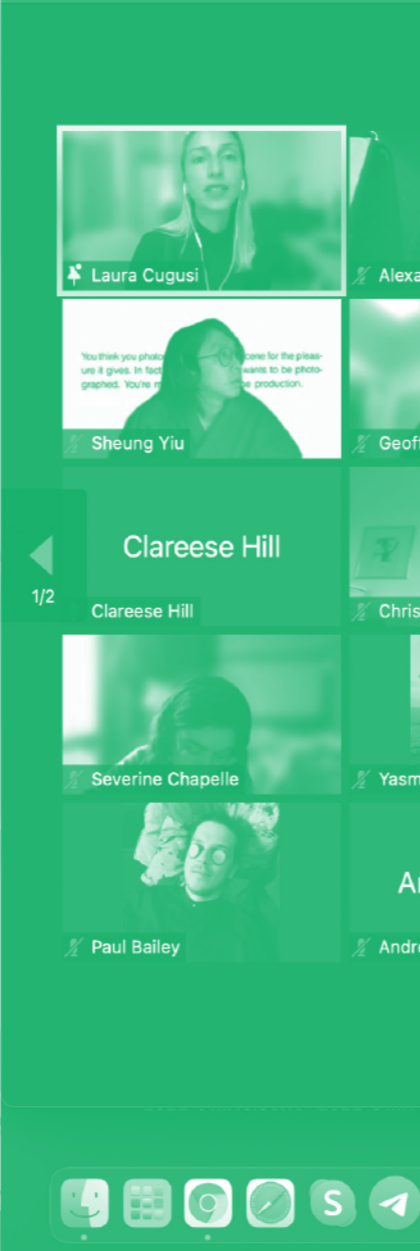


rendering

search

This publication serves as a record of the workshop Rendering Research with contributions by Alexandra Anikina, Christian Ulrik Andersen, Vítor Blanco-Fernández, Yasmine Boudiaf, Geoff Cox, Malthe Stavning Erslev, Rachel Falconer, Hanna Grzeskiewicz, Clareese Hill & Elly Clarke, Lee Tzu Tung, Nicolas Malevė, Kyveli Mavrokordopoulou & Agnėš Villette, One Research Collective (Andrea Macias-Yañez, Sėverine Chapelle, Caterina Selva, Giovanna Reder, Sanjana Varghese), Søren Pold, The Re:Source Project (Anne Lee Steele & Miriam Matthiessen), Winnie Soon, Pablo Velasco, Ruben van de Ven, Sheung Yiu. It was organized jointly by Digital Aesthetics Research Centre, Aarhus University and Centre for the Study of the Networked Image, London South Bank University and is a collective exploration of how we make our research public, and the forms it can take through speedy handson making. In this sense, it explores ways of collapsing the traditional workflows of peer review and academic publishing (typically taking many months to reach its public by which time its currency is questionable), drawing more closely together work in progress and feedback, writing and print production. It is part of an iterative process that began online late 2021, with early ideas presented at transmediale festival for art and digital culture in January 2022, and further developed in March 2022 as part of a 3 day workshop at École de recherche graphique in Brussels. Longer versions of these texts will be developed for the open access online journal APRJA at <https://aprja.net/>.

Edited by all the contributors
Design & production: Nicolas Storok, Julien Duterte,
and students at École de recherche graphique, Bruxelles
Font: Compagnon Light and Roman have been drawn by
Juliette Duhė and Léa Pradine; Compagnon Italic by
Valentin Papon; Compagnon Medium by Sébastien Riollier
and Compagnon Script by Chloė Lozano.
ISSN (PRINT): 2245-7593
ISSN (PDF): 2245-7607



Elly Clarke & Clareese Hill



500 word extract of a Meditative Drag/gy Sales Pitch

performed at the RR workshop to our [sound off] screenrecording of | Mixtape/Shuffle Play| as presented at Transmediale Rendering Research LiveStream on 27.01.2022.

ELLY:

Every research presentation is a form of rendering. It is a performance, a vision, a provision, an exhibition, a re-presentation - of ideas, possibilities, opinions, and facts. Every research presentation is also a Sales Pitch. This Sales Pitch pitches and performs good rendering of research by a Researcher who is (put) in place (or who has put herself in place) to perform (as legitimately and convincingly as possible) her Value as a Researcher. She is also performing and proposing and pitching her worthy-of-the-investment of your time-ness. This requires good delivery. A good surrendering. A good melting down and a good first coat of plaster. With an invitation or a suggestion of what (colours, stories, narratives, additional voices) might be (deliciously or disastrously) layered on top of this. The rendering of research is a giving back, a storing,

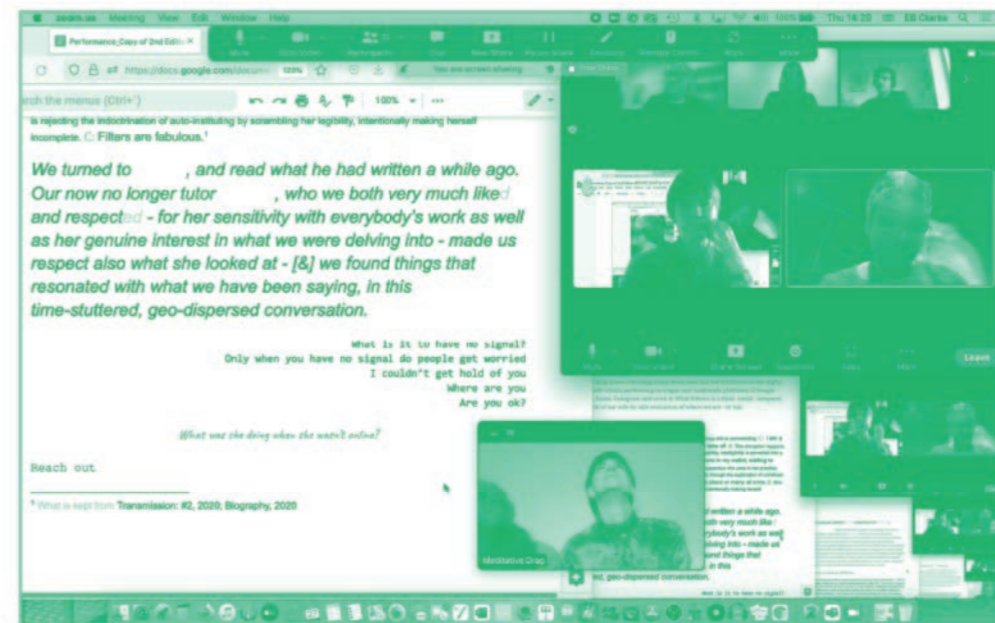
and a re-storing. And a handing down of one or more verdicts at once.

CLAREESE:

We are writing this on the train. I am writing this. I am sleeping. We are writing and sleeping alongside each other as the train brings us closer to where the Research Rendering will unfold. The events of the past few days, and weeks, and months even, have rendered us exhausted. I am writing this and I am wondering whether we will be able to render out our research well enough to gain your respect. If our giving is enough giving back. To you. To warrant your attention. For research is also an exchange. Your attention for this data. This data for your attention.

ELLY:

Attention!



CLAREESE:

Tension!

ELLY:

We would also like, very much, if you could take this Collaborative Rendering as an invitation to ruminate, reflect and meditate - both now and for a little bit beyond that. This is surely the wet dream of most researchers. That people who have been Close Contacts of the Research will feel they have been infected by these Research Fragments. And that that infection will last a while, and show up every now and then in casual and not so casual conversations. The hope is that the Research Fragments will be viral enough to morph, to change and be changed by each body and each voice that carries and transmits them. Each utterance or reference or re-remembering of

any Research Fragment trigger is a re-rendering that takes on some of these ideas, possibilities, opinions, and facts. And at that point the person picking up the Research becomes a collaborator in the ongoing journey of that research. The ongoing rendering. Research picks up meaning as it meets traction, purchase, friction and desire. Research is never done in a vacuum. Nor is reading. The reader is every bit as triggering for this research as the researcher who brought it together.

CLAREESE:

We believe in collaboration as a way forwards. Our collaborators are alive and dead and not yet born. They are human and not human.

Under ideal conditions, collaboration with Researchers outside as well as inside the academy, would be the norm. The stage would be set - and conditions supportive of - play, exploration, experimentation, conversation across disciplines, languages, contexts, and generations.

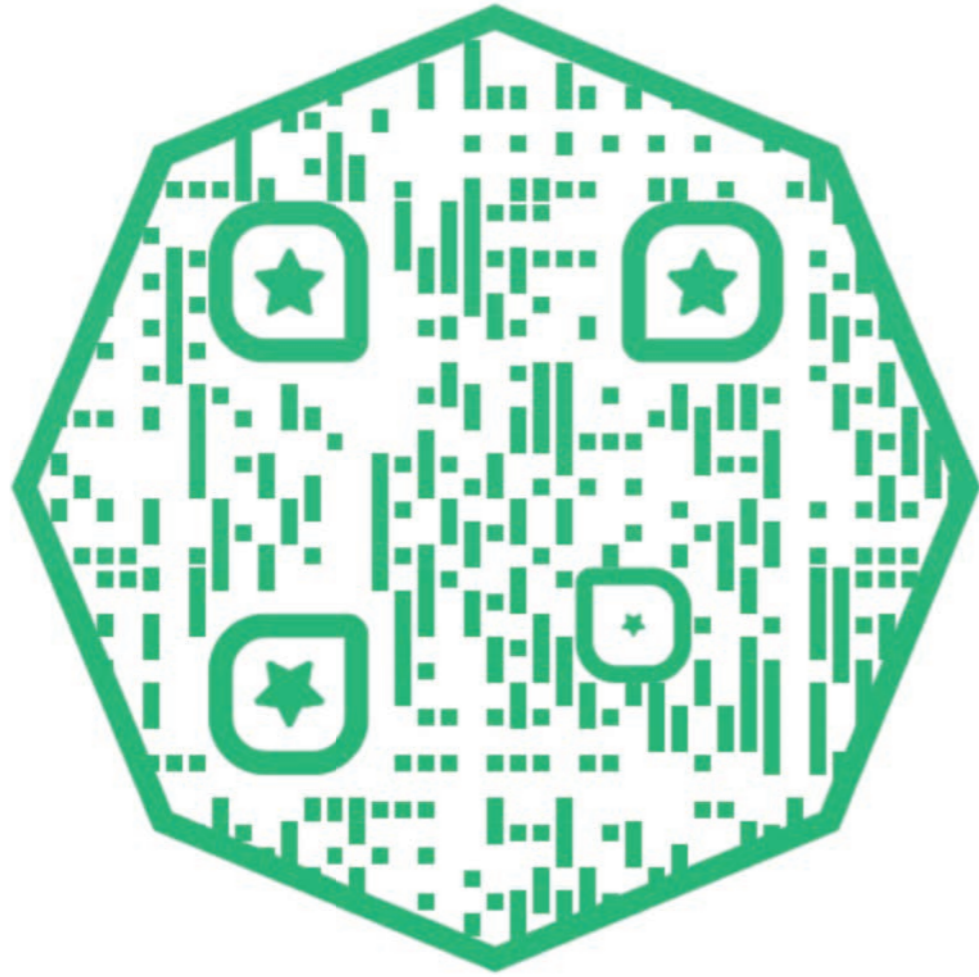
CLAREESE:

