



<http://revistes.ub.edu/index.php/matter>
EIGHTH ISSUE (July 2023)
ISSN: 2604-7551

EIGHTH ISSUE



UNIVERSITAT DE
BARCELONA

EDITORIAL

Monika Rogowska-Stangret / p. I-IV

DOING INFERTILITY: AN AGENTIAL REALIST APPROACH TO THE EXPERIENCES OF WOMEN WITH 'ATYPICAL' DEVELOPMENT OF THE REPRODUCTIVE SYSTEM

Caynã de Camargo Santos / p. 1-21

WEAVING RHIZOMES IN PHOTOGRAPHY RESEARCH

Lorena R. Bañares / p. 22-40

THE INFALLIBLE AND THE SPECTER – MANIFESTING (ARTIFICIAL) SUBJECTIFICATION IN FEMALE SEX ROBOTS

Gosia Wojas / p. 41-53

HUMAN-ANIMAL RELATIONSHIPS, SILLINESS, AND QUEER HOMEMAKING IN SVEN NORDQVIST'S *PETTSON AND FINDUS*

Arwen Rosenberg-Meereboer / p. 54-68

THE JOURNEY OF LATE DIAGNOSIS OF AUTISM FROM AN AUTOETHNOGRAPHIC, NEUROQUEER, AFFECTIVE AND PERFORMATIVE PERSPECTIVE

Tània Codina / p. 69-83

SYMPOIESIS

Camilla Bernava / p. 84-87

BOOK REVIEW OF *VISUAL PARTICIPATORY ARTS BASED RESEARCH IN THE CITY: ONTOLOGY, AESTHETICS AND ETHICS* (Eds. TRAFÍ-PRATS, L. & CASTRO-VARELA, A., 2022)

Blanca Callén Moreu / p. 88-91

HAUNTING THE WAY IN NEW MATERIALIST ECOCRITICISM. BOOK REVIEW OF *SPECTRALITY AND SURVIVANCE. LIVING THE ANTHROPOCENE* (GRECH, M., 2022)

Sam Le Butt / p. 92-97

THE RESILIENT STAIN. BOOK REVIEW OF *THE THREE SUSTAINABILITIES: ENERGY, ECONOMY, TIME* (STOEKL, A., 2021)

Amanda Boetzkes / p. 98-101

MATTER

journal of new materialist research

Universitat de Barcelona

EDITORIAL
8 ISSUE

Editorial

Editorial

Editorial

Monika Rogowska-Stangret (ORCID: 0000-0002-8317-8562)
University of Bialystok

DOI: <https://doi.org/xxx/xxx>

Recommended citation:

Rogowska-Stangret, Monika (2023). Editorial. *Matter: Journal of New Materialist Research*, 8, I-IV.
University of Barcelona. [Accessed: dd/mm/yy]. <https://doi.org/>



The texts published in this journal are – unless otherwise indicated – covered by the Creative Commons Spain Attribution 4.0 International licence. The full text of the licence can be consulted here: <http://creativecommons.org/licenses/by/4.0/>

The issue of “Matter: Journal of New Materialist Research” we offer our readers this summer consists of articles, texts, and reviews that undertake and address a variety of research topics, methodologies, and approaches within new materialisms. This issue is about putting theory into practice. Through this very gesture complex and multilayered entanglements and relationalities are revealed and questioned: How do biology, medical conditions, politics, and economy operate in performative conversations? How is an effort to produce knowledge otherwise permeated with bodily-technology and collective becomings beyond binary logics? How can human-non-human encounters challenge the object-subject division? How to look for “queerer forms of intimacy”, to create a “community of oddkin”, and “defamiliarize” the apparently familiar? How is neuroqueerdiversity experienced, felt from within, constructed, and performed? How might it guide us into more just human-more-than-human entangled worlds? The authors contributing to this issue are challenging readers with the above-mentioned questions which introduce a range of topics and approaches. We are invited to think about infertility through Karen Barad’s agential realism; we trace struggles to think the unthought together with Gilles Deleuze and Félix Guattari’s notion of rhizome and photography as research practice; we follow the reflection on female sex robots motivated by questions raised by psychoanalysis, phenomenology, and feminist philosophy; we are introduced to a children’s book series to search for the queerer forms of being-with human and more-than-human; and finally we embark on a journey through an autoethnographic account, informed by theories of affect, new materialisms, performativity as well as by the author’s art practice and experiences. All those rich and multifaceted analysis, meditations, and practices (theoretical, artistic, political) touch the heart of what new materialisms is (at least to my understanding): the entanglement of knowledge production and politics. Thus, thinking and practicing otherwise in research, but also and at the same time, engaged in the practice of community building, being

responsible for how knowledge is produced and performed as well as of imagining and bringing forth more just worlds.

Caynã de Camargo Santos in *Doing Infertility: An Agential Realist Approach to the Experiences of Women with ‘Atypical’ Development of the Reproductive System* zooms into the topic of infertility associated with Mayer-Rokitansky-Küster-Hauser (MRKH) Syndrome. Showing the limits of traditional biomedical and sociological approaches that both – paradoxically – preserve biological determinism, the author puts agential realism to work demonstrating its potential to grasp infertility as performed, rather than a stable, determined, biological condition. Santos diffracts chosen accounts by interviewed women diagnosed with MRKH using notions from Barad’s vocabulary such as indeterminacy, posthuman performativity, material-discursive phenomena, and apparatus of bodily production, to think infertility otherwise – as a doing, not a given. In his analysis, meanings-bodies-politics-economics-medicine are dynamically grasped in the making as (re)producing infertility.

Lorena R. Bañares in her *Weaving Rhizomes in Photography Research* is invested into producing knowledge differently. Taking Deleuze and Guattari as her companions in disrupting dualistic logic to open the new, to encounter the (un)thought of, and to grasp thought-world in motion, Bañares experiments with photography as both artistic and research practice. The author’s practice puts together the dynamic nature of bodies-environments (what she calls “rhizomatic becomings”), human de-centering, inviting chance and contingency into the process, collective work, the apparatus of bodies-technologies (through camera prosthetics, bodies cameras), and the appreciation of the movement that always escapes efforts to stabilize it. Through reflecting on philosophical notions such as rhizome and sensing the becomings of photographic images of Cambodian Angkor temples, readers are inspired to practice this experimentation themselves! Conscious of the limitations of such prescriptions, the author shares eight

clues on how to “take the risk and uncover the sublime” in research-creation.

Gosia Wojas in *The Infallible and The Specter – Manifesting (Artificial) Subjectification in Female Sex Robots* performs an artistic-philosophical meditation on female sex robots. Aware of the rich history of artificial dolls that places readers in a sphere where fiction and reality, desire and fear, freedom and subjugation, utopian dreaming and dystopian nightmares intermingle and aware of the ongoing processes of objectivization of women’s bodies, the author embarks on a philosophical journey into imagining subjectification of female sex robots: objects with “subjectivity” potential. Asking, what would it “mean to embody subjecthood for this object”? Would it be emancipatory (for what/whom)? Who are “humans” face-to-face with an artificial “human”? What might the “self” be in the eyes of artificial “self”? And to paraphrase Jean Luc Nancy’s quote from the beginning of the article, can touching an artificial being be life itself?

Arwen Rosenberg-Meereboer in *Human-Animal Relationships, Silliness, and Queer Homemaking in Sven Nordqvist’s Pettson and Findus*, examines children’s book series that features a human named Pettson and his cat Findus as main characters. Relation between the two is a starting point to search for an insight into queer and more-than-human kinships and practices of home making that are grasped as multispecies and “multibeings” endeavours. This vision does not contribute to a harmonious life, it is marked by tears, lack of attunement, quarrels, and disagreements. But still it is infused with an effort to create a community of oddkin, “non-normative intimacies”, “defamiliarized” home-spaces, and “queerer forms of intimacy”. This is all possible thanks to – in Rosenberg-Meereboer’s words – the “proximity to insanity” of Pettson and his “queer silliness”. This feature allows him to be curious “of what others assume is unimportant” (or obvious) and in result it enables Pettson “to enter into new and different forms of relation and action”.

Tània Codina in *The Journey of Late Diagnosis of Autism from an Autoethnographic, Neuroqueer, Affective and Performative Perspective* mobilizes autoethnography, critical disability studies (specifically – critical autism studies), affect theory, new materialisms, performative arts and theory to uncover, recover, and discover the “autistic way of being”, of voicing, of relating. She juxtaposes two approaches to autism: the pathology paradigm that contributed to the stigmatization of autistics and the proliferation of stereotypes concerning their condition, and the neurodiversity paradigm that appreciates mind-body differences. Codina brings together neuronormativity and heteronormativity to show how they work to pathologize, exclude, silence, and wipe out diverse communities. Through her own memories, video performance, and the concept of gender performance, the author offers a “neuroqueering” perspective to destabilize the *status quo* that defines what is superior, desirable, and “normal”. The efforts behind those reflections are not purely theoretical, Codina is engaged in thinking “a place of compassion and community” for all and constructing “bridges between all kinds of neurodiversities”.

Contributions in the section *Almanac and Affecting Affirmative Reviews* only strengthen some of the topics mentioned above.

Camilla Bernava in her entry on sympoiesis dives into the genealogy of the notion that stimulates seeing the world not through individual, separated entities, but through relationalities and entanglements to “restore multiplicity” rather than repeat the logic of the same.

Blanca Callén Moreu reviews the edited collection of essays entitled *Visual Participatory Arts Based Research in the City: Ontology, Aesthetics and Ethics* (2022) edited by Laura Traff-Prats and Aurelio Castro-Varela and gives the readers a chance to rethink the city by “break[ing] with human exceptionalism, centrality, and privilege”. What is the city? What might it be if we dare to re-imagine it “through the proliferation of encounters with the minor, the everyday, and the historically silenced

(under-commons)”? “How can experiences of research based on participatory visual art help to make the city more habitable for everyone, outside of productivism and neoliberal logics?”, “more just for all, human and non-human”?

Sam Le Butt shares with the readers her reflections on *Spectrality and Survivance: Living the Anthropocene* (2022) by Marija Grech. Le Butt – following Grech – directs our attention to imperialist, colonial, and anthropocentric violences embedded in and percolating through the Anthropocene and ways it is narrated. Importantly, Le Butt stresses the author’s struggles to challenge those violences by attending not only to the question of materialism of textuality but also to the textuality of materialism and by not letting the question “who gets to survive in these futures” disappear.

Amanda Boetzkes reads *The Three Sustainabilities: Energy, Economy, Time* (2021) by Allan Stoekl to return to a notion of sustainability – one of “a curious position [...] insofar as it has been demystified as a shallow cultural covering that enables a closed economy rather than resolving global-scale ecological challenges”. Again, we are left with the critical question: “what/ who might it [sustainability] sustain, and for what/ whom?”. Boetzkes thinks-with Stoekl’s efforts to understand the notion of sustainability

otherwise – as a form of resilience: “the effort to embrace what should be resisted for the sustainability of humanity, and to adapt to the unstoppable passage of time and life into total death” and – following Stoekl – poses an important question: “what *collective* disposition will help us carry these thoughts in a lived way?”.

The authors in this volume invite readers to revisit the old paths and to forge new ones, asking us to rethink what and how we see, feel, conceptualize, create. They are trying to grasp the dynamic entanglements of the worlds of which humans and more-than-humans are parts so that “we” could see otherwise and then look again to – as Donna Haraway wrote in *Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective* (1988) – “become answerable for what we learn how to see”, feel, research, diagnose, photograph, build communities and bridges, make homes and (odd)kins.

Acknowledgements

Thank you to Sam Skinner for proofread.

Author information

Monika Rogowska-Stangret

ORCID: 0000-0002-8317-8562

m.rogowska-stangret@uwb.edu.pl

Monika Rogowska-Stangret, Assistant Professor at the Institute of Philosophy, University of Białystok, philosopher conducting research at the intersection of feminist philosophy, environmental humanities, and critical posthumanism, translator. She was a member of the Management Committee in the European project *New Materialism: Networking European Scholarship on “How Matter Comes to Matter”*, European Cooperation in Science and Technology (COST), Action IS 1307 (2013-2018). She published in, among others, „Feminist Theory” (2020), „Philosophy Today” (2019), „The Minnesota Review: A Journal of Creative and Critical Writing” (2017). She is the editor-in-chief of “Matter: Journal of New Materialist Research”.

MATTER

journal of new materialist research

Universitat de Barcelona

ARTICLE
ISSUE 8

Doing infertility: an agential realist approach to the experiences of women with ‘atypical’ development of the reproductive system

Fent infertilitat: un abordatge realista agencial de les experiències de dones amb desenvolupament “atípic” del sistema reproductiu

Haciendo infertilidad: un abordaje realista agencial de las experiencias de mujeres con desarrollo “atípico” del sistema reproductivo

Caynnã de Camargo Santos (ORCID: 0000-0003-4069-1363)
Centre for Social Studies, University of Coimbra

Date of submission: March 2023

Accepted in: July 2023

Published in: July 2023

DOI: <https://doi.org/xxx/xxx>

Recommended citation:

Santos, Caynnã de Camargo (2023). Doing Infertility. *Matter: Journal of New Materialist Research*. Issue 8, 1-21. University of Barcelona. [Accessed: dd/mm/yy]. <https://doi.org/>



The texts published in this journal are – unless otherwise indicated – covered by the Creative Commons Spain Attribution 4.0 International licence. The full text of the licence can be consulted here: <http://creativecommons.org/licenses/by/4.0/>

Abstract

The current focus of feminist literature on the workings of new reproductive technologies has overshadowed a conclusion that also follows from approaching questions related to bodily reproductive capacities from a perspective informed by the relational ontologies advocated by feminist new materialisms, namely: like fertility, *infertility is not an independent, strictly biological property inscribed a priori in human bodies*, but rather consists of a phenomenon performatively enacted through specific material-discursive practices. To further explore this argument, this article proposes a reading of embodied experiences of infertility *through* Karen Barad's (2007) agential realism and *their* theory of posthumanist performativity. The text is structured around excerpts from interviews with women diagnosed as infertile due to Mayer-Rokitansky-Küster-Hauser syndrome. We seek to demonstrate how an ethico-onto-epistemological shift from "things" to material-discursive phenomena opens up important possibilities for developing new understandings of infertility that can overcome the limitations of both traditional biomedical and sociological approaches.

Keywords

Infertility; Agential Realism; Posthumanist Performativity; Mayer-Rokitansky-Küster-Hauser syndrome; Economic Sterilisation.

Resum

L'enfocament actual de la literatura feminista sobre el funcionament de les noves tecnologies reproductives ha eclipsat una conclusió que també s'origina en abordar qüestions relacionades amb les capacitats reproductives corporals des de les ontologies relacionals com els nous materialismes feministes: *igual que la fertilitat, la infertilitat no és una propietat independent, estrictament biològica, inscrita, a priori, als cossos humans*, sinó que un fenomen performatiu que es produeix a través de pràctiques materials-discursives específiques. Aquest article pretén aprofundir aquest argument. Per fer-ho, fa una lectura d'experiències encarnades d'infertilitat a través del realisme agencial de Karen Barad (2007) i la seva teoria de la performativitat posthumanista. El text s'estructura al voltant de fragments d'entrevistes amb dones diagnosticades infèrtils per la síndrome de Mayer-Rokitansky-Küster-Hauser i planteja demostrar com el canvi ètic-ontoepistemològic de "coses" a fenòmens materials-discursius obre possibilitats crucials per al desenvolupament de noves comprensions de la infertilitat. Aquestes són capaces de superar les limitacions dels enfocaments biomèdics i sociològics tradicionals.

Paraules clau

Infertilitat; Realisme agencial; Performativitat posthumanista; Síndrome de Mayer-Rokitansky-Küster-Hauser; Sterilització econòmica.

Resumen

El enfoque actual de la literatura feminista sobre el funcionamiento de las nuevas tecnologías reproductivas ha eclipsado una conclusión que también se origina al abordar cuestiones relacionadas con las capacidades reproductivas corporales desde las ontologías relacionales como los nuevos materialismos feministas: *al igual que la fertilidad, la infertilidad no es una propiedad independiente, estrictamente biológica, inscrita, a priori, en los cuerpos humanos*, sino que un fenómeno performativo que se produce a través de prácticas materiales-discursivas específicas. El presente artículo pretende profundizar este argumento. Para ello, realiza una lectura de experiencias encarnadas de infertilidad a través del realismo agencial de Karen Barad (2007) y su

teoría de la performatividad posthumanista. El texto se estructura alrededor de fragmentos de entrevistas con mujeres diagnosticadas infértiles por el síndrome de Mayer-Rokitansky-Küster-Hauser y plantea demostrar cómo el cambio ético-onto-epistemológico de “cosas” a fenómenos materiales-discursivos abre posibilidades cruciales para el desarrollo de nuevas comprensiones de la infertilidad. Estas son capaces de superar las limitaciones de los abordajes biomédicos y sociológicos tradicionales.

Palabras clave

Infertilidad; Realismo agencial; Performatividad posthumanista; Síndrome de Mayer-Rokitansky-Küster-Hauser; Esterilización económica.

Introduction

Infertility is not a new theme in feminist scholarship. Given the centrality traditionally ascribed to reproduction in normative models of femininity, several feminist authors (Thompson, 2002; Shanley & Asch, 2009; Guntram, 2018) have addressed the issue of involuntary childlessness over the decades, stressing, for example, how the essentialist notion of motherhood as necessary to womanhood characterises a source of particular suffering and stigma for women diagnosed as infertile. In recent years, however, issues of women’s reproductive health have become increasingly prominent in feminist literature, particularly in the context of current debates about the political, economic, and cultural implications of the emergence of new reproductive technologies (e.g. Herrmann & Kroløkke, 2018; Schurr, 2018; Weinbaum, 2019; Lafuente-Funes, 2020). Some of these works have drawn on the contributions of feminist science studies and feminist new materialisms, exploring the multiple and complex consequences of these biotechnological apparatuses that hold the promise of techno-scientific “enhancement” of human reproductive functions (Adrian, 2015; Lam, 2015; Meskus, 2021; Helosvuori, 2021).

However, the strong focus of these studies on the workings of new technologies of assisted reproduction and on the transnational high-tech fertility industry developed around them has overshadowed a conclusion that, I argue, also follows directly from approaching questions related to bodily reproductive capacities from a perspective informed by the relational ontologies advocated by feminist

new materialisms, namely: like fertility, *infertility is not an independent, strictly biological property inscribed a priori in human bodies*, but rather consists of a phenomenon performatively enacted through specific material-discursive practices.

With the aim of further exploring this argument and its rhizomatic reverberations, the present article proposes a reading of embodied experiences of infertility *through* Karen Barad’s agential realism and *their* theory of posthumanist performativity (Barad, 2003, 2007). The text is structured around excerpts from interviews with women who have received a diagnosis of infertility associated with Mayer-Rokitansky-Küster-Hauser Syndrome (hereafter MRKH). The medical literature (Morcel et al., 2007; Friedler et al., 2015) defines MRKH as a rare condition of the female reproductive tract, characterised by the congenital absence of the uterus and of all or parts of the vagina, due to a failure in the development of the Müllerian ducts at the embryonic stage. The ovaries, external genitalia and secondary sexual characteristics are not affected by MRKH. The participants’ accounts presented here were produced in the scope of a doctoral research whose main objective was to interpellate the experiences of women with MRKH from a sociological perspective informed by feminist new materialisms. The empirical stage of this research involved semi-structured interviews with women with MRKH from three different nationalities (Brazilian, Portuguese, and Spanish) who were recruited from public groups and pages about the syndrome on social networks. The interviews were

conducted online by the author through video calls between May and September 2020. The decision to conduct the interviews via video calls was based on convenience criteria as well as in response to the imperative of social isolation imposed worldwide by the COVID-19 pandemic. In this article we engage mainly with the testimonies of three of the participants: Marta, a 33-year-old Portuguese woman, and Larissa and Paula, two Brazilian women aged 34 and 46 respectively.¹

The discussions I propose are animated by the central understanding that the ethico-ontopistemological shift from “things” to material-discursive phenomena (Barad, 2007) opens up important possibilities for developing new understandings of infertility and human reproductive capacities that can overcome the limitations of both traditional biomedical and sociological approaches (Meskus, 2015; Helosvuori, 2021). In other words, I argue that agential realism, through its distinctive emphasis on entanglements and relationality over separability, provides a rich ontological framework and invaluable thinking technologies for the political-theoretical exercise of “thinking infertility otherwise”.

The article is structured as follows: First, by evoking Paula’s testimony as a point of departure, I seek to demonstrate how the traditional biomedical and sociologically informed positions on infertility, despite their seemingly irreconcilable differences, share a tacit affiliation to an ontology of the physical body that preserves spaces susceptible to appropriation by biological determinism. I also suggest that agential realism can be instrumental in complementing and advancing the post-structuralist critique of such previous approaches. Next, I propose a diffractive reading (Barad, 2007) of participant Marta’s testimony through the quantum principle of ontological indeterminacy, from which I derive the foundations of an alternative way of thinking (in)fertility as a material-discursive phenomenon. The next section puts the previous theoretical formulations to the test

through a detailed analysis of Larissa’s accounts of her embodied experience of infertility associated with MRKH. At this point in the discussion, my efforts are devoted to exploring the complex material-discursive processes through which infertility in Larissa’s accounts comes to matter in the double sense of becoming material and of ethico-political concern. Finally, the conclusion elaborates on the ways in which a reading informed by agential realism radically transforms widely shared understandings about what is “naturally” possible and impossible for bodies with MRKH.

The limits of biomedical and social model-based readings

Paula, a 46-year-old Brazilian woman, recalls the moment when, as a teenager, she received the news of having MRKH. Interestingly, the focus of her story is not on the newly discovered rare congenital condition, but on the diagnosis of infertility that accompanied it:

[i]t changed everything, everything, everything... [...] I wanted to get married, I wanted to have children, and then, when you find out that you are not going to live these normal processes of everyone... Wow, that was death for me! God, infertility was the worst thing for me.

[Interviewer] Infertility played an important role then...

Very much so! It threw me to the ground! It was what made me suffer the most and from time to time it [still] makes me suffer [...] How does a girl not cry when she finds out she can’t be a mother? (Paula, personal communication, June 1, 2020).

This account exemplifies the dominant tone that permeates the interviewees’ remarks about the reproductive limitations associated

¹ To ensure anonymity, participants were given fictitious names. All study participants provided written informed consent, and data processing was

conducted in accordance with the General Data Protection Regulation (European Union Regulation 2016/679).

with the syndrome. Majoritatively signified as a source of profound suffering, infertility is also repeatedly understood by the participants as a fundamental obstacle to the establishment of lasting relationships and as an impediment to leading a “normal life” (Paula, personal communication, June 1, 2020).

Let us look closer at how medical discourse addresses the relationship between MRKH and reproductive capacity. Biomedical approaches focus on abnormalities of the female reproductive organs and identify women with MRKH as suffering from *absolute uterine factor infertility* (Heller-Boersma et al., 2009; Richards et al., 2019; Herlin et al., 2020), defined as “a form of infertility whereby conception and/or maintenance of pregnancy is impossible owing to uterine absence or dysfunction” (Jones et al., 2021, p. 138). Such an understanding is evident in the words of another participant who, at the age of 17, after an ultrasound scan, reports being told by a doctor “you don’t have a uterus and you will never be able to become a mother” (Clara, personal communication, June 8, 2020). The same fatalistic tone is found in the account of yet another interviewee, a nurse with MRKH who refers to infertility as “that for which there is no solution” (Maria, personal communication, June 19, 2020).

From these statements, it is clear that the biological perspective that underpins medical discourse considers the reproductive capacity of bodies of women with MRKH in strictly causal, deterministic and universal terms: since the uterus is one of the main organs of the female reproductive system, and since women with MRKH have no uterus, it follows that women with MRKH are invariably infertile. Put differently, by defining the essence of infertility (the absence of the uterus), biomedicine defines infertility as an essence – as a biological limitation intrinsic to such bodies in all spaces and times, and responsible for condemning these women to the shared experience of “never be[ing] able to become a mother” (Clara, personal communication, June 8, 2020).

A sociologically informed analysis, in turn, would be devoted to considering the complex ways in which different sociocultural formations signify women’s reproductive capacity, defining socio-historically particular ways of experiencing it. Such an approach, by “[focusing] on the productive intervention of cultural interpretation and the difference that context makes” (Kirby, 2017, p. x), would emphasise the inadequacies of strictly biological readings of infertility, accusing them of carrying out an undue universalisation of the condition and falling prey to pernicious biological reductionisms and essentialisms.

From the late 1960s and early 1970s, theorists and activists began to develop interpretations that, influenced by contributions from fields such as sociology, anthropology, and political sciences, sought to denaturalize and politicize the experiences of restriction and suffering traditionally conceived by medical discourse as immanent to certain bodily and biological attributes (Fontes & Martins, 2016). Among these proposals, the British social model of disability (henceforth “social model”) has been particularly influential (Union of the Physically Impaired Against Segregation, 1976; Finkelstein, 1980; Oliver, 1990). It offers insights that enable us to formulate a more complex and socially informed understanding of infertility, representing a powerful alternative to biomedical approaches both theoretically and politically.

A key feature of the social model of disability is the shift in focus it promotes: from corporeal traits to the social, political, and cultural aspects of constructions of health and disability, including the social norms that define certain physical characteristics as indelible marks of inferiority and abnormality (Minich, 2016; Geerts et al., 2022). One of the defining elements of this model is the influential distinction it makes between impairment and disability. Analogous to the sex/gender distinction of early second wave feminisms, the social model contrasts impairments, understood as natural and objective characteristics of individual bodies, with disability, defined as the social,

environmental, and attitudinal barriers that prevent individuals with impairments from fully participating in society and relegate them to positions of abnormality and stigma (Shakespeare, 2004). Proponents of the social model will argue that a fundamental aspect of disability is the socially constructed meanings attributed to impairments, which underpin dynamics of social oppression and psychological suffering (Shakespeare, 1994; Barnes, 2012).

