about that perspective in the work?

MZ One of the issues I have struggled with is a certain kind of perceived misanthropy. I have focused on animals, plants, weather – anthropogenic influences and the outcomes of our complex systemic decisions. But when I speak about

ecological justice and the importance not only of a systems-level awareness, but also treating other species as equal to our own, I am often met with incredulity.

I have tried in this work to be more considered and inclusive of humans – not as villains or agents of the changes we so often are unwilling to look at on a systems level (unlimited growth, the mandate to scale up, the corporate bottom line, resource exploitation) – but rather as players, victims, animals, naturalized consumers who are completely distanced from how our consumption and its sources and effects are intertwined.

I should point out here that I am not excluding myself from this body of consumers. This endeavor is not an exorcism for me, nor a finger wagging excoriation of others. Once again, I am totally complicit, and it's a matter of coming-to-terms, or encountering intimately, the way I live.

My long-term goal with this project is to expand my thinking about capitalism as a delusional, untenable (land)mass, to find better-researched ways of working with this critique. And to advocate for human trafficking victims (so-called laborers, for instance) on the oceans, as well as the animals and plant life that are at risk because of the imperative to make and move STUFF at any cost from place to place.

KF The more I learn about the upcoming exhibition from you, the more it sounds like it functions more as an integrated installation, than a show of discreet works united by a common theme...does that ring true to you too?

MZ Yes; it's an additive process. I'm really focused on creating an experience of claustrophobia and delirium, useless empty commodities, absurd takes on cultural exports and on trade relations. Yet, I am looking at this from the perspective that they are still based on the reality of this system that depends on a certain kind of ignorance, or ignoring, I suppose. An ignoring of how, where, who and at what expense all of this shit is produced. At the same time I am focusing on the complex systemic outcomes that result from the production of stuff. My studio collaborators and myself are deliriously smitten with this – it's just incredible to us, still, after a year of work on this concept.

algorithm, or the human brain.
– Wikipedia



FLAGS OF CONVENIENCE

Flag of convenience is the business practice of registering a merchant ship in a sovereign state different from that of the ship's owners, and flying that state's civil ensign on the ship. Ships are registered under flags of convenience to reduce operating costs or avoid the regulations of the owner's country. The closely related term open registry is used to describe an organization that will register ships owned by foreign entities.

The term "flag of convenience" has been in use since the 1950s, and it refers to the civil ensign a ship flies in order to indicate its country of registration or flag state. A ship operates under the laws of its flag state, and these laws are used if the ship is involved in a case under admiralty law.

The modern practice of flagging ships in foreign countries began in the 1920s in the United States, when shipowners frustrated by increased regulations and rising labor costs began to register their ships to Panama. The use of open registries steadily increased, and in 1968, Liberia grew to surpass the United Kingdom as the world's largest shipping register. As of 2009, more than half of the world's merchant ships were registered with open registries, and the Panama, Liberia, and Marshall Islands flags accounted for almost 40% of the entire world fleet, in terms of deadweight tonnage.

– Wikipedia

"You know that 'African' print fabric? The idea was stolen from the Indonesians by the Dutch, who then found a way to manufacture it on an industrial scale and dumped the results in W-Africa because the quality wasn't good enough for Indonesia. So that's a whole bunch of appropriation: feel free to tell 99% of W-African women to stop wearing it.
- comment by "JEST" on *Browntourage* and *MoJuicy*, "Appropriation vs. Appreciation", *Interrupt Mag*



PRODUCTIVE KNOWLEDGE

Modern societies can amass large amounts of productive knowledge because they distribute bits and pieces of it among its many members. But to make use of it, this knowledge has to be put back together through organizations and markets. Our most prosperous modern societies are wiser, not because their citizens are individually brilliant, but because these societies hold a diversity of knowhow and because they are able to recombine it to create a larger variety of smarter and better products.
- Hausmann, Hidalgo et al., *Atlas of Economic Complexity*



ECONOMIC COMPLEXITY

How do we measure economic complexity? The countries in the top ten of this ranking are Japan, Germany, Switzerland, Sweden, Austria, Finland, Singapore, Czech Republic, the UK and Slovenia. Immediately after the top 10 we have France, Korea and the US. Of the top 20 countries, half are in Western Europe, 3 are in East Asia, and surprisingly 4 are in Eastern Europe. Israel and Mexico close the list of

We (Sarah and I) were also talking today at the studio about next steps for this work – and how we need to think about a counter-proposition: what if the containerization and transport was transparent, the process available, the materials open source?

KF When we met a few months ago you mentioned that you were going to be taking a journey yourself on a container ship from a port in China to the US. Which I didn't even know was "a thing" one could do. It's fascinating. Can you talk a little bit about what your intentions are for that journey and how it relates to this project?

MZ Sure, well to begin, Allan Sekula, the filmmaker I mentioned previously, was more concerned in his film with the forgotten neglected and exploited labor force of the seas in order for us get our stuff (merchant marines) but have never been celebrated and whose rights and honor have diminished greatly in the global economy. This is something that is of great importance to me too.

I am hoping to go to China by plane, wander around industrial and manufacturing cities, including older or even ancient ones and take a container ship back to the US. I want to be a thing amongst things on that ship. I have no idea what to expect – boredom, emptiness, nausea, nothing, whales, strangers, a jogging track, diesel fumes, a long drop from the deck to the sea, gigantic Terminator-like port machinery. A mid-sized ship is 10 blocks long. That is astonishing. 20 people work that ship. You eat with the captain and first mate. It is not glamorous.

It's tremendously important to me to do field work, to be in the field, for a length of time, upended, made strange. To have my biases contested by complex, often contradictory truths and a compassion for what is at hand. Things like people, biases other than my own, social and biological systemic co-dependencies, and the always-surprising affordances of the landscape when you encounter it in person and let it slowly unfold and influence you.

the top 20. These are countries with productive structures that are able to hold vast amounts of productive knowledge, and that manufacture and export a large number of sophisticated goods. At the bottom of the economic complexity ranking we have Papua New Guinea. The Republic of Congo, Sudan, Angola and Mauritania.
- Hausmann, Hidalgo et al., Atlas of Economic Complexity

Each container is accompanied by a manifest listing its contents, but neither ship lines nor ports can vouch that what is on the manifest corresponds to what is inside. Nor is there any easy way to check: opening the doors at the end of the box normally reveals only a wall of paperboard cartons. With a single ship able to disgorge 3,000 40-foot-long containers in a matter of hours, and with a port such as Long Beach or Tokyo handling perhaps 10,000 loaded containers on the average workday, and with each container itself holding row after row of boxes stacked floor to ceiling, not even the most careful examiners have a remote prospect of inspecting it all. Containers can be just as efficient for smuggling undeclared merchandise, illegal drugs, undocumented immigrants, and terrorist bombs as for moving legitimate cargo.
- Marc Levinson, The Box: How the Shipping Container Made the World Smaller and the World Economy Bigger