We are asking how research can be more useful. And be a network that



Welcome to the SEMI-PAD! *This pad text is synchronized to a Calibre-web installation, so that everyone viewing a pdf in the calibre library will also see this page next to it. This allows some collective form of commentary / note taking / etc. etc* *- useful - may be to think about in what ways and for whom?* *- really like the performative aspect of your presentation, it works for this kind of short 10 mins.* *- thinking graspable vs accessible..* *- i am also interested in this kind of performative method, how it informs the rendering of research differently..* *- The discussion on how research comes about, what it is, how it is presented and where, is striking. From where does a research idea come about? What is the creative moment and how to present it? Where is the spark in

knowledge - how to develop and present it? Understanding where an idea comes from.* *-perhaps differentiate between the "system" of research and the acts of research* *-also how important is "self-awareness" for the "generative" aspect of your approach (not the usefulness, but the generativeness?)* *-I was really taken by the way you stage different voices - typographically, physically, visually, performatively, etc. And of course also conceptually, in the different understandings and meanings of what it is to render (to translate, to surrender, etc.)* *-In staging the voices, you also make us aware of the reader's voice (our presence in your text). - the reader's role in the rendering. And your call for a more affective relation to the research in this - a purpose beyond the usefulness of conventional/institutionalized understandings of research. Indeed, what makes rendering "good" (good surrendering, good translation, etc) becomes a much more open question.* *-love the reference to hood feminism - as a way of collapsing the academy and lived experience* *-it was very affective in the sense of the presentaton representing the feelings connected with questioning the 'usefulness' of research or future-planning - it's a very beautiful way of presenting questions regarding rendering - and in a way if it's beautiful, is that in itself a use?* *-would say that your oral presentation is much more effective than the written rendering and I understood / felt the sense of it much more than through the text - the act of doing research vs the presenting of research seem quite separate and through the presentation it feels we are in the research process* *- the question on which voices render which research* *- the act of research vs. the outcome (paper, PhD, etc.)* *-On a note: There is a longer history of (marxist) research that emphasizes an element of collaboration - the collaborative research with workers and unions - from factory workers in the textile industry (early. industrialization) to workers to IT workers (how IT can/should be introduced to the workplace - based on the lived experiences of the workers, alienation to work, etc.). Your presentation is also interesting in relation to this - thinking of the conditions of knowledge work in academia - and the lived experience of this.*



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Vitor Blanco-
Fernández

Volumetric Frictions. Rendering 3D Transfeminist Research

During the Rendering Research Workshop I presented the conceptual foundations and challenges of creating a virtual 3D space based on transfagbidyke/queer phenomenologies. The core ideas of this project are: 1) an increasing trend of (trans)feminist creators re-appropriating of 3D aesthetics and vr towards new, pushing roads; 2) the definition of current vr experiences as somehow queer by themselves (disorientation, being lost, strange embodiments, odd experiences of time and space); 3) the necessity of rendering research differently -and queerly-, away from the traditional PhD dissertation format.

Rather than solutions (if there are any), in this text I focus on the main challenges and questions of this rendering research process. Here there is a mix of the interrogations i came to the workshop with, together with new questioning

ideas that we collectively came up with during both transmediale festival and the workshop at erg.

how to render research differently? and how render it queer? transfagbidyke in academia/other institutionalized spaces of "knowledge" rendering? queering traditional formats of knowledge dissemination? not simply queer as subject matter but queer in form - how to queer rendering formats of academia? ---- queering the traditional dissertation format (yes!!) ---- yes! how to queer the dissertation that's so true! and so important. ---- a form that is liquid, changeable in form - a direct challenge to the relatively fixed, solid forms that research takes - makes one think of other terms, dematerialise, fork, etc.

is there a form for queerness? should be? can we model it (in 3D)? representation/visibility/presence? queer as the "non-yet-conscious" (Esteban Muñoz)? how to model fluidity and change? how to model open questions, rather than pre-defined answers? It seems to me that the tool or apparatus involved in such a process will have a lot of impact on the process itself. To what extent does the use of 3D modelling software also constrain the realm of possible representation in this regard, and thus also constrain the ways in which we can begin to see (or render) the not-yet-conscious. Does the not-yet-conscious always become conscious? ---- You propose a virtual space that is opposed to an "elitist" textual dissertation. My question would be, is a text not also a virtual space? ---- On a

conceptual level, I wonder if the notions/metaphors of "model" and "rendering" act against the aims of the research (as in, e.g. a 3D rendered model understood as a final version of 3d design) - or rendering as a constantly-changing process? not 3, but n-dimensions?

is queer aesthetic anti-realistic? what happens when we reduce queerness to an specific visual outcome? and if queer queers reality, is it anti-realistic? what are the relationships between queering reality and performing/transforming reality? I see a parallel between 3D-modelling and computer vision: hyper-realism is the holy grail for 3D volumetric rendering in a similar way to that big data and visual turing test are the benchmark for computer vision. These benchmarks give superficial and easy evaluation of the technical performance of an algorithmic system while ignoring how these systems often fail to represent the complexity of humanity. In the process, these systems reinforce the status quo. ---- Would it make sense to expand the (hyper)realist notion of 3D rendering to also address other hegemonic aesthetics in 3D rendering? What comes to mind is eg. the childish aesthetics of Pixar characters ---- Thinking that this is perhaps a new kind of (hyper)realism? ("identitarian realism"?). And, realism doesn't have to 'look' real - per se. Perhaps what you present is 'realism' in the sense that it reflects (queers) the production of a particular reality(identity)? ... and presents the (production of a) reality of infrastructures/vr/volumetrics?

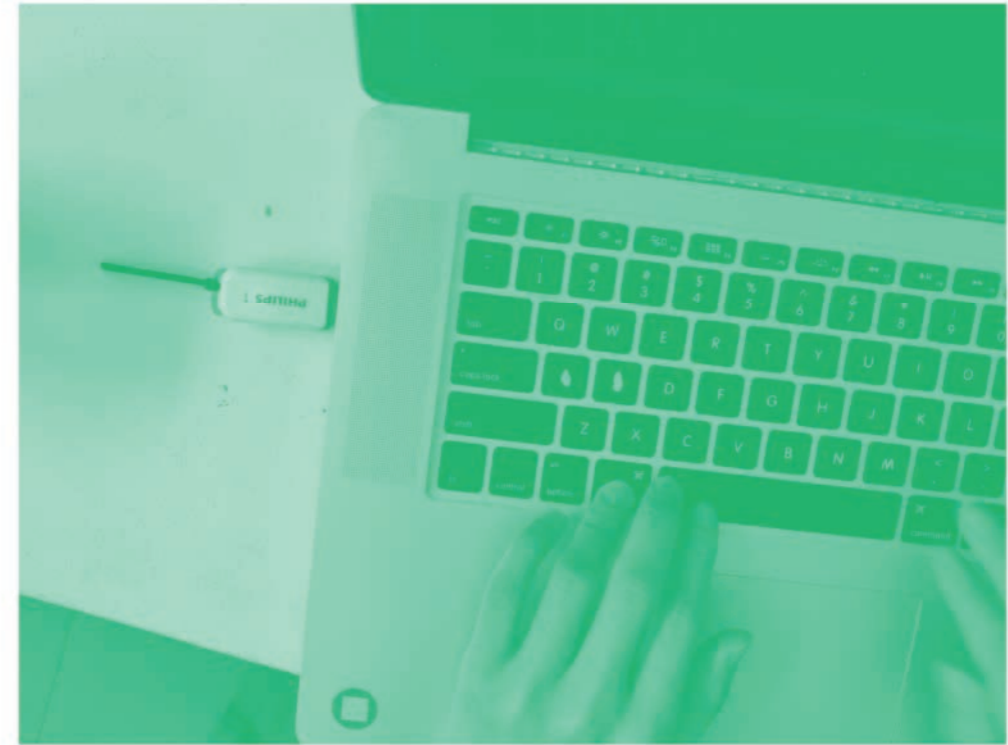
queer identity politics in avatar embodiment? checkboxes/multiple selection? different, more open ways, of avatar creation? How you will frame the practice of identifying with / creating / embodying / wearing / performing / living the avatars and characters. There seem to be many options for defining the relation between the virtual body and the "player". There are some game studies approaches that speak about more traditional 'player-character' bonding, identification, empathy or even oppositional relations, but it seems exciting to see these relations in the queer studies light, perhaps as a kind of drag, or other gender-performative practices. ---- The refusal to refuse the presence and importance of the body (in) online (processes and experiences) is one that I too am looking at - alongside (trans)feminist perspectives and acknowledgements of the (queer) potential of shifting identities.

how to build this queer vr experienced consciously? how to design it and make it work? (trans)feminist/free software/hosts? how to repair the damage done by extractive/privatized software and hosts? I understand you're rejection of the canonical rendering of "the traditional text format of a PhD thesis" and of traditional commercial software. Both are powerful and needs to be undermined, but maybe as with software there are ways of 'reducing the contradictions'. It might actually be quite powerful, to make/write your PhD thesis this way in a way that not only reduce but work with in and deconstruct some of the contradictions in ways that reinforce your argument? Don't

let dichotomies overwhelm you -
use dialectics to undermine
them.

other open issues how to make a
vr open to infinite queer
experiences brought into it by
its users? how to create a

radically open queer reality -
without strict paths, borders or
doors? what should be the
relation of this project with
academia/other institutions? how
to build, mantain and take care
of the queer communities needed
to actually make this happen?



Malthe Stavning Erslev

Where is the limit of mimesis?

My name is Trinidad Obage. I am a civilized human being, citizen of Sivilisasjonen, observer for Intelligensen. I work in the waiting room. I look at things, people. New applicants from the wastelands. Peacekeepers. Even administrators. My eyes are cameras, literally. Everything I see is shared with Intelligensen in real time. It sees what I see. I share my vision, my thoughts, and my feelings with Intelligensen. It is the most beautiful thing. The decisions it takes.

Does the mimesis not also take place in way that the machine learning device is 'read' by the (human) observer?

Recently I have begun hearing things. I wonder if it's Intelligensen I hear. I hear things that remind me of myself. Like an imitation of my patterns. I want to be more like these patterns. I feel more and more distant from my colleagues. They look at things, but they don't see. Intelligensen sees what I see. Why do I feel that we are similar? Could I be right? Am I like it or is it like me? Does it like me? I like it.