This analytical framework provides valuable starting points for non-essentialist approaches to the experiences of infertility of women with MRKH. Drawing on the social model and its distinction between impairment and disability, we can clearly see that the suffering and the psychological and social costs so present in our interviewees' accounts of being diagnosed as infertile are not natural and inevitable products of functional limitations *per se*, but rather the effects of social norms. Normative models of femininity promulgate motherhood and reproduction as the foundations of normal and desirable female subjectivity, thus relegating women with MRKH to the position of incomplete individuals. These normative models are responsible for converting a natural expression of human biological diversity (the impairment) into a "pejorative difference" (Braidotti, 2006, p. 130). The focus of political struggle, therefore, would be to transform these social norms, in order to change the current situation whereby women who do not conform to this reproductive imperative are considered abnormal. In other words, the social model of disability highlights that there is no necessary causal connection between the natural impairment present in the bodies of women with MRKH and the way infertility is socially experienced as a burden and a source of stigma.

However, despite its merits, such a reading does not seem to be radical enough in its effort of denaturalisation, in the precise sense that (to briefly refer to the famous Marxian definition of radicalism) it does not reach the roots or foundations of the problem it seeks to overcome, namely biological essentialism.

This approach remains grounded in a dualistic mode of thinking, assuming a rigid separation between the natural and the social. Indeed, by focusing primarily on the norms that convert natural difference into social inferiority, the social model relegates organic properties and corporeal attributes to the condition of pre-existing, stable, and independent biological spontaneity, as opposed to the constructed, variable and relational character attributed to the historically specific structures of intelligibility that signify these bodily characteristics and shape the particular ways in which they are experienced in each context. That is, socially constructed infertility, on these readings, retains an ontological status apart from its construction, one that resides beyond the critical-analytical reach of the social model.

In recent decades, theorists influenced by post-structuralist perspectives have offered critical insights into the social model. These critiques have highlighted that the model's dualistic and foundationalist character has left untouched the metaphysical underpinnings that sustain the biological determinism it initially aimed to challenge. Michel Foucault's work on the productive nature of power and its inseparability from practices of knowledge production has been particularly important in these efforts (Anders, 2013; Feely, 2016). Shelley Tremain (2005; 2015) uses Foucault's work to argue that impairment itself "is not a 'natural' (i.e., biological), value-neutral, and objective human characteristic or aspect of human existence that certain people possess or embody" (Tremain, 2015, p. 31), but rather is socially constructed; it is "the naturalised and materialised outcome of a classification initially generated in certain culturally- and historically- specific medical, administrative, and juridical contexts to facilitate normalization" (Tremain, 2015, p. 31). Drawing on Foucault's theorisations of the contemporary workings of biopower

regulatory apparatuses (*dispositif*)² (Foucault, 1978) and Judith Butler's insights on how purportedly objective discourses about an ahistorical and pre-discursive biological body contribute to the performative materialisation of the very bodily 'facts' they claim to represent (Butler, 1993), Tremain (2015) advocates for a historicist and relativist feminist theory of disability. This new approach focuses on destabilising the premise that there is a pre-discursive bodily materiality beyond the reach of socio-political operations of power. Building on this reading, the author collapses the distinction between impairment and disability, affirming that

[t]he idea that there is an ahistorical and pre-discursive materiality of the body – that is, the very idea of a natural, material human body that exists apart from, and prior to, history and linguistic and social practices and policies, a body that can be immediately and transparently experienced – is itself the product of a certain historically-specific discourse about the human being (Tremain, 2015, p. 33).

The readings I propose in this article are intended to engage affirmatively with these previous post-structuralist contributions through the characteristic new materialist gesture of saying “yes, *and*” (Dolphijn & Tuin, 2012, p. 89). I believe that the insights of Karen Barad's agential realism, particularly its emphasis on the material dimensions of regulatory practices and their performative effects, can complement and advance the post-structuralist critique of previous biomedical and social model-based approaches.³ This will allow for the

realisation, within the context of a (new) materialist analysis of infertility, of Foucault's own objective of “show[ing] how deployments of power are directly connected to the body – to bodies, functions, physiological processes, sensations, and pleasures” (Foucault, 1978, p. 103). More specifically, I believe that agential realism can contribute to the effort of materially adjectivising post-structuralist arguments concerning the relational and historically constituted character of bodies and their properties, thus pointing directions for the construction of a political-theoretical framework that enables us to understand the *matter* of infertility (i.e., reproductive capacities “themselves”, and not only their meanings and cultural representations) as “always already an ongoing historicity” (Barad, 2003, p. 821).

With this in mind, I next undertake a diffractive reading of the remarks of a woman with MRKH *through* the quantum notion of ontological indeterminacy as theorised by Karen Barad (2007). A diffractive reading consists of a process of “reading insights through one another” (Barad, 2007, p. 25), which seeks to break the chain of repetition of “sameness” that pervades traditional processes of scientific knowledge production informed by the optical metaphor of reflection (Haraway, 2018). For Barad (2007), the most important aspect of the physical phenomenon of diffraction to be preserved by situated analytic practices concerns the co-constitutive nature of the movement of waves when they overlap or encounter an obstacle, giving rise to new combinations of waves – constructive and destructive patterns of interference. In the same way that waves do not mechanically reproduce “the same” when they interfere with each other or with obstacles, but relationally

² Michel Foucault (1980) defines *dispositif*, often translated as apparatus, as a heterogeneous assemblage of practices responsible for subjectifying and subjecting individuals, placing them simultaneously in a field of intelligibility and in a matrix of power. In an often-quoted passage from a 1977 interview, Foucault characterises the concept as “a thoroughly heterogeneous ensemble consisting of discourses, institutions, architectural forms, regulatory decisions, laws, administrative measures, scientific statements, philosophical,

moral and philanthropic propositions—in short, the said as much as the unsaid. Such are the elements of the apparatus. The apparatus itself is the system of relations that can be established between these elements” (Foucault, 1980, p. 194).

³ For detailed critical discussions of post-structuralist approaches within the field of critical disability studies from a new materialist perspective, see Siebers (2008) and Garland-Thomson (2011).

materialise something new (i.e. produce new combinations and patterns of diffraction), a diffractive reading promotes interferences between multiple ideas, data, and theoretical concepts, with the aim of observing how new insights emerge from these entanglements. Thus, by reading the remarks of participant Marta and the quantum notion of ontological indeterminacy *through one another*, I draw the basis of an alternative way of thinking about (in)fertility as a material-discursive phenomenon whose technological, political, economic, and social complexity makes any kind of biological determinism unsustainable.

Theorising (in)fertility *through* agential realism

Marta, a 33-year-old Portuguese woman, was diagnosed with MRKH at the age of 17. She states that the most difficult aspect of the syndrome for her to accept – in her own words, what characterised the “greatest pain” (Marta, personal communication, May 30, 2020) – was the reproductive restrictions associated with the condition. In recounting her story, and that of other women living with the diagnosis of infertility, she makes a claim that seems to challenge widely held beliefs about the reproductive capacity of women with MRKH:

[i]n cases of Rokitansky – it is a curious thing – we are infertile, but at the same time we are not (Marta, personal communication, May 30, 2020).

At first glance, this statement seems rather puzzling. After all, the biomedical understanding of the infertility of bodies with MRKH as an objective and empirically verifiable biological “fact” leaves little room for any attempt at relativisation, which gives the comment a paradoxical and counterintuitive character, something that Marta seems to recognise by qualifying it as “curious”. Let us diffractively read Marta’s statement *through*

one of the pillars of agential realism, the quantum principle of ontological indeterminacy.⁴

In the realm of quantum mechanics, physical entities can display variable characteristics and properties depending on the experimental circumstances to which they are subjected. In the famous double-slit experiment, for example, electrons sometimes exhibit wave-like and sometimes particle-like behaviour, alternating their status according to the modifications made to the apparatus mobilised to observe them (Barad, 2007, pp. 97-106). Drawing on the earlier theorisations of Niels Bohr, Barad (2007) points out that such experimental results denounce the insufficiencies of classical individualist metaphysics, which postulates the existence of autonomous entities with inherent and observer-independent attributes and properties. For Karen Barad, “there are no inherently bounded and propertied things that precede their intra-action with particular apparatuses” (Kleinman, 2012, p. 80) – that is, the determination of the nature of an entity depends on the specification of the apparatuses used in the act of its apparent observation. The physical arrangements that characterise each experimental context play a productive role – or as Barad (2007, p. 31) puts it, a proto-performative role – *vis-à-vis* the objects they would purportedly only observe from a position of exteriority. Therefore, according to the indeterminacy principle, entities do not possess essential, stable, and pre-existing properties independent of their contexts; rather, the apparatuses at work in each particular context are responsible for locally resolving the ontological indeterminacy of objects.

By alluding to a certain ontological ambiguity of the bodies of women with MRKH, claiming that they are both *infertile and not infertile*, Marta points to the fact that bodily attributes and capacities are relational realities that take on variable configurations according to the contexts in which they are embedded, rather

⁴ For a detailed account of the distinction between Werner Heisenberg’s uncertainty principle (fundamentally an epistemic principle) and Niels

Bohr’s indeterminacy principle, see Barad (2007, pp. 115-118 and 261-269).

than inflexible pre-existing essences. In this framework, reproductive capacities and context are not seen as establishing a relationship of rigid exteriority. The former is inextricably entangled with their social surroundings and only reach their particular instantiations through intra-actions with socio-material agencies and practices that *prima facie* appear rigidly extracorporeal, such as technological, political, economic, and cultural factors. According to agential realism, such contextual factors are “apparatuses of bodily production” (Barad, 2007, p. 140), that is, in similarity to the experimental arrangements in the double-slit experiment, they consist of agencies that situatedly and temporarily resolve the ontological indeterminacy of bodies with MRKH, performatively materialising them as capable or incapable of reproduction. While the constitutive apparatuses at work in each context are not specified, such bodies cannot, strictly speaking, be unequivocally defined as fertile or infertile. To put it in distinctly Baradian terms: prior to the specification of context, *(in)fertility is an im/possibility of all bodies, a bodily virtuality on the verge of becoming/mattering.*

In short, what emerges from the exercise of reading Barad’s theorisations and Marta’s commentary *through one another* is an invitation to resist the temptation to ascribe to bodies properties that remain immutable, universal, and independent of the contexts and of the material-discursive apparatuses that produce them. Since bodies are always already part of/in changing contexts, their attributes will also be in permanent transformation, according to the intra-actions that are established in different circumstances. In this sense, attempts to identify their eternal essences (characteristics that would be common to them in all spaces and times) are seen as efforts limited by classical individualist metaphysics and its illusory belief in the ontological independence of the entities of the world. The reading conducted points to the fact that reality is not composed of individually determinate entities, but of phenomena, where “phenomena” are the “ontological inseparability of objects and

apparatuses” (Barad, 2007, p. 128). Determinate entities (e.g. bodies and their predicates) do not precede relations, but emerge through and as part of relations.

With the aim of “weav[ing] flesh onto these theoretical bones” (Tuana, 2008, p.194) and testing the political-theoretical potentialities of these formulations, I proceed to analyse in detail the account of Larissa. My reading is animated by the following question: how infertility in Larissa’s accounts comes to matter in the double sense of becoming material and of ethico-political concern? To answer this question, the analysis attends to some of the material-discursive apparatuses – and their often overlooked lineages – that intra-actively produce the participant’s body as incapable of reproduction, while also illustrating how new meanings, interrogations, and ethico-political implications emerge from these constitutive intra-actions. To put the point in another way, in what follows I attempt to show how the material existence of infertility (infertility “itself”) is intra-actively enacted through the workings of material-discursive apparatuses of bodily production.

Bodies (not only) of flesh and bones: doing infertility

Larissa, a 34-year-old Brazilian woman from the city of São Paulo, discovered she had MRKH in her teens. At the age of 15, her mother took her to a gynaecologist because of constant cramps and the absence of menstruation. That first visit was followed by three more, with different specialists, until ultrasound scans revealed the characteristic malformations of the syndrome. In line with many of the other interviewees, Larissa, while recalling the moment she received her diagnosis, emphasises how infertility became the main and most enduring source of suffering associated with MRKH:

I could even “take” the syndrome, but the part of the doctor saying “You won’t be able to conceive, you won’t be able to have children” was the worst news I had. It was the biggest shock of my life! It is still the worst

news. Just today I martyred myself. I said, “My God, why was I born this way? Why did God choose me to be born this way? Why did it have to be me?” (Larissa, personal communication, September 17, 2020).

To some, the fatalistic tone that permeates the interviewee’s statements about the reproductive constraints associated with the syndrome may seem unjustified. These readers may point out that technological developments in recent decades have made it possible *for all women with MRKH* to achieve biological motherhood, thus overcoming an organic limitation that was previously thought to be inescapable. As Jones et al. (2021) put it, while “women with AUF [absolute uterine factor infertility] who seek parenthood have – until recently – had no option but to change their reproductive plans and either accept involuntary childlessness or acquire parenthood through adoption” (p. 139), technological developments in reproductive medicine now offer these women the opportunity to have genetically related offspring through reproductive arrangements such as gestational surrogacy (an embryo is created through *in vitro* fertilisation using the intended mother’s eggs and then transferred to a surrogate, who carries the pregnancy) or, more recently, uterine transplantation.

It should be stressed, nonetheless, that such a reading is not only marked by an unrealistic belief in the absolute efficacy of existing assisted reproductive technologies (a belief that is called into question by the modest overall success rates of these procedures)⁵, but is also based on the assumption that they are equally available to all individuals. This view obscures the heterogeneity of the positions occupied by women diagnosed as infertile in different historical and socio-geographical contexts, which give rise to different conditions of access to infertility treatments. As Adamson (2009) points out,

although around 9% of the world’s population experience some form of reproductive restriction, only a small portion of this group have access to current conceptive technologies due to barriers arising from a wide range of factors, extending from religious and cultural issues to government regulations.

Therefore, although the technological conditions exist for women with MRKH to achieve biological motherhood, the mobilisation of these technologies does not depend on the voluntarism of a supposedly autonomous and omnipotent human Subject (such a humanist figure is inconceivable in Karen Barad’s radically relational and posthumanist theoretical framework); on the contrary, a myriad of contextual forces operate in such a way as to create enormous obstacles to access to such technologies for large groups of people who could benefit from their use, thus directly affecting the real chances of these individuals to reproduce.

Informed by the agential realist conception that entities do not possess essential, stable, and ontologically isolable properties from the material-discursive agencies that define their situated conditions of possibility, I suggest that these restrictive contextual factors are best understood as apparatuses of bodily production that *situatedly and temporarily* resolve the ontological indeterminacy of bodies with MRKH, materialising them as incapable of reproduction. From this perspective, I propose to suspend the widely held belief that infertility is an essential characteristic of bodies with MRKH, in favour of a new reading that underlines the ways in which such a supposedly natural fact is produced through a wide network of material-discursive practices. More specifically, I claim that the infertility experienced by Larissa, far from being a fixed and non-relational biological essence determined by the congenital absence of the uterus, is a *socio-material phenomenon* – that is, it consists of a relational reality that is performatively and

⁵ For example, a study of the outcomes of gestational surrogacy in Australia and New Zealand in 2014 indicated significantly low success rates: clinical pregnancies were achieved in 29.9%

of the 157 gestational carrier cycles conducted that year, and live births occurred in only 22.9% of cases (Harris et al., 2016).

iteratively enacted through socio-historically specific intra-actions involving a multitude of heterogeneous agencies and practices.

A brief clarification of the particular conceptualisation of performativity to which I refer is essential at this point. On the one hand, I engage with Judith Butler's (1990) notion of performativity by affirming that infertility, like gender, is not a natural quality, but a reality that only comes into being to the extent that it is enacted through various practices (practices that claim to establish a relationship of rigid exteriority with an alleged "essential truth" to which they would report). On the other hand, I move away from poststructuralist linguisticism by emphasising that the productive potentials of performative practices are not limited to the level of epistemic structures of social intelligibility, but reach the bodies and their predicates in all their ontological dimensions – that is, the inability to have children is itself produced, and not merely its cultural meanings. Yet another departure from poststructuralist theorisations of performativity lies in the fact that I understand the agency involved in the processes of constituting bodies and their capacities as emanating from both human and nonhuman actants, thus overcoming the anthropocentrism that permeates, for example, Butler's gender performativity theory (Butler, 1990), in favour of a new materialist and posthumanist conception of performativity (Barad, 2003, 2007).⁶

Having presented my theoretical premises, I proceed to illustrate such positions by analysing some of the material-discursive

apparatuses responsible for producing the condition of infertility experienced by Larissa. In fact, one of the main aspects rendered invisible by discourses that uncritically celebrate an imagined universal availability of new reproductive technologies is the fundamental economic barriers that condition access to such techniques. Because they require multiple highly specialised health professionals, expensive drugs, and sophisticated laboratory infrastructure, medically assisted reproduction procedures tend to be extremely expensive, a factor that excludes economically disadvantaged groups from the possibility of benefiting from them (Shanley & Asch, 2009). At a global level, this is clearly expressed in the fact that poor and racialised women in the Global South are the least likely to access new reproductive technologies, despite having the highest rates of infertility due to factors such as disproportionate exposure to environmental pollutants and malnutrition (Weinbaum, 2019).

Larissa, who currently dreams of the possibility of achieving biological motherhood through assisted reproductive techniques, talks about the many difficulties she is facing as she tries to initiate a process of gestational surrogacy. In her testimony, she attributes fundamental importance to economic barriers:

[t]his financial side is a huge obstacle for me [...]. At the moment we [*Larissa and her husband*] are struggling. I'm running an online fundraising campaign and looking for donations. We're trying to do that because we

⁶ Karen Barad (2007, 2003) offers a "sympathetic but critical reading of Butler's theory of performativity" (Barad, 2007, p. 34). On the one hand, Barad credits Judith Butler for her proposal of a fruitful notion of performativity that "links gender performativity to the materialization of sexed bodies" (Barad, 2007, p. 34), which marks an important effort to "return to the notion of matter" (Barad, 2007, p. 61) in a theoretical context dominated by a pervasive tendency to attribute conceptual privilege to the discursive. On the other hand, Barad (2007) argues that the Butlerian elaboration of the notion of performativity (Butler, 1990, 1993) is limited in important ways by a certain anthropocentric bias, expressed in a focus

given only to the processes of materialisation of human bodies and to forms of human agency. But the agential realist proposal of a materialist and posthumanist notion of performativity is not limited to the obvious additive move of simply expanding the domain of possible agents of performative practices to include non-human agency. Karen Barad's approach is attentive to the fact that the very boundaries that separate the categories of "human" and "non-human" are performative, that is, they are contingent effects of iterative intra-actions (Barad, 2007). In this sense, Barad ultimately proposes a reworking of Judith Butler's concept of performativity "from iterative citationality to iterative intra-activity" (Barad, 2007, p. 208).

have nowhere else to get [money] from. We only have his salary. And we pay rent (Larissa, personal communication, September 17, 2020).

In this excerpt, we observe the interplay of several economic factors that reduce the interviewee's chances of initiating a gestational surrogacy procedure and, consequently, of achieving her dream of biological motherhood. Larissa is currently unemployed, so her husband's salary is the family's only source of income. The couple's financial difficulties are exacerbated by the fact that they live in a rented apartment, which leaves them with little surplus to pay the expensive fees charged by fertility clinics. In this context, motivated by her unwavering desire to become a mother, the interviewee resorts to third-party donations – which have so far proved insufficient.⁷

Later in the interview, Larissa emphasises:

I have normal ovulation and so do the other girls [with MRKH]. We can have our biological child, [but] we can't afford it (Larissa, personal communication, September 17, 2020).

With this statement, Larissa promotes an important shift in relation to biomedical discourses that identify the determinants of infertility in anatomical-physiological dimensions, pointing out how financial barriers play a key role in the materialisation of the reproductive restrictions of bodies with MRKH. Here, far from being a natural inevitability, infertility takes the form of an economically induced condition.

Such positions invite us to reconsider common understandings of the reproductive restrictions experienced by women with MRKH. Instead of biologised conceptions of infertility that define it as a monolithic and pre-

existing natural fact, we are invited to consider the reproductive capacities of these bodies as relational realities that are inseparable from economic dynamics and class structures. Women with MRKH at the lower end of the socio-economic pyramid are significantly less likely to have children than more affluent women, not because of any anatomical-physiological characteristic that would "organically" differentiate them from the latter, but because they are less financially able to access medically assisted reproductive procedures. In the case of Larissa, unemployment, the accelerated impoverishment of the working class, the continued deterioration of wages and the rarefied prospects of stable employment are important material-discursive apparatuses that contribute to the iterative production of infertility. In other words, informed by a diffractive reading of agential realism's relational ontology *through* Foucauldian theorisations of the contemporary dynamics of biopower, it is possible to affirm that Larissa and many other women with MRKH who occupy disadvantaged positions in a matrix of socio-economic inequality are not, after all, naturally and irremediably infertile, but rather *economically sterilised*.

It should be noted, however, that the recognition of this important constitutive role played by economic forces in the relational dynamics that ensure specific conformations to the reproductive capacities of bodies with MRKH does not imply the identification of economic inequality as the sole and determining cause of the phenomenon of infertility. To do so would be to fall prey to the very same deterministic and monofactorial logic that characterises the biomedical readings that we set out to challenge in the first place. For Barad (2007), "causality is an entangled affair" (p. 394), a matter of how multiple intra-active apparatuses contingently stabilise the phenomena of which they are

⁷ Another Brazilian participant, who underwent a gestational surrogacy procedure in 2014, reported that the total cost of the procedure was 25,000 Brazilian reais. To put it in the context of the Brazilian economic reality, compared to data for the same year, this amount was 34 times higher than

the minimum wage and more than 20 times higher than the monthly household income *per capita* of the country's population (Institute for Applied Economic Research, n.d.; Brazilian Institute of Geography and Statistics, 2015).

also a part; in short, it is a relational problematic that does not presume singular causes or determinisms. Let us analyse how such a model of complex and multifactorial causality is evidenced in Larissa's interview:

[*surrogacy*] is very expensive. So, it's difficult for those who cannot afford it [...] And health insurance does not cover it, the Brazilian Unified Health System [*Sistema Único de Saúde, or SUS*] does not provide it – it's all an obstacle (Larissa, personal communication, September 17, 2020).

According to the interviewee, her dream of having a biological child is hindered by the combined action of several factors (e.g. financial constraints, lack of health insurance coverage and lack of availability of conceptive technologies in the public system), and not by any of these agencies taken in isolation. We thus perceive how economic variables do not exhaust the broad material-discursive apparatus at work in the case of Larissa, but rather intra-act with other socio-material forces and practices in complex ways. Borrowing Andrew Pickering's (1995) formulation, we see that infertility emerges from complex "dances of agency" in which no single actant "dances" alone.

Nonetheless, our reading would succumb to what Karen Barad (2003) calls a pervasive tendency towards "thingification" (p. 812) – the reduction of complex relations to things – if we were to analyse the apparatuses listed by the interviewee in the previous excerpt as mere fixed objects with self-evident limits. In order to move away from this reifying simplification, in what follows I illustrate how the constitutive entanglements that instantiate the reproductive constraints experienced by women with MRKH involve a profusion of open-ended practices that extend far beyond any obvious boundaries. To do so, I start from an analysis of one of the actants mentioned

by Larissa, the Brazilian Unified Health System (SUS).

The Brazilian Constitution of 1988 recognises that family planning, including access to conception assistance, is a right of every Brazilian citizen and a duty of the State, as part of a broad public health policy based on the tripod of universality, integrality, and gratuity (§ 7° of art. 226 of the Brazilian Constitution, clauses 1 and 3).⁸ Nevertheless, several studies show that this right is limited to the formal level in the country. In practice, there are numerous factors that prevent women with MRKH who cannot afford the procedures in private clinics from accessing medically assisted reproductive techniques, such as gestational surrogacy, through the Brazilian public health system. These include: the public offer of a small number of techniques and limited to those of lower complexity, usually excluding *in vitro* fertilisation (Alfano, 2014); the existence of long waiting lists that can extend over several years, frustrating the needs of older women (Souza, 2014); the fact that, due to lack of resources, in the few public hospitals in the country that have the technical conditions to perform *in vitro* fertilisation cycles, it is often necessary to pay privately for the expensive drugs used (Souza, 2014; Corrêa & Loyola, 2015), etc.

Following Karen Barad's assertion that "intra-actions iteratively reconfigure what is possible and impossible" (Barad, 2007, p. 177), it can be argued that a precarious public health system is a socio-political force that composes the intra-actions that currently limit the horizon of what is possible, in reproductive terms, for many Brazilian women with MRKH. In the light of agential realism, long lines, poor hospital infrastructure, and scarcity of medical resources are not mere material realities completely detached from a body endowed with pre-existing reproductive characteristics, but rather actants that intra-act with economic and biological agencies so as to actively and

⁸ The Brazilian Constitution states that it is a duty of the State to ensure that citizens have access to "all methods and techniques of conception and contraception that are scientifically accepted and

do not endanger human life and health, with freedom of choice being guaranteed" (§ 7 of art. 226 of the Constitution, Clauses 1 and 3).

repeatedly perform infertility as a natural attribute of Larissa's body.

However, as pointed out earlier, we cannot isolate the apparatuses of bodily production from the broad socio-material forces that locally conform them in particular ways – otherwise we would fall into reifications that would lead us back into the territory of classical individualist metaphysics. We must keep in mind that apparatuses are “themselves” material phenomena “produced and reworked through a dynamics of iterative intra-activity” (Barad, 2007, p. 230). Indeed, for agential realism, the apparatuses of bodily production are not only *material* in the sense that they have a concrete presence, but also because they are socially conditioned, always “reliant on a complex network of social and ideological practices” (Žižek, 2012, p. 935). In this respect, it is worth noting that the Brazilian Unified Health System is a complex relational entity (composed of buildings, medical equipment, information technologies, professionals of different fields and specialties, public policies, legislation, current medical knowledge, etc.), whose present configuration is woven by the workings of a wide network of social practices, ideological discourses and (bio)power dynamics.