CARGO

Allan Sekula, in his book *Fish Story*, writes about Michel Foucault's definition of a heterotopia, a displacement habitat, a place that exists between places. Cemeteries, fairgrounds, retirement homes,

psychiatric hospitals. But the best heterotopia, he writes, is the ship, "a floating piece of space, a place without a place, that exists by itself, that is closed in on itself and at the same time is given over to the infinity of the sea."
- Rose George, Ninety Percent of Everything

...the largest man-made moving objects on the planet.
- Rose George, Ninety Percent of Everything

Affixed to an image of shipping containers which we might surmise contain the components of the export of the Western beauty myth (be these cosmetics, domestic appliances, or indeed the military ordnance needed to "open doors" to US capital), the term cargo cult of course echoes the anthropological inversion already at work in the history of the idea of commodity fetishism - beauty under capital is a monetised social relation between things, just as the beauty industry is in turn an irrational, ritualised invocation of future "cargo".
- Kinkle and Toscano, Cartographies of the Absolute

The biggest container ship can carry fifteen thousand boxes. It can hold 746 million bananas, one for every European on one ship. If the containers of Maersk alone were lined up, they would stretch eleven thousand miles or nearly halfway around the planet. If they were stacked instead, they would be fifteen hundred miles high, 7,530 Eiffel Towers. If Kendall discharged her containers onto trucks, the line of traffic would be sixty miles long.
- Rose George, Ninety Percent of Everything

Shipping is so cheap that it makes more financial sense for Scottish cod to be sent ten thousand miles to China to be filleted, then sent back to Scottish shops and restaurants, than to pay Scottish filleters. A Scottish newspaper called this practice "madness," but actually it's just shipping.
- Rose George, Ninety Percent of Everything

Container manifests rely on the legal term "said to contain." Security people will assure you that intelligence and clever analysis can fill in the rest of the percentages, that they can spot smuggled goods, people, or weapons... All sorts of criminals like ships. Counterfeiters ship \$200 billion worth of fake goods in them, or more than the GDP of 150 countries. People traffickers regularly send their desperate clients off in boxes. Drug barons love boxes. In one report, the GAO was blunt: "U.S. initiatives relating to cargo container security have been limited and generally ineffective for the international counter narcotics effort."
- Rose George, Ninety Percent of Everything



LABOR

The Scythian philosopher Anacharsis was once asked whether there were more people alive or dead. He couldn't answer, said Anacharsis, because he didn't know where to place seamen. "Seamen," concluded the seventeenth-century clergyman John Flavel, who quotes this remark, "are, as it were, a third sort of persons, to be numbered neither

with the living nor the dead;
their lives hanging continually
in suspense before them.”
– Rose George, Ninety Percent of
Everything

Two thousand seafarers die at
sea every year...more than two
ships are lost every week.
– Rose George, Ninety Percent of
Everything

Buy your fair-trade coffee
beans by all means, but don't
assume fair-trade principles
govern the conditions of the
men who fetch it to you.
– Rose George, Ninety Percent of
Everything



TRASH AND CAPITAL

The tourists had insistent,
unspoken questions and we
just had to answer as best we
could, with forged furniture.
They were really asking, 'Are
we safe?' and we were really
replying, 'No, but a barricade
of useless goods may help block
the view.'
– Richard Flanagan, Gould's Book
of Fish

The massive plastic trash gyre
isn't an island, it's the
disaster of capital circling
the globe on ocean currents.
...what breaks down doesn't
remain solely in the Garbage
Patch; that anywhere ocean
currents converge is this
toxic soup. That this soup is
suffused with Bisphenol A,
phthalates, polychlorinated
biphenyls, persistent organic
pollutants, and other
reminders from discarded
commodities that contribute
directly to the ocean
acidification killing fragile
ecosystems.

Under this system, the
overwhelming majority of

goods that make convenient
consumer culture possible are
composed of manmade polymers,
including but not limited to
whiskey bottles, water and soda
bottles, bottle caps, six-pack
loops, industrial felt, fishing
rope, nylon flags, fleece
sweaters, shoes, purses, eating
utensils, cups, bowls, cell
phones, computers, printers,
furniture, toys, and, of
course, plastic bags.
– Maya Weeks, Myth of the Garbage
Patch

How do we pollute the ocean?
With plastic and chemicals and
sewage, but also with noise...
The movement of propellers in
water produces something known
as cavitation: a constant
creation of tiny bubbles that
constantly pop. Aquatic bubble
wrap. The cavitation of a
freighter leaving Cape Cod
Canal can be heard all over the
bay. A supertanker can be heard
in the sea a day before its
arrival...Researchers had been
looking at daily, weekly, or
monthly noise rates.

When they compared levels
over a longer timescale, the
results were shocking. Ambient
noise in the deep ocean was
increasing by 3 decibels every
decade. Every ten years, noise
from commercial shipping had
doubled...Sonar, pinging,
and air guns are intense but
discrete and short-lived.
Shipping noise is always
there. Christopher Clark, a
Cornell University professor
and acoustic specialist, calls
commercial shipping "by far the
most ubiquitous anthropogenic
contributor to ocean noise."
Humpback whales now have 10
percent of the acoustic range
they used to have, so that
their chances of finding a
mate, food, and probably
surviving have all been
decimated.
– Rose George, Ninety Percent of
Everything



KF Are there essays texts
or books that affected your
thinking about this work?

MZ Rose George, 90% of
Everything
Ian Urbina's NY Times series
"Outlaw Ocean"
Marc Levinson The Box: How the
Shipping Container Made the
World Smaller
Phil Steinberg The Social
Construction of the Ocean
Stacy Alaimo's work, esp the
essay Violet Black

KF Documentaries?

MZ Alan Sekula, "The Forgotten
Space"

KF Web sites (project related)

MZ Observatory of Economic
Complexity
The idea of "productive
knowledge"

KF An event, trip, residency
etc that has most inspired your
practice/this show in 2015?