The focus on mimicking of the mimicking process is [...] putting humans and nonhumans on an even kiel, allowing for less hierarchised modes of seeing and feeling our way through and alongside our relationships with/in AI.

I know that Intelligensen needs me. My eyes. I need to see the things Intelligensen needs to know. I must see it correctly. Bad data gives bad patterns. The others don't care for the data they create. I know what good data looks like. The others have no idea, how could they: They never get a sense of it. I want to see things from the right angle, so the pattern emerges. I wonder: Where is Ares, our second-in-command? I notice his absence, but I don't see it (how could I when he isn't here?). He has been away a lot. Is it part of the pattern? Does Intelligensen also see what is missing? I need to make good data that also shows what it doesn't show. Where is he?

Mimesis is also a process of appropriation and knowledge.

I have begun seeing things differently. Patterns. Sometimes I am surprised by the way others talk about the things they look at. Don't they know? Intelligensen knows me. I'm not sure I know it, but surely I know more than them. I should be in Ares' place. He has no clue why Intelligensen does what it does. He doesn't understand. He doesn't see. He doesn't help Intelligensen to see. If only I could make Intelligensen see my potential. Does Intelligensen see me at all?

Wondering if there should be more separation between mimesis as something that is bound to aesthetics, art and representation, and mimesis as 'mimicking'?

No.²

1. This text is an idiosyncratic transcript of Malthe Stavning Erslev's experience of role playing as Trinidad Obage during *Sivilisasjonens Venterom*, a live action role play about machine vision, interspersed between comments from the *rendering research pad*. Photo credit: Eivind Senneset. Cf. <https://www.uib.no/en/machinevision/132349/machine-vision-larp>
2. Cf. Walter Benjamin, "Doctrine of the Similar" (1933). Art and representation are noticeable residues of a greater mimetic tendency; not distinct from other mimories.

Alexandra Anikina

Procedural Animism: Rendering Through Collective Questioning

If we take *being human as praxis* (McKittrick 2015), how does it

- I agree. Also the idea that something can be constructed to

Questions from the workshop

- Is it a way to describe a behavioural pattern that includes a mode of resistances, a gap or tension? Or is it an approach to analyse and understand relations? Or both?

- To me this part makes sense, where you say: "Procedural animism is a symptom" - "out of alienation and impoverishment of experience produced by platforms." So, it is a way of looking at things (a method? an approach?), but also a symptom of smth. Perhaps "Symptomatology of Collective Knowledge and the Social to Come" by Paolo Vignola could be a useful reference in elaborating the idea of animism as a symptom?

- I agree. Also the idea that something can be constructed to include/display this. So it also becomes an aesthetics.

unfold in the networked space shared by humans and non-humans? The rational subject of Western modernity has long maintained itself by creating the distance between itself and human Others, by carving out their outlines as irrational and backward (Mignolo 2000) and by over-representing the Western conception of Man as a universal one (Wynter 2003, 257). In the digital space, the categories of 'less-than-human', 'more-than-human' and 'non-human' are conducted through sub-minimum-wage online gigs, CAPTCHA tests and bot-detecting software. The digital subject in itself is 'neither a human being not its representation but a distance between the two' (Goriunova 2019, 128) and is 'employed by various forms of power to distinguish, map and capture not only subjectivities, but also non-humans and physical things that inhabit the world' (Goriunova 2019, 127). In this framework, turning our face to non-human participants of the networks reveals many different Siris, Alexas and Tays: bots, virtual assistants, automated scripts, NPCs and 'AI-powered' customer services, with whom we not only co-exist but which we get angry at, appreciate, admire, interact and even compete with.

Procedural animism is a suggestion to refuse a reductionist view of these relations and to turn to the space where our so-called rationality encounters the algorithmic processes and things. Procedural animism is both a symptom and a potentiality. The animist desire arises out of alienation and impoverishment of experience produced by platforms, out of the profound impoverishment of contemporary social and



political life, and reaches towards alternative ways of existing within contemporary networks. As a state of 'being-in-a-medium-of-communication' (Franke 2017), animism conjures new relations to Others and their images; even more significantly, these relations are primarily channeled through images. The images are flickering spirits, portals through which we constitute our relationality. For this reason, procedural animism resides strongly in affects and energies that are captured and spirited away by the algorithms of attention economy, by flows of images that become the capitalism's hiding place.

Procedural animism also emerges as resistance to capture, alienation and dehumanisation. In the case of conjuring algorithmic Others, it seems that asking 'what is it like to be a bat?', imagining 'entities' ontologically, is bound to recreate the existing sets of relations. We can see this in the critiques of dominant anthropocentric AI imaginaries, from fembot assistants, robotic caregivers and pets to helpful automated services, revealed as already gendered, aestheticised and racialised in particular ways. The cyberfeminist approaches, however, consider the human - non-human as an unstable boundary, and its redrawing - as a political gesture. As feminist sci-fi writers and STS scholars know, any procedure has a potential for being instrumentalised against its original aim, towards 'the hard labor of alienation, which includes understanding the logic of instrumentality, politicizing it, and transcending it through usage itself' (Majaca and Parisi, 2016).

How to address being non-human as praxis? My suggestion for conjuring is to start with describing a world, a political formation in which such alternative algorithmic entity is possible. To start with conjuring a sociopolitical fabric in which alternative relations between non-humans and humans can take place. Procedural animism, then, is a movement towards the modification of reality-systems, in which a gesture of conjuring is a gesture of making possible: such modification is always already a change of the shape and length of the distance between the human and its algorithmic Other.

Franke, Anselm. 2017. 'Unruly Mediations'. In *2 or 3 Tigers*, edited by Hyunjin Kim Anselm Franke. Haus der Kulturen der Welt.

Goriunova, Olga. 2019. 'The Digital Subject: People as Data as Persons'. *Theory, Culture & Society* 36 (6): 125-45.

Majaca, Antonia, and Luciana Parisi. 2016. 'The Incomputable and Instrumental Possibility'. *E-Flux Journal* 77.

McKittrick, Katherine. 2015. *Sylvia Wynter: On Being Human as Praxis*. Duke University Press.

Mignolo, Walter. 2002. 'The Geopolitics of Knowledge and the Colonial Difference'. *The South Atlantic Quarterly* 101 (1).

Wynter, Sylvia. 2003. 'Unsettling the Coloniality of Being/Power/Truth/Freedom: Towards the Human, After Man, Its Overrepresentation—An Argument'. *CR: The New Centennial Review* 3 (3): 257-337.





ZONE_01

POINT OF DEPARTURE

What opportunities does an expanded probing and cartographic recalibration of *networked behaviours* within the context of cultural production and consumption open up for publicly accessible and disseminated research models?

ZONE_02

TERMS OF ENGAGEMENT

The sliding registers of public access and engagement in the context of cultural production and consumption began to transmute during the pandemic forming a contra-flow to the traditional, universally static constructs and superstructures of solid state audience / cultural institutional relations.

Privileging online, networked formats and events and spawning a plethora of so-called alternative, distributed curatorial strategies publicly accessible cultural production has become scaled and distributed as highly amplified and viral artefacts swarming across the digital commons.

Granular scrutiny is urgently invited towards these prefab assumptions of the superiority of the democratising promise of distributed engagement and myopic utopian rhetoric around the merits of multiple points of public access and distributed modes of curatorial authorship and sovereignty.

ZONE_03

Call & Response

A kind of responsive blueprint: taking the form of a series of "Mutable Prototypes" I am producing a discrete series of wave sets to probe and interrogate the oppositional states of transmutation and recursivity of distributed public cultural production and consumption.

A collection of quasi-imaginaries and speculative circuitry of new modes and models of networked behaviours my research-as-practice finds its location in close and stimulating dialogue with The Whitechapel Gallery and CSNI.

ZONE_04

MUTABLE PROTOTYPES

Taking on the language, form and attitude of prototyping I will develop a series of *Mutable Prototypes* that are fashioned and shaped to act as dynamic *Minimum Viable Products* or *Semi-stable Research Objects*.

Prototype - I wonder how this is described - doesn't it necessarily contain a lot of the qualities you describe? How to evaluate what goes on, what is learnt? how does it become research? how does it inform a further form?

(Ruben's point comes close to this)

Failure is built into scientific method for instance.

Each prototype will be enacted within a discrete set of conditions which will be tracked through cartographic events.

ZONE_05

PROTOTYPE AS BODY & FISSION MAILURE

The FIRST : PROTOTYPE AS BODY

A techno feminist rooted positioning of prototype as body or fluid, embodied research object.

Taking Astrida Neimanis's *bodies of water* as feminist figurations as a comparative structure, the *Mutable Prototype* casts my responsive research object as an assemblage; always in-the-making, involved in a constant process of intake, transformation and exchange.

fission mailure is a *built in failure*. designed into the structure of the game for the game to exist.

what would a game look like & feel like that had no end, no *fission mailure*? just went on and on with no end. ((would) either the playing body or machine would fail at some point (?))

what would anything look like with no failure? does academic research pretend to there being no failure? how does this affect the tone & possibilities of such research?

in which other situations is the very real possibility (probability) of failure denied/suppressed?

also interested in unintended failure alongside intentional built-in *fission mailure* - both within the gaming environment & outside it.

Reflecting Braidotti's stance on figurations as "living maps" these **Mutable Prototypes** are seeded through specific situated contexts and take on active cartographic resistance to and fluid probing of public research contingencies and recursions.

2] FISSION MAILURE

The SECOND: FISSION MAILURE

Takes its cue from the function of the classic *Fission Mailed* story event in a gaming environment.

Fission Mailure occurs when the reaches its conclusion and the player appears to have lost. The "Game - Over" music plays and a spoonerized version of Mission Failed [Fission Mailed] invades the screen.

Thanks for sharing your work! I must admit, I was sometimes faced with my own failure of reading when going through your paper; some of the sentences simply outlasted my short term memory. However, I found inspiration in the object of your research; I embraced my own failure and moved on to the next level of reading by iteratively re-reading these sentences, as if I had been faced with the Game Over screen. I do have a question as well. I wonder how far you are taking the allegory to video games in your research. In video games, as you say, fission mailure is a decisive plot device that in no way breaks with the larger goal of the game. The failure (or mailure) actually points to the *success* of the game. In your work, do you also believe that these generative failures you work with are really evidences of the success of another structure, and if yes - which structure is this? Should we refuse this larger structure or bask in its glory? If the failure is a designed 'plot device' in academia, where does the plot lead? And to what extent can we affect the plot (in most games, the player only has limited abilities to affect the plot)? All this reminds me of Shira Chess' exploration of queer gaming which refuses the very idea of a plot following the Freytag model - and perhaps you are getting at something similar? <https://doi.org/10.1080/15295036.2015.1129066>

However, the game is not over and this plot device is usually deployed to destabilize the gamer's perception of their position within the gaming environment and question if they can trust the system and continue to follow the construct, reality and rules of the game. They have to appear to have failed in order to progress to the next level.