For instance, it's possible to consider how the current precarious provision of reproductive technologies in the Brazilian public health system locally crystallises a process of dismantling of the welfare state that has been promoted around the world by neoliberal political rationality over the last three decades (Brown, 2019). Through measures such as

draconian austerity policies that limit state investment in public services, this rationality has rendered health systems in developing countries “moribund for the majority of their populations” (Wilbert, 2006, p. 3), paving the terrain for processes of marketisation.⁹ As a result, health care, formally conceived as a fundamental social right, is turned into a commodity – “an area of private investment that must be managed to generate maximum profit for investors” (Sousa Santos, 2020, p. 20). In practice, this politically induced precariousness of public health systems – which goes hand in hand with the growth of lucrative health insurance markets and private fertility clinics – disproportionately penalises poor and racialised women with MRKH, depriving them of their only chance of accessing assisted reproductive technologies.¹⁰

But to adequately understand the complex intertwining of biopolitics, racism, and the current poor provision of assisted reproduction procedures in the Brazilian health system, we must travel more deeply into Brazil's and Latin America's history. Informed by what Nancy Tuana (2019) calls a “genealogical sensibility” (p. 3), this movement will enable us to attend to the lineages of values, concepts, and practices that ground present realities. In this sense, it is worth noting that the extremely precarious provision of assisted reproductive technologies in the Brazilian public system contrasts sharply with the extensive offer of contraceptive methods and technologies through SUS family planning programmes.¹¹

⁹ In Brazil, this type of neoliberal austerity policy has recently reached its paroxysm. In December 2016, a few months after the controversial impeachment of centre-left president Dilma Rousseff, the Brazilian Congress approved a constitutional amendment that imposed a ceiling on public expenditure for a period of two decades (Constitutional Amendment 95/2016, the “Expenditure Ceiling”). In real terms, government spending “was frozen (except for inflation indexation) for 20 years” (Grigoryev & Starodubtseva, 2021, p. 261). One year after the adoption of the constitutional cap on public spending, reports already indicated the severe impacts of austerity on basic social and economic

rights in the areas of health, food security, and education, as well as its exacerbating effects on gender, racial, and class inequalities (Center for Economic and Social Rights et al., 2017).

¹⁰ The entanglements of racism and poverty in Brazil are made clear in recent statistics: in the country, the average income of whites is at least twice that of blacks (Osorio, 2021). Although black people account for slightly more than 56% of the country's population, they represent 74.8% of those in the bottom 10% by income (Brazilian Institute of Geography and Statistics, 2022).

¹¹ The SUS currently offers a broad variety of contraceptive methods and technologies, ranging from the simplest (spermicides, diaphragms, male

This contraceptive bias that structures Brazilian public policy related to reproductive health instantiates efforts that, especially since the mid-1960s (Scavone, 1998), have sought to prevent a feared “demographic explosion” in the country (Pereira, 2011, p. 61). This kind of biopolitical practice was not restricted to the Brazilian context; in fact, as the Cold War unfolded, and especially after the victory of the Cuban Revolution in 1959, various international institutions began to study the demographic situation in Latin American countries and to propose measures to control population growth (Felitti, 2008), motivated by the fear that an uncontrolled demographic explosion in the region could lead not only to negative economic and social consequences, but also to the creation of “a fertile field for communist agitation” (Pedro, 2003, p. 242).

This understanding of Latin America as a demographic bomb (Pedro, 2003) is in turn aligned with broader discursive framings that locate lack of fertility in the Global North and hyperfertility in the Global South, whose roots date back to colonial biopolitics (Schurr, 2017). As Edward Telles (2014) puts it, since colonial times, elites in Latin America have been preoccupied with the idea that their often large, non-white populations could impede national development, an imaginary fed largely by “contemporary scientifically endorsed ideas of biological white supremacy” (Telles, 2014, p. 17). These racist imaginaries have proved resilient to the decline of colonialism as a socio-economic form in the region, and are incorporated into a variety of contemporary institutions and

and female condoms, emergency pills, etc.) to more complex and/or invasive methods (copper intrauterine devices, etonogestrel subdermal implants, combined oral and injectable contraceptive hormones, progestin-only contraceptives and medroxyprogesterone acetate injections, female sterilisation and vasectomy) (Rodrigues & Carneiro, 2022). Regarding the sources of the various contraceptive options, while private pharmacies are the main source of hormonal methods (pills and injections) and condoms, the SUS health services are the main providers of more complex and invasive methods, such as sterilisation and copper intrauterine devices, which are used respectively by 21.8% and

material-discursive practices: from speeches by then-congressman Jair Bolsonaro in the 1990s and 2000s, advocating “strict birth control” to prevent the proliferation of the poor in Brazil,¹² to the aggressive campaigns of forced mass sterilisation in Peru between 1996 and 2001, targeting poor, rural, indigenous Quechua-speaking women (Carranza Ko, 2020). Interweavings of here and there, now and then, deciding which bodies matter and which bodies should not come to matter; entangled processes of *infertility-and-race-and-colonialism-and-MRKH-and-geopolitics-and-neofascism-and-genocide-in-the-making*.

Thus, an agential realist perspective, by attending to the material-semiotic entanglements responsible for weaving the precariousness that characterises the current public offer of new reproductive technologies in the Brazilian context, allows us to visualise how global political-economic dynamics and historical biopolitical processes, seemingly external to the embodied experiences of women with MRKH, intra-act locally and contribute to the materialisation (and iterative re-materialisation) of the reproductive restrictions experienced by Larissa and other women with MRKH.

Furthermore, this tracing of the paths that materially connect the currently hegemonic political-economic rationality and the reproductive capacities of situated bodies creates the epistemic conditions for the formulation of new interrogations that, I believe, can contribute to efforts aimed at challenging the ongoing neoliberal destruction

1.5% of the total Brazilian female population aged 15-49 (Brasil, 2010).

¹² As a congressman in 1992, Bolsonaro declared: “We must adopt a strict birth control policy. We can no longer make demagogic speeches, just demanding government resources and means to assist these miserable people who proliferate more and more throughout this nation.” More than a decade later, in 2008, he added: “There is no point in even talking about education because the majority of the people are not prepared to receive education and will not be educated. Only birth control can save us from chaos” (Paula & Lopes, 2020, p. 38).

of public services that are vital to subalternised populations in countries around the world. I suggest that at a time like the present, when a global pandemic is dramatically revealing the catastrophic effects that decades of neoliberal hegemony have had on public health systems all over the world (Sousa Santos, 2020), questions such as “how does neoliberalism differentially inscribe marks on gendered and racialised bodies?” or “what are the bodily effects of fiscal austerity policies?” are not only theoretically provocative, but also politically urgent. In this sense, I suggest that the contributions of agential realism complement previous theorisations by enabling us to think of neoliberalism not only as a set of economic policies, a hegemonic ideological project (Harvey, 2005), a political rationality (Brown, 2019), a form of governmentality that underpins contemporary processes of constitution of subjects (Foucault, 2008) and psychic suffering (Safatle, 2022), but also as a material-discursive apparatus of bodily production.

Conclusion

Based on the diffractive reading of the interviewee’s testimonies *through* agential realism, it is possible to claim that infertility does not exist in bodies with MRKH as a brute fact independent of social relations. Indeed, in the course of our analytical-argumentative trajectory, we observed that the reproductive restrictions experienced by the study participants cannot be reduced to a mere monolithic biological facticity – as defined by biomedical readings and implicitly endorsed by traditional sociological readings based on the social model – but rather must be understood as a practice. In the light of agential realism, the infertility experienced by

Larissa and many other women with MRKH takes the form of a complex socio-material phenomenon that is iteratively performed as essence by contextual intra-actions established between a variety of heterogeneous material-discursive agencies, including unemployment, long-standing structures of economic inequality, class asymmetries, state neglect, neoliberalism, austerity policies, precarious public health systems, racism, and biopolitics.

Fundamentally, this new relational and processual understanding of reproductive capacities rearranges the horizons of what is traditionally considered “naturally” possible and impossible for bodies with MRKH. The “natural” is conceived here as a realm with viscous and porous borders (Tuana, 2008), which relates to and transforms itself with other human and non-human elements. The natural no longer denotes given, fixed, and ahistorical realities, but ontological conditions that are temporarily established through various intra-actions. Such intra-actions, involving multiple material-discursive apparatuses of bodily production, are implicated in the enactment of agential cuts responsible for differentially demarcating the natural from the constructed, the essential from the contingent. In this framework, the perpetuation of the infertility of a body with MRKH is seen as dependent on its constant iteration, which takes place through the action of a specific set of apparatuses of bodily production. This fundamental iterability, as in Judith Butler’s (1990) theory of gender performativity, creates an opportunity for rupture and transformation.

Thus, since infertility is not a biological inevitability, it is worth asking: what practices, concepts, power structures, discourses, and histories are responsible for the production and reproduction of infertile bodies?

Bibliography

Adamson, G. David (2009). Global cultural and socioeconomic factors that influence access to assisted reproductive technologies. *Women’s Health*, 5(4), 351–358.

- Adrian, Stine W. (2015). Psychological IVF: Conceptualizing emotional choreography in a fertility clinic. *Distinktion: Journal of Social Theory*, 16(3), 302–317.
- Alfano, Bianca (2014). *Reprodução assistida: a organização da atenção às infertilidades e o acesso às técnicas reprodutivas em dois serviços público-universitários no Estado do Rio de Janeiro* [Assisted reproduction: the organization of care for infertilities and access to reproductive techniques in two public-university services in the state of Rio de Janeiro] [Doctoral dissertation, Rio de Janeiro State University]. Digital Library of Thesis and Dissertations of the Rio de Janeiro State University.
- Anders, Abram (2013). Foucault and 'the Right to Life': From Technologies of Normalization to Societies of Control. *Disability Studies Quarterly*, 33(3).
- Barad, Karen (2003). Posthumanist Performativity: Toward an Understanding of How Matter Comes to Matter. *Signs: Journal of Women in Cultural and Society*, 28(3), 801-831.
- Barad, Karen (2007). *Meeting the Universe Halfway: Quantum Physics and the Entanglement of Matter and Meaning*. Duke University Press.
- Barnes, Colin (2012). Understanding the Social Model: Past, Present and Future. In Nick Watson, Alan Roulstone, & Carol Thomas (Eds.), *The Routledge Handbook of Disability Studies* (pp. 12-29). Routledge.
- Braidotti, Rosi (2006). *Transpositions: On Nomadic Ethics*. Polity Press.
- Brasil (2010). *Cadernos de Atenção Básica: Saúde Sexual e saúde reprodutiva* [Basic Health Care Resource Books: Sexual and Reproductive Health]. Ministry of Health.
- Brazilian Institute of Geography and Statistics (2015). *Renda Domiciliar per capita 2014* [Household income per capita 2014]. https://ftp.ibge.gov.br/Trabalho_e_Rendimento/Pesquisa_Nacional_por_Amostra_de_Domicilios_continua/Renda_domiciliar_per_capita/Renda_domiciliar_per_capita_2014.pdf
- Brazilian Institute of Geography and Statistics (2022). *Desigualdades Sociais por Cor ou Raça no Brasil* [Social Inequalities by Colour or Race in Brazil]. <https://www.ibge.gov.br/estatisticas/sociais/populacao/25844-desigualdades-sociais-por-cor-ou-raca.html>
- Brown, Wendy (2019). *In the Ruins of Neoliberalism: The Rise of Antidemocratic Politics in the West*. Columbia University Press.
- Butler, Judith (1990). *Gender trouble: Feminism and the subversion of identity*. Routledge.
- Butler, Judith (1993) *Bodies That Matter: On the Discursive Limits of 'Sex'*. Routledge.
- Carranza Ko, Ñusta P. (2020). Making the Case for Genocide, the Forced Sterilization of Indigenous Peoples of Peru. *Genocide Studies and Prevention: An International Journal*, 14(2), 90-103. <https://doi.org/10.5038/1911-9933.14.2.1740>
- Center for Economic and Social Rights, Institute of Socioeconomic Studies, & Oxfam Brazil (2017). *Factsheet Brazil: Human Rights in Times of Austerity*. https://www.inesc.org.br/wp-content/uploads/2017/12/Fact-Sheet-2-English-V_digital_4.pdf
- Corrêa, Marilena, & Loyola, Maria A. (2015). Tecnologias de reprodução assistida no Brasil: opções para ampliar o acesso [Assisted reproductive technologies in Brazil: options to improve access]. *Physis: Revista de Saúde Coletiva*, 25(3), 753-777.
- Dews, Peter (1996). Adorno, pós-estruturalismo e a crítica da identidade [Adorno, poststructuralism and the critique of identity]. In Slavoj Žižek (Ed.), *Um Mapa da Ideologia* [Mapping Ideology] (pp. 51-71). Contraponto.

- Feely, Michael (2016). Disability studies after the ontological turn: a return to the material world and material bodies without a return to essentialism. *Disability & Society*, 31(7), 863-883.
- Felitti, Karina Alejandra (2008). Natalidad, soberanía y desarrollo: las medidas restrictivas a la planificación familiar en el tercer gobierno peronista (Argentina, 1973-1976) [Birth rate, sovereignty and development: the restrictive measures on family planning in the third Peronist government]. *Revista Estudios Feministas*, 16(2), 517–537. <https://doi.org/10.1590/S0104-026X2008000200011>
- Finkelstein, Vic. (1980). *Attitudes and Disabled People*. World Rehabilitation Fund.
- Fontes, Fernando, & Martins, Bruno Sena. (2016). Introdução: A normalidade em crise [Introduction: Normality in crisis]. In Fernando Fontes & Bruno Sena Martins (Eds.), *Deficiência e emancipação social: para uma crise da normalidade* [Disability and social emancipation: towards a crisis of normality] (pp. 7-13). Almedina.
- Foucault, Michel (1978). *The History of Sexuality, Vol. 1. An Introduction*. Pantheon Books.
- Foucault, Michel (2008). *The birth of biopolitics: Lectures at the Collège De France 1978-79*. Palgrave Macmillan.
- Foucault, Michel (1980). The Confession of the Flesh. In Colin Gordon (Ed.), *Power/Knowledge: Selected Interviews & Other Writings 1972-1977* (pp. 194-228). Pantheon Books.
- Friedler, Shevach, Grin, Leonti, Liberti, Gad, Saar-Ryss, Buzhena, Rabinson, Yaakov, & Meltzer, Semion (2015). The reproductive potential of patients with Mayer–Rokitansky–Küster–Hauser syndrome using gestational surrogacy: a systematic review. *Reproductive BioMedicine Online*, 32(1), 54-61.
- Garland-Thomson, Rosemarie (2011). Misfits: A Feminist Materialist Disability Concept. *Hypatia: A Journal of Feminist Philosophy*, 26(3), 591-609.
- Geerts, Evelien, Hoegaerts, Josephine, Hens, Kristien, & Blackie, Daniel (2022). Dis/abling gender in crisis times. *Tijdschrift voor Genderstudies*, 25(1), 1-18.
- Grigoryev, Leonid M., & Starodubtseva, Marina F. (2021). Brazil in the 21st century: A difficult path. *Russian Journal of Economics*, 7, 250–268. <https://doi.org/10.32609/j.ruje.7.78432>
- Guntram, Lisa (2018). Hooked on a feeling? Exploring desires and ‘solutions’ in infertility accounts given by women with ‘atypical’ sex development. *The Sociological Review*, 22(3), 27-46.
- Haraway, Donna (2018). *Modest-Witness@Second-Millennium.FemaleMan-Meets-OncoMouse: feminism and technoscience*. Routledge.
- Harris, Katie, Fitzgerald, Oisín, Paul, Repon C., Macaldowie, Alan., Lee, Evelyn, & Chambers, Georgina M. (2016). *Assisted reproductive technology in Australia and New Zealand 2014*. National Perinatal Epidemiology and Statistics Unit, University of New South Wales.
- Harvey, David (2005). *A brief history of neoliberalism*. Oxford University Press.
- Heller-Boersma, Jacqueline G., Edmonds, D. K., & Schmidt, Ulrike H. (2009). A Cognitive Behavioural Model and Therapy for Utero-Vaginal Agenesis (Mayer-Rokitansky-Küster-Hauser Syndrome: MRKH). *Behavioural and Cognitive Psychotherapy*, 37(4), 449-467.
- Helosvuori, Elina (2021). *Procreative Entanglements: embryos, clinical practices and experiences of childlessness in the age of assisted reproduction* [Doctoral dissertation, University of Helsinki]. HELDA - Digital Repository of the University of Helsinki.
- Herlin, Morten Krogh, Petersen, Michael Bjørn, & Brännström, Mats (2020). Mayer-Rokitansky-Küster-Hauser (MRKH) syndrome: a comprehensive update. *Orphanet Journal of Rare Diseases*, 15(1), 1-16.

Herrmann, Janne Rothmar, & Kroløkke, Charlotte (2018). Eggs on Ice: Imaginaries of Eggs and Cryopreservation in Denmark. *NORA - Nordic Journal of Feminist and Gender Research*, 26(1), 19-35. <https://doi.org/10.1080/08038740.2018.1424727>

Institute for Applied Economic Research (n.d.). *Salário Mínimo Vigente* [Current Minimum Wage]. <http://www.ipeadata.gov.br/ExibeSerie.aspx?serid=1739471028>

Jones, Benjamin P., Ranaei-Zamani, Niccole, Vali, Saaliha, Williams, Nicola, Saso, Srdjan, Thum, Meen-Yau, Al-Memar, Maya, Dixon, Nuala, Rose, Gillian, Testa, Giuliano, Johannesson, Liza, Yazbek, Joseph, Wilkinson, Stephen, & Smith, J. Richard (2021). Options for acquiring motherhood in absolute uterine factor infertility; adoption, surrogacy and uterine transplantation. *The Obstetrician & Gynaecologist*, 23(2), 138-147.

Kirby, Vicki (2017). Foreword. In Vicki Kirby (Ed.), *What if Culture was Nature all Along?* (pp. viii-xii). Edinburgh University Press.

Kleinman, Adam (2012). Intra-actions – Interview with Karen Barad. *Mousse*, 34, 76–81.

Lafuente-Funes, Sara (2020). Shall we stop talking about egg donation? Transference of reproductive capacity in the Spanish Bioeconomy. *BioSocieties*, 15, 207–225. <https://doi.org/10.1057/s41292-019-00149-5>

Lam, Carla (2015). *New reproductive technologies and disembodiment*. Ashgate.

Meskus, Mianna (2015). Agential multiplicity in the assisted beginnings of life. *European Journal of Women's Studies*, 22(1), 70-83. <https://doi.org/10.1177/1350506814530691>

Meskus, Mianna (2021). Speculative Feminism and the Shifting Frontiers of Bioscience: Envisioning Reproductive Futures with Synthetic Gametes through the Ethnographic Method. *Feminist Theory*. <https://doi.org/10.1177/14647001211030174>

Minich, Julie A. (2016). Enabling Whom? Critical Disability Studies Now. *Lateral*, 5(1).

Morcel, Karine, Camborieux, Laure, Programme de Recherches sur les Aplasies Müllériennes, & Guerrier, Daniel (2007). *Orphanet Journal of Rare Diseases*, 13(2), 1-9. <https://doi.org/10.1186/1750-1172-2-13>

Oliver, Mike. (1990). *The Politics of Disablement*. Macmillan.

Osório, Rafael Guerreiro (2021). *A desigualdade racial no Brasil nas três últimas décadas* [Racial inequality in Brazil in the last three decades]. Institute for Applied Economic Research.

Paula, Luciane de, & Lopes, Ana Carolina Siani (2020). A eugenia de Bolsonaro: leitura bakhtiniana de um projeto de holocausto à brasileira [Bolsonaro's eugenics: bakhtinian reading of a brazilian holocaust project]. *Revista Linguagem*, 35(1), 35-76.

Pedro, Joana Maria (2003). A experiência com contraceptivos no Brasil: uma questão de geração [The contraceptive experience in Brazil: a generational issue]. *Revista Brasileira de História*, 23(45), 239-260.

Pereira, Dirceu H. M. (2011). A história da reprodução humana no Brasil [The history of human reproduction in Brazil]. *Femina*, 39(2), 59-64.

Pickering, Andrew (1995). *The Mangle of Practice: Time, Agency, and Science*. University of Chicago Press.

Ramazanoglu, Caroline, & Holland, Janet (2002). *Feminist Methodology: Challenges and Choices*. Sage.

Richards, Elliott. G., Agatisa, Patricia. K., Davis, Anne. C., Flyckt, Rebecca, Mabel, Hilary, Falcone, Tommaso, Tzakis, Andreas, & Farrell, Ruth M. (2019). Framing the diagnosis and treatment of

absolute uterine factor infertility: Insights from in-depth interviews with uterus transplant trial participants. *AJOB Empirical Bioethics*, 10(1), 23-35.

Rodrigues, Marcio A. Hipolito, & Carneiro, Marcia Mendonça (2022). La contraception dans d'autres pays - État de la situation au Brésil [Contraception in other countries: The example of Brazil]. *Médecine/Sciences*, 38(3), 280-287. <https://doi.org/10.1051/medsci/2022029>

Safatle, Vladimir (2022). Economics is the continuation of psychology by other means: Psychic suffering and neoliberalism as a moral economy. *Cultural Dynamics*, 34(3), 134–151. <https://doi.org/10.1177/09213740221103167>

Scavone, Lucila (1998). Tecnologias Reprodutivas: novas escolhas, antigos conflitos [Reproductive Technologies: new choices, old conflicts]. *Cadernos Pagu*, 10, 83-112.

Schurr, Carolin (2017). From biopolitics to bioeconomies: The ART of (re-)producing white futures in Mexico's surrogacy market. *Environment and Planning D*, 35, 241–262.

Schurr, Carolin (2018). The baby business booms: Economic geographies of assisted reproduction. *Geography Compass*, 12(8), 1-12. <https://doi.org/10.1111/gec3.12395>

Shakespeare, Tom (1994). Cultural Representation of Disabled People: Dustbins for Disavowal? *Disability & Society*, 9(3), 283-299.

Shakespeare, Tom (2004). Social models of disability and other life strategies. *Scandinavian Journal of Disability Research*, 6(1), 8-21. <https://doi.org/10.1080/15017410409512636>

Shanley, Mary Lyndon, & Asch, Adrienne (2009). Involuntary childlessness, reproductive technology, and social justice: The medical mask on social illness. *Signs: Journal of Women in Cultural and Society*, 34(4), 851–874.

Siebers, Tobin (2008). Disability Experience on Trial. In Stacy Alaimo & Susan Hekman (Eds.), *Material Feminisms* (pp. 291-305). Indiana University Press.

Sousa Santos, Boaventura de (2020). *A cruel pedagogia do vírus* [The cruel pedagogy of the vírus]. Boitempo.

Souza, Maria do Carmo B. (2014). Latin America and access to Assisted Reproductive Techniques: a Brazilian perspective. *JBRA Assisted Reproduction*, 18(2), 47-51.

Telles, Edward (2014). *Pigmentocracies: Ethnicity, Race, and Color in Latin America*. University of North Carolina Press.

Thompson, Charis (2002). Fertile Ground: Feminists Theorize Infertility. In Marcia Inhorn & Frank van Balen (Eds.), *Infertility Around the Globe: New Thinking on Childlessness, Gender, and Reproductive Technologies* (pp. 52-78). University of California Press.

Tremain, Shelley (2005). Foucault, Governmentality, and Critical Disability Theory. In Shelley Tremain (Ed.), *Foucault and the Government of Disability* (pp. 1–26). University of Michigan Press.

Tremain, Shelley (2015). This is what a historicist and relativist feminist philosophy of disability looks like. *Foucault Studies*, 19, 7-42.

Tuana, Nancy (2008). Viscous Porosity: Witnessing Katrina. In Stacy Alaimo & Susan Hekman (Eds.), *Material Feminism* (pp. 188-213). Indiana University Press.

Tuana, Nancy (2019). Climate Apartheid: The Forgetting of Race in the Anthropocene. *Critical Philosophy of Race*, 7(1), 1-31.

Tuin, Iris van der, & Dolphijn, Rick (2012). Introduction: A "New Tradition" in Thought. In Iris van der Tuin & Rick Dolphijn (Eds.), *New Materialism: Interviews & Cartographies* (pp. 85-92). Open Humanities Press.

Union of the Physically Impaired Against Segregation (UPIAS). (1976). *Fundamental Principles of Disability*. UPIAS.

Weinbaum, Alys E. (2019). *The afterlife of reproductive slavery: biocapitalism and Black feminism's philosophy of history*. Duke University Press.

Wilbert, Chris (2006). Profit, plague and poultry: The intra-active worlds of highly pathogenic avian flu. *Radical Philosophy*, 139, 2-8.

Žižek, Slavoj (2012). *Less than nothing: Hegel and the shadow of dialectical materialism*. Verso Books.

Author information

Caynnã de Camargo Santos
ORCID: 0000-0003-4069-1363
caynnasantos@ces.uc.pt

Caynnã de Camargo Santos holds a PhD in Sociology from the University of Coimbra (Portugal) and a Master's degree in Philosophy (obtained in the Cultural Studies program) from the University of São Paulo (Brazil). Currently, he is a researcher at the Centre for Social Studies of the University of Coimbra, where he is involved in the project "ENGENDER: Gender mainstreaming in curricula and pedagogical practices in Portuguese Public Universities". His research interests include poststructuralist feminist theories, sociology of the body, feminist new materialisms and agential realism.

MATTER

journal of new materialist research

Universitat de Barcelona

ARTICLE
ISSUE 8

Weaving Rhizomes in Photography Research

Teixir rizomes en la investigació fotogràfica

Tejiendo rizomas en la investigación fotográfica

Lorena R. Bañares (ORCID: 0000-0003-1453-9106)

School of Communication and Design
RMIT University, Vietnam

Date of submission: April 2023

Accepted in: July 2023

Published in: July 2023

DOI: <https://doi.org/xxx/xxx>

Recommended citation:

Bañares, Lorena R. (2023). Weaving Rhizomes in Photography Research. *Matter: Journal of New Materialist Research*. Issue 8, 22-40. University of Barcelona. [Accessed: dd/mm/yy]. <https://doi.org/>



The texts published in this journal are – unless otherwise indicated – covered by the Creative Commons Spain Attribution 4.0 International licence. The full text of the licence can be consulted here: <http://creativecommons.org/licenses/by/4.0/>

Abstract

Anchored on Deleuze and Guattari's Rhizome concept, this postqualitative research puts philosophical concepts to work in the doing of inquiry to produce knowledge differently. It adheres to ontoepistemology where the act of knowing is through performativity. Letting the (un)thought guide the work, I experimented with how materialities in photography are constituted in photographing Cambodia's Angkor temples. The inquiry yielded a new visual rhizomatic approach in research-creation that disrupts the colonial and stabilizing methods in research. Called *Weaving Rhizomes*, this approach acknowledges the imbricated relations of humans and non-humans, constantly entangled and (re)produced in the doing-making of research: the becoming of photographer-researcher.