MZ This show was triggered
by the animated piece
"Mesocosmico: Paulista" that I
did with Sarah Rothberg for São
Paulo in 2014. We had a very
short turnaround time to make
a work for a 20 story building
on the main shopping street
in São Paulo for a week-long
outdoor screening festival
called SP Urban. The pixel size
of the building was minuscule,
and it forced me to reconsider
my aesthetic approach. I was
interested in making something
that would not feel like an
ad, or a decoration, and we
landed on a treatment of a
software-driven work that took

key endangered endemic species of animal and tree from the disappearing forest of the state of São Paulo called the Atlantic Rainforest of Brazil, and combining this with visual patterns that defined São Paulo (such as the cobblestone street patterns). This led to a consideration of what cultural exports look like, and how influenced by early global trade they really are.

KF Art/artist?

MZ Unknown Fields
Phil Ross, my mentor in fungus

KF Most influential / favorite artists not necessarily related to this project / life in general)

MZ Artists I think about and am inspired by:
General: Peter Breughel the Elder and Wang Hui for their works' density, unrealism, attention to detail and allegory. Dieter Roth, Rosemary Trockel, Kiki Smith, Marcus Coates, Saul Bass, film titles from the 50s/60s, elBulli Restaurant, Mark Lombardi, Morgan Puett, Walid Raad, Spencer Finch, Tim Hawkinson, Philip Guston, Sue Williams, Robert Smithson, the Situationists, writers Timothy Morton (The Ecological Thought), Jane Bennett (Vibrant Matter and The Enchantment of Modern Life), Una Chaudhuri, Michael Pollan (Botany of Desire)

FUNGUS





More&More Shop Products
3D powder, plaster, wood, fungus,
coffee husks
Approx 8" x 8"
Unique objects
2016



SWIMSUITS

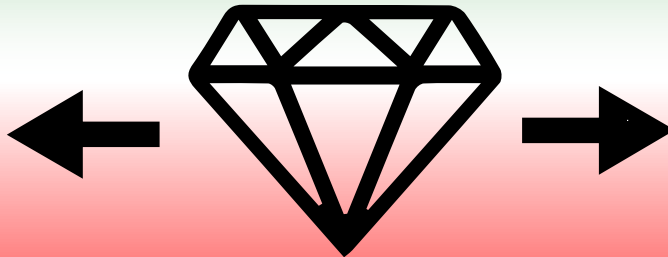


WHERE ARE YOU?

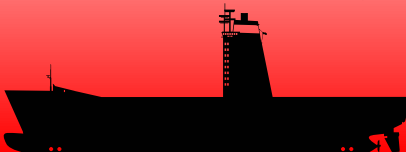
Mexico

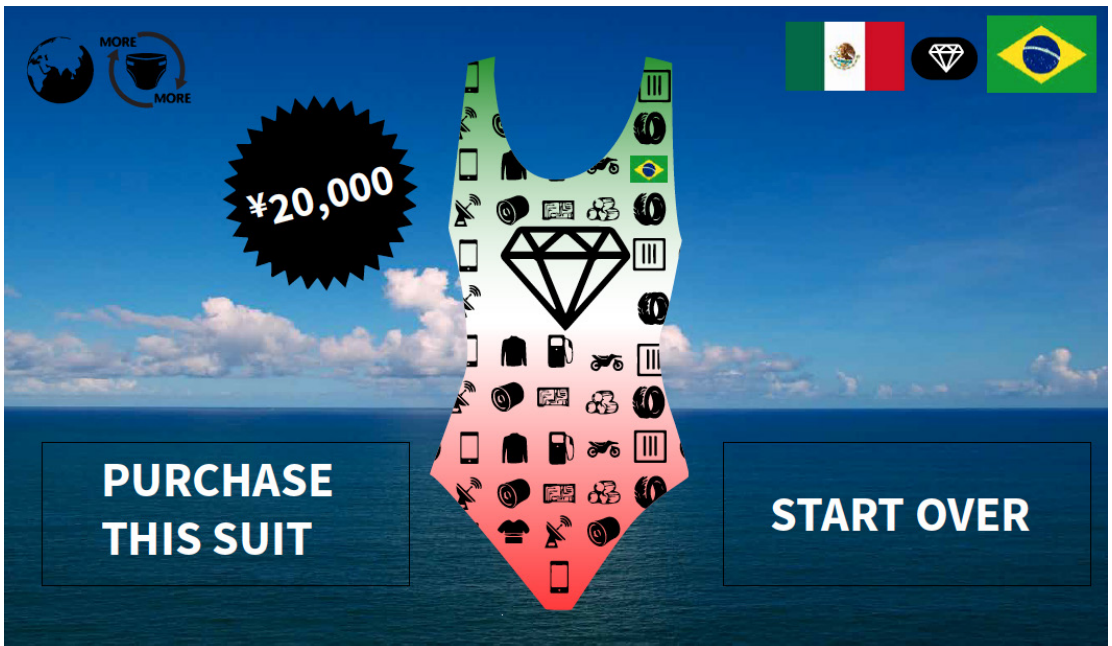


WHAT DO YOU WANT?



DIAMOND - 210210







REFERENCES

HISTORY OF GLOBAL TRADE
<http://tinyurl.com/7416hja>

OPEN DATA ON IMPORT/EXPORT

The Observatory of Economic Complexity: OEC
atlas.media.mit.edu/

MARINE TRAFFIC MONITORING
<http://www.marinetraffic.com/>

INTERNATIONAL MARITIME ORGANIZATION DATABASE
<https://gis.imo.org/Public/Default.aspx>

"HOW TO EXPORT IMPORT"

A breakdown of what kinds of products are listed in the HS Code
<http://howtoexportimport.com/Harmonized-System-Codes-HS-codes-Chapter-01-to-97-811.aspx>

How to start a container ship business
<http://tinyurl.com/jy6g4z5>

BUSIEST PORTS
http://en.wikipedia.org/wiki/List_of_world%27s_busiest_container_ports

PORT INDUSTRY STATISTICS
<http://www.aapa-ports.org/Industry/content.cfm?ItemNumber=900&navItemNumber=551>

ECOPORTS
<http://www.ecoports.com/>

PORTS CLIMATE INITIATIVE
<http://wpci.iaphworldports.org/project-in-progress/index.html>

FLAGS OF (IN)CONVENIENCE
<http://www.economist.com/news/business/21602237-flags-inconvenience>

PIRACY
Real-time piracy map
<https://icc-ccs.org/piracy-reporting-centre/live-piracy-map>

Piracy Incidents reports
<https://gis.imo.org/Public/PAR/Default.aspx>

ILLEGAL TRAFFICKING OVERVIEW
<http://www.worldwatch.org/node/523>

Map of Illegal Trade Routes
<http://www.substance.com/map-the-worlds-illegal-trade-routes/16547/>