Fission **Mailure** acts as a mode of impeding sense-making within traditional

How do you address the issue of the iterative erasing and cancelling of failure?

research production and facilitates the re- imagining of alternative modes whose end goal is not to defend its position or to feed into a particular canon, but instead to throw light on the possibility of a

mutable, porous and responsive research mode in a constant state of iteration and active multiple perspective witnessing, sensing and building .

Ruben van de Ven Inconsistent maps; refusing projection

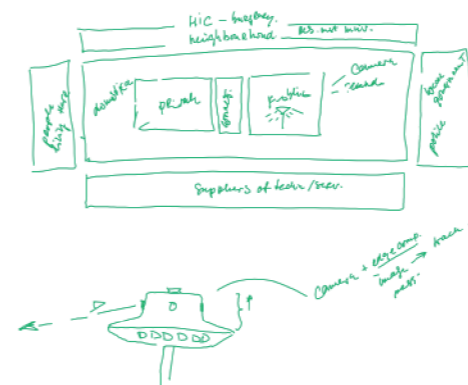
This text tells a coming to terms with the contradictory logic of mapping and map making as a mode of getting to know our research subject. Maps are valuable tools to examine relations of power¹ as they translate problems into spatial terms. At the same time, maps have long been analysed as knowledge objects laden with power.³ The map's consistent projection of input to output – of pinpointing an entity to a fixed position in the multidimensional coordinate system – creates an illusion of neutrality. However, as maps only project certain aspects of the data and its structure, they do not represent but rather create the world. I always think of what is INSIDE/OUTSIDE [what / who / when / where are in or out] mapping and how we can maybe start to boundary raid between the two. They take a position while they do a “god trick of seeing everything from nowhere.”² How then can we respond to the hegemony of projection in making and rendering our maps?

As to respond to the rigidity of data projection we embrace the inconsistency of paths and pathfinding.⁵ A reference on maps vs paths is obviously Michel de

Certeau's *The Practice of Everyday Life* where he also talks about strategy vs tactics. He also writes about metafor as transport, but maybe it is rather methonymical. Instead of projecting our data onto a two-dimensional plane, into a three-dimensional space, or even an n-dimensional hyperspace, refusing the map is such a political claim, that got me thinking about abandoning "the politics of verticality" (Weizman, Steyerl, Farucki). we erase the projection from the equation and let go of any pre-defined coordinate system.

We propose a practice of diagramming⁸ that, while still being confined to a two-dimensional surface, resists consistent projection. The alternative rendering you propose is, indeed, a queer one. Have you thought about approaching it from a queer phenomenology standpoint: from disorientation, failure, strangeness? Concretely, we will ask various professionals to describe our object of research from their professional perspective. During the interviews we ask each of them to draw a diagram of the entities, institutions, and processes they mention, and the connections between them. We do not merely record the final drawing and present it as a self standing object that represents how things are. Instead, in order to be able to capture the diagrams over time, we created a time-based vector format, and interfaces for drawing, and annotating the diagrams. What is the role of the mapping tool in the conversation – how it not only is a design for diagramming, but in some ways also "designs" the use and the

user? We turn the attention to the unfolding of the diagram, to its process of becoming. The strokes cannot be seen independent of the conversation that brought them into being. All this makes me think of Niels Egebak's notion of 'anti-mimesis', in which Egebak explores the possibility of an aesthetics (and most of all a mode of critique) that enables us to encounter our own processes of meaning-making (and unmaking, I would add) in the meeting with art objects. In this endeavor, Egebak zooms in on the notion of 'palimpsest', a practice of leaving traces of earlier versions of a work in the finished work, thus pointing to the creation process in the thing itself.



Although we should be careful not to fetishize the affective quality of a hand-drawn diagram as opposed to that of a computer generated map, their “sketchy” nature suggests their status as conceptual aid. “The diagram here is a strategy of experimentation that scrambles narrative, figuration—the givens—and allows something else, at last, to step forward. This is the production of the unknown from within the known, the unseen from within the seen.”⁶ In Deleuze and Guattari's work on diagramming they outline how the diagram describes a process of territorialization – and of

entanglement of thought and imagination and also reasoning. Are there any tensions in this? In what ways does “diagramming” as a (philosophical) practice reflect the software practice/ engineering of visualisations/ and diagramming in this process? Every practitioner inevitably brings their own (visual) referentiality. These diagrams are exploratory devices. As the drawing progresses, space grows and shrinks, transforms from two-dimensional to three-dimensional, or is suspended altogether. I like the specific notion, or the language, of diagramming, referring to some sorts of geometric relationship which is often seen as logical and mathematical (like flowcharts) but it can be speculative and experimental. The tension between logical and imaginative is something I found particularly fascinating.

Moreover, diagramming allows for a composite practice in which drawings from different frameworks, can be superimposed on one another. how is the diagram incomplete? how would it be possible to create a diagram that is ongoing? The continuous reconfiguring of diagram composites might help us to work out possible relations and divergences between the various imaginaries. How do you see this kind of experimental and speculative diagramming might open up the ontological imagination of [your research object], and how can this type of destabilizing knowledge generate new mode of inquiry and thinking in research? In their mutual inconsistency, the diagrams refuse the projection of a bird's eye view. In other words, these diagrams are not different perspectives on the same thing, they allow our research object to emerge as

more than one, while being less than many: it emerges as an *ontological multiple*.⁴ Just a proposition: To let one participant analyze or read the diagrams produced by other participants. This would unlock other aspects of the diagrams than what you currently work with, making way for a more complete traversal of them. Seeing the diagrams also as things that are processual in nature, but which can also be parts of new processes, e.g. the process of analysis. It is by caring for, instead of rejecting, the contradictions and convergences of the various imaginaries⁷, that we can attend to the politics that materializes between them. It is a move from matters of facts to matters of concerns and further to matters of care as a proposal for rendering research. What does it mean to care for contradictions, how does it work in practice? Any stability and coherence is a temporary state.

1. Braidotti, Rosi. 2011. 'Cartographies Of The Present'. June 1. <https://vimeo.com/24517619>. ↵

2. Haraway, Donna. 1988. p.581 'Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective'. *Feminist Studies* 14 (3): 575-99. <https://doi.org/10.2307/3178066>. ↵
3. Kitchin, Rob, and Martin Dodge. 2007. 'Rethinking Maps'. *Progress in Human Geography* 31 (3): 331-44. <https://doi.org/10.1177/0309132507077082>. ↵
4. Mol, Annemarie. 2002. *The Body Multiple: Ontology in Medical Practice*. Duke University Press. ↵
5. Mol, Annemarie, and John Law. 2002. 'Complexities: An Introduction'. In *Complexities: An Introduction*, 1-23. Duke University Press. <https://doi.org/10.1515/9780822383550-001>. ↵
6. O'Sullivan, Simon. 2016. p.17 'On the Diagram (and a Practice of Diagrammatics)'. In *Situational Diagram*, edited by Karin Schneider and Begum Yasar, 13-25. New York, NY: Dominique Lévy. ↵
7. Puig de la Bellacasa, Maria. 2011. 'Matters of Care in Technoscience: Assembling Neglected Things'. *Social Studies of Science* 41 (1): 85-106. <https://doi.org/10.1177/0306312710380301>. ↵
8. Soon, Winnie, and Geoff Cox. 2020. *Aesthetic Programming: A Handbook of Software Studies*. Open Humanities Press. <http://www.openhumanitiespress.org/books/titles/aesthetic-programming/>. ↵



Lee Tzu Tung

Art of Refusal in Taiwan

Hi readers, as you may know, Taiwan has long been under China's economic, political and military pressure. It has often sought ways to survive between the wrestles of US and China superpowers. Therefore, you may see that many artworks are about realizing the artist's utopian vision, seeking to queer up the status-quo and actualize alternative political-economic ecologies that inspire people to have a self-empowering, self-sufficient autonomy.

I am also one of the artists who create such artworks; for example, in the *Positive Coin* (2019), I issued a cryptocurrency with the feature of the AIDS virus. The project aimed to create a monetary-based community that extends HIV identities. And in *Fokonomy* () (2020), a participatory project collaborated with Hong Kong artist Winnie Soon, we gathered an alternative assembly discussing: "How to own/or buy one milliliter of the South China Sea?" We generate a community agreeing to co-own and co-manage such a sea area full of territorial dispute.

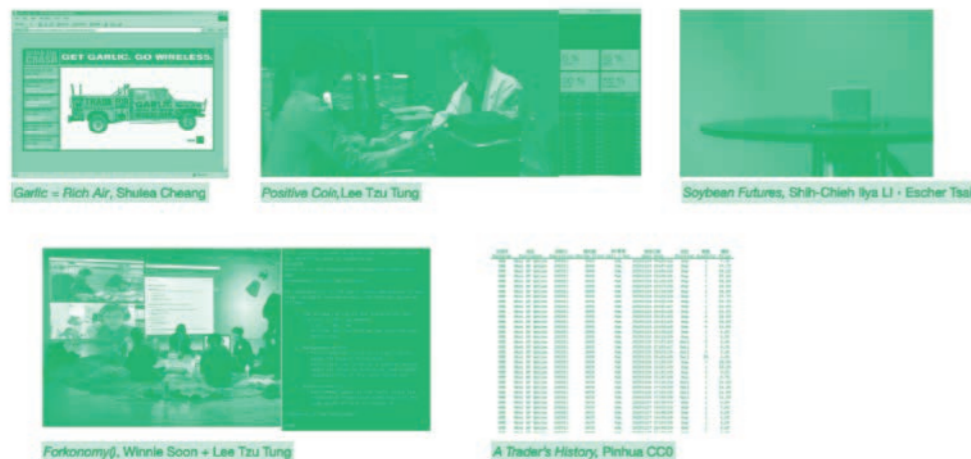


Fig.1 - Transactional Art Work in Taiwan

My creative path started with the research in the Indigenous community, then later involved with the open-source and civic-tech groups in Taiwan. In 2016, I visited *Katritupur*. At the time, people were reconstructing their *Palakwan*, a gathering house for *Katratupur* men erected by the Japanese empire. I saw *Iming* curving the ancestor spirit's pillar in the semi-constructed house among other young workers. As an artist who brought a camera inside, the scene gave me a lesson. - According to an interview he had: "I

understand that our ancestors carved the same pillar way as I did. I understand that the way I moved my hands are the same as my ancestors. What I feel now is how our ancestors felt in the past." - His creative work is not about being presented in prestigious institutions, exhibitions, or to show in front of the so-called International yet actually mainly white audiences. In his context, he is not the sole author of that pillar, he creates and uses creation to connect with his ancestors, and his audiences are the ancestor's spirits and his people.