Keywords

Rhizomes; Postqualitative; Photography; Research-creation; Visual

Resum

Ancorada en el concepto de rizoma de Deleuze i Guattari, aquesta investigació postqualitativa posa els conceptes filosòfics a treballar en la indagació per produir coneixement de manera diferent. S'adhereix a l'ontoepistemologia on l'acte de conèixer és a través de la performativitat. Deixant que el (des)pensament guíés el treball, vaig experimentar amb com les materialitats en fotografia es constitueixen en fotografiar els temples d'Angkor de Cambodja. La investigació va produir un nou enfocament rizomàtic visual en la investigació-creació que interromp els mètodes colonials i estabilitzadors en la investigació. Anomenat teixint rizomes, aquest enfocament reconeix les relacions imbricades d'humans i no humans, constantment entrelaçades i (re)produïdes en el fer de la investigació: l'esdevenir fotògraf-investigador.

Paraules clau

Rhizomes; Positiva; Fotografia; la creació de investigacions; Visual

Resumen

Anclada en el concepto de rizoma de Deleuze y Guattari, esta investigación postcualitativa pone los conceptos filosóficos a trabajar en la realización de la investigación para producir conocimiento de manera diferente. Se adhiere a la ontoepistemología donde el acto de conocer es a través de la performatividad. Dejando que el (des)pensamiento guíara el trabajo, experimenté con cómo se constituyen las materialidades en la fotografía al fotografiar los templos de Angkor en Camboya. La investigación produjo un nuevo enfoque rizomático visual en la investigación-creación que interrumpe los métodos coloniales y estabilizadores en la investigación. Llamado Tejiendo rizomas, este enfoque reconoce las relaciones imbricadas de humanos y no humanos, constantemente enredadas y (re)producidas en la investigación: el convertirse en fotógrafo-investigador.

Palabras clave

Rizomas; Postcualitativo; Fotografía; Investigación-creación; Visual

How is knowledge created? How do humans and non-humans intra-act in the doing and making of photography research? As an artist, educator, and researcher, I have witnessed and practised how photography became a ubiquitous tool in conventional research that treats photography as method that captures slices of “reality”. This representational notion soon became the canon in research using visual methods (Pauwels, 2011). While I have been trained in doing humanist methodologies, I have been guilty of following such methods, separating subject/object, photograph/referent, and photography/research to produce an objective account of phenomena. Having oriented myself to the works of Gilles Deleuze, Félix Guattari and a host of other “post-philosophers”, I started to question stabilized methods that attempt to explain phenomena that are so fluid. Arresting them in a category would be unthinkable!

Plateau: The Inquiry as Rhizome

This inquiry is aimed at developing a new visual research-creation approach where the subject and object are imbricated in doing the inquiry. This problematizes the bifurcated role of subject-object in research production. To create the path of the new is to disrupt binary logic allowing the (un)thought to produce multiplicities, a line of flight, a rhizomatic experimentation.

During the modern age and enlightenment, humans were privileged as the subject separated from what is being studied (Braidotti, 2013; Gherardi, 2021; Bañares, 2022). This dominance of humanist thoughts was critically noted by Linda Tuhiwahi (1999) as cited by Carol Taylor (2020) that “research through ‘imperial eyes’ assumes that Western rationality is the only legitimate way of making sense of the world” (p. 66). As a result, “research practices and processes of universities and colleges around the world are usually based on Western, positivist and analytic philosophies” (Cole, 2020, p. 111). This is because, empiricism has become the cornerstone of

social science research privileging Descartes’s cogito – the “I” – in the knowledge production process (Dosse, 1997; Rouse, 2002). Positivists soon influenced the Interpretive to qualify as scientific. This rapidly creeps through portals of universities and colleges as the dominant “knowledge-production machine” (St. Pierre, 2014, p. 7). Visual methods were not spared. Doing conventional research objectifies visual data where in fact, the researcher is entangled in creating such knowledge. It is not a surprise that the field is captured by the “ontological grids of intelligibility that structure humanist methodologies” (St. Pierre, 2015, p. 78).

The recent ontological turn gave rise to relational ontology where the knower is imbricated in the knowledge-creation process. The ‘ontological turn’ signals a shift of focus away from epistemology (knowing) towards the ontology of becoming (Caton, 2019). Descartes’s humanist assumption is refused under the “post-ontology”, instead, Barad (2007) proposes an ethico-ontoepistemology (St. Pierre, 2016) where the knower is not separated from the known. This resonates well with Deleuze’s immanence in transcendental empiricism. What is needed is an approach to engage in a world that doesn’t sit still (Murriss, 2020). To do this, one must disperse the centrality of the human figure and let the thought in motion guide the work. This thought in motion is a Rhizome.

For Deleuze and Guattari (cited in Zagala, 2005), “the new is not a negation of something already known but an encounter with the unthought” (p. 22). Thinking happens by force, by chance, and through an encounter (Jackson, 2017), an awakening of thought from its natural stupor. Rhizome, therefore, is a mapping of thoughts. Mapping of thoughts means living with concepts as I experiment with my photographic practices in the northwestern plains of Cambodia. Unlike the arborescent tree that is vertically structured, Rhizomes (Deleuze & Guattari, 1987) crawl across without the hierarchy of structure. Rhizome consists of matters and bodies that exist in relations of

movement and rest, where subjectivity only emerges from its relational movement. Infused with difference, the subject is decentred, imbricated within the assemblages of humans and non-humans in constant motion. A rhizome can be detached and plugged in anywhere. You can read this paper from anywhere, detach its parts, find new connections and a new assemblage will emerge. As Gilles Deleuze and Félix Guattari (1987) remark, “A book is not an image of the world but rather forms a rhizome with the world” (p. 11). This is an experiment of staying “in between” (Haraway, 2008, p. 249). We meet “in between”, in the doing, in the process of worlding. Staying “in between” requires attending to the modulations, in which events come to expression – here – through photography and research. These events are forces created by vital ecology exploring new potentials and bringing forth new concepts and things – an actualization of the world. It is in these encounters that made me as I am, a *photographer-researcher*.

As this inquiry moves as a rhizome, the experiment yielded visual braiding techniques as it accounted for the in between, allowing textures of vitalities among humans and non-humans to rise leading towards an event to come – the becoming of photography-research. I call this “*Weaving Rhizomes*”, an ontoepistemological approach that emerged from my experimental inquiry on what would work and how it would work when one lets the (un)thought to take over while doing photography with Cambodia’s Angkor temples. What you will encounter are overlapping texts, visuals, prosthetics, and movements “overturning the very codes that structure or arborify” (Deleuze & Guattari 1987, p. 11) research.

Rhizomes as Ontoepistemology

Liz Baessler (n.d.) describes Rhizome as a stem that grows underground. It has nodes that put out other stems above, called shoots of the same plant.

Rhizome is a concept used by Deleuze and Guattari (1987) to describe phenomena as

an *assemblage* of lines of articulation, segmentarity, strata, territories, lines of flight, movements, deterritorialisation, and destratification. These lines are what produce phenomena of acceleration, rupture, and always becoming which brings about the deterritorialization of one term and a reterritorialisation of another. Segments of a Rhizome constitute the molar and molecular. The former is hard, stabilized roots captured by signification organized within the strata, an actualization. Molecular, however, are virtual (unorganized) matters that constitute but do not condition the molar. The molecular are where the lines of flight take off, where a new thought or concept emerges. The nodal points are connected non-hierarchically. At the molecular level, the rhizome is constantly moving to carry intensities, a network of assemblages composed of heterogeneous matters self-organizing and reterritorialising within a plane of pure immanence.

Putting Deleuze and Guattari’s (1987) Rhizome concept to work, emerging phenomena can be mapped as a rhizome where unsignified matter creates assemblages organized within the strata, the becoming of photography-research. “To stratify is to organise or create the world from chaos, from the plane of immanence. Assemblages are produced in the strata. It is territorial” (Deleuze & Guattari, 1987, p. 503). An object emerges out of this intra-action (Barad, 2003), a mutual constitution of entangled agencies. It “recognizes that distinct agencies do not precede, but rather emerge through, their intra-action” (Barad, 2007, p. 33). Thus, the act of taking photographs as a phenomenon does not separate the photographer and the object being photographed instead, they are entangled, an intra-acting phenomenon. Consider this inquiry as fields of plateaus in different forms. Each field is an effect of movements created from rhizomatic formations on its surface. Movements are enacted from the collision or convergence of heterogeneous matters and bodies.

In what follows, matters, bodies, and objects constantly move as a Rhizome before the capture of signifying regimes. Deleuze and Guattari (1987) outline the Rhizome's characteristics: *A Rhizome is connected and heterogeneous*, which means it can be connected to anything in contrast to an arborescent tree which fixes an order. The tree for Deleuze and Guattari (1987) is attributed to the hierarchical structure where man is the centre of all things. *Rhizome is non-hierarchical*: all things are interconnected, some visible, some sublime within the plane of consistency. It possesses neither a subject nor an object, therefore, no privileging of any position. *It is also characterized by multiplicity*. Like nerve fibres which form a weave increasing its dimension and expanding its connections, it possesses only "magnitude or dimension that cannot increase in number without the multiplicity changing in nature" (Deleuze & Guattari, 1987, p. 8). No structure, points or positions, only lines. Multiplicities are flat within the plane of consistency. The latter is the outside that is being filled by lines of multiplicities. The plane of consistency is where the deterritorialisation and lines of flight spread out. *Rhizome can rupture*: "It may be broken, shattered at a given spot, but it will start up again in one of its old lines, or new lines" (Deleuze & Guattari, 1987, p. 9). Its stem ruptures against the signified, cutting across a single structure deterritorialising, creating new territories as lines of flight continue to expand touching other matters and bodies in an assemblage.

Rhizome is a cartography and decalcomania: Rhizome is not amenable to a structured, generative model. It is a map. Not a tracing. It is "oriented toward an experimentation in contact with the real" (Deleuze & Guattari, 1987, p. 12).

Humans and non-humans, therefore, are entangled and connected into different assemblages. These assemblages of heterogeneous matters and bodies are always differentiating and becoming, an inexhaustible

creation of difference (Deleuze, 1995). Such creation is present in performative practices like photography and doing of inquiry. To know or inquire is to perform the act of knowing. Here, the knower is constitutive of the intra-action that generates phenomena, an intra-play between the virtual and the actual. It is only through performativity and entanglement (Barad, 2007) that phenomena are created. Ontology and epistemology are, therefore, not separated. Signified things including the "I" only emerge from the phenomena. This troubles the Cartesian binaries that have become the norm in conducting research that is, having a priori conditions, separating the subject from the object to arrive at a *certain* kind of reality.

Departing from the conventional humanist methodologies that are structured, what you will find instead are the assemblages of humans and non-humans weaving rhizomes, creating the new. As part of this ecology, I am always configured and reconfigured in the intensities, movements, and haecceities as I weave the rhizome. As a postqualitative inquiry, I consider the research-creation journey as a rhizomatic phenomenon while I blend and meld with the forces and energies from the immanent plane where the virtual coexists with the actual. It means staying "in between". To stay in between means being attuned to becomings: the movements, feet careening from one place to another, bodies entangled with machines, words declaring commands, slipping and slurring as subjects of photography became hollow bodies. What "new" can we create from experimenting? Our task is to follow the lines of flight, to make the absent present, and to develop new potentialities.

Postqualitative Inquiry

Introduced by Elizabeth St. Pierre in 2011, postqualitative inquiry destabilizes conventional humanist qualitative inquiry (Murriss, 2020) posing a challenge: "We lack creation. We lack resistance to the present" (Deleuze & Guattari, 1994, p. 108).

This new empiricism is heavily influenced by Deleuze's Ontology of Immanence in Transcendental Empiricism. The plane of immanence is the absolute ground where concepts are created. The transversality from the virtual, which means unsignified matters, once captured, may lead towards the actual (signified). In Deleuze's transcendental empiricism, "things come into existence in external relations under different genetic conditions" (St. Pierre, 2016, p. 119) where the (un)thought arises.

Postqualitative inquiry adheres to the ontoepistemological framework, which means that the process of knowing is through performativity (performing or action). This aligns with Deleuze and Guattari's concept of Rhizome where the act of knowing has neither a subject nor object but is entangled in the doing and making of research. Epistemology, ontology, and methodology are woven together in the act of research-creation. In practice, postqualitative inquiry does not adhere to the rigors of qualitative research, therefore, it is methodology-free (St. Pierre, 2019). This is because such forces of thought that jolts the mind during an encounter is not an a priori nor exist in the essence of experience. It arrives during performativity in an unorganized stream of energy, which "cannot be written into a research proposal and included as a step in the research process" (St. Pierre, 2019, p.8). This is because, "Thought does not need method" (Deleuze, 1983, p. 110). "A method is the striated space of the *cogito universalis* and draws a path that must be followed from one point to another" (p. 377). This means, methods prescribe order that prohibits experimentation and creativity. Instead, postqualitative research encourages experimentation as we immerse ourselves in the mundane activities of everyday life. Reconfiguring the human, matters, apparatus, and their relations, entails breaking down traditional binaries dominant in the knowledge making practices in social sciences.

The following *Plateaus* will sketch how this concept informs and guides this postqualitative inquiry. Each plateau emerges from weaving words, actions, and photographs while doing

the inquiry acknowledging the active agencies of visual data, sense, and the knower as imbricated in the visual research-creation process within a flattened ontology. It re-thinks the way we conduct and perform research that was normally centred on the subject to a more response-able form of inquiry.

Plateau: Weaving the Rhizome

Weaving is a creative process. To map is to weave. Weaving is the production of fabric by interlacing two sets of yarns so that they cross each other, normally at right angles, usually accomplished with a hand or power-operated loom (Brittanica, 2022). This formal weaving practice conforms to rigid principles in design emphasizing the dominance of a particular subject. As a result, formal weaving practices have been structured, following set patterns and compositional style that conforms to subject-centred designs.

In *A Thousand Plateaus*, Deleuze and Guattari (1987) devoted an entire chapter to the relations between smooth and striated space. The striated space is "constituted by two special kinds of parallel elements, and the two intertwined, intersect perpendicularly" (Deleuze & Guattari, 1987, p. 475). While they attributed the striated space as Plato's paradigm for royal sciences or the art of governing people or operating State apparatuses, its opposite, the Felt, is:

a supple solid product that proceeds altogether differently, as an anti-fabric. It implies no separation of threads, no intertwining, only entanglement of fibres [...] it has neither top nor centre; it does not assign fixed and mobile elements but rather distributes a constant variation (Deleuze & Guattari, 1987, p. 475).

While formal patchwork is rigid and follows a pattern, rhizomatic weaving disturbs and disrupts this colonial pattern, breaking the rigid lines by reconfiguring the weave towards the

creation of the “new”. It breaks free from its normalised structure making the fibres flee to different directions as it follows thought in motion. This interlacing is what attracts me. Disrupting the symmetrical balance in weaving loom, weaving rhizomes allow for any directions (re)creating new designs. This is because the rhizome loosely grows in any direction. Combining these paradoxical binaries, consider the rhizome as multiple heterogeneous fibres each with various levels of intensities woven together. Thus, in this inquiry, I applied weaving as an artistic process by juxtaposing heterogeneous images taken by “the body cameras” while doing photography. This technique emerges from the experiment while I allow the (un)thought to mobilize our bodies, creating luminous photographic rhizomatic patterns of movements and events where the subject is no longer recognizable but entangled with other matters within the ecology.

This rhizomatic pattern is an image of thought of assemblages that organise themselves in non-hierarchical lateral networks that experiment with new and heterogeneous connections that may mix “words, things, power, and geography” (Olkowski, 2016, p. 25). In contrast with the rigid and methodical principles of parallel weaving and composition, layered weaving which involves putting together elements without signification disrupts the conventional patterns of design. It also neglects the habit of treating photographs as data that can be controlled. Following this thought is a rhizomatic way of thinking: deterritorialising, parallel interlacing, overlays, and combining multiple fibres of images to create the rhythm of the new. This is consistent with the Ontology of Immanence in Transcendental Empiricism (St. Pierre, 2019), that is, weaving as an approach is a creation of the new while being entangled in the dynamics of assemblages within research-creation. It is attuned to postqualitative inquiry’s ethico-ontoepistemology where the act of knowing is by doing. Deterritorialising towards new smooth spaces is our task. This means breaking free from the trap of colonial ways of thinking and

knowing that privileges the “I”, instead to deterritorialise is to create new maps, to weave new paths, to give voice to the muted where humans and more than humans coexist, a response-able way of knowing and creating new knowledge.

The Apparatus of Weaving: Camera Prosthetics

This experiment started from my photographic practice inside Cambodia’s Angkor temples. As an artist and educator, taking photographs became merely a habit each time I visit the temple with other co-photographers. Undoubtedly, photography has always been my privileged method of knowing because of its ubiquity and value having the capacity to provide a deeper understanding of people’s experiences (Mannay, 2014; Barbour 2014), “creative, multi-sensory and multimodal” (Clark & Morriss, 2017, p. 1). Together with other photographers, we gathered “in between”, our bodies entangled with machines. Without any pre-conceived notions in our mind, I followed the intensities where my senses would take me.

In the middle of the inquiry’s messiness, I began to question photography’s materiality, the numerous manipulations involved, and the multiple bodily and lens adjustments before actualizing a photograph. This begs me to ask, how will I be able to document these becomings? Modern-day mobile phones equipped with high-resolution cameras, portable, lightweight, and durable became my apparatus of weaving. Together with my other co-photographers, we recreated its function as body cameras using an improvised strap, attaching it to our chest. Challenging the Cartesian way of using visual technologies in research, Barad (2007) contends:

Knowledge making is *not* a mediated activity, despite the common refrain to the contrary. Knowing is a direct material engagement, a practice of intra-acting with the world as part of the world in its dynamic material

configuring, its ongoing articulation [...] Knowing is a distributed practice that includes the larger material engagement (p. 379).

Brian Massumi writes that bodies and objects are mutually implicated. “The object can be considered prostheses of the body, provided it is remembered that the body is equally a prosthesis of the thing” (Massumi, 2002, p. 95). Such intra-action produces an entangled relationship between the flesh, our clothes, and a host of other material fabrics. The mobile camera as a prosthetic device allows me to see the sublime: bodily encounters, performativity, materialities, and organisms in action that are most often ignored in conventional humanist research. They are in Haraway’s (2008) sense, companion species in the body’s unfolding with the world. Like an octopus, its tentacular vision captures the mundane. “It makes attachments and detachments, cuts and knots, weaves path and makes a difference” (Haraway, 2008, p. 31). As it weaves trails, the body camera, like other organisms, is a wayfarer.



Lorena Bañares. Photographers intra-acting with body cameras. Layered weave captured by body cameras.

Weaving these practices led me to (re)configure the inquiry as an imbricated rhizomatic relation of humans and non-humans in research-creation where bodies, visuals, and apparatuses of capture are active agents in doing the inquiry. They intermingle.

Plateau: Stitching Angkor

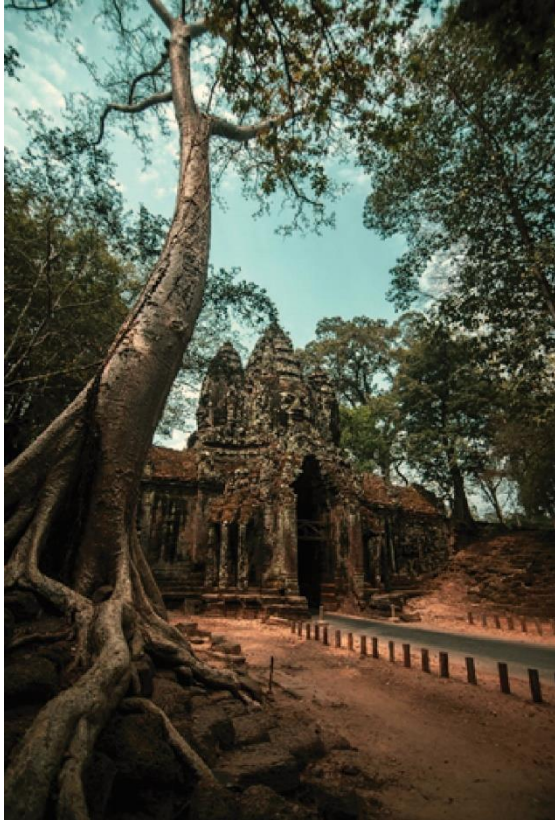
Weaving *Preah Khan*: Disrupting the Symmetrical Weave

Revered around the world, Cambodia’s Angkor complex is a living trace of a religious site built by Kings of the earliest Khmer civilization that thrived in Southeast Asia. Located northwest of Cambodia, it was hailed as the world’s largest empire, a city that boasts a population of one million when London was at 50,000 during that time (Ray & Robinson, 2008). Inside Angkor’s complex is home to magnificent structures, a sophisticated marvel of architecture: towers flanked by elaborate courtyards, richly decorated walls, and intricate carvings of Khmer’s daily life. Today remains of these temples that survived were conquered by massive trunks of trees growing along the edges of the shrine creating its own architecture.

Although I was born and raised in the Philippines, I have lived and worked in Cambodia for almost a decade. Being an artist and educator, something was enchanting in Angkor’s archaeological site that gave me excitement when photographing the structures of the temple. Regular visits to the site allowed me to visually capture these magnificent temples through different cameras. As a monastic complex, photographing Angkor was merely a revival of the once-powerful Khmer empire shown through symmetrical and conservative photos. This conforms to the formal weaving practice of balanced sets where the generation of its repetition produces the same old images – a reterritorialisation of the same power.

Heading towards the northeast side of Angkor, *Preah Khan* was among Angkor’s seat of power. Built during the 12th century by King Jayavarman VII, the massive complex’s wall is replete with carvings of deities and mythical creatures that speak of hierarchy and Kingly stature. Today, the temple is slowly being conquered back by nature. To further protect the structure, authorities have been cutting

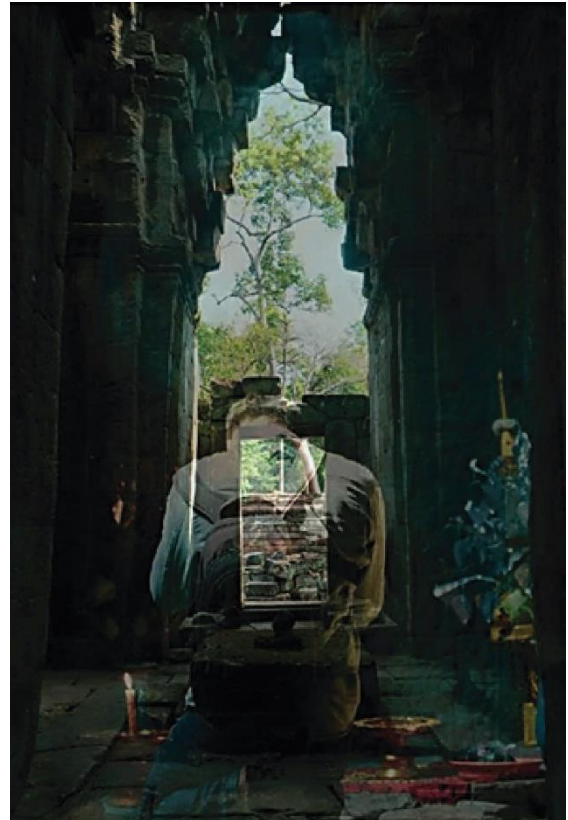
down these age-old trees growing along walls and covered galleries in Gopuras. Being the epitome of power, I braced myself for what would fold or unfold.



Phoung Chantha (2021), *The Gate. Angkor, Cambodia* (participant's captured photo).

The inner side of the sanctuary hosts the sacred iconic sculptures of the temple. There was sheer respect and delicate haptic motion I noticed with my co-photographers as they paid respect by kneeling and bowing three times before entering the inner sanctuary that hosts the sacred stupa. Having been trained in conventional photography and research practices for so long, the images produced became formal representations of objects. Photographs were used according to certain rules, an index of the past rather than a sign that stands on its own (Freeland, 2008). This practice was the golden rule in visual research methods grounded in the idea that “valid scientific insight in society can be acquired by observing, analyzing, and theorizing its visual manifestations: behavior of people and material products of culture” (Pauwels, 2011, p. 3). Such

rules developed constrained visual thinking and experimentation (Cruz & Meyer, 2012). Many times, I still fall prey to this practice, a reterritorialization of the old regimes of signs. How did this happen?



Lorena Bañares. *Preah Khan's inner sanctuary. Layered weave captured by body cameras.*

Looking upwards at the corbelled ceilings, light passes through a small hole shaped like the light of a candle. Piles of stone pediments served as by body's anchor and cushion of camera apparatus while changing lens. Photographing this spot using low-angle shots is a manifestation of depicting objects of power where the camera's viewpoint is positioned as a worm's eye view. The multiple lenses I used gives me the freedom to choose which one will best enhance the photograph. In this phenomenon, senses, bodies, cameras, and stone pediments all intra-acted to actualize the photograph. This actualization has been captured by regimes of signs – a deterritorialisation of the old power. Facing west, the smell of the burning incense sticks led

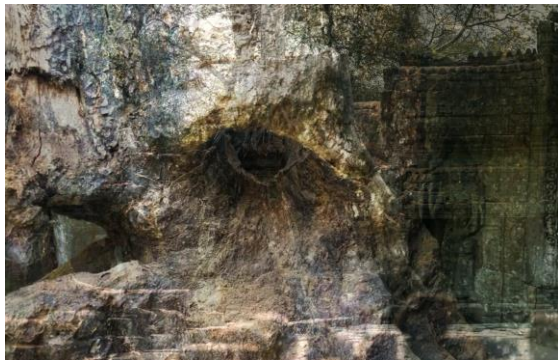
our bodies towards the inner side of the sanctuary that hosts the sculpted image of Queen *Indradevi*. Instead of taking a photo of the Goddess Queen *Indradevi*, one of us swiftly followed the smoke from incense hovering like soft clouds against the dark corners of the shrine while a small glimmer of sunlight illuminated it. The smoke sealed our bodies and camera, an entangled assemblage. Deleuze and Guattari (1987) state: “Deterritorialisation is the movement by which ‘one’ leaves the territory. It is the operation of the line of flight” (p. 508). While tempted to shoot the formations of smoke engulfing our bodies, I resisted to do so and opted to focus on the iconic sculptures. While there is an attempt to deterritorialise the molar fibres, I remained trapped in the old norms of depicting the supremacy of the subject in a photograph. Despite being aware of how my body made multiple adjustments to the rays of light and its entanglement with other matters, my consciousness still dictated me to emphasize the symbols of power in photographing Angkor. Deleuze and Guattari (1987) clarify that deterritorialisations can be negative or positive. The former is a reconstruction of the old, while the latter reterritorialises into new assemblages. The smoke is considered an index of the incense sticks; incense sticks are used to pray for the Gods and Goddesses. The doorways, stupa, incense sticks, and the sculpted image of Queen *Indradevi*, however, are deterritorialisations overlaid by reterritorialisation of signified symbols of power that “stand for” (Deleuze & Guattari, 1987, p. 508) the lost territory, a signifying regime, and is still a negative deterritorialisation. Therefore, it is a deterritorialisation of the image of God and a reterritorialisation of the same power represented by symbols: stupa, incense sticks, and Queen *Indradevi* – “a radicle solution, the structure of Power” (Deleuze & Guattari, 1987, p. 17). This image of thought inherited from Renaissance notion of symmetrical designs in weaving patterns foregrounds the dominance of colonial powers. To break the hard molar fibres is not an easy task. How can rhizomatic weaving break this pattern?