Interpol
<http://www.interpol.int/INTERPOL-expertise/Databases>

Interpol Casebook
<http://tinyurl.com/j6hav8a>

Bureau of Foreign Trade
<http://cus93.trade.gov.tw/ENGLISH/FSCE/>

Stockholm International Peace Research Institute
<http://tinyurl.com/gmwqy7>

ARMS
<http://geographicalimagination.com/2012/08/08/the-death-merchants/>
<http://www.armsflow.org/>
<https://arirusila.wordpress.com/tag/arms-trade/>
<http://www.dataviva.info/profiles/hs/19/?app=1>
<http://nisat.prio.org/Data-Visualization/>

GLOBAL WASTE TRADE POLICIES
<http://toxicslink.org/?q=policiesinternational>

The Basel Action Network
<http://www.ban.org/>

Illegal Flows Map
<http://worldloop.org/e-waste/illegal-flows/>

Transboundary Waste Shipments
<http://leon.creat.mun.ca/ewaste-export/networks/2012/index.html>

Visualizing Waste
<http://scalar.usc.edu/works/reassembling-rubbish/visualizing-transboundary-shipments-of-e-waste>

Global E-Waste Monitor
<http://tinyurl.com/j2r3w7b>

Waste Crime, Waste Risks
<http://tinyurl.com/j5pczwm>

Global Review of Waste Management
<http://tinyurl.com/74x6p6u>

Tracking the Global Generation and Exports of e-Waste
<http://pubs.acs.org/doi/abs/10.1021/es5021313>

DRUGS

CIA factbook
<https://www.cia.gov/Library/publications/the-world-factbook/fields/2086.html>

World Drug Report
<http://www.unodc.org/wdr2015/>

HUMAN TRAFFICKING
<http://humantraffickingcenter.org/posts-by-htc-associates/memex-helps-find-human-trafficking-cases-online/>
<http://www.unodc.org/unodc/en/data-and-analysis/glotip.html>

ENDANGERED SPECIES CONVENTION ON INTERNATIONAL TRADE IN ENDANGERED SPECIES
<http://trade.cites.org/>

Endangered Species Databases
<http://www.earthsendangered.com/search-regions3.asp>
<http://www.animalinfo.org/>
<http://www.iucnredlist.org/about/summary-statistics>
http://europe.chinadaily.com.cn/epaper/2014-02/14/content_17282358.htm
<https://occrp.org/occrp/en/investigations/2596-endangered-animals-enter-armeniaand-then-go-where>

ARTIFACTS

<http://www.unesco.org/new/en/culture/themes/illicit-trafficking-of-cultural-property/databases/>
<https://www0.gsb.columbia.edu/faculty/rfisman/papers/artsmuggling.pdf>
<http://www.interpol.int/notice/search/woa>

JELLYFISH WATCH LIST

http://www.jellywatch.org/sightings_list

FISHING/OVERFISHING

COMMERCIAL FISHERIES STATISTICS

<http://tinyurl.com/hybqcr7>
<http://www.fishwatch.gov/>
<http://www.seafoodwatch.org/>

Big data allow fish to be protected as never before. Governments should take advantage of this
<http://tinyurl.com/krvuus>

DEEP SEA CAMS

<http://www.oceannetworks.ca/sights-sounds/video/live-video/tempo-mini-vent-camera>
<http://www.nautiluslive.org/>
<http://oceanexplorer.noaa.gov/oceanos/media/exstream/exstream.html>