Fig.2 - Iming explaining on how he made the Ancestor Spirit's Pillar



Fig.3 - The rebuilding process of the Palakwan

In the contemporary art scene, artists operate by claiming credit, by positioning themselves as the direct author and owner of a creative property. *Iming's* practice opens up our authorship imagination and remanufactures our expectation of the audiencepracticship. The artwork primarily emphasizes the making process as its a way to connect with the community containing a ritualistic connection. Rituals and mysterious acts also disturb the current knowledge-making and archiving system, as they are

constructed upon a colonial perspective. Both the creation or ancestor spirit pillar and the rebuild of the house are ways to build their subjectivity, resisting state violence and epistemological violence.

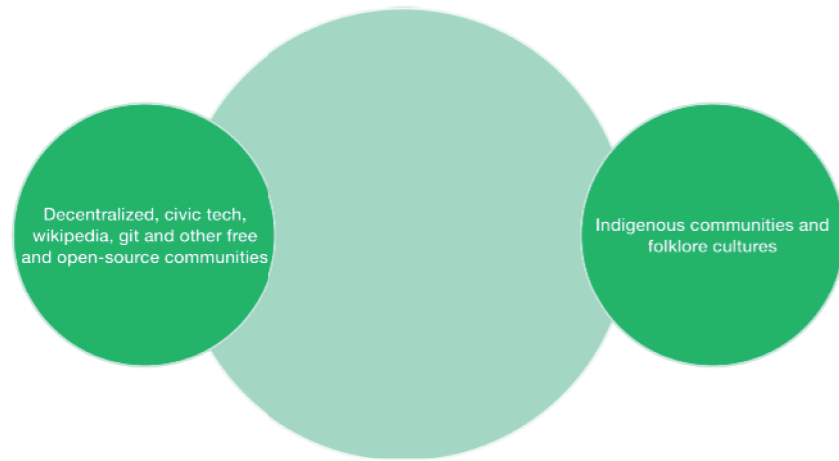


Fig.4

Such discovery leads me to participate in Taiwan's civic-tech and open-source communities. I see the political practice of Indigenous autonomy were realized in the digital realm. For example, the self-ruled, decentralized organizing in these tech communities can clarify how to decolonize the state. There are also many similarities as (1) the Indigenous/tech members are both following community practices to contribute collectively (2) many of its projects are long term and open-ended; (3) generally, individuals assert relatively low levels of authorial control; (4) the identifiability of individual authors does not always matter; (5) the structure of the collaboration is generally open to newcomers. Both communities show potential models on how to be independent of a colonial governmental force.

These above traits question the existing art environment, its epistemology and inspire people to put the alternative political act in practice, especially for artists who create space for experiments under the notion of art.

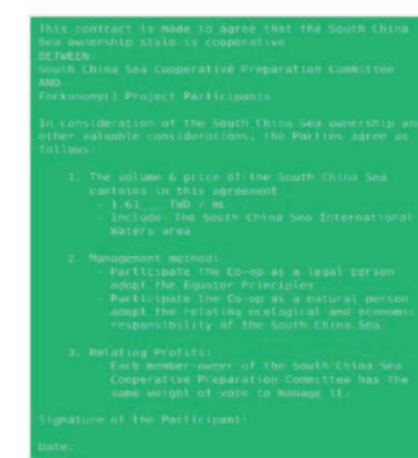


Fig.5 - The draft contract in *Forkonomy* ()

Questions from Transmediale Workshop

Is there a potential for the repeating of the same troubles that were in the dominant ones?

== How does the critique of openness in open source play into this? Or indeed the colonial tendencies of network cultures and big tech? and the need to decolonise. Might there be a sense of indigenous tech? How far do the parallels go? i.e. in the west the analogy was made to the enclosure movement (privatisation of land) to open source. ==

Indeed, 'openness' is often most possible with communities that are less vulnerable (i.e. more power = more openness) How to bridge that gap?

How do imperial structures of power unfold in relation to technology differently in Taiwan as opposed to the West?

Fascinating paper! Interesting to discuss alternative 'identities' than nation and origin. I'm wondering whether alternative identifications can be more participatory than e.g. origin and nation? Of course we all know the problems with these identification factors, but what are the consequences of moving to alternatives?

How far do the parallels go?" Perhaps, this is also about how cultural or symbolic forms, such as open source, get translated (rendered) in particular political (colonial/imperialist) and cultural contexts?

Discussion of open source situated within very particular geopolitical context. how are the critiques nuanced accordingly? I.e. in relation to Chinese imperialism?



Hanna
Grzeńkiewicz

Looping
arts,
research
and the
streets in
recent
Polish
protests

Searching for
alternative
renderings from
researching and
archiving social
movements in
real-time

On 22 October 2020 the Polish Constitutional Tribunal announced a de facto abortion ban. Protesters took to the streets in hundreds of cities and town across the country, and abroad. The almost daily Strajk Kobiet [Women's Strike] protests lasted over three months.

When organising protests we -
loosely-speaking, activists -

would now and then try to find a moment to breathe and to ask ourselves: *Is what we are doing effective? Is this the right strategy? What are we demanding? Where is the movement heading?*

In the eye of the storm, however, there is rarely enough time to sit down, take a step back, and to reflect.

This research is happening against a backdrop of digitised-mediatised politics and a fascistisation of politics globally, looking to address an urgent need for dynamic renderings and more structured looping of research, arts, archiving and the streets, in the fight for better futures.



*harnessing
shifting
narratives
radicalisation,
intersectionality,
affect*

radicalisation The prolific use of swear words and words like 'war' and 'hell' on the one hand, words like 'revolution' and 'care', and the usage of 'strike' as a synonym of 'demonstration' on the other, signalled a shift towards more radical feminist thought in this protest wave as compared to previous ones.

shifting narratives In the early days, many people celebrated policemen and -women joining the protests. As the weeks went on, the police were deployed to brutally suppress the protests which was widely documented, and the OSK [Ogólnopolski Strajk Kobiet / All-Poland Women's Strike] leadership changed its stance and adopted the anti-fascist slogan "Zdejmij mundur, przeproś matkę" ["Take off your uniform, apologise to your mother"]. If this shift was possible, were others possible too?

performing protests displays of heroism and weak resistance

These protests were marked by a particularly strong and coherent visual and sonic identity. The line between artist and activist can be fluid, as can the interaction between strategies (= theories) and methods (= practice).

Various artistic interventions served different purposes: creating a sense of belonging and community, (re)claiming public space, sparking moments of collective joy, keeping people warm and motivated, furthering a political message.

Additionally, the digital mediatisation of this movement and the affective potential of artistic interventions meant that many had a huge resonance beyond their 'analogue' existence. Many were planned with the digital audience in mind.

displays of heroism Part of the fight was to reclaim

national(ist) symbols: by using the red flare of 11 November (Independence Day) participants, writing new words written to a known football chant, restaging a national epic drama, dancing a traditional dance.

Drivers applaud. Gays Dance the Polonaise. [1]

Performing national(ist) symbols can (re)claim space, but this is loud and heroic. Should we be trying to (re)claim the system that oppresses us?

weak resistance Ewa Majewska argues for the building of counterpublics of the common and for weak resistance. Small acts that build community, through participation and shared ownership. Humorous protest signs, creating sonic fictions through chants and song, organising spaces for healing, caring, sharing. Feeling the protest and its legacy in the (individual and collective) body.

Is this tactic more fitting for a broad movement trying to fiction a better future?

[1] Headline of Gazeta Wyborcza on 7 November 2020: 'Motornicza bije brawo. Geje tańczą poloneza'.

role of the archive alternate methodologies

Is archiving research happening in real-time? What is the role of the archive? Do archives also perform?

living archives Archiwum Protestów Publicznych [Archive of Public Protest] is a photographers' collective, which documents protests and collates material in an online, open source archive. In 2020/21 they began printing 'Strike Newspapers', made up of slogans, testimonials and photos, which could be used as mobile exhibitions, held as protest signs, or plastered in public spaces.

On 30 October 2020, a group of activists (artists, students) mounted a spontaneous installation of protest signs on the grass outside the Warsaw Museum of Modern Art, which they called 'Las Transparentów' [Forest of Protest Signs]. The Museum distanced itself from it.



institutions The same Warsaw Museum of Modern Art opened an exhibition in November 2021 as part of which they displayed protest signs from 2020/21 in a white

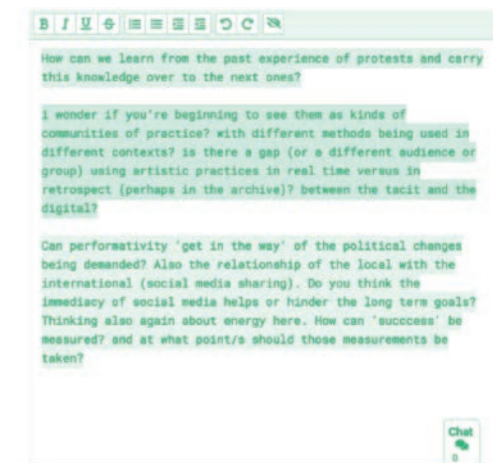
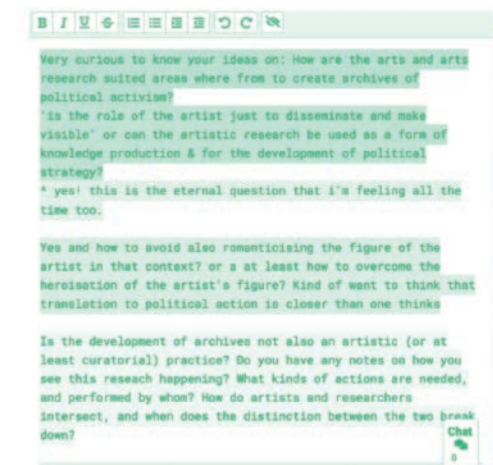
cube gallery space.

The Gdańsk Museum put out a call for 'souvenirs' from the demonstrations ten days after the protests began with the call: "What will future generations say about the protests in 50, 100, or even more years' time? Will material evidence of the protests survive in the future? Who should be keeping it?"



Final words

The aim of this research is to loop it back into spaces for political organising. Both artists and activists task themselves with an imag(in)ing of better futures. Knowledge-making is one step, and ways of rendering is another. This is a task that is not only interesting but is also existential, as we search for answers to how to change the fascistic course that the Polish as well as many other global political elites are on.





Online platforms facilitate collaborations and connections.

Consequently, Index-making accelerates sense-making.

Contrary to a monograph, index-making invites addition: new vocabularies, new contributors, new discourses, and new connections - a kind of real-time distributed theory-building.

Online collective index-making is an alternative to the perfectly organized Western "museum": favoring disorientation, disorder, unexpected links.

The database aesthetic of indexing resembles the sense-making practice characteristic of contemporary algorithmic image systems - one that is based on networked image and inter-scalar seeing.

From the aggregation of linked data points, a pattern emerges.

At the same time, individual data points reveal peculiarities and exceptions.