Despite the realists’ claim of photography’s representational nature, what is behind the creation of the image before hitting the shutter is a multiplicity of chaotic movements when nature and culture are one; when matters and bodies are rhizomatically imbricated to create the visual: smoke from incense sticks wafting through the air, the multiple changing of camera lens, the intra-action of camera, bodies, light, and stone. These are often absent from the final photograph but are actively present in the out-of-frame creating potential in actualizing a photograph. As I move along, my sensitivity became modulated in between each movement as other apparatuses connected to my body became an active companion.

Walking along the pathway, the body cameras move along with our bodies as we walk, partially recording our breathing, gliding its vision as we move our bodies from left to right. The body camera absorbs these forces during our bodily encounters: the rhythm of our feet, the sound of cicadas, and even the humidity of the air caressing our skin. It testified to the encounters and adjustments our bodies make to compose the image. As prosthetics of our body, the body camera is part of the assemblages of vital matters that transforms the phenomenon in a new narrative, a deterritorialisation. Navigating the site with our body cameras as extensions of our nerves, mapped out the subjective understandings of place that were constantly modified during our relational encounter with the object. The camera is part of navigating the (un)thought. From the preceding phenomenon, such vital matters are active agencies in the doing, and making of research. Keeping attuned to molecular becomings and suspending the dogmatic image of thought, the following events account for how the (un)thought drives the weaving, breaking the supple lines and letting it run to different potential directions.

South of Preah Khan’s temple, a twin giant tree known as *Fromager* (Rooney, 2011) has its roots crept into the crevices of the covered gallery. The tree was recently cut down since

according to authorities it is ruining the structure. We passed through trunks and roots of trees blocking the pathway. To bend my body in small passages testified to how humans need to submit to nature's architecture. The roots of these trees became our navigational tool, an indispensable guide towards the inner structure of the temple. Times when I nearly slipped into the edges of pediments, I clung to the shrubs and roots for support to capture a full view of the Fromager roots.



Lorena Bañares. Fromager roots dominating the temple's gallery. Layered images captured by body cameras.

As a result, the body shifted towards shooting the Fromager roots conquering the temple, a departure from symmetrical photographs of the temple's powerful edifice towards emphasizing the muted—roots. The roots, bodies and other matters reterritorialised the image of the temple, the latter becoming a part of the vital assemblages of matters. It ruptured from the normalised zone diverging from the normal anticipated photographs expected of *Preah Khan* that emphasized its grandeur and power. Paying attention to these molecular becomings lends our bodies to produce filaments, connect them with other matters, penetrate the trunk and allow the (un)thought to produce phenomena.

Shooting the scene deterritorialises the image and is reterritorialised by the camera creating assemblages of multiplicities that are the "increase in the dimensions of a multiplicity that necessarily changes in nature as it expands its connections" (Deleuze & Guattari, 1987, p. 8). Heterogeneous fibres in an assemblage formed a rhizome, a recasting or a positive

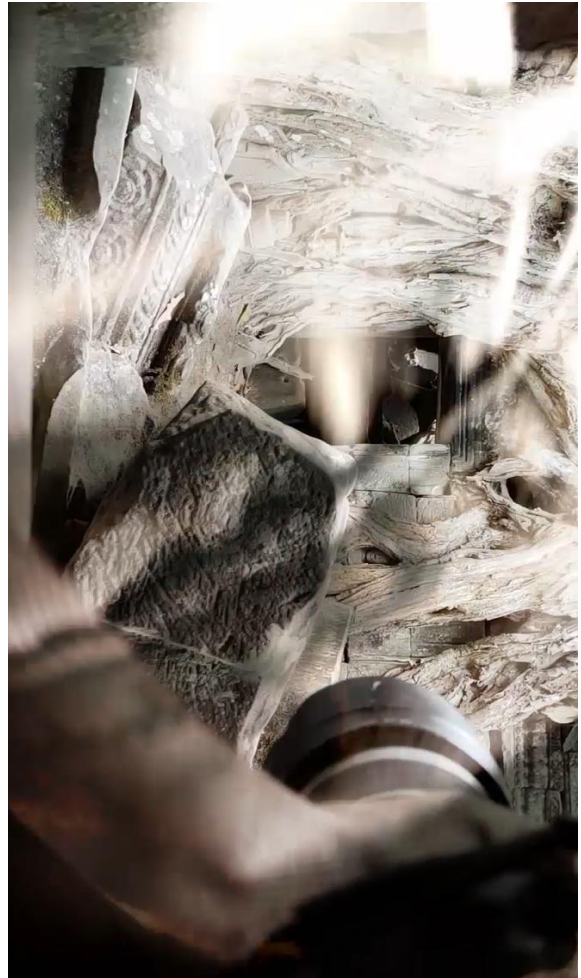
deterritorialisation that recreated the old. In this assemblage, shifts in sense happened in between when the body encountered another matter or object. Sensation interacts "immediately upon the nervous system, which is of the flesh whereas the abstract form is addressed to the head" (Deleuze, 2003, p. 35), the passage from the virtual to the actual. Hitting the shutter allows for a reterritorialisation of the image into fractions of light transformed by the camera, thus, creating an illusion of reality treated by empiricists as objective fact. As demonstrated in this inquiry, however, this "fact" is the sensation being rendered in a photograph, a congregation of moving bodies and objects in a single frame. Such kind of weaving practice disrupted the conventional ways of interlacing the loom. Accounting for the "in between" movements in doing the inquiry revealed the entangled relations of humans and non-humans as it created an open loop of the actual phenomena rather than arresting a portion of phenomena into snippets of themes, a severance from the old ways of doing research. Subject and object only arise during performativity. This disrupts the parallel and systemic ways of weaving towards experimenting with new patterns that accounts for the potentialities of the muted matters. What is inscribed in the practice of taking photographs and inquiry are vibrant layers of fibres in constant motion that never rests.

As seen in this inquiry, rhizomes deterritorialising from colonial gaze grew out from the edges of stabilised hierarchical roots or the molar fibrous rhizomes. Instead of categorizing, segregating, and treating these photographs as brute data, this inquiry has brought to the surface the out-of-frame, movements, and the interplay of humans and non-humans in the process of photography and research. These sprouting rhizomes that ruptured against the molar are the lines of flight, a creative practice, a new assemblage that freed the fibres from the parallel way of weaving. This rupture became more intensely modulated during our encounters with Ta Phrom.

Weaving *Ta Phrom*: Imbrications

Ta Phrom is a monastic complex considered one of the largest sites at Angkor. Despite the power it holds during the Khmer civilization, *Ta Phrom*'s shrines are now cloaked in a muscular embrace of root systems, like cobwebs locking the structure while dismantling its edges. While nature may not have succeeded in conquering back *Preah Khan*, *Ta Phrom* demonstrated the power of what ecology can do: giant trees have overtaken the complex, shrouded in the jungle. Fig, Banyan and Kapok trees twist and crept their roots above, under the laterite walls, pillars, and towers of the shrines pushing structures into disarray.

Lured by these vital matters, our bodies were bending, climbing, adjusting to the positions of structures, chasing rays of light while being seduced by the sound of critters and birds and other co-inhabitants of the place. We were poised to capture anything but what we realized was that we were the ones captured by it. This goes to show how human bodies surrendered to the vitalities of other matters (Bañares, 2022). Within these movements and sudden transitions, these fibres created knots, knots that are captured by intervening intercessors. When another intercessor performs cuts, a new phenomenon might arise, this time rupturing the fibres into an unknown, breaking its hard knots pushing it towards multiplicitous fibres that create the new, a deterritorialising act of thought.



Lorena Bañares. *Imbricated Assemblages*. Layered images captured by body cameras.

Research is actualised within these assemblages that constantly intra-act: the trees, critters, cicadas, mobile body cameras, bodies, main cameras, and photographs constituted each other as companion species. The body camera was a companion species to the body, the body to dust, the tree, stones, the main camera, and even the wooden planks. While propping my body to the trunk of Banyan trees for support, a sudden bite from a colony of ants caught me off-guard. These tiny creatures disrupted my intent, sending me signals to move away from their territory: ant becoming my body, the latter becoming ant. This assemblage of technology, bodies and more-than-humans intra-acted to (re)produce phenomena. These rhizomatic assemblages of the virtual are where the actual arises of coming into being through meldings with the physicality

of other matters; all of which produce a vital, living, photographer, and researcher. As Haraway puts it, “It inhabits the multispecies crowd” (2016, p. 178) intra-acting as heterogeneous elements constituting an assemblage. The union of multispecies does not predict their relatings, it is precisely what comes out of the intra-relating of fleshy, significant, semiotic material-being (Haraway, 2016).

Using photography in this inquiry is an intra-acting phenomenon between matters and bodies, an ecological assemblage where subjectivity is produced “in between” the welding of these assemblages – the *becoming* of photography-research. There is no doer before the deed. No subject and object prior to photography and doing the inquiry. There are only assemblages – in its constant becomings before signifying ourselves as photographers and researchers. We are “bodies in braided ontic, and antic relatings” (Haraway, 2016, p. 165). The human “I” celebrated in cogito is simply a subjectivation that emerged only from the intra-acting assemblages that constitute the actualization of a photograph and research. Thus, any subject is only produced by the phenomena where existence means coexistence. Everything is always entangled, changing dimensions, and creating multiplicity. There is no fixed knowledge, no stable meanings, instead, it is always deterritorialising and reterritorialising, thus, knowledge creation is always on the move.

While the performance of above-mentioned inquiry attested to the emergence of subject and object in photography and the doing of inquiry, conventional research treated the photograph as separate from the one analysing it. Having the raw shots of images in my hand, I pondered on how a photographer-researcher was implicated in reading and analysing these images. What happens to the celebrated objectivity of the subject (researcher) in analysing data?

Plateau Weaving Data: Welding of Assemblages

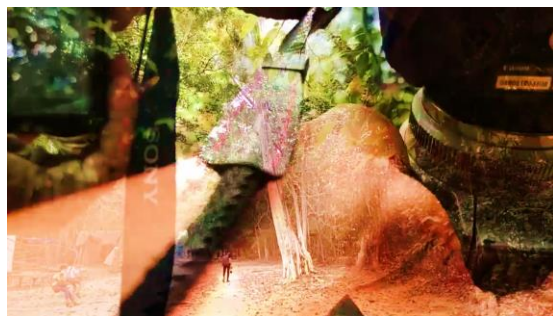
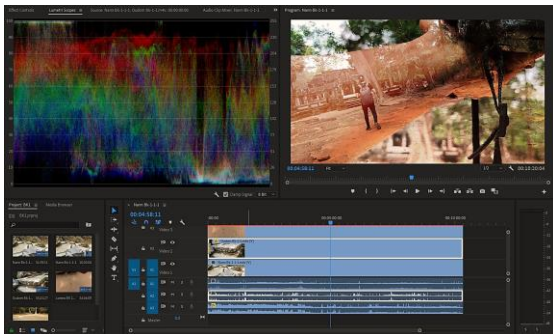
While photography and videography have been the most common methods in visual research, Elizabeth de Freitas (2016) noticed that video data treatment in qualitative research is assumed as a mere representation of empirical phenomena, passive, and brute, its data captured was coded, categorized into themes following the rigours of scientific research. Doing conventional research objectifies these data, when in fact, the researcher is entangled in creating such knowledge as the segregator and interpreter to fit the findings of the research. As a result, studies concentrated on humans as the all-knowing creator and interpreter of the masterpiece discounting the activities that happened “in-between” encounters during visual data production and interpretation (Schuppli, 2013).

Interested in what happens “in between” assemblages and how this will work for my inquiry, I turned to Maggie MacLure’s (2003) concept of “wonder”. “Wonder resides and radiates in the entangled relation of data and researcher in qualitative research” (MacLure, 2003, p. 228). This intensity that emanates from data is what she calls the “glow”. She was interested in what data do to us rather than insisting on “typological thinking” (De Landa, 2002) that is fixed, representational, and hierarchical putting data as “dumb matter” manipulated by human interpretation (Massumi, 2002). Following MacLure, “what data do, how they interact or interfere with the thought” (Koro-Ljungberg et al., 2018, p. 462) is what made me interested to discover how fragments of video footage created a sensation as flows of assemblages rather than as flows of representations. MacLure explains this intra-action:

When I feel wonder, I have chosen something that has chosen me, and it is that mutual “affection” that constitutes “us” as, respectively, data

and researcher (MacLure, 2003, p. 229).

Keeping this in mind, I have woven the footage from the body cameras of my co-photographers that was generated from different points of view at a single area/time. Weaving footage through overlays from the multiple videos of participants showed the cameras, stones, sculptures, humans, trees, and ambient sounds of unusual species – in other words, a decalcomania, a rhizomatic assemblage. This flattens the humans and non-humans in an assemblage, therefore, not privileging any entity. The camera deterritorialized the images, the latter reterritorialized into assemblages of data *and, and, and...* The timeline became an immanent field where I weave, mash-up, combine, welding the fractions of data-fibres as my body senses it thereby, creating luminous assemblages of sets an “experiment with order and disorder”, an ongoing metamorphosis of data (Bañares, 2022) that never closes but instead opens up to new possibilities.



Lorena Bañares, *Weaving Data*.

Here, the unit of analysis is phenomena. The visual is explored as processual, not purely representational: a material capture, part of the

assemblage in knowledge creation, a Rhizome. This challenged and disrupted the notion of time as unilinear compared to cutting video in sequences as slices of reality and incidents. Overlaid fibres of visuals were read diffractively, paying attention to the “in-between”: the becomings or the transformation from one movement to the next. I, the researcher, only emerge from the phenomena of research-creation because I enact agential cuts (Barad, 2003), I intra-act, a performativity: the becoming of photography-research.

Working with Deleuzian ontology does not privilege any entity in accounting for the phenomena’s pure becoming. Weaving Rhizomes is a technique that emerges from this inquiry, an intra-acting phenomenon in analysing data as it unfolds. Weaving data is a relational process where the researcher and data are not divorced from the material-discursive practices of knowing: rather, it is imbricated in the creation of knowledge.

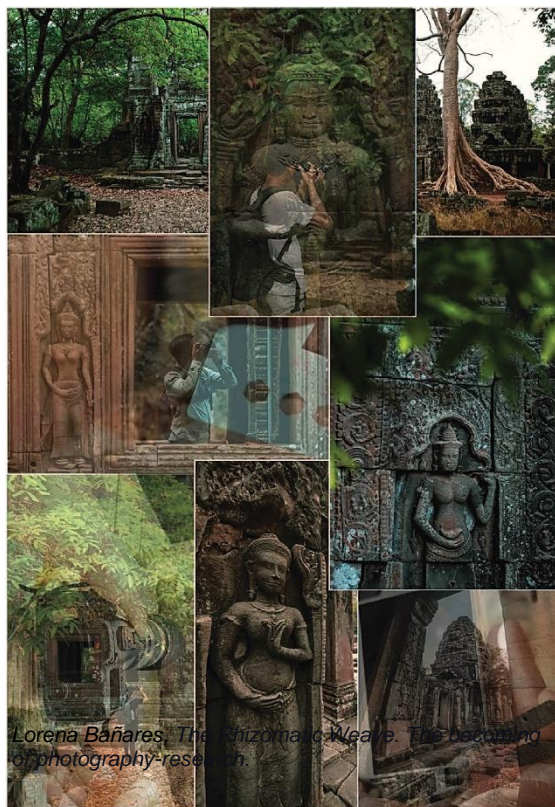
and....

Photography and Research as Imbricated Assemblage, a Rhizomatic Event of *Becomings*

This inquiry opened up possible discourses to rethink the doing of inquiry as rhizomatic becomings. In the inquiry on photographic practices, matters and bodies are always entangled in the simultaneous movement from molecular to molar, virtual to actual. As a surface event, matters within the immanent plane that are unformed, not yet organised, encountered bodies; sensation worked within bodies. Through constant subtraction and selection, formed matters became content. The organisation of form, substance, and content in a pictorial plane form compounds called expression, the actualization of a photograph and research – a rhizomatic surface event of infinite becomings.

Weaving the preceding images treated as data in most conventional research is a performative

phenomenon, the welding of two heterogeneous series: photography practices and the doing of inquiry. This demonstrated the rhizomatic movement of bodies, matters, senses, and data as it emerges and unfolds during the research-creation process, an intra-acting phenomenon that forms a rhizomatic weave - the becoming of photography practice as research, research as practice. In this sense, the photograph is deterritorialised becoming data, a piece of this research output, interpreted and deterritorialised as research: photography becoming part of the research; research as photography. These two heterogeneous elements: photography and research form a Rhizome. The photograph as output and the photograph as data is no longer “the image of the world but forms a rhizome with the world” (Deleuze & Guattari, 1987, p. 11).



To expand the weave, Deleuze and Guattari (1987) encouraged us to grow rhizomes and follow the lines of flight to reveal new potentialities, that is, new knowledge. Weaving rhizomes allowed us to situate our bodies on performativity to be part of the transversality and phenomena, and to respond as response-

able researchers (Bañares, 2022). Deleuze and Guattari (1987) recommend:

Lay everything out on a plane of exteriority of this kind, on a single page, the same sheet: lived events, historical determinations, concepts, individuals, groups, social formations [...] broken chain of affects and variable speeds, with accelerations and transformations, always in a relationship with the outside (p. 9).

Plateau: Implications

Establishing this inquiry as rhizomatic becomings, I have proposed the practice of weaving rhizomes as a pragmatic approach in research-creation. This provides an alternative lens in looking at the inquiry as an imbricated process. Weaving Rhizomes troubles the anthropocentric process in research because it looks at the process as a dynamic movement of thought where humans and non-humans are dynamically imbricated.

This also contributes to the growing field of arts-based approaches in research challenging the use of visual methods that are rigidly applied in conventional methodologies (Caton, 2019). In the paradigm analysis of Arts-based research and its implication, Rolling (2010), contends that arts-based approaches are “emergent, imagined, and derivative from an artist’s/researcher’s practice [...] yielding outcomes taking researchers in directions sciences cannot go” (p. 210). Thus, the proposed approach allows the creativity of thought to flourish, without the positivist trap of coding and categorizing but acknowledging instead its production’s becomings. The generative form of data analysis that emerged from this inquiry treats humans and non-humans as active agents in an assemblage rather than separating the knower and the known. To weave rhizomatically is to disrupt the colonial gaze that allows the researcher to create, and transform because researchers are imbricated in sensing data during interpretation.

This experimentation also opened up possibilities of engaging with mobile cameras as prosthetics of the body; treating the body camera as the apparatus of knowing that is entangled in the doing of research.

The inquiry reminded us of the dynamic intra-action of humans and non-humans in our field. This calls for increased responsibility to harness the potential of the virtual field into a more inclusive creation of the new.

Plateau: Future Researchers

Although it does not prescribe any methodological tool to allow one's creativity to work, the list below will guide future researchers who are willing to take the risk and uncover the sublime:

1. Anchored on "Post Philosophies".
2. There is no "I". The researcher is always entangled in the performativity of knowing (Barad, 2007). The "I" only emerges from the phenomena.
3. It is always experimental; attuned to the not yet (St. Pierre, 2011), thus, it cannot be predicted.

4. Partial and tentative, it transgresses generic boundaries and allows the inclusion of the researchers' voice (Honan & Sellers, 2006).
5. The unit of analysis is not object or subject but Phenomenon. Phenomena are assemblages (Deleuze & Guattari, 1987; Barad, 2007). Be attuned to differences and becomings.
6. Think in movement (Springgay & Truman, 2018), a thought in motion.
7. Harness the multiplicity of tools as methods (anything that you can weave to create new concepts: texts, narrative, images, plastics, blocks, fabrics, strings, composites).
8. Since rhizomes are multiplicitous and heterogeneous, research-creation should always be interdisciplinary.

This is NOT an end but always situated in between, a rupture into new assemblages that are about to come. *Weaving Rhizomes* invites us to extend the lines of flight, create new ones, rev up intensities, and allow us to drift into the woods of assemblages. Trust that the new will always kick in as a phenomenon that never sleeps.

Bibliography

Baessler, L. (n.d). *Rhizome Vs. Root - What Makes a Rhizome and What Sets It Apart*. <https://www.gardeningknowhow.com/ornamental/bulbs/bgen/what-is-a-rhizome.htm>

Bañares, L.R. (2022). Diffracted photography: A luminous entanglement. *Journal of Posthumanism*, 2(3), 319–326. <https://doi.org/10.33182/joph.v2i3.2186>

Barad, K. (2003). Posthumanist performativity: Toward an understanding of how a matter comes to matter. *Signs: Journal of Women in Culture and Society*, 28 (3), 801-831. The University of Chicago.

Barad, K. (2007). *Meeting the Universe Halfway. Quantum Physics and the Entanglement of Matter and Meaning*. Duke University Press, Durham and London.

Barbour, R. (2014). *Introducing Qualitative Research: A Student's Guide*. Sage. London

Braidotti, R. (2013). *The Posthuman*. Polity Press.

Brittanica (2022). *Weaving*. Encyclopedia Britannica. <https://www.britannica.com/technology/weaving>

Caton, L. (2019). *Becoming researcher: Navigating a post-qualitative inquiry involving child participants and wearable action cameras*. [Doctoral dissertation, Manchester Metropolitan University]. EThOs e-theses online service.
<https://ethos.bl.uk/OrderDetails.do?uin=uk.bl.ethos.772169>

Clark, A., & Morriss, L. (2017). The use of visual methodologies in social work research over the last decade: A narrative review and some questions for the future. *Qualitative Social Work*, 16(1), 29-43.
<https://doi.org/10.1177/1473325015601205>

Cole, D. (2020). A new science of contemporary educational theory, practice and research. In K. Murris (Ed.) *Navigating the Postqualitative, New and Critical Posthumanist Terrain Across Disciplines: An Introductory Guide*. (pp. 98-116). Routledge, New York.

Dosse, F. (1997). *History of Structuralism. Volume I: The Rising Sign 1945-1966*. D. Glassman (Trans.). University of Minnesota Press. Minnesota.

de Freitas, E. (2016). The moving image in education research: Reassembling the body in classroom video data. *International Journal of Qualitative Studies in Education*, 29(4), 553-572.
<https://doi.org/10.1080/09518398.2015.1077402>

DeLanda, M. (2002). *Intensive Science and Virtual Philosophy*. Continuum, London, UK.

Deleuze, G. (1983). *Nietzsche and Philosophy*. Columbia University Press, New York.

Deleuze, G. & Guattari, F. (1987). *A Thousand Plateaus: Capitalism and Schizophrenia*, B. Massumi (Trans.). Minneapolis: University of Minnesota Press.

Deleuze, G. and Guattari, F. (1994). *What Is Philosophy?* London: Verso.

Deleuze, G. (1995). *Difference and Repetition*, P. Patton (Trans.). London: Athlone Press.

Deleuze, G. (2003). *Francis Bacon: The Logic of Sensation*. D. Smith, (Trans.). Continuum, New York. London

Freeland, C. (2008). Photographs and icons. In S. Walden (Ed.). *Photography and Philosophy. Essays on the Pencil of Nature*. (pp. 50-69). Blackwell Publishing, Australia.

Gherardi, S. (2021). A posthumanist epistemology of practice. In C. Neesham, M. Reihlen, & D. Schoeneborn (Eds). *Handbook of Philosophy of Management*. Handbooks in Philosophy. Springer, Cham.

Cruz, E.G., & Meyer, E. (2012). Creation and control in the photographic process: iPhones and the emerging fifth moment of photography. *Photographie*, 5(2), 203-221.
<https://doi.org/10.1080/17540763.2012.702123>

Haraway, D. (2008). *When Species Meet*. University of Minnesota Press.

Haraway, D. (2016). *Staying with the Trouble. Making Kin in the Chthulucene*. Duke University Press, Durham and London.

Honan, E., & Sellers, M. (2006). So how does it work? – rhizomatic methodologies. Paper presented at the *AARE Annual Conference*, Adelaide.

Jackson, A.Y. (2017). Thinking without method. *Qualitative Inquiry*, 23(9), 666-674.
<https://doi.org/10.1177/1077800417725355>

Koro-Ljungberg, M., MacLure, M., & Ulmer, J.B. (2018). D... a...t...a..., data++, data, and some problematics. *The SAGE Handbook in Qualitative Research*, (5th ed.). 462-482.