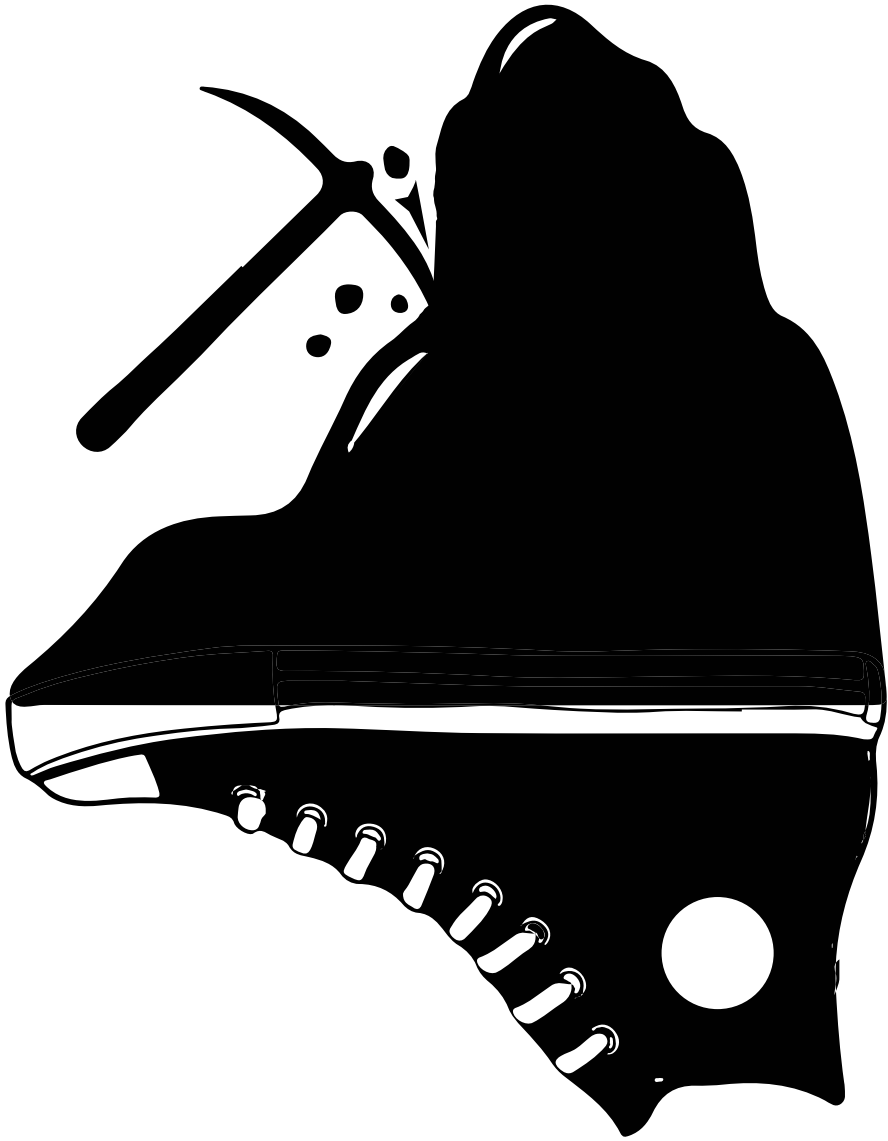
ARTISTS

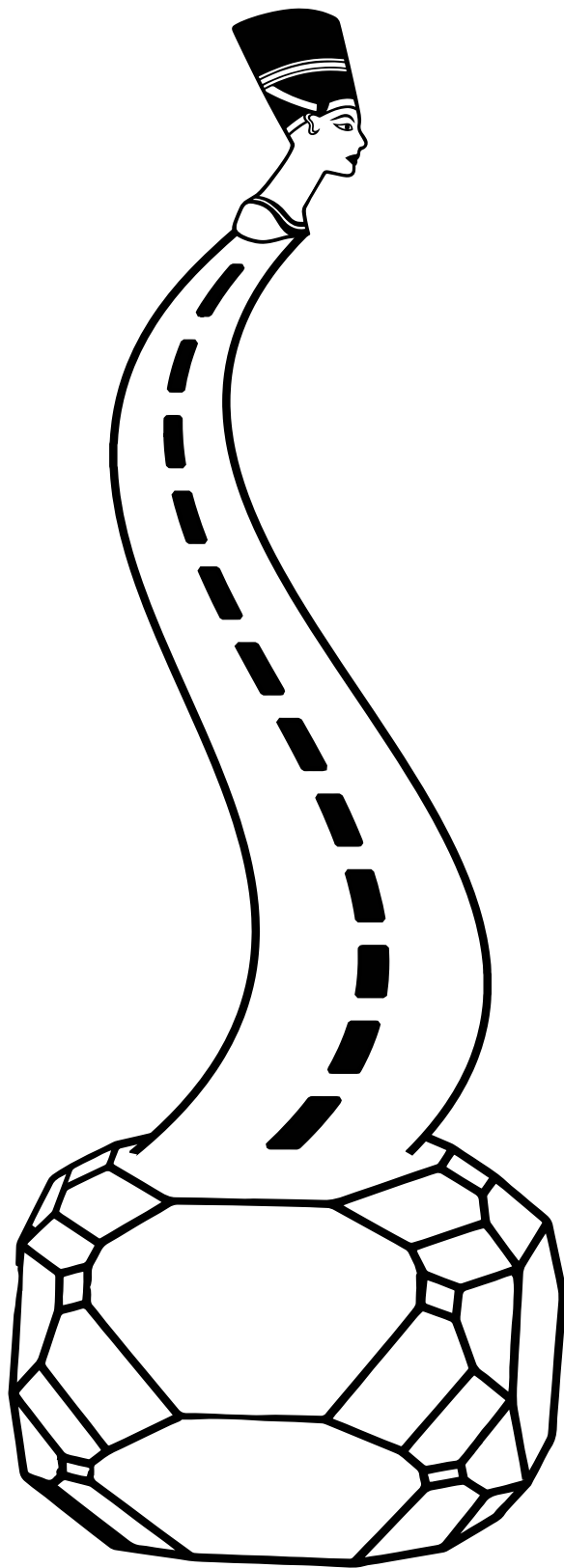
Unknown Fields

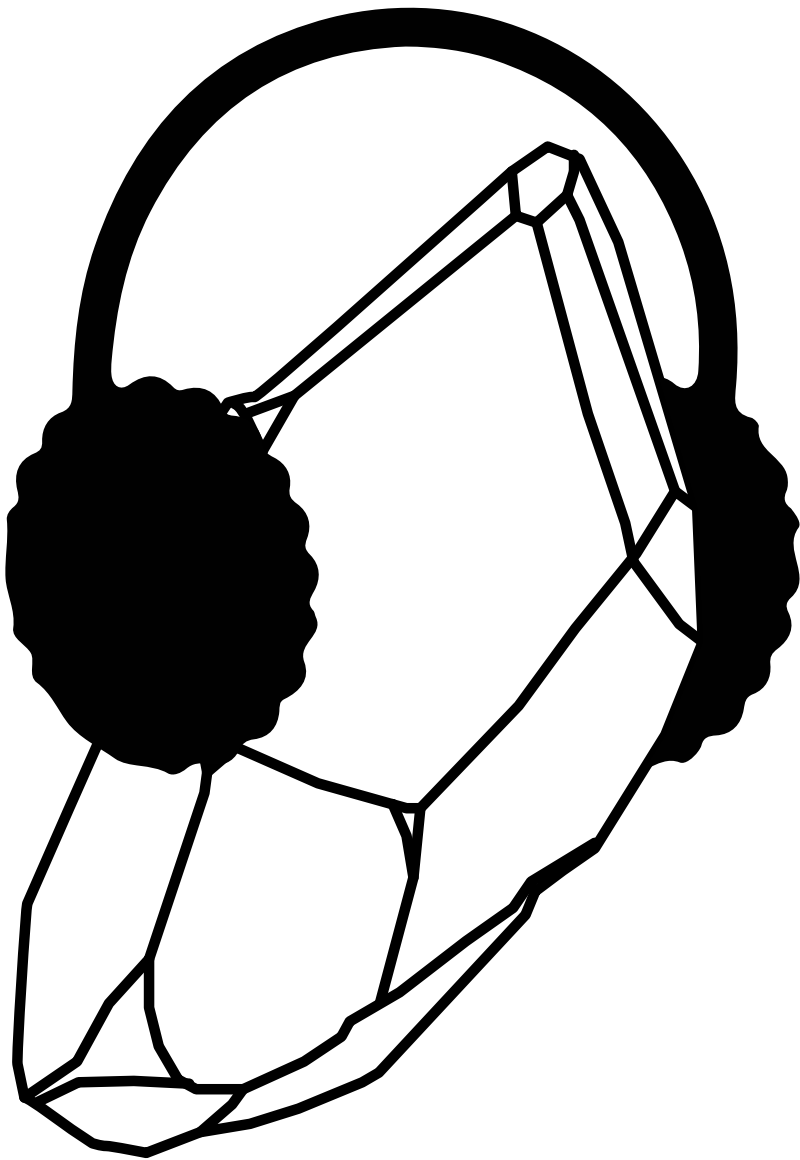
<http://www.unknownfieldsdivision.com/winter2013china-aworldadriftpart01.html>
<http://www.unknownfieldsdivision.com/summer2014china-aworldadriftpart02.html>