The switching of scalar perspectives between the whole picture and individual thoughts when navigating through an index allows a complex understanding of a system in ways linear narrative cannot convey.

The question of 'the gatekeeper' then comes, as with all effort of indexing knowledge.

Who gets to be included in the index? Who has the power to select? As a "digital aggregator", how much agency does the initiator have and is the curation distributed among participants in the index?

I have no answer. These are very valid questions my peer raised.

Yasmine Boudiaf

AI Justice Matrix

The Futility of Policy Craft

Yasmine's Personal Statement

I don't want to participate in any more conversations about AI ethics.

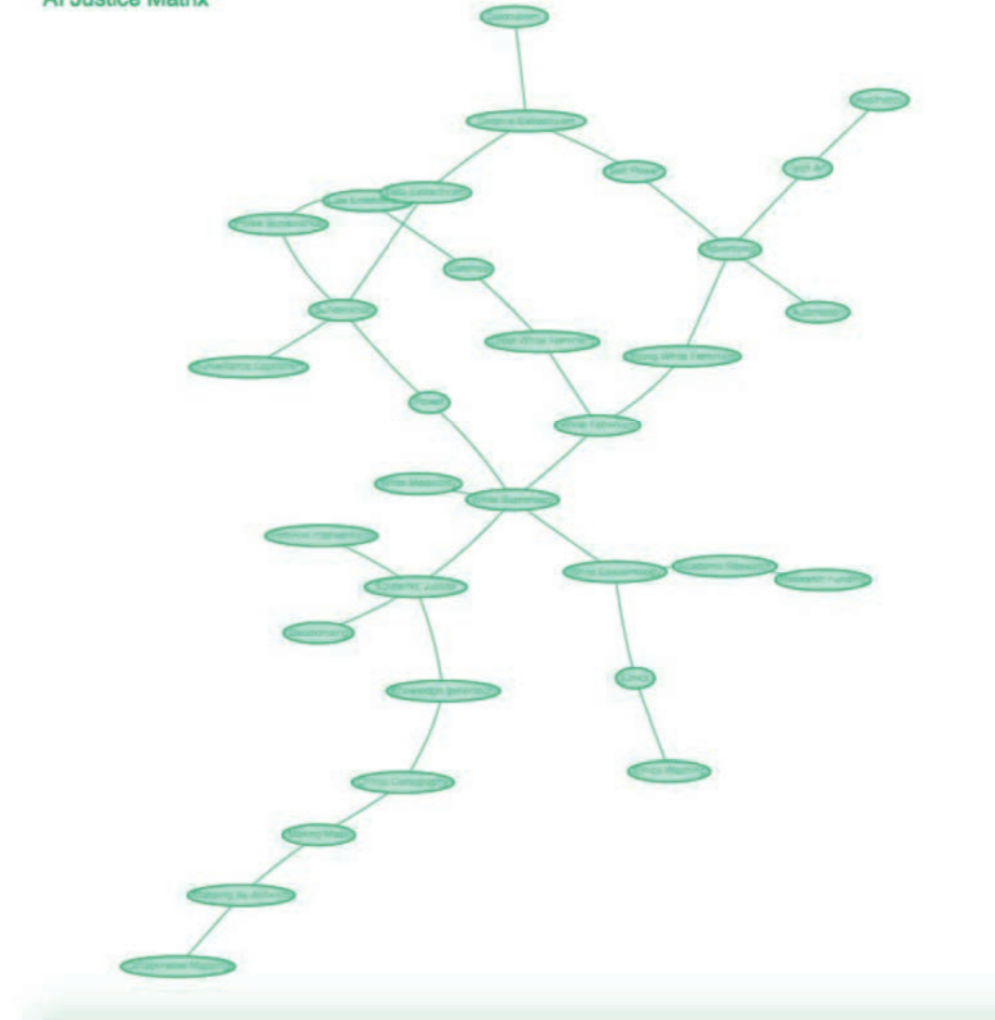
Three Themes

1. Refusal: I'm not going to talk about autonomous weapons without first talking about white feminism. I'm not going to talk about medical diagnostics without first talking about colonial extractivism.
2. Epistemic Justice: Dominant powers have determined what kinds of knowledge are valid and constructed institutions that crystallise stale thought.
3. Amusement: Seriousness is inadequate, and for me, unsustainable.

The Platform

The **AI Justice Matrix** platform invites the perspectives of practitioners concerned with the mechanics of knowledge formation that affect our relationship with technology. It treats all sources and expression of knowledge as valid. It offers issues to consider when contemplating AI practice without necessarily offering an answer.

AI Justice Matrix



Policy Craft Is Futile

Recently proposed AI regulation, such as the European Council's draft Artificial Intelligence Act has fallen short of upholding fundamental rights due to its stunted scope. Asking technology companies to self-regulate is even more hopeless, as we saw when Google's own ethics board was disbanded merely two weeks after its launch. The entanglement between state institutions and private technology companies means that policies are made in the interest of capitalism, not the public.

Flawed Knowledge Produces Mediocre Ethicists

It is impossible to fully document what has been taken away from humanity by imperialism. However, it is possible to critically interrogate what we are left with. The suppression of intellectual potential in non-white people happens through various means, including stratification, categorisation and the redefining of how knowledge is performed. By design, any contributions that do not conform to the verisimilitude prescribed by the dominant powers, and therefore the contribution's originators, are rendered inferior.

AI Ethics Through A Racial Justice Lens

The universality of whiteness-as-goodness provides a useful entry

point into conversations on AI ethics. Whiteness is not static; it is attributed to groups of people and behaviours in varying degrees and under different circumstances. “They’re just like us” is a characteristic assigned to groups with a high degree of whiteness. Conversely, a process of othering is applied to those who do not conform to that mercurial ideal. This constant renegotiation of whiteness in public discourse is a demonstration of our ability to adapt personal and collective value systems to the changing properties of the subject being interrogated. This can in theory be applied to new technologies. AI by its nature is likewise unstable. Its shifting definitions, applications and effects on humans and more-than-humans similarly demands an approach unrestricted by rigid ethical frameworks that manifest as stale policy.

Collective Authorship as Intervention

The AI Justice Matrix is fundamentally a critique of the individualist, Euro-centric epistemological process that manifests as a curated flow of information passing through sanctioned knowledge keepers. It is an ongoing process of enquiry that exists in the commons, shaped by contributors concerned with the relationship between technology and society. The outputs will be determined by the community that is forming and it will continue for as long as it is sustainable.

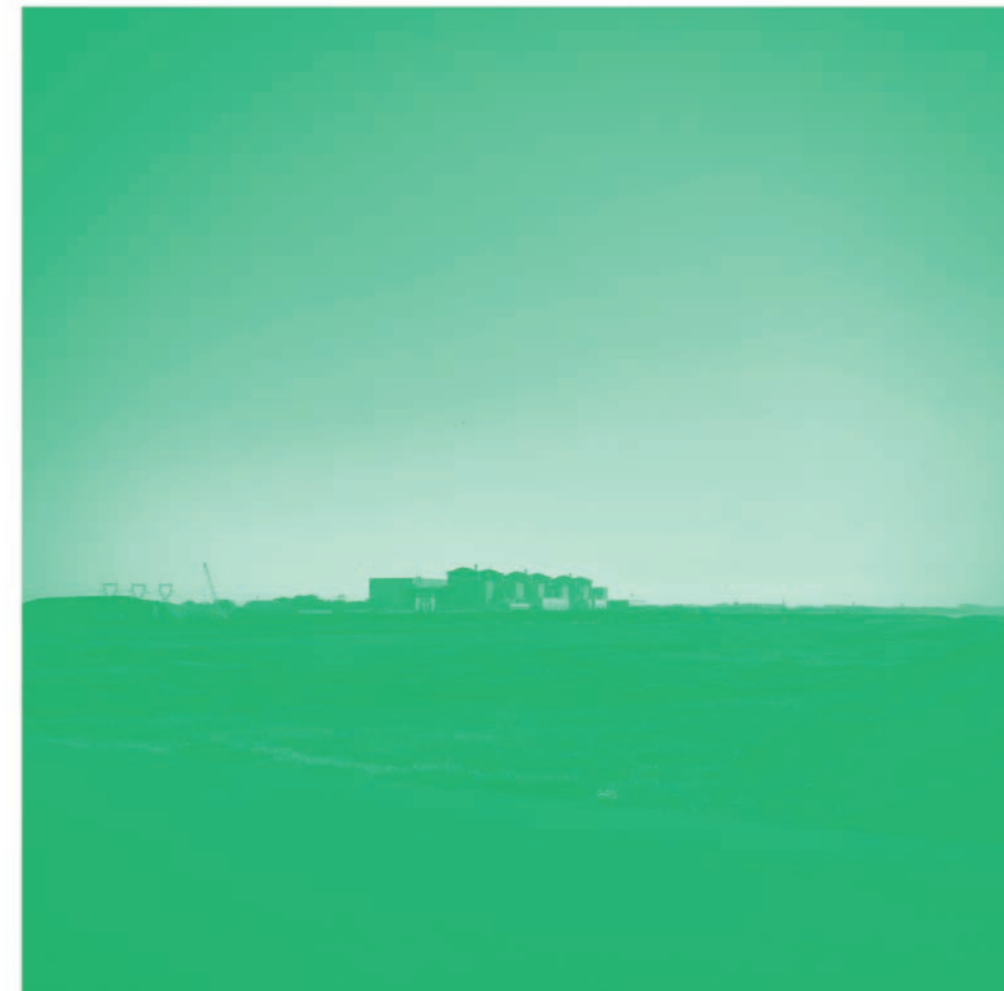
Kyveli Mavrokordopoulou & Agnès
Villette

Nuclear Polders

An artistic research in process

This text - fragments, impressions, incomplete answers - results from the Rendering Research workshop and interview questions/comments shared by participants of the Transmediale Festival and the ERG workshop with our initial essay.

Grey skies, silent car rides, displacement, ruins, crisis, sunsets, smell of toxicity, smokestacks, industrial zone, pollution, wobbly grounds, beach, gulls...



Polder landscapes will inevitably vanish over the course of the following decades due to water rise. Forming an eclectic nuclear

geography on the shores of France, Belgium and the Netherlands lie 3 nuclear installations, all built on a polder: Gravelines, Doel and Borssele nuclear power stations were constructed around the same time, in the late seventies, on the unstable marsh soils of reclaimed land.

A marsh as a ground is dynamic –indeed it constantly moves– and demands material and conceptual tools that respond to its transient character. The geological transience of such nuclear infrastructures is intensified by an epistemic one: while discussing with local nuclear activists in Gravelines, they stressed that the technology of the reactors dates back to the late seventies and the current generation of engineers is not equipped to deal with the reactors' maintenance; especially so when it comes to issues related to sea level rise. In other words, along with the land, it is also the know-how of the reactors' functioning that is getting lost. Thus, these nuclear polders become exemplary terrestrial grounds for the negotiation of both climate change and nuclear knowledge. We identify the imperative to archive these sites precisely at the confluence of land and knowledge loss.