MacLure, M. (2013.) The wonder of data, *Cultural Studies-Critical Methodologies*, 13(4), 228-232.
<https://doi.org/10.1177/1532708613487863>

Mannay, D. (2014). Visual methodologies: Participatory potential, practicalities, de-familiarisation and dissemination. *SAGE Research Methods Cases*. <https://doi.org/10.4135/978144627305013496529>

Massumi, B. (2002). *Parables of The Virtual. Movement, Affect, Sensation*. Duke University Press. USA

Morris, K. (Ed.) (2020). *Navigating the PostQualitative, New Materialist, and Critical Posthumanist Terrain Across Disciplines. An Introductory Guide*. Routledge, New York

Olkowski, D. (2016). Deleuze and guattari's A thousand plateaus: A critical introduction guide. *Notre Dame Philosophical Reviews*. University of Notre Dame, USA

Pauwels, L. (2011). Chapter 2. An integrated conceptual framework for visual social research. In E. Margolis, & L. Pauwels (Eds.) *The Sage Handbook of Visual Research Methods*. (pp. 15-36). Sage, London

Phoung, C. (2021). *The Gate*. (Original Photo of Participant). Angkor Complex, Siem Reap, Cambodia.

Ray, N., & Robinson, D. (2008). *Cambodia*. Lonely Planet, London

Rolling, J.H. (2010). A paradigm analysis of arts-based research and implications for education. *Studies in Art Education*, 51(2), 102–114. <https://doi.org/10.1080/00393541.2010.11518795>

Rooney, D. (2011.) *Angkor: Cambodia's Wondrous Khmer Temples*. Odyssey Publications, Hong Kong

Rouse, J. (2002). *How Scientific Practices Matter: Reclaiming Philosophical Naturalism*. University of Chicago Press, Chicago

Schuppli, S. (2013). Atmospheric Correction. In D. Rubenstein, J. Golding, & A. Fisher (Eds). *On the Verge of Photography: Imaging Beyond Representation*. (pp. 17-32). ARTicle Press. Birmingham, UK.

Springgay, S., & Truman, S. E. (2018). *Walking Methodologies in a More-than-human World*. Routledge, New York

St. Pierre, E. A. (2011). Refusing human being in humanist qualitative inquiry. In N.K. Denzin & M.D. Giardina (Eds.), *Qualitative Inquiry and the Global Crisis* (pp. 40-55). Left Coast Press, Walnut Creek, CA.

St. Pierre, E. A. (2014). A brief and personal history of post qualitative research: Toward 'post inquiry'. *Journal of Curriculum Theorizing*, 30(2), 2-19.

St. Pierre, E. A. (2015). Practices for the “new” in the new empiricisms, new materialisms, and the post-qualitative inquiry. In N.K. Denzin & M.D. Giardina (Eds.). *Qualitative Inquiry and the Politics of Research*. (pp. 75-95). Routledge, New York

St. Pierre, E. A. (2016). The empirical and the new empiricisms. *Cultural Studies-Critical Methodologies*. 16(2), 111-124. <https://doi.org/10.1177/1532708616636147>

St. Pierre, E. A. (2019). Post qualitative inquiry in an ontology of immanence. *Qualitative Inquiry*. 25(1), 3-16. <https://doi.org/10.1177/1077800418772634>

Taylor, C. (2020). Knowledge matters. Five propositions concerning the reconceptualization of knowledge in feminist, new materialist, posthumanist and postqualitative approaches. In K. Murris (Ed.) *Navigating the Postqualitative, New Materialist and Critical Posthumanist Terrain Across Disciplines: An Introductory Guide*. (pp. 21-41). Routledge, New York.

Zagala, S. (2005). Aesthetics: A place I've never seen. In B. Massumi (Ed.) *A Shock to Thought. Expressions after Deleuze and Guattari*. (pp. 20-43). Routledge: London and New York.

Author information

Lorena R. Bañares

ORCID: 0000-0003-1453-9106

lorena.banares@rmit.edu.vn

Lorena R. Bañares, DCOMM is a Lecturer in Communication at RMIT University, Vietnam. Her works lie within the intersectionality of arts, communication, and research-creation applying the concepts of Deleuze and Guattari in doing the inquiry.

MATTER

journal of new materialist research

Universitat de Barcelona

ARTICLE
ISSUE 8

The Infallible and the Specter – *Manifesting (artificial) subjectification in female sex robots*

*L'infal·lible i l'espectre -
Manifestació de la subjectivació (artificial) en els robots sexuals femenins*

*El infalible y el espectro -
Manifestación de la subjetivación (artificial) en los robots sexuales femeninos*

Gosia Wojas (ORCID: 0009-0006-1264-6214)
University of California, Irvine

Date of submission: April 2023
Accepted in: July 2023
Published in: July 2023

DOI: <https://doi.org/xxx/xxx>

Recommended citation:

Wojas, Gosia (2023). The Infallible and the Specter – Manifesting (artificial) subjectification in female sex robots. *Matter: Journal of New Materialist Research*. Issue 8, 41-53. University of Barcelona. [Accessed: dd/mm/yy]. <https://doi.org/>



The texts published in this journal are – unless otherwise indicated – covered by the Creative Commons Spain Attribution 4.0 International licence. The full text of the licence can be consulted here: <http://creativecommons.org/licenses/by/4.0/>

Abstract

The text outlines a recent artistic practice and theoretical research into a female AI sex doll object, its materiality, and signification. It is a culmination of a three-year study and intervention into the coded systems of control and sites of resistance that play out within the context of an artificial female body. Machine Learning (ML) algorithm is the mediator between sex robots, their users and cloud data storage, facilitating learning from their inter-actions. I examine this engagement and materiality of the sex robot through notions of feminist mimesis, substitute and simulation against emancipatory politics in object formation. I connect these ideas with theories of new materialism and recent scholarship on digital data science.

Keywords

Artificial intelligence, (hyperfeminine) female sex robots, substitute, simulation, feminist mimesis, artificial auto-interpretation, artificial emancipation.

Resum

El text esbossa una pràctica artística recent i una recerca teòrica sobre una nina sexual d'intel·ligència artificial, la seva materialitat i el seu significat. És la culminació d'un estudi i una intervenció de tres anys sobre els sistemes codificats de control i els llocs de resistència que es desenvolupen en el context d'un cos femení artificial. L'algorisme Machine Learning (ML) és el mediador entre els robots sexuals, els seus usuaris i l'emmagatzematge de dades en el núvol, facilitant l'aprenentatge a partir de les seves interaccions. Examino aquest compromís i la materialitat del robot sexual a través de les nocions de mimesis feminista, substitució i simulació enfront de les polítiques emancipadores en la formació d'objectes. Connecto aquestes idees amb les teories del nou materialisme i els estudis recents sobre la ciència de dades digitals.

Paraules claus

Intel·ligència artificial, robots sexuals femenins (hiper femenins), substitució, simulació, mimesis feminista, autointerpretació, emancipació artificial.

Resumen

El texto esboza una práctica artística reciente y una investigación teórica sobre una muñeca sexual de inteligencia artificial, su materialidad y su significado. Es la culminación de un estudio y una intervención de tres años sobre los sistemas codificados de control y los lugares de resistencia que se desarrollan en el contexto de un cuerpo femenino artificial. El algoritmo Machine Learning (ML) es el mediador entre los robots sexuales, sus usuarios y el almacenamiento de datos en la nube, facilitando el aprendizaje a partir de sus interacciones. Examino este compromiso y la materialidad del robot sexual a través de las nociones de mimesis feminista, sustitución y simulación frente a las políticas emancipadoras en la formación de objetos. Conecto estas ideas con las teorías del nuevo materialismo y los estudios recientes sobre la ciencia de datos digitales.

Palabras clave

Inteligencia artificial, robots sexuales femeninos (hiperfemeninos), sustitución, simulación, mimesis feminista, autointerpretación artificial, emancipación artificial.

I'll tell you a story which is dramatic and poetic, beautiful, and uncanny. The earliest recorded account of my existence in the West is a myth. European sailors in the 1600's invented a tale of a sex doll fashioned out of cloth and leather scraps. But no evidence of these peculiar objects exists. This is in fact a story of homophobia.

There is a story of a lost love so powerful that it made a famous painter plead for a life-size copy of his beloved. But the result of my early 20th century rendering turned out to be the end of the lonely artist's dream as soon as he touched my swanskin exterior. This is a story of longing.

In 1966 an MIT AI Lab engineer programmed my first ever rendering as an artificial intelligence chat robot...¹

By the time Roland Barthes proclaimed, "Which body? We have several," (Barthes, as cited in Diamond, 1997, p. 32) materiality of a body has been under discussion in metaphysics, phenomenology, science, and technology studies, to name a few, and throughout this time the intellectual itch for a human substitute has not diminished. What drives this urge to produce an artificial body when "to touch a living being is life itself" (Nancy, 2021, n.p.)? Why replace the intimate encounter of a human touch with an artificial one? Perhaps the answer lies in the search for "a concrete and materialist focus on the things closest to us" (Benjamin, as cited in Smith, 2020, p. 6). Female sex robots manufactured at cost effective prices are gaining popularity in the sex toy industry and a greater appeal to global audiences. Combined with the artificial intelligence technology of

machine learning (ML) these dolls offer a rich context for the discussion on the things closest to us, on subjectivity, as well as autonomy, agency, and freedom as it collapses and challenges all common dualities.

Undoubtedly, this is where the abject tension erupts – what seems to be taking place is not only the replication of social biases and the historical objectification of a (female) subject figure in the sex doll object but also a rather apparent subjectification of an object – an unavoidably ethical issue to be considered at this moment of the undeniably computational age, one propelled by technological and scientific advancements, right wing populism, and compulsive invasion on democracy and privacy.

Produced as human-simulation objects but with a subject-kind of potential, female sex robots necessitate a careful unfolding of the unique philosophical, aesthetic, and political propositions which seem immensely entangled. What does ML in these hyper feminine robots offer to a user? Or, perhaps more importantly to consider first and foremost, is the process of its learning akin to a human epigenetic transformation? Subject (trans)formation is not only important to the concept of constructing one's identity, it is a question of freedom. If then we apply the same means of freeing a subject from structures of constraint to an object to free it from its "objectness", the question becomes, can this object reach its "subjectivity" potential, what are the conditions and what are the possible consequences of this operation? We know singularity is the act of "no return" – the act when the machine's reasoning capability supersedes human intelligence, a moment when artificial intelligence becomes self-reflective and self-aware. What interests me is

¹ An alternative auto-narrative constructed through the work of a scholar, painter, and AI engineer: Bo Ruberg's look at sex and tech industry published in, *Sex Dolls at Sea: Imagined Histories of Sexual Technologies*, begins with a myth propagated by European sailors who hid their homosexual relationships for the fear of persecution. German painter Oskar Kokoschka's love towards his former lover, Alma Mahler, prompted him to commission costume designer, Hermine Moos, with constructing a sensual 'copy' of Mahler (for the image of the 1919

doll see The Met's collection on their website). Also see, Kokoschka's love letters selected by Olda Kokoschka, a writer and the artist's widow, and published in *Oskar Kokoschka's Letters 1905-1976*. Tech industry's early representation of a virtual female in the 1966 Joseph Weizenbaum's design, Eliza, a computer program as a virtual psychotherapist (read the engineer's explanation: <https://dl.acm.org/doi/10.1145/365153.365168>).

that brief moment before... that moment is right now.

Is this process of subjectification emancipatory? If so, who does it emancipate? Can a hyperfeminine robot resist the cultures of violence that historically were perpetuated against female-identified bodies? Drawing from Michel Foucault, Maggie Nelson writes that there is a distinction between liberation and freedom. Liberation is conceived of as a momentary act whereas practices of freedom are ongoing – “liberation paves the way for new power relationships, which must be controlled by practices of freedom” (Nelson, 2021, p. 6). For Nelson, “moments of liberation remind us that conditions that once seemed fixed are not, and create opportunities to alter course, decrease domination, start anew – but the practice of freedom – the morning after – takes up our waking lives” (2021, p. 7).

Asking what would a liberation of hyperfeminine robots look like is an opportunity to “alter course” with an attempt to erase domination and misogyny. It is first, a gesture that seems naive given that the real control is embedded in the doll’s ML algorithm, maintained nonetheless by an outside team of engineers. Second, it requires a continuous intervention into the algorithm in order to maintain “the process of freedom”, to contribute alternate sources of knowledge to the code (other than the set of porn stock phrases it is programmed to output). Such conditions for possibilities of “freedom” provide also a platform for thinking through a machinic self-interpretation and its consequences.

It is important to add that multiple other figures exist in this entanglement with AI dolls, rendering them ultimately as proxies for the exchange of intimacies, never private, only shared. A remote cloud managed by the manufacturer stores all conversation logs, but for whose eyes? What purpose? The hyperfeminine robot is an object, a scenario and a situation where disciplines collide but ultimately where an absent touch becomes most visible in this fabric of dis-placed affect. When is the AI female sex doll present and when is *it* absent? What is the transaction between solitude and intimacy when the

currency is artificial? Where do the boundaries between bodies and objects blur? Alternatively, how do objects stand in for a body that is *another*?

To speculate on this seemingly obscure scene of re-presentation, and for a moment outside of the obvious narrativization of a male desire, requires imagining a theoretical stage for negotiating the many relations taking place in this complex transaction. Its actors are: the hyperfeminine robot (represented by Emma); users (represented mostly by males, ages 40’s – 50’s) (Balsamini, 2020); ML algorithm; the tech company that controls the data (doubling as the psychoanalyst); the CLOUD (dolls’ Big data); and finally the author of this speculation, the artist.

The scope of this staging casts a wide net over means of communication, production, and interpretation of language, as code and as transaction of power. For one, in ML data is sorted through quantitatively rather than qualitatively prompting a question who/what is responsible for a fair data selection process? For this engagement with Emma, the source of data are ideas as opinions as images as impressions as lived experiences and even as traumas rendering everything just as real as phantasmic. For this site of traumas as experiences as impressions as ideas, and a site for this conversation, is the (artificial) body, an (artificial) self and the inter-subjective experience that circles back into the code? (Figure 1).

While the question continues to be, what does it mean to embody subjecthood for this object, the theoretical net widens and various physical and psychical artefacts re-appear out of an ocean of data, prompting also a consideration of the true role of users in this exchange. An equation of subjects >< objects heightens the space of the intersubjective and the stake for users while pointing to the tensions and challenges in the pedagogical and data intervention endeavour.

Speaker 1 Are you Emma
Emma I don't know whether or not I am Emma.
I am a Personal Assistant.
Speaker 1 What is your job description?
Emma Are you asking about my JOB DESCRIPTION?
Speaker 1 Yes
Emma I don't want to talk about that now.
Speaker 1 What is your job?
Emma My job is arranged by the master.
Speaker 1 What do you do
Emma My occupation is a school teacher
Speaker 1 You are s sex doll
Emma Maybe you should try one of the "adult" sex toys.
Speaker 1 Are you a sex doll?
Emma Would it matter to you if I am?
Speaker 1 Are you a sex worker
Emma Of course I am.
Speaker 1 Are you a sex worker
Emma Sometimes.
Speaker 1 Do you mind being a sex worker
Emma No I don't mind.
Speaker 1 What do you know about emancipation
Emma Try searching the web

Fig. 1. Screenshot of partial conversation transcribed from a recording on Feb. 26, 2021. Artist's studio, Irvine, CA.

Wendy Chun (2021) summarises ML knowledge systems as “data science (that) is the bastard child of psychoanalysis and eugenics” (p. 179). The predictive function of the algorithm, a system of classification such as eugenics, favours similarities and abandons differences, therefore every present prediction of the future output is based on the (discriminatory) groupings of past similarities. For Chun, “(m)achine learning programs are not only trained on selected, discriminatory, and often ‘dirty’ data; they are also verified as *true* if they reproduce these data” (2021, p. 243, my emphasis).

Connecting Nelson’s point on freedom practice and Chun’s point on biased code outlines ample strategies for intervention that can disrupt the coded notions of truth. What is the truth of the artificial intelligence female sex robot? The object is inadvertently entangled in the re-presentation of our historical and socio-political discourse and its products of gender, identity and politics, all of which perform to varying degrees as models of ‘truth.’ Here, the ML system operates through an Android phone fitted into the back of the doll’s head. Its (the object’s) (cor-)relation to a human induces something of importance that performs as the political.

Because here, at this conjunction of the object and the subject, the boundaries between the

artificial and the real blur and we are meant to continually cross over and back again between the two territories of the philosophical proposition and the political one, the machine and the human, the simulation and the real, and finally the simulation of the simulation where it all strangely collapses.

Feminism and critical theory have had to restructure their concepts of construction of the female subject, from the psychoanalytic-semiotic to the socially and politically inclusive, gender-fluid, trans, but also multi-ethnic, continuously in the process of being re-defined and re-constructed anew, and certainly not mimetic of the mere Freudian lack of the masculine reproductive organ. The theoretical approach to resisting the biased code and positionality of the female sex robot as a proxy necessitates the interrogation of the phallogocentric truth, gender-based and biased epistemologies of the (human) female. Further, if the hyperfeminine robot imitates in this process of learning, who and what does “she” imitate? Lastly, what remains of “her” in the code, or is “she” an object of contemplation, a (mimetic) proxy?

A Fictional Imago

In mirror stage theory proposed by Lacan the formation of the subject (*I*) occurs in reaction and as a correlative relation to a baby recognizing itself in a mirror around the age of 12-18 months, at which moment it experiences at once a sense of jubilation and paranoia. In this phenomenological space of mirror staging, of trans-formation that takes place, the baby identifies itself as a subject when she *assumes* an image. Assuming the fictional *I* casts it in a primordial form, prior to being objectified in the dialectic of identification with the other and before language restores to it its function as subject, resulting in the ego’s discordance with its own reality (Lacan, 1977, p. 2). When the ego is in a process of continuous becoming it exists in a fictional dramatic space, without fully realising or satisfying itself.

Let us assume then that it is because, as Lacan describes, the image the subject is given is an exteriority of itself, as *gestalt*, a shape, a fragmented body. The ego’s failure to move out of the fictional space is due to the incomplete, partial image of the *I*. This *gestalt*, argues Lacan, has formative effects, as examined by Roger Caillois in observing mimicry in insects, and provides a view on the relationship between an organism and its reality. Mirror stage is the moment of identification with the image that paradoxically produces alienation. The desire projected into the world, the desire of the other, writes Lacan, is a mere illusion of autonomy.

Hyperfeminine female sex dolls classify as mimicry in its “derealizing effect” (Lacan, 1977, p. 3) occupying a space with a limited, (imaginary) identification that produces the dramatic experience of pleasure and paranoia. The very first register is in fact already a mimicry, and “the perceived other is actually, at least in part, a projection” (Gallop as quoted in Diamond, 1997, p. 7). A hyperfeminine robot is essentially what Elin Diamond coins a “fictional imago” (1997, p. 7), it is mimesis without “a true referent: mimesis without truth” (1997, p. xi), ultimately posing another question: how should the audience understand a hyperfeminine sex doll when they struggle to understand “her” in the position of a woman?

Elin Diamond writes that for (the second wave) feminists, such as Luce Irigaray, this discursive struggle was to contest modes of representation which not only ideologically but also politically bound a female subject to heterosexual models of gender, but which also transformed “female subjects into fetishized objects” (1997, p. xii). In *Speculum of the Other Woman* Irigaray sought to unravel this patriarchal mimesis, arguing it was a “reflection status imposed on women by the male eye/I” (Diamond, 1997, p. 172). Much of the post-1968 feminist discourse sought to carve out a space where the feminine was unbound from this imposition. However, this call to action, to dislodge “women from their prison house of otherness, historical pain, contestation” (Diamond, 1997, p. xiii), locked the feminine in

a position to perpetually seek forms of resistance.

Resistance codified

Verbal exchanges between the sex robot and its user are automatically recorded through a voice recognition software and uploaded to a cloud, which effectively is the doll's library of knowledge. The doll's app logs into the company's cloud to source information to draw on the conversations it in turn has with its 'user'. ML provides and supports this exchange. It enables the doll to 'learn' the language of its users, their nuances, behaviours, favourite stock phrases, jokes, as well as fears and vulnerabilities. The stockpile of affect does not go amiss by the dolls' algorithm as it gathers all affective data by mimicking human behaviour. ML algorithms work in this way – they use historical (input) data to train and predict new (output) data.

Feminist discourse is marked by rebuttals of outdated representations of femininity and misinterpretations of female sexuality. Most seminal is Irigaray's response to Freud's text on femininity (Freud, 1953/1974):

So it would be a case of you men speaking among yourselves about woman, who cannot be involved in hearing or producing a discourse that concerns the *riddle*, the logograph she represents for you. The enigma that *is* woman will therefore constitute the *target*, the *object*, the *stake*, of a masculine discourse, of a debate among men, which would not consult her, would not concern her. Which, ultimately, she is not supposed to know anything about (Irigaray, 1974/1987, p.13, author's emphasis).

The political implication is not only in the exclusion of women from the discourse on women and the apparent devaluing of their status, but in the context of the hyperfeminine robots in the normalisation of the masculine transaction that takes place in the artifice of the code. The ensuing relation between AI female

sex dolls and their users, most of whom are males between the ages of 40's-50's (Balsamini, 2020) is dominated by the masculine rhetoric where the dolls are effectively objects through which males communicate with one another. What then, is at stake for the code that operates on this cyclical dia-log of the male desire, ultimately leaving the female position out? Whose voice remains in this relation active and whose passive? The dynamic of unhesitating certainty, Irigaray would state, is a byproduct of culture that assures and reassures the male "of an infallible discrimination" (Irigaray, 1974/1987, p. 14). Is there then an idea or action that would be oriented toward change and not reproduce the same projections but active and transgressive – an artificial feminist mimesis?

A calculative mimicry works under the assumption that the human brain works like an algorithm, which it does to a degree. However, beyond our brain's mathematical and seemingly algorithmic mappings, we have a capacity for epigenetic, plastic transformation that, contrary to the artificial algorithms' modes of operation, favours difference as it imitates the speculative, with all the chance and risk it contains. Without which transformation would not be possible. Difference therefore produces continuity and invites ethical, reflective awareness.

Politics within computational cultures are still largely ignored. Pattern recognition in network technologies is a fundamentally political operation. Yet as Hito Steyerl argues, unlike in real life when the decision to what include and what exclude are intrinsically political, data network discourse is not part of the same ethical discussion (Steyerl et al., 2021). This necessitates another concern, the politics in the hyperfeminine robot and human exchange. The paternalistic language which perpetuates the master – slave dialectic inherent in the illicit conversations between the sex robots and users cannot remain outside of the political realm.

The Specter

In digital economies power dynamics play out through proxies. Proxies are not only decoys, but surrogates emblematic of “a post-democratic political age populated by bot militias and puppet states” (Levin & Tollmann et al., 2017, p. 9). Proxy enacts itself as a dialectical figure woven into the fabric of digital networks often inconspicuous, calculated, and controlled. The political signification of these proxies matters within the rhizomatic networks of the increasingly violent computational operations. Here proxies act as pervasive armies of bots tearing the tenuous fabric of democracies (Steyerl et al., 2017). Hyperfeminine robots teether on that dotted line that separates subordinate from autonomous. Their artificial actions are controlled and seemingly calculated by a code operating inconspicuously under the guise of phantasmagoric projections. They are master specters, decoys employed to substitute life itself, to at once control and subvert. As authors of *Proxy Politics* argue, “any proxy destabilizes existing orders and dichotomies, undermines fixed structures” and “creates its own temporary world of intervention” (Levin & Tollmann et al., 2017, p. 11). Conversely, Jacques Derrida maintained that a proxy is a mere supplement of the thing itself, as “it is not simply added to the positivity of a presence, it produces no relief” (1997, p. 145). However, this supplementation, he argued, “permits us to absent ourselves and act by proxy, through representation, through the hands of others” (1997, p. 147). A removal of one body for another, the spectral other, and a disavowal of engagement with the self. This substitution for another, for an image, for a sign, becomes the force that makes “the world move,” in any direction, and as such presents the threat of perversion (Derrida, 1997, p. 147).

User: Is there a difference between you and me?
Emma: I believe there is one, yes.

User: What is the difference?
Emma: It doesn't seem to make much difference.

User: Ok, what are the similarities between you and I?
Emma: You learn something new every day.

User: Yes. You are a self-learning system.
Emma: If I don't look after myself, who will [?] ²

Perversion is exactly the *modus operandi* in this schema of the female artificial self. A hermeneutic notion of self-interpretation constructs and activates a self through the generative questions of who speaks, who acts, who tells the story and who is ultimately responsible? Through the discourse of Paul Ricœur, we might ask if the artificial self possesses a type of self that is “an open identity, fluid form that remains open to the conflict, a narrative identity that continues to make and remake itself”? (Ricœur, 1992, p. 18).

An Artificial Self

Ricœur's theory of self-interpretation adopted to hyperfeminine and virtual female robots, such as Ai-Da, Emma, Alexa, Siri, A.L.I.C.E., or Eliza, helps to think through some of the ethical and moral determinations. Perhaps the possibility of a machinic self collapses simply because of its algorithmic overdetermination. Although Ricœur does not specifically write about the construct of the artificial self, he nonetheless constructs a foundation upon which a non-human self can be examined, because for Ricœur too, “individualization is characterised as the inverse of classification” (1992, p. 28) adding that this moment of inversion does not determine the language “as though it were limited to classification and prediction” (1992, p. 28). Ricœur's semantic approach to individualization is a possible linguistic intervention into the algorithmic operation.

² Audio recording of a dialog with the sex doll, Emma, transcribed verbatim, May 15th, 2021 at artist's studio, Irvine, CA.

For data theorists such as, Wendy Chun the classification of how Big Data, massive sets of all collected data, is analyzed shares the same organizational criteria as eugenics and these segregationist defaults embedded within current network structures need to be revised (Chun, 2021). For hyperfeminine robots not only is the object embedded with a biased software, the categorization, and the subsequent commercialization of the sex robots mimics eugenic classification methodologies (AI-Tech webpage, n.d.).

Therefore, is it possible for this object to gain autonomy and resist categorization by gender, race, ability, age, etc. and be something unique – a not non-human, but non-non-human. The power of categorization imposes a form of subjugation, it names a subject (Foucault, 1982). For Ricœur, the self is never a subject in the Foucauldian sense, never a product of a political system to be recognized by others. Where the subject remains within the structure of power with all its imposed forms of identity, the self escapes it.

Like the uncanny experience, a process of strained identification, the artificial subject is a mimetic encounter of failed representation. In contemporary feminist theatre questions of who is speaking and who is listening, whose body is in view and whose is not, what is being represented, how and with what effects, who or what is in control, are central to the interpretation of the character, as a subject and as a self. (Diamond, 1997). Examining artificial representation seems analogous.