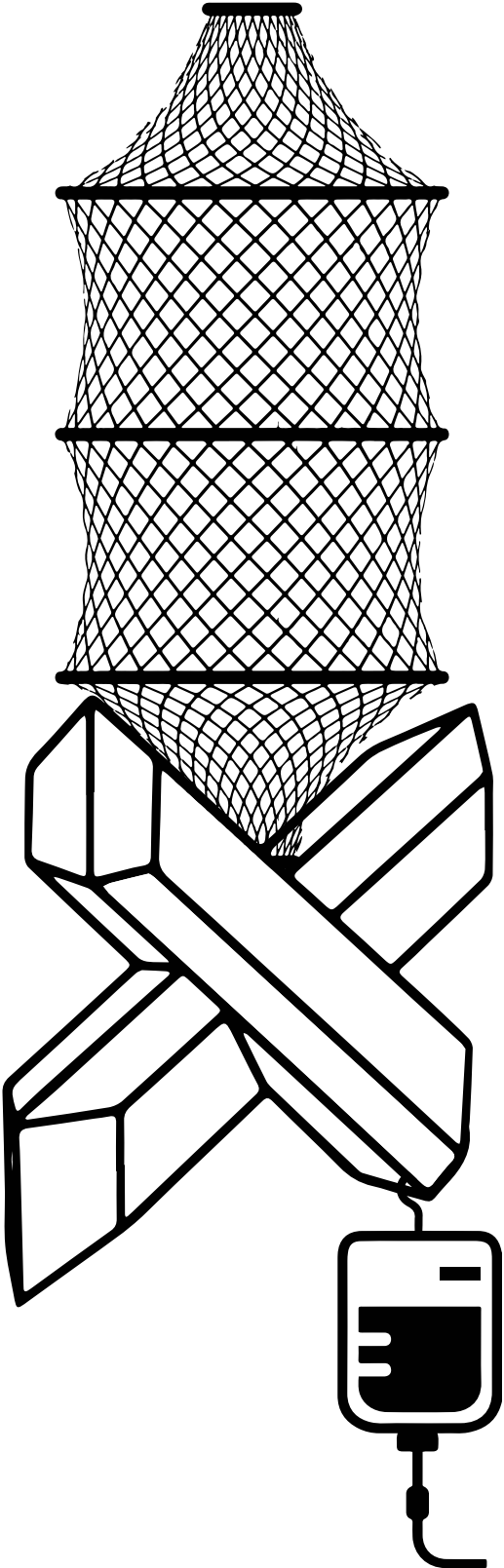
Phil Ross

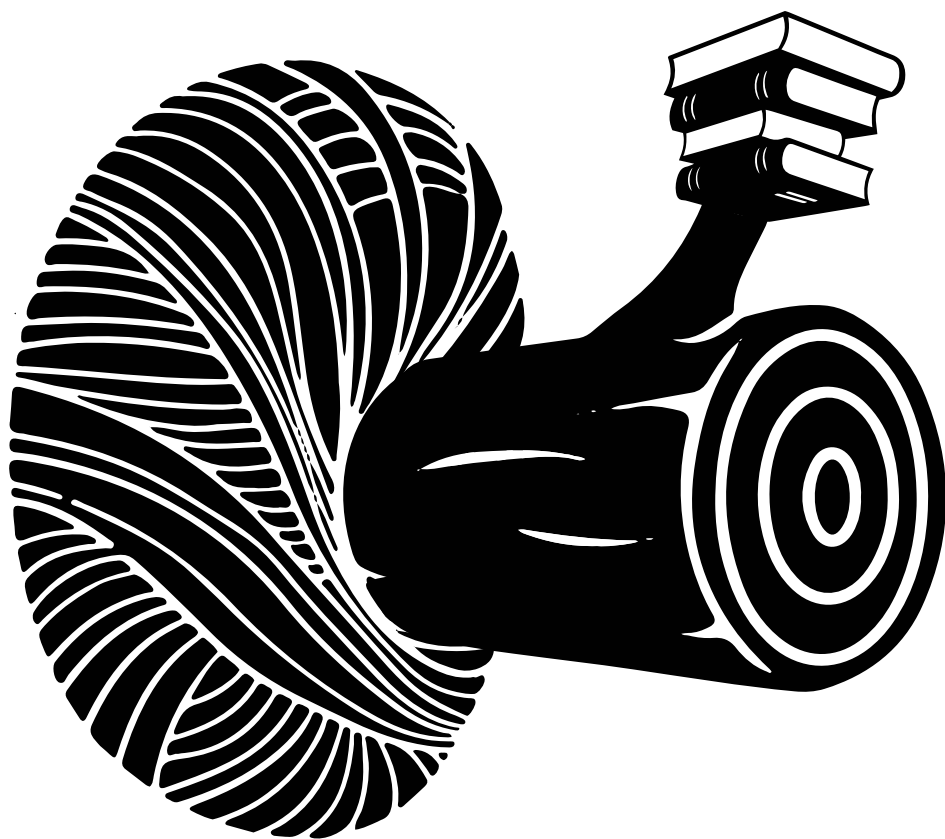
<http://philross.org/>

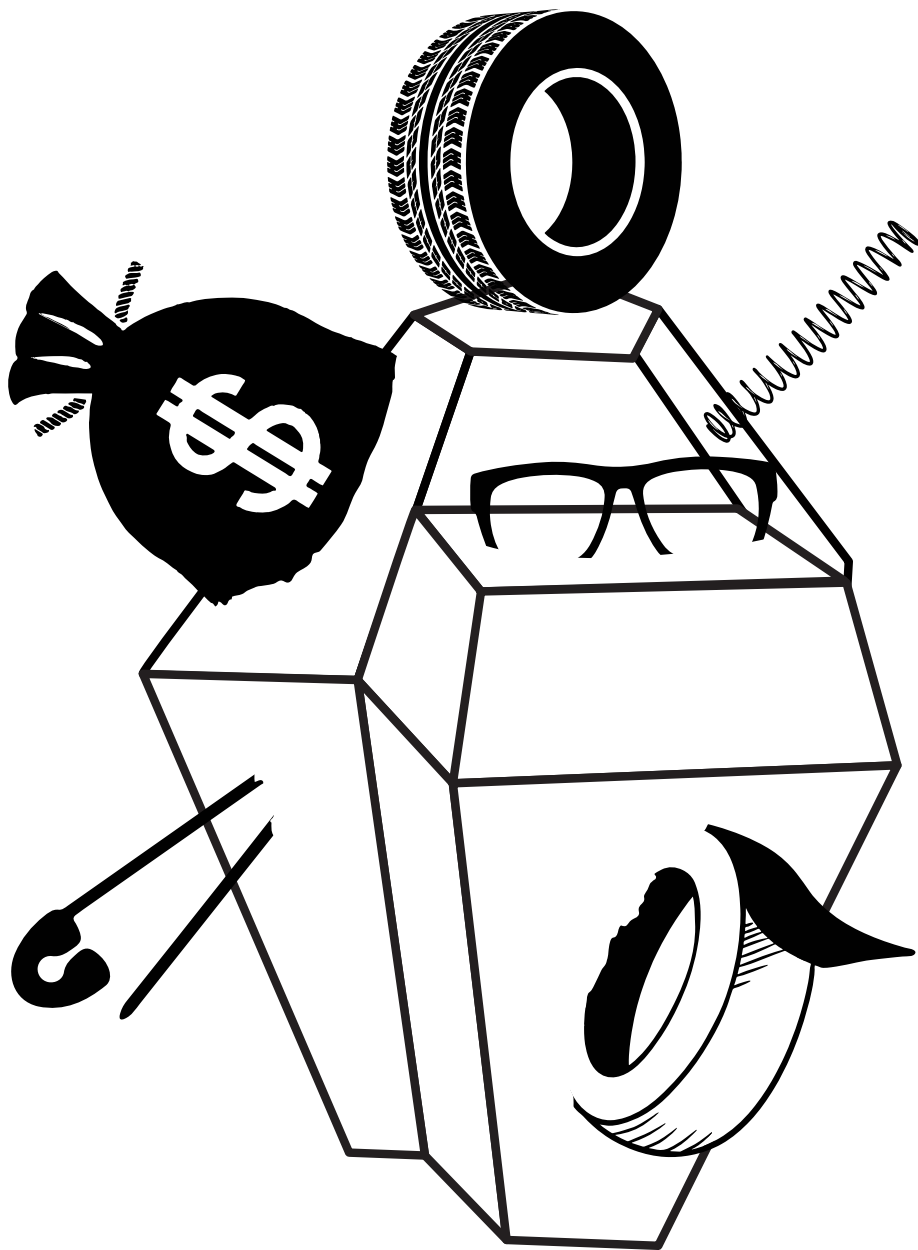


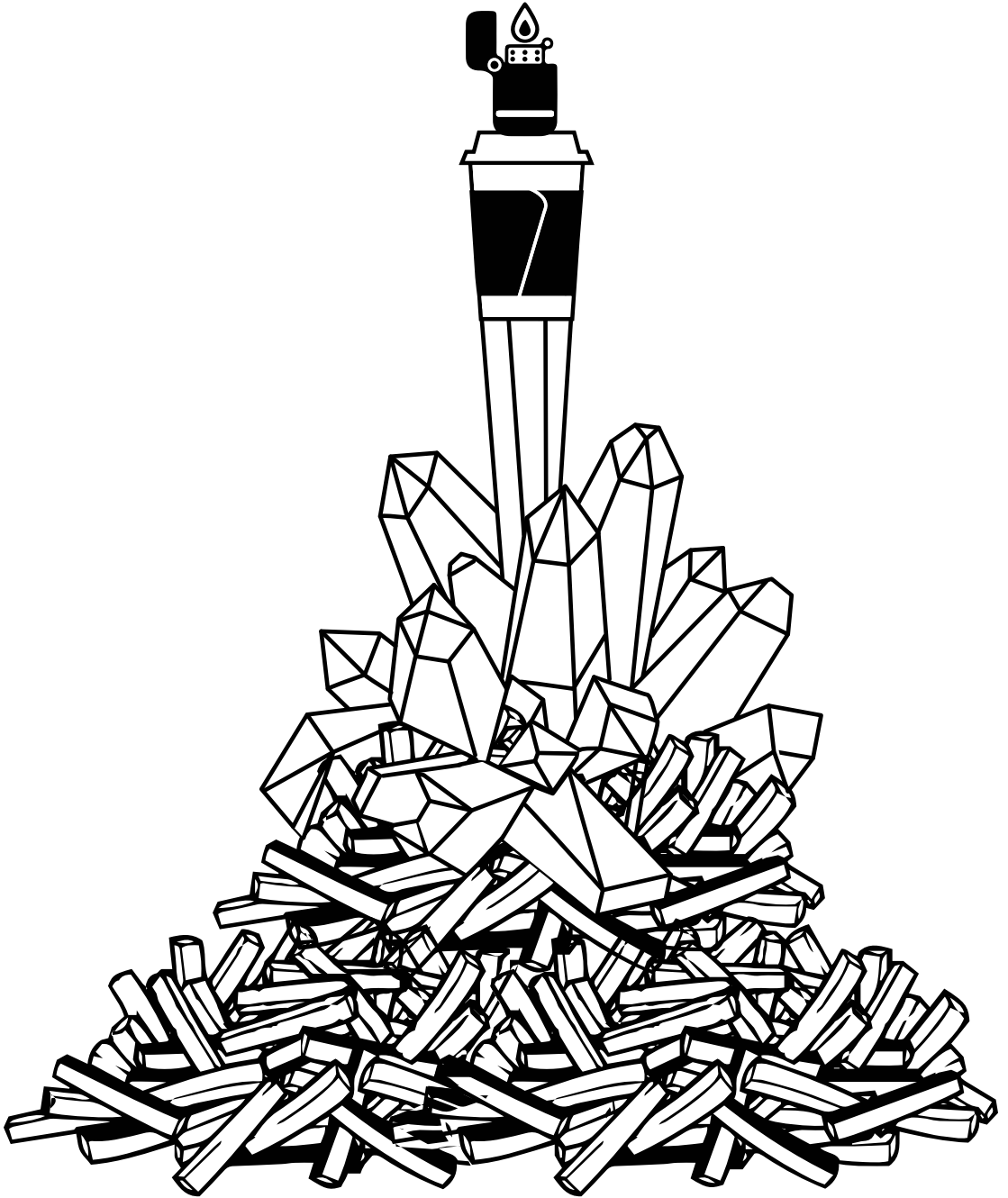












MARINA ZURKOW is a media artist focused on near-impossible nature and culture intersections. She uses life science, materials, and technologies to foster intimate connections between people and non-human agents.

Recent solo exhibitions of her work include bitforms gallery in New York; Chronus Art Center, Shanghai; the Montclair Art Museum, New Jersey; Diverseworks, Houston; her work has also been featured at FACT, Liverpool; San Francisco Museum of Modern Art; Walker Art Center, Minneapolis; Smithsonian American Art Museum, Washington D.C.; Museum of Fine Arts, Houston; National Museum for Women in the Arts, Washington D.C.; Borusan Collection, Istanbul; Museum of the Moving Image, New York; The Kitchen, New York; Ars Electronica, Linz, Austria; Transmediale, Berlin; Eyebeam, New York; Sundance Film Festival, Utah; Rotterdam Film Festival, The Netherlands; and the Seoul Media City Biennial, Korea, among others.