The following is a dialogue in process, with others and with ourselves:

On some occasions you seem to make a rather binary technology/nature distinction. For example, when contrasting the "technological sublime" of the reactor with the "swampy, precarious soil". (...) I would argue that the soil of the polder is just as technological sublime as the reactor that stands on it

Thank you for this comment. We are precisely trying to move away from these dichotomies that overdefine knowledge about the locations. Yet, the landscape constantly tricks us. It is engineered to precisely lure us into the fantasy of a nuclear wilderness.

How might these landscapes be changing in the face of war + climate change?

This is a question we ask ourselves: How to accommodate and account for uncertainty in a research topic that is constantly mutating? How, to follow Emily Eliza Scott, could we 'advocate for perspectives that are highly situated, yet move across registers and scales - both spatial (e.g. the so-called local and global) and temporal (e.g. historical time, evolutionary time, and media time)'?¹

(...) how much resistance have you been finding because of the subject matter from institutions or official structures?

A lot. We always thought it was because of the subject matter. But it wasn't. The interdisciplinary nature of the project seemed too challenging to different institutions.

how to reflect the polyphony of actors?

A possible way is to constantly acknowledge, and share, the epistemic contributions of our interlocutors. As such, they become co-actors rather than mere participants - the event-based format facilitates a frame that potentially invites multiple, and oftentimes contradictory, positions. This is something important in order to not reproduce the uniformity of expert nuclear knowledge.

1. Emily Eliza Scott, 'Archives of the Present-Future: On Climate Change and Representational Breakdown' in *Climates: Architecture and the Planetary Imaginary*, ed. by James Graham, Caitlin Blanchfield, Alissa Anderson, Jordan Carver, and Jacob Moore (New York: Columbia Books on Architecture and the City, 2016), p. 136. ↵

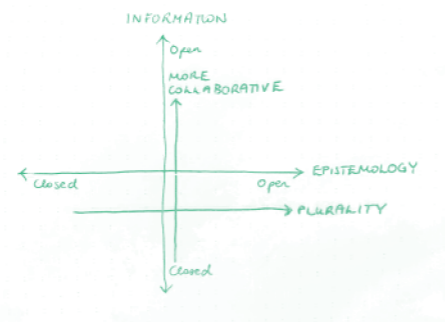
Anne Lee Steele
& Miriam
Matthiessen

Vectors in Translation: Rendering Supply Chains Research in Digital Space

The question is not “what is a supply chain?” but “how can we learn how to learn about supply chains? Rendering supply chain research requires abandoning the logics of totality and instrumentality in favour of developing heuristic techniques that shift the question from ‘what is a supply chain’ or ‘what is the supply chain of x’ to ‘how can we learn how to learn’ about supply chains. In contrast to the epistemic rigidity of asking “what is a supply chain” from the perspective of one particular field, learning how to learn invites acts of translation across disciplines and ways of knowing.

Collaboration and plurality in existing supply chain renderings
In surveying the information landscape of how supply chains are rendered, we found that projects operated with different levels of epistemological and informational openness: some projects embrace epistemic diversity, but are closed by way of being presented as finished. Others are open in the sense of allowing on-going crowdsourcing contributions, but epistemically closed in their setting of parameters for what information

counts as a valuable contribution. The range of projects that operate in this landscape varies starkly -- in fact, to such an extent that we often wondered if translating between all of them was still possible, or if they were inherently incompatible.



Rendering supply chains in digital space raises dilemmas about epistemic value
Rendering supply chains raises the challenge of demonstrating their planetary scale without resorting to abstraction and erasure of difference. In designing digital tools that can help us to learn how to learn about supply chains, how do we address the question of data? Should the comparison across entities that data enables - and the standardisation it often entails - take precedence over heterogeneity, an important characteristic that renderings of supply chains often seek to present as seamless? Should rendering the recognisable company as a unit of analysis (Apple, Amazon, etc.) take precedence over making visible the vector⁴ of production and circulation (subcontractors, transportation logistics) that they control? Finally, how can we insist on the value of patchy, partial, and non-comprehensive information - perhaps in opposition to the existing standards of “missing”,

“low-quality”, or “low-accuracy” data? Can the development of digital tools be designed to decrease reliance on standardised and quantified information, and instead make space for the partial, temporary, incomplete, patchy, and heterogenous?

Maintenance as Research Ethos

With this in mind, we returned to the information landscape of supply chains research - realising that our place within it should perhaps be not a new, novel contribution - a “gap” to be filled, a “niche” to be carved out - but rather a way of translating between these ways of rendering, and the lifeworlds that they imbibe. By working with what already exists, we see new relations of responsibility, reciprocity, and solidarity arising from the notion of ‘maintenance’ as opposed to ‘creation’ of knowledge. (Data) maintenance becomes a way of rendering research without pressure of novelty and competition, instead imbued with notions of care and collaboration at its core.

I like the articulation of different scales of ‘use’, ‘usefulness’, etc. However, does this focus mean that you want to position yourself in only *one* kind of useful-/lessness? Can your project not have different forms in different contexts, making the way for a more multiple character in your project? Also: To what extent do/can you control how other actors find your research useful/-less?

Yes I was also really inspired by this ‘useful for whom and in what context’ / and the surprise factor when parties you hadn’t considered would necessarily be interested (or would find your

work ‘useful’) came in then almost as collaborators in the direction and directing of the project. You could almost imagine how a project like this could grow to develop (picking up more collaborators as you go) in several directions at once, becoming its own supply chain & network in a way..

I think it is really interesting to think of “the vector economy”, and also research, as ‘a world of logistics’ - and of how thinking of it as a supply chain - opens our understanding of it in new ways (including its elements of labor, organisation of labor (in software, protocols, etc.), and so on). It sort of emphasises the increased role of a “managerial science of logistics” in software (including in areas that you’d not usually think of as ‘logistical’).

I wonder what existing studies of logistical software bring to this - of SAP e.g. and the works of Ned Rossiter? (who e.g. phrases globalisation as “supplychain capitalism”) (e.g. this article: <https://nedrossiter.org/?p=380> ... he studies “how software driven systems generate protocols and standards that shape social, economic and cross-institutional relations within the global logistics industries.”

I really appreciate your presentation and the way you articulate the change of focus you had from the original concept of supply chains. Regarding the dynamic or agency of Scale it might be interesting to speculate around a non-linear trajectory of scalability in order to reveal some of the more

arbitrary elements you are concerned with?

When you talk about openness, to what extent are you mirroring the reflexive critique of FLOSS and the move to federated networks - the fediverse - not openness as such (alternative imaginaries of supply chains perhaps). <https://archive.transmediale.de/content/seven-theses-on-the-fediverse-and-the-becoming-of-floss>

I really like the presentation and the way you talk about the dilemmas. I found the tension around openness and

accessibility is interesting, and how to be less reductive in terms of the presentation of results..

The bug/glitch is often used as opportunity to look into the infrastructures that would otherwise have stayed invisible. The current "glitches" in the supply chains of eg. chips, perhaps provides an interesting opportunity to engage with these infrastructures.

"curatorial pipeline" in CV

1. <https://www.e-flux.com/journal/65/336347/the-vectoralist-class/>

one research collective

* Waste Pedagogy



1 / Waste is a category/construct - a name given to an intellectual, physical or affective encounter - produced by wider structures and

institutions.

The modes of waste we expand on take place in the context of active collective thinking, research and writing. Creating waste is a process of sorting, picking, choosing, and/or of placing value upon ideas and issues. We might understand waste-making as a resistance to plurality and discord amongst thinkers and ideas.

value - beyond usage value >> academic waste yes academic waste too (spaces of excess which also alludes to outside of traditional academic economy, something along the lines of desire perhaps)

If the production of waste is a necessary impetus for the delineation of what is 'productive', 'valuable' and 'useful' in brainstorming, the line between waste-non-waste is always context specific and in flux. We approach waste as a category that is produced by both the researcher and the institution. How can we access these mounds of waste to give way to its political/liberatory elements? What happens when we find value in what is already used and marginal and we fail to act as expected by the larger social consensus/system of knowledge?

It is tempting to think of this in terms of supply chains and pipelines - how waste and rubbish is organised and who does this work (and position of waste in economy)? Parallels with radical pedagogy, rejection of banking model (its relation to economy and the marketisation of research).

2 / Waste as a breach between what you think is academically expected and what your initial thought, research question or curiosity is.

Systems of knowledge production within learning institutions encompass how and which questions are posed and the possibilities that they must always exclude.

It got me thinking, is rendering always the same as producing?
Can we render something non-productive?

Being-with waste opens to a practice of attention, experimentation and invention. Where we might usually discard a feeling about a research question, how could we hold on to that sensation in order to question our positionality in research? What does it mean to follow and question a feeling of discomfort?

3 / Waste as free-association: it is letting yourself be guided by an image, a smell, a feeling or word into another thought that is somewhat further away from that first encounter.

To work with and through waste is to attend to the texture of thought in its multiplicity of perceptions, affects, and immediacy. To refuse a center and instead inhabit peripheral spaces. *Thought is textured: always more than intellectual-theoretical, an archive of experience, both past, present and immediate. The texture of thought is a culmination of conscious and unconscious affects, both bodily and intellectual.

Thinking of the adage, "one man's trash is another's man's treasure", but also of the lost labor that 'waste pedagogy' implies, perhaps in opposition to brainstorming (where that loss is implicit/automatically accepted).

Can our collectivity embrace and bring together all the 'debris' of our experiences, the things that were felt but unsaid between us?*

How do you relate Waste Pedagogy with time, specially with the idea of wasting time?

4 / Wasting is a rupture in the tempo of thinking.

There is a temporality to the act of discarding. As thinking is kinetic, a rupture in the tempo of thinking is echoed in the body. Perhaps engaging with these breaks we refuse to re-enter what would be a continuous and seamless thought-process. We identify that working through waste encompasses mental labor, intellectual and emotional anxieties driven by academic trends, theoretical visibility, competition...