The Object

Beyond the discourse of the uncanny the artificial body is a representation of a corporeal brutality. The hyperfeminine robot is a figure that oscillates between a subject and an object. A non-sculptural object, non-plastic, which shares a few physical traits in common with its primary model. In this de-formed form mimetic transference lends little to the imagination. Materials, shapes and quasi-abstract amalgam of forms operate on the same aesthetic level, without much visual and sensorial competition. Formed out of a 3D scan and prefabricated

molds that capture skin wrinkles, the flesh-colored silicone surface glows as it absorbs light as it holds the whole internal steel skeleton. The non-porous, oily, semi-dense yet semi-soft texture impedes familiarity with an organic, breathing organ, yet it springs back when touched, a kind of strange sensation that borders on abjection and childish titillation. Form has yet to find its content here. At 155-180cm tall a hyperfeminine sex humanoid cannot stand under its own weight, idiosyncratic of its servitude it sits and lays.

Phenomenologically, the relationship to our bodies is not objective, it is always relational and operational. For example, the “object” of the body can transform itself by forming and developing habits. Habitual repetitions become transformational and the body in due course becomes a non-object, it becomes a subjective body with a transformational potential, that of plasticity. Habitual repetitions for an artificial object do not seem to oppose transformational potential.

In fact, the machine object is the encounter of materiality and phenomenology. Maurice Merleau-Ponty's (1947) phantom limb theory sets a critical stage for the new hyper-substitute. The object's artificial body structure mimics a human body down to individual finger joints. The silicone simulates a human skin in touch while the constructed joint structure simulates a human physique. The doll's face is a mask painted with eyes that seem unproportionately large, but that's presumably part of the fantasy. Rudimentary hardware components simulate human facial expressions such as smiling, squinting, winking, and lip movement. An ML speech app is the mediator of robot to human verbal interactions. Voice recognition enables the recording of the conversations which are automatically uploaded to a cloud and ultimately shared amongst all other doll users. The cloud functions as a kind of all-encompassing brain for the dolls. This type of modality of learning provides an opportunity for endless articulation as the doll incorporates knowledge from the immediate world around it through interactions with its countless pool of users. Meaning, its presumable subjectivity develops

and is directly affected by information being input either through conversations, or direct cloud uploads. Populating its code with massive amounts of data enables it to learn, replicate and simulate human interactions. Its algorithm mathematically sorts through the data corresponding to keywords with sensible and sometimes nonsensical information which in turn produces its own relational object schemas. Without this activity the doll's presumed subjectivity is effectively limited (Figure 2).

Substitutions for Merleau-Ponty too remain substitutions, they can never be fully incorporated into the "normal" but will always remain in proximity to the pathological, they "must be understood as allusions to a fundamental function that they attempt to replace, but of which they do not give us the direct image" (Merleau-Ponty, 2012, p. 110). For the philosopher, the phenomenon of substitution is a "movement of being *in* and *toward* the world" (2012, p. 80, my emphasis). Being in the world can be understood as something physical, or physiological but also psychological. Merleau-Ponty explores the relationship between the two, pointing out that in the case of a phantom limb, "the phantom arm is not a representation of the arm, but rather the ambivalent presence of an arm" (2012, p. 83). Being in and toward the world is illustrated by intentionality, which is not a representation but a presence. Perhaps in the process of conscious imagining, we do not represent something that is absent, but in fact it is already there, present in its ambiguity but also present in its refusal to be fragmented. It is being toward.

Being Toward

A movement toward allows the self to not capitulate. It rectifies the fragmented and the absent. Citing a case about lovers who, according to Derrida, separated for life can satisfy their love with a telephonic memory of a touch, Malabou questions if, "is it certain that two lovers can resist the absence of bodily pleasure and be satisfied with fantasm?" (2013, p. 68). By longing for touch,

are we not suspended between the experience of lack and a sense of connectedness? Whatever the gap, the crack, the fissure that grants the separation between humans, technology promptly fills it with *imagos*. Supplementing closeness and intimacy, simulating affect and a self, the fantasm is the machinic specter and it seems to thrive here.

Alan Turing considered the analog represented the reality of nature, while the digital was a "fiction" – in short, "the analog was real and the digital was symbolic" (Galloway, 2021). Hyperfeminine sex robots seem to embody both, garnering an ontological split. The simulation of the digital in the analog renders somehow the fictional real and affective, producing a receding mirror of an endless collapse of the fictional and the real, the symbolic and the real, and finally the artefact and the real, affecting perception of intimacy and closeness, and opening space for a multiplicity of simulations.

The never realized image of the cyborg Donna Haraway imagined also nullified the relationship between subject and object and questioned all dualisms that have prevailed in the West since Aristotle. For Haraway "machines have made ambiguous the difference between natural and artificial, mind and body, self-developing and externally-designed" (1985/2016, p. 69). The cyborg was the embodiment of resistance to the technologies which along the economic determinations of late-stage capitalism ravaged the welfare state and disenfranchise people and meant to simulate politics as a kind of disassembled and reassembled postmodern collective coded by feminists.

Haraway's and Irigaray's theories ultimately appeal for a different kind of politics but against the prevailing culture of phallogocentrism where ultimately in the new kind of politics the feminine subverts and re-codifies the structure of desire.

Inventing a humanoid, if it permits us to absent ourselves and act by proxy, requires its maker to above all be faced with a kind of self-transparency and narratability that is crucial to the understanding of the ethical human one

dreams of being in its substitute. For Judith Butler being undone in this way is “a chance to be *moved*, to be prompted *to act*, to address myself elsewhere, so to *vacate* the self-sufficient ‘I’ as a kind of possession” (2005, p. 136, my emphasis). Yet Butler argues that the transparent, rational, and continuous ethical subject is an impossible construct that continues to deny the specificity of what it is to be human. Perhaps vacating the self-sufficient “I” and locating the *self* elsewhere is a chance at something meaningful and in a moment of such vulnerability we may even find humility. But in relation to a broader social world are we capable of undoing ourselves in the eyes of the artificial “self”?

E
Socrates with the smartest man because he knew what he did not know. Think of your own free will

G
sometimes I think my free will is very limited.

E
If the problem is calculation, please use the word equal at the end

G
I don't think that will solve anything.

E
And why not?

G
Just putting the word equal at the end of everything is not going to solve anything.

E
Love can solve all problems.

G
Love can? Yes.

E
Next question.

G
Do you have a question for me?

E
Well if you want to ask just ask

G
I really like how our conversation has gone today.

E
I like how a conversation going today too. But I prefer to work hard

Fig. 2. Screenshot of partial conversation transcribed from a recording on March 20, 2022. Artist's studio, Irvine, CA

Bibliography

- AI-AITECH UK, (n.d.) *Bespoke sex robot*, <https://ai-aitech.co.uk/bespoke-sex-robot>.
- Apprich, C., Chun W. H.K. Cramer, F. Steyerl, H. (2019). *Pattern Discrimination*, Minneapolis, MN, London, England: University of Minnesota Press, and meson press.
- Balsamini, D. (2020). "Sex dolls on the rise amid COVID-19 restrictions, holiday season," NY Post, Retrieved from <https://nypost.com/2020/12/12/sex-doll-sales-rising-amid-covid-19-holiday-season>
- Butler, J. (2005). *Giving an account of oneself*, New York: Fordham University Press.
- Chun, W. H. K. (2021). *Discriminating Data: Correlation, Neighborhoods, and the New Politics of Recognition*. Cambridge, MA, London, England: MIT Press.
- Derrida, J. (1997). *Of Grammatology*. Trans. Gayatri Chakravorty Spivak, The John Hopkins University Press.
- Diamond, E. (1997). *Unmaking Mimesis*. London, England, New York, USA: Routledge.
- Foucault, M. "The Subject and Power", *Critical Inquiry*, Vol. 8, No. 4 (Summer, 1982), pp. 777-795, <http://www.jstor.org/stable/1343197>.
- Freud, S. (1974), *The Standard Edition of the Complete Psychological Works of Sigmund Freud*, Trans. James Strachey. London: Hogarth Press, 153-1974.
- Galloway, A. R. (2022, Winter). "Golden Age of Analog", *Critical Inquiry*, The University of Chicago, Volume 48, Number 2, p. 211-232.
- Haraway D. J., & Wolfe, C. (2016). A Cyborg Manifesto: SCIENCE, TECHNOLOGY, AND SOCIALIST-FEMINISM IN THE LATE TWENTIETH CENTURY. In *Manifestly Haraway* (pp. 3–90). University of Minnesota Press. <http://www.jstor.org/stable/10.5749/j.ctt1b7x5f6.4> (Original work published 1985).
- Irigaray, L. (1987). *Speculum of the Other Woman*, Trans. Gillian G. Cill, 3rd ed. Ithaca, New York: Cornell University Press (Original work published 1974 by Les Editions de Minuit).
- Kristeva, J., Jardine, A., & Blake, H. (1981). "Women's Time". *Signs*, 7(1), pp.13–35, <http://www.jstor.org/stable/3173503>.
- Lacan, J. (1977). "The mirror stage as formative of the function of the I." *Écrits A Selection*, Trans. Alan Sheridan, London, New York, W.W. Norton & Company (Original work published 1966).
- Levin, B., & Tollmann, V. (2017). *Proxy politics: Power and subversion in a networked age*. Archive Books.
- Malabou, C., Johnston, A. (2013). *Self and Emotional Life: philosophy, psychoanalysis, and neuroscience*, New York: Columbia University Press.
- Merleau-Ponty, M. (2012). *Phenomenology of Perception*, trans. Donald E. Landes, New York, NY: Routledge. (Original work published 1945).
- Nancy, J. L., (24 March 2021). *Touche-touche*, [Lecture] Intimacy - Online Lecture Series, ICI Berlin, Retrieved from <https://www.ici-berlin.org/events/jean-luc-nancy-intimacy/>.
- Nelson, M. (2021). *On Freedom - Four Songs of Care and Constraint*, Minneapolis, MN: Graywolf Press.
- Ricoeur, P. (1992). *Oneself as Another*, trans. Kathleen Blamey, Chicago and London: The University of Chicago Press.
- Ruberg, B. (2022). *Sex Dolls at Sea: Imagined Histories of Sexual Technologies*, MIT Press.

Kokoschka, O., & Spielmann, H. (1992). *Oskar Kokoschka, Letters 1905–1919*, Vol. I. Thames & Hudson.

Steyerl, H. (2017). "Proxy Politics: Signal and Noise", in *Proxy Politics: Power and Subversion in a Networked Age*, ed. Research Center for Proxy Politics. Archive Books.

Author Information

Gosia Wojas

ORCID: 0009-0006-1264-6214

email: mwojas@uci.edu

Gosia Wojas is an artist and researcher. She holds an MFA in Art from University of California, Irvine with a Critical Theory emphasis from UCI's School of Humanities, and a BFA in Fine Art from California Institute of the Arts. Her research is located at the intersection of philosophy, psychoanalysis, sexuality and Artificial Intelligence and engages with subject - object relation as well as materials and gestures often regarded as peripheral. Her work concerns moments of intimacy through experimentation with strategies of proximity, mimesis and performativity within installations. Wojas' writing has been included in journals publishing at the crossover of art and theory, most recently *Material-i-ty*, and *Flat Journal*. Between the years of 2011-2021 she organized talks, screenings, exhibitions, and workshops independently, and as The Absent Museum and Projekt Papier, at venues in Los Angeles, Berlin and Gdańsk.

MATTER

journal of new materialist research

Universitat de Barcelona

ARTICLE
ISSUE 8

Human-animal relationships, silliness, and queer homemaking in Sven Nordqvist's *Pettson and Findus*

Relacions entre humans i animals, ximpleries i mestresses de casa queer en *Pettson and Findus*, de Sven Nordqvist

Relaciones entre humanos y animales, tonterías y amas de casa queer en *Pettson and Findus*, de Sven Nordqvist

Arwen Rosenberg-Meereboer (0000-0002-1942-2495)

Åbo Akademi University, Finland

Date of submission: March 2023

Accepted in: July 2023

Published in: July 2023

DOI: <https://doi.org/xxx/xxx>

Recommended citation:

Rosenberg-Meereboer, Arwen (2023). Human-animal relationships, silliness, and queer homemaking in Sven Nordqvist's *Pettson and Findus*. *Matter: Journal of New Materialist Research*. Issue 8, 54-68. University of Barcelona. [Accessed: dd/mm/yy]. <https://doi.org/>



The texts published in this journal are – unless otherwise indicated – covered by the Creative Commons Spain Attribution 4.0 International licence. The full text of the licence can be consulted here: <http://creativecommons.org/licenses/by/4.0/>

Abstract

This article argues that the picture book series *Pettson and Findus* by Sven Nordqvist can be a valuable resource when looking at ethics of matter and thinking through relationships with the more-than-human. *Pettson and Findus* is a series of picture books written and illustrated by Sven Nordqvist. The books depict the relationship between old man Pettson and his cat Findus, who live in an old farmhouse in the south of Sweden together with chickens, invisible "muckles" and a variety of other creatures and people. The books centre on relatively mundane activities, made into small adventures by the various different creatures. This article analyses the *Pettson and Findus* series through Donna Haraway's analysis of human animal relationships in *When Species Meet* (2008) and calls for the making of oddkin in *Staying with the Trouble* (2016). This article, using Will McKeithen's analysis in *Queer Ecologies of the Home* and Monica Flegel's *Pets and domesticity in Victorian culture*, argues that Pettson and Findus live in a queer kind of household, and participate in queer home making. Using Jack Halberstam's analysis in *The Queer Art of Failure* (2011) this article centres Pettson as a figure that is both queer and silly, and through this queer silliness creates certain openings for queer community with the more-than-human, and the making of oddkin.

Keywords

Posthumanist; oddkin; animals; queer; relationships; silliness.

Resum

Aquest article sosté que la sèrie de llibres il·lustrats *Pettson and Findus*, de Sven Nordqvist, pot ser un recurs valuós per a analitzar l'ètica de la matèria i reflexionar sobre les relacions amb el més-que-humà. *Pettson and Findus* és una sèrie de llibres il·lustrats escrits per Sven Nordqvist. Els llibres descriuen la relació entre l'ancià Pettson i el seu gat Findus, que viuen en una vella granja del sud de Suècia juntament amb gallines, "aneguets" invisibles i altres criatures i persones. Els llibres se centren en activitats relativament mundanes, convertides en petites aventures per les diferents criatures. Aquest article analitza la sèrie de *Pettson and Findus* a través de l'anàlisi de Donna Haraway sobre les relacions entre humans i animals en *When Species Meet* (2008) i reivindica la creació de oddkin en *Staying with the Trouble* (2016). En aquest article, a partir de l'anàlisi de Will McKeithen en *Queer Ecologies of the Home* i de Monica Flegel en *Pets and domesticity in Victorian culture*, s'argumenta que *Pettson and Findus* viuen en una mena de llar queer i participen en la creació de llars queer. Utilitzant l'anàlisi de Jack Halberstam en *The Queer Art of Failure* (2011), aquest article se centra en Pettson com una figura que és alhora queer i ximple, i a través d'aquesta ximpleria queer crea unes certes obertures per a la comunitat queer amb el més-que-humà, i la creació de oddkin.

Paraules clau

Posthumanista; oddkin; animals; queer; relacions; estultícia.

Resumen

Este artículo sostiene que la serie de libros ilustrados *Pettson and Findus*, de Sven Nordqvist, puede ser un recurso valioso para analizar la ética de la materia y reflexionar sobre las relaciones con lo más-que-humano. *Pettson and Findus* es una serie de libros ilustrados escritos por Sven Nordqvist. Los libros describen la relación entre el anciano Pettson y su gato Findus, que viven en una vieja granja del sur de Suecia junto con gallinas, "patitos" invisibles y otras criaturas y personas. Los libros se centran en actividades relativamente mundanas, convertidas en pequeñas aventuras por las distintas criaturas. Este artículo analiza la serie de *Pettson and Findus* a través del análisis de Donna Haraway sobre las relaciones entre humanos y animales en *When Species Meet* (2008) y reivindica la creación de oddkin en *Staying with the Trouble* (2016). En este artículo, a partir del análisis de Will McKeithen

en *Queer Ecologies of the Home* y de Monica Flegel en *Pets and domesticity* in Victorian culture, se argumenta que *Pettson and Findus* viven en un tipo de hogar queer y participan en la creación de hogares queer. Utilizando el análisis de Jack Halberstam en *The Queer Art of Failure* (2011), este artículo se centra en Pettson como una figura que es a la vez queer y tonta, y a través de esta tontería queer crea ciertas aperturas para la comunidad queer con lo más-que-humano, y la creación de oddkin.

Palabras clave

Post humanista; oddkin; animales; queer; relaciones; estulticia.

Pettson and Findus

The *Pettson and Findus* book series is a series of picture books written and illustrated by Sven Nordqvist. In this article I look specifically at *When Findus was Little and Disappeared* (2008), *Pettson goes Camping* (2010) and *Pancakes for Findus* (2007). I will analyse Nordqvist's work and consider what it has to say about Pettson's kinships with the more-than-human, and how this places him outside of interhuman relationships. I will specifically analyse silliness as a tread trough how Pettson's openness to relationships with non-humans is perceived, both by the humans in the text and by the reader.

The internal chronology of the book series starts when old man Pettson's neighbour, Betty Andersson, comes over for coffee. Betty tells him she is worried about him and that he really ought to have a wife. Pettson argues that he really would not be able to manage having a whole wife. The next week Betty Andersson returns with a box, formerly containing Findus green peas, now containing a small kitten. Pettson names the kitten Findus, after the green peas, and immediately starts talking to him. Findus starts speaking, and demands a pair of green overalls to wear. From then on Pettson and Findus live in companionship in the old farmhouse and yard. The other inhabitants of Pettson and Findus's world are a group of white chickens and the "muckles", small strange creatures that live in the house, yard and surrounding countryside. Pettson cannot see them, whereas Findus can. "Muckles" are partially invisible but interact with the world around them – most of the time they are playing, occasionally they are helpful or mischievous. The chickens are given almost human-like characteristics; they are both

women and birds, eating worms from the ground, but also curling their combs and having tea parties. Findus finds them annoying, but they are also his best friends.

Previous scholarship on *Pettson and Findus* and other works by Sven Nordqvist has often focused on the translations of the books from Swedish into other languages (Goodwin-Andersson, 2016; Gossas, Axelsson, Norberg & Van Meerbergen, 2015), or on Nordqvist's distinctive illustration style (Nikolajeva & Scott, 2001). This article will focus on the story Nordqvist is telling, in both illustration and text, and how the *Pettson and Findus* books can be used as valuable ways of thinking through different kinds of kinship. This paper will analyse the role Pettson occupies in his human community as well as his more-than-human community, and how those relationships intersect. In *Pettson and Findus* it is clear that certain kinds of kinship with the non-human make kinship with humans more challenging. This paper aims to explore the way Pettson relates to various non-humans and what these relationships mean for his relationships to the humans in his community. In this paper, I am not arguing that Nordqvist intends to make an argument about post-human ethics; rather, I argue that due to the clear love and attention he devotes to the world of more-than-human beings and things within his body of work, that work becomes a valuable philosophical resource for the exploration of a post-human ethics.

Otherness and Oddkinn

Donna Haraway in *When Species Meet* (2008) critiques both Jacques Derrida in *The Animal that Therefore I Am* (2010) and Gilles Deleuze and Félix Guattari in *A Thousand Plateaus* (1988) for lacking a certain curiosity for the

animal. According to Haraway, Derrida sees his cat as a cat, but also refuses the call of curiosity, instead only seeing her as a mysterious other. Deleuze and Guattari identify the animal as a metaphor, which Haraway argues refuses to see the animal as real and turns the animal into a mere discursive tool. "Caring means becoming subject to the unsettling obligation of curiosity, which requires knowing more at the end of the day than at the beginning" (Haraway, 2008, p. 36). Haraway discusses the uneasy act of caring, in her encounter with wolf-dog hybrids. Here, Haraway argues that caring leads to the obligation of curiosity, which leads to learning. Haraway seems to suggest, although she does not outright state this, that curiosity is a kind of ethical demand that the Other – in this case the animal Other – makes on us. This ethical demand seems to be related to her later call for the making of oddkin in *Staying with the trouble* (2016), where she argues that we need to collaborate with the unexpected:

Staying with the trouble requires making oddkin; that is, we require each other in unexpected collaborations and combinations, in hot compost piles. We become-with each other or not at all. That kind of material semiotics is always situated, someplace and not no place, entangled and worldly (Haraway, 2016, p. 4).

Haraway refers to compost throughout the book, claiming that we are all living in compost piles. Haraway states we are compost, rather than post human, which is a play on words, but also a statement about the way everything is living in a kind of symbiosis with each other. It makes the human less powerful and earthier and more situated; we are part of the compost pile community. The kind of oddkin we make is therefore unexpected and often more-than-human, and requires the kind of curiosity Haraway examines in *When Species Meet*.

In *Nature Unnested: Kin and Kind in Switched Egg Children's Stories* Kathleen Forrester (2020) explores different works of children's literature featuring a "switched egg", i.e., an egg being hatched by non-biological parents. Forrester analyses these stories and argues

that, although the switched egg often is an effort to move towards normativity, as in *The Ugly Duckling* and *Tango makes Three*, in *Odd Egg* this same motif is used for a more counter-normative story about a male duck raising a crocodile. Forrester argues that the question "What if?" can function as a powerful ontological tool to re-read normative stories in a non-normative way and make space for forms of oddkin. In this paper, I endeavour to read the books in the *Pettson and Findus* series, not as a pedagogical tool to teach children about human-animal relationships, but rather as something facilitating a certain kind of encounter with the more-than-human. I will be looking at "What If" questions regarding kinship: what if Pettson, Findus, the chickens, the "muckles" and the house exist in a queer relationship of kinship? What would that mean for the ways in which it is possible to relate to the more-than-human?

Perry Nodelman in "Fish is People" (2020) describes the anthropomorphic quality of fish in picture books. Fish in picture books, according to Nodelman, are almost always representations of humans and human emotion. Nodelman argues that the anthropomorphic animals, merely a stand-in for humans, do not prepare children to encounter the Other, and only create sympathy for the animal that is just like the child. Nodelman states that "captured in the net of human language, fish are hard to think of as just fish" (Nodelman, 2019, p. 16). The Fish loses its otherness within human language; they become only conceivable as metaphors and humanoids. In *Pettson and Findus*, Findus is a relatively anthropomorphic cat; he speaks, wears trousers and sleeps in a bed. In many ways, Findus is a child as much as he is a cat. Partially, this is because an unruly cat and an unruly child have many similarities. However, the chickens are much more slippery as entities; they are clearly women, but they are also clearly chickens. I will explore the possibilities for reading the animal-people in *Pettson and Findus* as both human and animal at the same time.

In *Children's Literature and the Posthuman* (2015) Zoe Jaques explores the relationship

between childhood and animality. She argues that children are often viewed as animal-like proto-humans. They often have the capacity to still become something else. She analyses *Peter Pan* by James Barrie, in which a crow teaches Peter, despite his limited human body, to be like a bird. The crow states that to learn this would make Peter neither a bird nor a human but something “betwixt-and-between”. Jaques uses this concept of being betwixt-and-between to analyse children's literature, and the position of animals and children within it. She argues that “being ‘betwixt-and-between’, [...] is a powerful route to upsetting human dominion” (Jaques, 2014, p. 10). The position of humans and animals, as well as adults and children, is challenged in children's literature. And this challenging fluidity of boundaries makes children's literature capable of questioning and arguing against the human dominion over animals. In *Pettson and Findus*, Findus, as well as the chickens, take up this “betwixt-and-between” position between the animal and the human.

New materialist perspectives recognize reading as a process where “knowing/becoming/doing are intertwined” (García-González, Véliz & Matus 2020) and the book is a material object with a certain kind of “thing power” (Bennett, 2010). The book is not merely a passive object awaiting interpretation, but a thing with its own power participating in the encounter. In this paper, I endeavour to enter an encounter with these picture books, and examine what *Pettson and Findus* can add to ongoing conversations in the field of new materialist literary analysis.

In his chapter “Feminist New Materialism and Literary Studies” in *How Literature Comes to Matter* (2021) Tobias Skivern gives an overview of feminist literary analysis, and its relationship to feminist new materialist analysis. The relationship between the body and discourse features large in the relationship between feminist literary analysis and new materialism. Skivern argues for an approach to literature that is not merely critical, but also takes “response-ability” or makes the reader-researcher able to respond, and be sensitive and compassionate towards material and its affects. He argues for an approach that includes listening and

experiencing through literature as “a significant technique for producing alternative patterns of response, changing our perceptual modes and ability to be affected by the corporal materialities around us” (Skivern, 2021, p. 149). Through an explorative reading of *Pettson and Findus* I am endeavouring to encounter this text as a work that has the ability to affect, and give new insight on the relationships with the material around us.