Her public art engagements have been supported by Creative Time, New York; LACE, Los Angeles; The New Museum's Ideas City, New York; Northern Lights, Minneapolis; The Artist's Institute, New York; 01SJ Biennial, San Jose, California; Rice University, Houston; University of Minnesota, Minneapolis; and Baruch College, New York.

Zurkow is the recipient of a 2011 John Simon Guggenheim Memorial Fellowship, and has been granted awards from the New York Foundation for the Arts, New York State Council for the Arts, the Rockefeller Foundation, and Creative Capital. She is on full time faculty at NYU's Interactive Technology Program (ITP) in Tisch School of the Arts, and lives in Brooklyn, NY. She is represented by bitforms gallery.

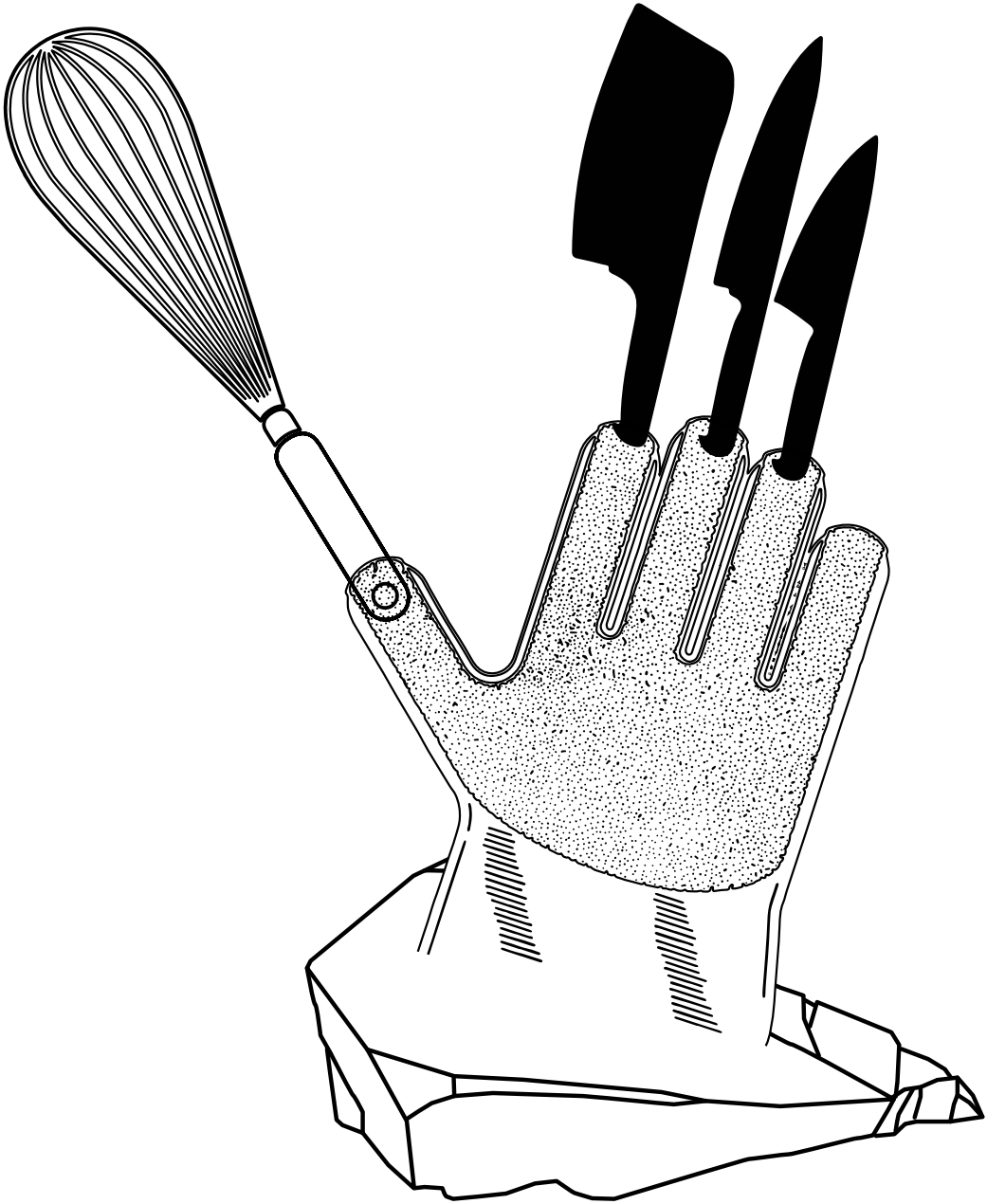
KATHLEEN FORDE is a curator based in NYC and Istanbul. Forde is the artistic director at large for Borusan Contemporary, a collection-based space for media arts exhibitions, commissions and public programming in Istanbul. Concurrently she is working as an independent curator with various institutions both nationally and abroad.

From 2005 to 2012 Forde was the Curator of Time-Based Visual Arts at the Experimental Media and Performing Arts Center (EMPAC) in Troy, NY.

Prior to EMPAC, Forde was the Curatorial Director for Live Arts and New Media at the Goethe Institut Internaciones in Berlin and Munich.

She has written and/or curated on a freelance basis for various organizations, including the Eyebeam Center for Art and Technology; The University of Michigan Museum of Art (UMMA); Independent Curators International; The Transmediale Festival, Berlin; Kunstverein Dusseldorf and Cologne; VideoZone, Tel Aviv; the Rotterdam Film Festival; and the Philadelphia Museum of Art. She sits on the board of Issue Project Room, NY, and on the Advisory Committees for the SETI Institute Artist in Residence Program and the Moving Image Art Fair, Istanbul.

In 2010 Forde was a fellow in the 2010 Center for Curatorial Leadership (CCL) fellowship class and held an Alexander von Humboldt research scholarship in Berlin from 2002–2003. She earned an MA in Post-1945 Art and Theory from Goldsmiths College, University of London, and a BA in Communications and Art History from the Loyola College of Maryland





Zurkow, Marina; Rothberg, Sarah; Mattu, Surya

More&More: The Invisible Oceans

Piuma, Chris

punctum books, 2016

ISBN: 9780692622001

<https://punctumbooks.com/titles/moremore-the-invisible-oceans/>

<https://www.doi.org/10.21983/P3.0126.1.00>