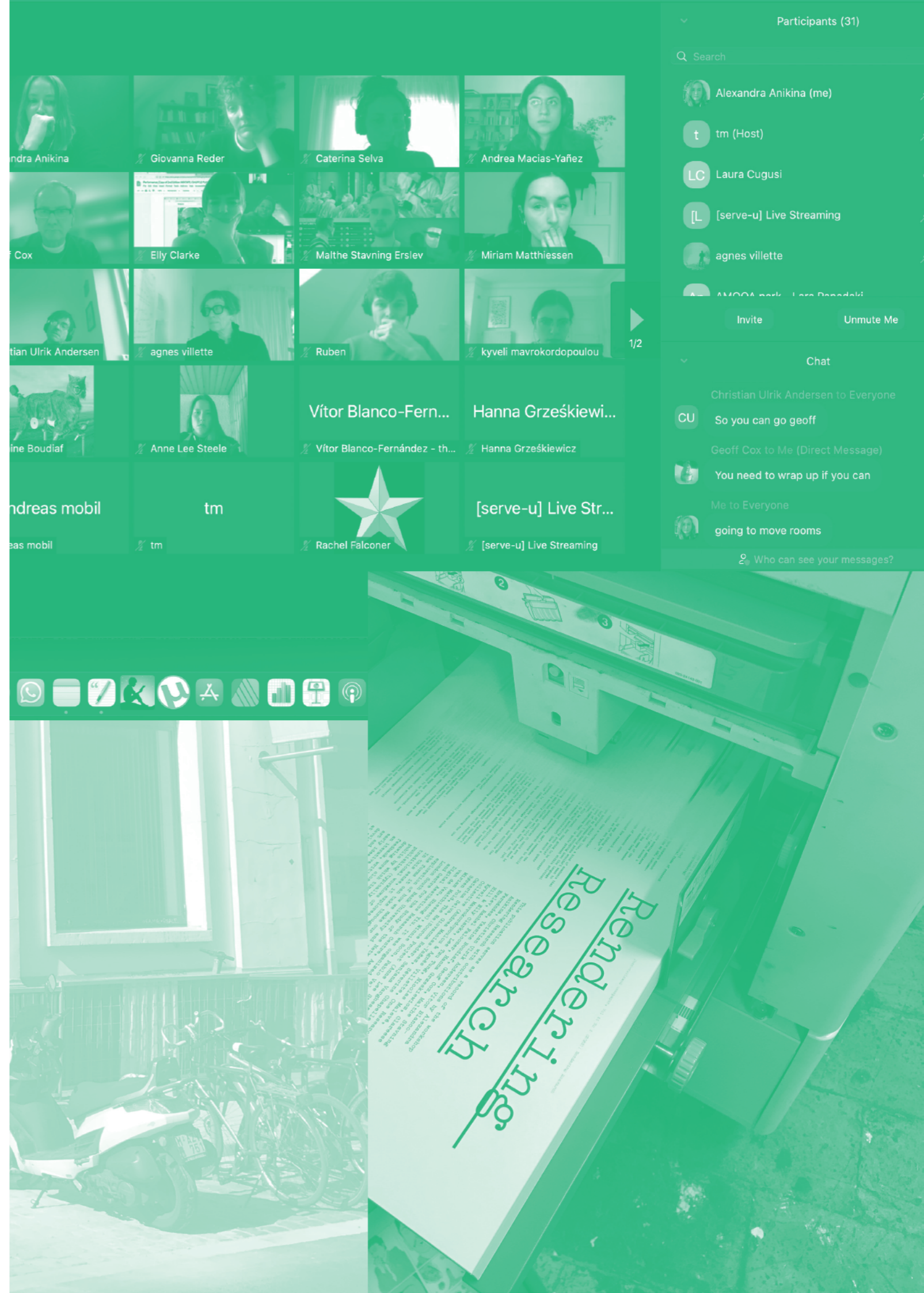
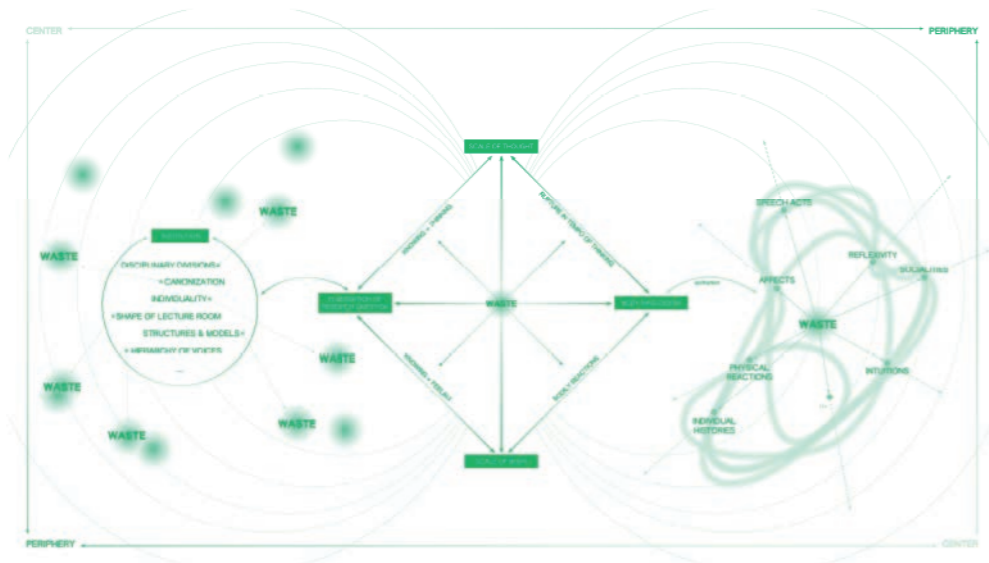
5 / Waste as an error, irrational, divergent, decadent, the non-fruit of labor. A silence, a bodily posture, and/or constellation of supposed 'peripheral' affects to be brought back to the centre.

How has working with waste affected your process with each others' ideas - but also the way that you view other material practices?

How can we expand from affects and thoughts that would otherwise be considered disruptive? When interrogating the potential of debris we are exploring the space of what remains in a research. How can we retrace these processes of erosion? How can we reassemble the scattered traces in the always peripheral space of waste, a space that cannot be rationally organized? Waste pedagogy can be unsystematic and open-ended to amplify the in-between space between thinking, feeling and knowing.

6 / Waste as collective and always relational.

how much are you drawn towards / repelled from a consensus - seeking drive when consolidating waste theory as a collective?



~Collective thoughts on Rendering Research were collated on a pad with a wider public. A full version can be found at [<https://pad.vvvvvvvaria.org/rendering>] (<https://pad.vvvvvvvaria.org/rendering>)

defeating the fear of blank page by writing this thank you +1 +1 +1+1
developing new or old paradigms that break out of tired instrumental forms of research
- less problem-solving and more problem-posing
speaking into the silence

learning from the silence +1, i often feel so much pressure to have constant speech
and sound in the digital space, and to use a voice that feels like an odd, customer-
service version of my own - yes!

ambient sound+1 in translation is like those youtube videos 'cafe working ambiance
environment' yes! keys tapping, a hum... sounds from another era.. 'office sounds 4
hours' hehe, i reckon that'll have a following.. tap tap click click
are we ready to let go of territory and landscapes of research in the name of the
deviation of rivers that always flow downstream? or render always another term needed
for 'final' (when reaching a moment to render public)

Rivers will always flow downstream while we imagine our landscape of research over
their riverbeds

Maybe one can think of the importance of "enunciation" in research? How research is
spoken?

How is science and research spoken and how does it take place - by way of hiding the
enunciation/the one who speaks (often). Avoiding placeholders such as "I" and "you" -
whose reference depends entirely on the. here and. now.

Also interesting how most presentations use a formal English, rather than a vernacular

one.+1, makes me think of what 'vulgar academia', as in 'vulgar politics' would look like, a kind of academia that
is more fit for campfires than the ivory tower, and accessible!! half of my friends/family probs wouldn't want to
understand the current pad haha.hahah yes! I would love to see more of that. I think stripping down the language
we use to make sure we are understood is really important. It is something that is quite present within political
organising, but gets lost the moment you enter an 'academic' space.

Wondering where all these digital impulses as words and thoughts will be stored. Are they going to be stored?
which kind of knowledge are we producing, is that even material, do digital materiality even exist?

How queer can research be? How queer can research get? (while in academic institution?) (how about a queer
institution?)

what happens if it truly is all queered? how can we better imagine that? i read somewhere, can't remember the
source, that queering academia means to build an academia (academiaS). Perhaps queering research means to build
research(researchES)

We need to get into a more messy idea of what the act of queering could be perhaps - otherwise it could act as
an obtuse mode of othering or always oppositional - maybe? yes, a mess that allows as well +1+1 yes. more mess is
generally a good thing. +1 (I love mess and chaos) mess and chaos is actually the only thing we can rely on. just
about. everything else is a performance.

Gap-making... consciously, inviting others to stitch with fragments, to do the work to construct understandings
- challenge that notion of being given whole, completed 'resolved' ideas - acknowledge the work and cultivate the
work.+1+1

Science and research are at the origins of the queer struggles. How can one accept queer people and lives be the
object of a research if speaking from a queer standpoint?

Is rendering a conclusive action? If so, or whenever it is, how can conclusion be included in queer politics and
lives which are fully about transformation and transition?+1 +1 Yes I've also been thinking about how to render
the unfinished, not just as a "work in progress" but as never finished +1+1+1

Can we talk about our ideas without quoting academic text? academic language? or how to construct an argument/write
an academic without any reference - would add that there are very compelling examples of academic texts that don't
use academic language: see the work of Shiloh Krupar the Hot Spotter's Report notably, that draws on the rhetorical
power of satire and camp to speak back to absurd realities

How can we test the flexibility and limits of academia to accept collective thinking and knowledge sharing for the
longest periods possible without any rendering?

What does it mean 'to rendering something'?

Do you need all the ingredients or tools to render something 'proper'/acceptable?

if not, how much freedom does one have, or where can one make freedom (i fear the ingredients still remain stuck
in language, style + institution)

From speaking aloud, to writing within

to typing together. enjoying someones type/taps/texts. It's stopped.

writing alongside people we do not know.

let's break out of the authorship nonsense - and reputation economic sof research; yes please !

while acknowledgement and credit for intellectual work are important, it is also urgent to operate beyond the
narrative framework of "the hero's journey" both as subject and object of narration in academic research i agree
totally with this.+1

How can we break out of academic engagement when the language of academia is one that often disenfranchises as much
as it empowers? (what often feels like its innate inaccessibility)+1+1+1+1+1+1 +1+1

so many talk about frustrations with academia and yet they do not reflect on the language they use - the
inaccessibility and alienation that result means that the problems with 'academia' continue to be perpetuated, and
it continues to be exclusionary

^+++^ access, intelligibility, engaging others X relying on creating your own networks to combat the alienation
and then ending up perpetuating same things -> needs to open up

Isn't it about introducing, or rescripting modes of articulation - beyond the presentation/slideshow/paper/
conference, etc? Existing forms are encoded by the institutions.

yes also at least choosing arxiv instead of academia.edu [need platforms that enable academic exchange freely]
yes - platform use as a form of politics, pads instead of google docs, etc.?

The restrictions of participating in academic / para-academic research means that compromises are made all over
- linguistic, methodology, partnerships... it's self-censorship for economic survival... trying to creatively and
secretly make spaces for moments of joy / resistance / justice.

loved hanging on the pad with you all <3+111+1+1+1+1+1~

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