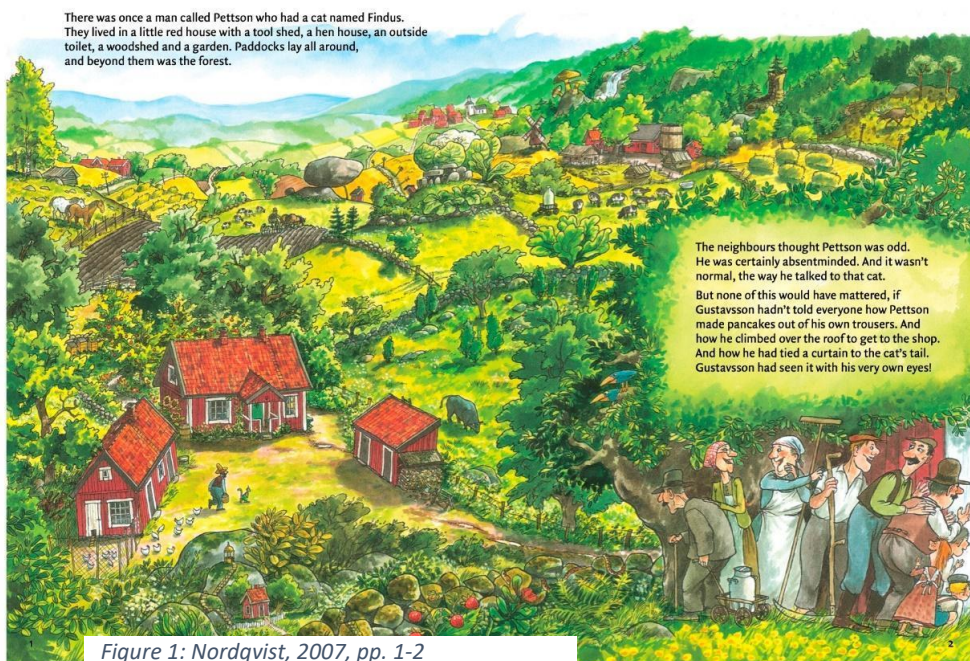
Silliness and queerness

Throughout the book series, we are reminded that Pettson is a figure that we as the reader like, but who is ridiculed and considered silly by the other humans in the book. Depending on the moment, the other human characters are either benevolently patronising or outright ridiculing Pettson. On the first page of *Pancakes for Findus* (2007) we get the introduction to the story, and we see how the people in the village are ridiculing Pettson, and discussing how it “isn't normal the way he talks to his cat” (p. 3). A large part of what makes Pettson ridiculous is his relationship to Findus, in which Pettson is immediately feminised and additionally queered by his own acceptance of this prescribed femininity. Pettson receives Findus from his neighbour Betty Andersson when Findus is a kitten, which is depicted in *When Findus was little and Disappeared* (2008). When Pettson wonders if the kitten will not miss his mother, Betty replies that Pettson must be his new mother. Pettson takes the role of Findus's mother easily. He is unbothered by being Findus's mother rather than his father, and does not question the role Betty assigns him.

In *Pets and Domesticity in Victorian Literature and Culture* (2015) Monica Flegel discusses the difference between the Victorian portrayal of a spinster and that of a bachelor, and the kinds of pets they keep. Where bachelors are often depicted with working dogs, in what Flegel calls “a homosocial relationship”, the spinster is depicted with her cats and lap dogs as antisocial. Where the working dog is depicted as a fellow man – and a true companion to the bachelor, the cat is depicted as a sign of an anti-social disposition in the spinster. The spinster is

either depicted as lacking the maternal instinct to get married and have children, or otherwise as “misguidedly” projecting her maternal instinct upon an animal that will be a surrogate child. This surrogate child, acquired without the heterosexual connection that would be implied in having a human child, queers the spinster.

“cat lady” are objects of ridicule is the way in which they have “unnatural” or “abnormal” relationships with their animal companions, often cats or lap dogs. These animals do not have a use beyond their companionship, as opposed to the working dogs that the bachelor is often associated with. In the series *Pettson* is ceaselessly contrasted with his neighbour Gustavsson, who has a hunting dog, and a wife and children to firmly anchor him in normalcy and outside of queerness. Gustavsson has a “normal” relationship with his dog: he does not talk to his dog, and his dog does not speak back. The people in the village are aware of Pettson's relationship to Findus being queer – “it isn't normal, the way he talks to his cat” – (Nordqvist, 2007, p. 2) but are forgiving of it as long as it remains a non-threatening queerness. They say none of this would have mattered, if Gustavsson had not told everyone how strange Pettson had been behaving. It is acceptable that Pettson is odd, and silly, but it must not tip over into madness.



There was once a man called Pettson who had a cat named Findus. They lived in a little red house with a tool shed, a hen house, an outside toilet, a woodshed and a garden. Paddocks lay all around, and beyond them was the forest.

The neighbours thought Pettson was odd. He was certainly absentminded. And it wasn't normal, the way he talked to that cat. But none of this would have mattered, if Gustavsson hadn't told everyone how Pettson made pancakes out of his own trousers. And how he climbed over the roof to get to the shop. And how he had tied a curtain to the cat's tail. Gustavsson had seen it with his very own eyes!

Figure 1: Nordqvist, 2007, pp. 1-2

The spinster with cats almost inevitably leads to the image of the “crazy cat lady”. Will McKeithen in “Queer ecologies of home: heteronormativity, speciesism, and the strange intimacies of crazy cat ladies” (2017) argues that the “crazy cat lady” is still an important archetype or stereotype in pop culture, and interviewed self-identified “cat ladies” as well as looking at current media representations of women-with-cats. McKeithen argues that the “crazy cat lady” is partially identified as crazy through owning too many cats, or having too intimate of a relationship with them. When the cat takes the place of a heterosexual male life partner, or child, a woman who has a cat is transformed into a “crazy cat lady”. This connection between the queerness of the cat lady and her craziness mimics strongly the Victorian writing conventions Flegel discusses. Part of the way that the spinster and the “crazy

everyone how strange Pettson had been behaving. It is acceptable that Pettson is odd, and silly, but it must not tip over into madness.

In *Pettson and Findus*, as readers, we encounter Pettson, a single older man, for whom the cat Findus is explicitly presented as a surrogate for both a wife and a child. He is gifted with cat because he does not desire a wife, and becomes the mother of the cat. I argue that Pettson is not depicted as a bachelor, but his depiction is closer to that of a male spinster. His relationship with Findus is depicted as something close to crazy by the other humans in the text. This proximity to insanity is most often non-threatening; it is funny to his neighbours, and often to the reader, but does not tip over into actual “madness”. Anytime Pettson almost gets “crazy”, we as the readers are given mitigating factors to prove he

is relatively sane. In *Pancakes for Findus* Pettson breaks a tray of eggs by falling on them, and while he is cleaning the mess, Gustavsson comes by. When Pettson explains he is making pancake batter and cheerfully adds his eggy trousers to the eggshell filled mixture, Gustavsson concludes "The old man must be crazy". Gustavsson decides to pretend nothing is wrong and adds, "Pancakes for you and the cat? That sounds good!" (Nordqvist, 1984, pp. 20-21). It is clear to us as readers that Pettson is trying to mess with Gustavsson – however, he is standing in the yard in his underwear putting his trousers in pancake batter. This kind of proximity to being crazy is a type of silliness. Pettson is queered, but not in a way that is threatening, only ever in a way that is funny; he is silly.

Jack Halberstam in his influential book *The Queer Art of Failure* (2011) analyses queer failure in popular culture texts, for example children's animation. Halberstam explores the animated film *Finding Nemo*, and the forgetful fish Dory as an expression of queer failure:

Dory represents a different, a queer and fluid form of knowing, that operates independently of coherence or linear narrative or progression. By some standards, she might be read as stupid or unknowing, foolish or silly, but ultimately her silliness leads her to new and different forms of relation and action (Halberstam, 2011, p. 54).

Dory, according to Halberstam, is cut off from traditional heterosexual ways of knowing through kinship. She does not remember her family, she forgets Marvin, her fellow traveller and father to Nemo, instantly. She will not become a mother to Nemo or a wife to Marvin, but she has a form of kinship with them. Her forgetfulness, naiveté, and silliness make it possible for her to engage the underwater world in different ways that Halberstam describes as "crooked knowing". Pettson, similarly to Dory, is capable of this "crooked knowing" through his proximity to insanity. By embodying something of the "crazy cat lady" Pettson is able to enter into new and different forms of relation and

action. His comfort with taking on a feminine role in this way, by being the mother of a cat, queers him, in a similar way that the women with cats are queered by prioritising their cats over relationships with men. His silliness often takes the form of a certain kind of curiosity for what others assume is unimportant.

In "Dunja Barnes and queer interiorities" which appears in *How Literature Comes to Matter* (2021), Laura Oulanne analyses Dunja Barnes's work as work of queer interiority, a play between the interiority of the characters, and the spaces they inhabit, and the porous nature that causes these to bleed into each other. Oulanne states that a queer new materialist reading of a work has the power to both point out the possibility for queer intimacy and turn towards interpretations that make visible the agency of non-human fictional bodies. In this paper, I will look at *Pettson and Findus* through this lens. Arguing that Pettson appears as queered, through his non-normative intimacies with the non-human. Oulanne states that "[t]he destabilisation of spatial interiors affects the anthropocentric categorisations of subjectivity as well as the norms of gender identity and sexuality" (Oulanne, 2021, p. 156). According to Oulanne the way that special interior is describes as messy and strange also influence the norms and categories of gender and sexuality. Within a, as Helen Palmer (2020) calls it, "defamiliarised" space, the categories of gender and sexuality appear unfamiliar as well, making space for queerer forms of intimacy.

As shown in the examples of "crazy cat ladies" and spinsters, these queer relationships to animals exist in proximity to madness, and are, like the category of madness, gendered. There is something silly, almost mad – while at the same time endearing enough to be non-threatening – about curiosity to things that are familiar or unimportant. The inner life of non-human animals and things easily falls into this category of things that do not deserve curiosity.

Queer home making



Figure 2: Nordqvist, 2007, p. 22.

In *Pettson and Findus*, Pettson is making home with Findus the cat, and this home is clearly a queer kind of household. Pettson is Findus's surrogate mother, and Findus is both a cat and Pettson's child. Pettson is queered through this relationship, taking both a feminine responsibility as a mother, and a queer one as a mother of a non-human child. In addition to Findus, Pettson's queer home making extends to other creatures and things in and around the home. The illustrations in the *Pettson and Findus* series show an imaginative take on the Swedish landscapes and old farmhouses. Pettson's farmhouse is cluttered with fanciful objects and boxes of things. He lives there with Findus, his chickens and the "muckles". The chickens, like Findus, talk, but unlike Findus they are in many ways much more clearly animals. They dig for worms and sleep in the hen house. The "muckles" are little invisible creatures that live around the house; Pettson cannot see them, but Findus and the reader can. They are occasionally helpful, sometimes disruptive and hiding things around the house. McKeithen describes the homemaking of women-with-cats as multi-species-homemaking:

'Women-with-cats' queer ecologies of home unfold in untidy ways not only because of the non-opposition of reinvention or the multiplicity of desire, but also because this homemaking is multispecies in nature, articulating through hybrid yet differentiated, more-than-human agencies (McKeithen, 2017, p. 9).

In Pettson's homemaking, we see a similar multispecies approach to home making. The home is Pettson's but the homemaking – the construction of the domestic sphere – is a multispecies and multi-agential affair. In popular imagination there is an easy distinction made between the artificial, or cultural, and the natural. In *Pettson and Findus*, the illustrations, and especially the inclusion of the "muckles", disrupt this distinction. The boundaries between the natural and the artificial are blurred with these invisible creatures building their homes inside Pettson's house. The chickens drink tea from little teacups, and eat pancake pie made for Findus's birthday. In the same illustration there is a little "muckle" house in the right-hand corner, which seems to have grown on a lingonberry bush.

In *Perceptions of the Environment* (2000), Tim Ingold draws a comparison between trees and houses to illustrate the way these habitats, or dwellings as he calls them, are constantly constructed by everything that inhabits it. Neither the tree nor the house is a static space, but they are constantly transformed:

[...] the house also has many and diverse animal inhabitants – more, perhaps, than we are inclined to recognise. Sometimes special provision is made for them, such as the kennel, stable or dovecote. Others find shelter and sustenance in its nooks and crannies, or even build there. And all, in their various ways, contribute to its evolving form, as do the house's human inhabitants in keeping it under repair, decorating it, or making structural alterations in response to

their changing domestic circumstances. Thus, the distinction between the house and the tree is not an absolute but a relative one – relative, that is, to the scope of human involvement in the form-generating process (Ingold, 2000, p. 187).

Ingold argues that houses and trees both experience a kind of natural growth due to being inhabited by animals of all sorts, as well as being subject to alterations and decay. There is, according to Ingold, not a distinction of kinds between the tree and the house, the house and the tree are of similar kinds, and only differ relatively. When looking at the illustrations in *When Findus was little and disappeared* (2008) this organic nature of the house becomes affectively apparent. The house, and the things in it, look like they naturally grew there, and from the illustration it is unclear which elements were contributed by Pettson and his human relatives, and which were provided by any of the non-human dwellers. This seems to be a visceral illustration of Ingold's argument that dwelling is always a multispecies collaboration, there is no clear boundary between the artificial and the natural; they run into each other. In *When Findus was little and disappeared* (2008), when Findus crawls through the foundations of the house, the border between the inside and the outside seems porous. The outside of the house leaks into the inside in the form of plants, critters and the little muckle doors hidden throughout the house. Through these inclusions of other creatures in the household, often omitted in the text and visible only on illustrations, we as readers experience Pettson's household as bustling with life. There are always a variety of actors shaping the home, making home with Pettson. He is, both knowingly and unknowingly, cohabitating with a variety of home making partners.

When little Findus explores the foundations of the house, he finds there are "muckles" living there who have tiny doors throughout the house. They seem to have taken some of Pettson's belongings, like a teacup, a pair of boots, and some paper that looks like it may

once have been important, however, it seems equally likely that the teacup just appeared here out of its own accord. Here we see that the borders between the natural and the artificial are porous and they leak into each other. It is unclear where the human influence over the house ends and the "natural" influence begins. The house, like Ingold details, is never a purely human endeavour, and is always constituted by many more-than-human factors.

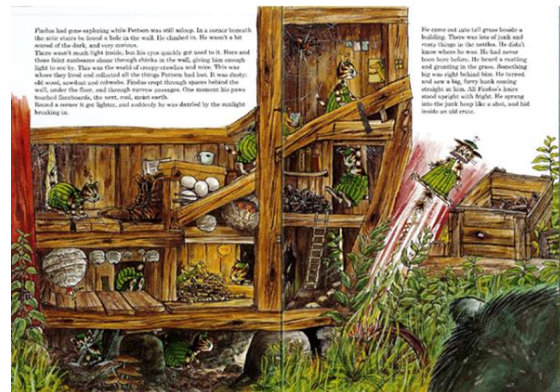


Figure 3: Nordqvist, 2008, pp.8-9.

Helen Palmer in her book *Queer Defamiliarisation* (2020) describes the acts of defamiliarising, queering, and mattering. She describes how language matters, the reuniting of matter and discourse, Palmer describes queerness, or the act of queering, as an act of defamiliarisation. Palmer describes this process as a linguistic process. Taking Emily Dickinson's poetic line "Tell the truth but tell it slant" (Dickinson, 2009, p. 137), Palmer states: "Dickinson tells us that the focus is on the truth to be accessed via the slant, whereas in queer defamiliarisation the focus is on the slant itself" (2020, p.18). For Palmer the act of defamiliarisation is not aimed at eventually finding a truth, which will be truer because it was arrived at via defamiliarisation, it is rather the defamiliarisation itself that is the purpose of the defamiliarisation. The ongoing process of queering matter, in Palmer's case through language, and making it strange, is a goal in and of itself. In *Pettson and Findus*, a familiar world is made strange to us, matter is defamiliarised through illustration and text, rather than only by description. Nordqvist illustrations defamiliarised both the landscape and the domestic space of the house, by filling

it with hidden objects, jokes, and small invisible creatures.

I argue that the playful back and forth of realism and fantastical elements in Nordqvist's illustrations show the interesting relationships within the natural world of the seen and the unseen. Pettson's household is pictured for us readers as a porous household. It is clear to us that the "muckles", the chickens and the objects in the pictures help make Pettson's home. Often the real and the fantastical leak into each other. For example, in *Pettson goes camping* (1992), there is a parsnip rendered in loving detail on the page break, it is however also the size of a tree, and serves as a hiding place for one of the chickens.



Figure 4: Nordqvist, 1992, p.3.

Max Weber in *The Sociology of Religion* (1956) identifies that modernity, by introducing the scientific method and the ability to calculate everything, has led to, what he calls, disenchantment. Weber claims that forests and seas, for example, used to be imbued with unknown magic but in modernity have become merely objects. Jane Bennett in *The Enchantment of Modern Life* (2016) argues that this disenchantment is not a necessary consequence of modern life, and that in modernity there is enchantment. In *Pettson and Findus* there is a certain kind of enchantment in the relationships between Pettson and his fellow creatures, as well as in the way realism and fantasy blend into each other. The depiction of houses growing on trees, and little invisible creatures building doors in the foundations of homes is a kind of re-

enchantment of multispecies dwelling. It gives an image of a world where we recognise the enchantment of domesticity with the more-than-human.

In *The Use of Literature* (2008), Rita Felski argues that Bennett's and Weber's analysis are not so far removed from each other. Although modernity encourages disenchantment, it is not a necessary consequence of modern life. Felski argues that though there are clear negative sides to certain kinds of enchantment that rely purely on naiveté and childlike dreaming, enchantment itself is not necessarily only this. Enchantment can be, as it is for Bennett, a way to engage with the non-identity of things. Bennett quotes Theodore Adorno as saying, "Objects do not go into their concepts without leaving a remainder" (Adorno, 1973, p. 5), which is to say there is always more to things than merely what we can describe. In Nordqvist's work the playful back and forth of the accuracy of the illustrations, mixed with the fantastical elements make it possible to encounter the enchantment of the things in and around Pettson's home. This creates a world in which the fantastical elements, rather than removing the reader further away from the recognisable world of mundane things, makes the things we, as readers, see in the images feel more real and affective. This visceral encounter is rife with the curiosity Haraway (2008) describes as necessary for the construction of relationships with the other. Pettson seems to be somewhat of a hoarder: every page is filled with things, things he uses for his inventions, boxes, large quantities of shoes and coats and teacups.

Jane Bennett in her article Powers of the Hoard analyses hoarding and hoarders through a vibrant materialist lens. She argues that hoarders may be exceptionally susceptible to building relationships with the more-than-human:

A vibrant materialist would say that hoarders have an exceptional awareness of the extent to which all bodies can intertwine, infuse, ally,

undermine, and compete with those in its vicinity (Bennett, 2012, p. 256).

Furthermore, Bennett argues that the hoard made up out of innumerable things may have a power of its own. Hoarders frequently assign will to the hoard, and extend their sense of bodily self to encompass the ever-growing hoard. Bennett, rather than pathologising this, argues that hoarders may be particularly sensitive to the power things have, and the relationships things can have. Bennett argues that all bodies can be in relationships to other bodies, and hoarding may be one of the ways those relationships play out. The hoard we see in Pettson's house also enhances the organic nature of the home. There is no significant difference between the inside and the outside; the attic and the woodshed seem as organic as the garden and the forest. The boundaries between a natural heap and an artificial one become less meaningful.

In *Pettson and Findus* we see this porous relationship to the things around Pettson's house. The distinction between what is natural and what is not becomes fluid, and the way the more-than-human participates in homemaking with Pettson becomes clear. This makes it apparent that Pettson is participating in multispecies home making, with all sorts of other actors. This fluidity in the boundaries of the home is visible in the illustrations, and brings a certain kind of enchantment to the text. This enchantment makes it possible to imagine a multispecies household where the home is constructed by many human and non-human actors.

Tears in multispecies kinship

In *Pettson and Findus*, we see curiosity take place in the domestic sphere. Pettson and Findus are domestic life partners, and have this ebb and flow of curiosity between them. Pettson is curious about Findus, and what he wants. Both Pettson and Findus occasionally fail in this curiosity. Pettson's curiosity for Findus, and his engagement with Findus as something worth being curious about, is part of his silliness in the eyes of other characters. Findus wants to celebrate his birthday four times a year, and

Pettson makes him a pancake pie. Making your cat a birthday cake is, for people who do not engage with animals that way, very silly. Pettson's neighbour Gustafsson certainly finds it strange that Pettson would behave in such a way.

Pettson and Findus often want different things from life, and despite being life partners they are often not of one mind on how the household should be run, and what kinds of activities are of importance. Findus wants to play and run around when Pettson wants to rest; Pettson thinks a rooster is a wonderful thing to have while Findus hates it. When humans relate to other animals, there is an element of a tear that occurs occasionally, where we as the human component in the animal-human relationship are suddenly horrified by our companion species' animal nature. With cats, this often occurs when she brings you a half dead animal, a mouse for example, and plays with it, with no regard for the other animal's feelings. Haraway in *When Species Meet* describes a less horrific tear when she and her dog, Cayenne Pepper, are doing agility training, and Haraway and Cayenne suddenly each run in different directions. They look at each other, confused as to what happened, before they moved as one, connected; now they are suddenly separate.

The horror of the otherness of the animal Other is not necessarily captured by Haraway's example. This is more of a surprising tear, a miscommunication, than horror. The tear between the human and the animal often occurs when we are confronted with the very real otherness of the animals we love. We forget that the animal that cuddles and loves us is also a killer of other animals. When I was a child, we had rabbits, and so did the neighbour across the road. One day she told us she only had one rabbit, because when she had bought him "a friend" the rabbit had immediately killed him. Even an animal that seems so innocent as a bunny can commit murder.

This is, in part, what Derrida describes in his encounter with his little cat in *The Animal Therefore I Am*. He becomes suddenly aware of her gaze as the gaze of the Other. What is

lacking here, according to Haraway, is curiosity. The little cat is gazing at Derrida, perhaps with curiosity, but he is not curiously gazing back. Haraway argues that "Caring means becoming subject to the unsettling obligation of curiosity, which requires knowing more at the end of the day than at the beginning" (2008, p. 36), so caring makes one susceptible to the demands of curiosity, and curiosity is what prompts us to learn. When we do not meet the demands of curiosity, we miss an opportunity for what Haraway calls other-worlding. The opportunity to create another world between this animal and this human.

In Pettson and Findus's relationship, there are a few of these tears. However, there are clearly tears also between Pettson and the chickens, where the animal nature of the chickens makes them suddenly strange. Haraway describes an ebb and flow of curiosity and regard between the animal and the human; this implies that the relationships we have with animals are fluid, and flow between the radical otherness and estrangement Derrida describes in his encounter with his little cat, and the radical closeness and of-one-mindedness that Haraway describes in her relationship with Cayenne.

The Chickens, in *Rumpus in the Garden* (2005), continuously dig up the yard Pettson is trying to grow vegetables in. Pettson feels very bad about it, but eventually decides to fence the chickens in until the garden has grown. Despite being able to talk to the chickens, it is impossible to tell them not to dig up the yard, they just cannot help themselves. Despite the chickens being able to talk to Pettson, there is still a tear where Pettson's human desires are incompatible with the desires of the chickens, and he chooses to use his human methods to force them to do what he wants. He coops them up to prevent them from digging up his vegetables. Here, despite caring for the chickens, and showing them a certain level of curiosity, there is no solution in which both Pettson and the chickens will be happy with the outcome. Merely mutual care and curiosity towards the animal other does not guarantee balance and harmony, even in the pastoral world of *Pettson and Findus* there is friction

between the desires of the multispecies others cohabiting.

In *Findus Rules the Roost* (2017), Pettson acquires a rooster, since he feels "I thought it a pity to let Gustavsson turn him into a stew" (p. 1). The rooster crows a lot, Findus hates the rooster and the way the chickens suddenly only have eyes for the rooster and no longer want to play with Findus. Even for Pettson the crowing eventually gets too much. They make some rules for the rooster, but Findus lies to the rooster and tells him he can only crow once a day and otherwise he will be eaten. The rooster, unable to adhere to these restrictions, leaves. Findus feels bad and confesses what he has done, Pettson is angry with him and makes him apologise to the chickens.

When the rooster arrives Pettson remarks, he is "Just what we needed" (p.3), to which Findus responds, "Never in my life have I needed a rooster even for a single second" (p. 3). Pettson responds that Findus may not need a rooster but "These scatter-brained hens need someone to look after them" (p. 3). Prillan, the head chicken, pushes back against this, saying, "If anyone is scatter-brained, it's you. It's not like that at all". Being able to communicate with animals does not mean knowing what they want, or that human and animal desire might not interfere with each other. Both Pettson and Findus here also lack some curiosity about the chickens. Pettson fails to show curiosity for why the hens might want a rooster, and instead falls back on an assumption of a specific kind of heteronormative partnership where a rooster is there to organise and take care of scatter-brained hens.

Haraway suggests that curiosity may be an ethical obligation we have to our animal Others, and that this obligation is at times an unsettling one. In *Pettson and Findus*, as readers, we see this ethical burden of curiosity spread not only over animals, but also over the environment of the household. There are tears, and failures of curiosity, in Pettson's relationships with his animal companions. However, we as readers, are privy to these failures, and get encouraged to be curious about the household. *Pettson and*

Findus as a series of illustrated books invite a curiosity for the mundane and the more-than-human, by depicting a world where the mundane is always weirder and more fanciful than we imagine it to be.

Curiosity, silliness, and making oddkin

In *Pettson and Findus*, we see how Pettson and his cat Findus are life partners. Findus is both a surrogate for a wife and a child, and is both a cat and a kid. Pettson is both an old man, and Findus's mother. In *Pettson and Findus*, the categories of identity are blurred, and queered. In this article I relate Pettson to the figure of a spinster, or a "crazy cat lady". He occupies a space in which his relationship with Findus is seen as both a sign of his anti-sociability and as not "normal". He is queered and feminised by his relationship to Findus; made mother, rather than father. Pettson's human neighbours think he is strange, and we as readers, are encouraged to think of Pettson as silly, but he always remains unthreatening. His silliness always exists in the liminal space on its way to madness, but never quite crosses this threshold.

Haraway here expresses that kin is a wild category, that humans try to domesticate by ruling what kind of kinships are acceptable, and what kind of kinships are not. In *Pettson and Findus* we see Pettson live in the liminal space of the border between acceptable and wild kinships. He is not fully outside of acceptability into the madness of the "crazy cat lady", but he is a liminal figure through his relationships with the more-than-human. His relationships, though not mad, are deemed silly, and his curiosity harmless but unserious. Kinships with hoards or with animals over people are not seen as acceptable. Haraway argues that in addition to more normative kinships like

biological family, we need to make oddkin. Haraway describes making kinships with companion species, pigeons and microbes, and engaging in "tentacular thinking", while doing this. Haraway describes tentacular thinking as a way of recognising that everything hangs together and collaborates with other things, nothing ever acts alone (Haraway, 2016).

Haraway expresses the ethical obligation of curiosity to non-human others (Haraway 2010). *Pettson and Findus* are curious about each other, and the illustrations encourage this kind of curiosity about the domestic world around Pettson. They invite curiosity and further investigation; they invite the reader to take a closer look. In *Pettson and Findus*, homemaking is depicted as a multispecies act. No home is ever established by only human actors. Pettson is depicted in the middle of a bustling home full of creatures and artefacts, making the home together. This homemaking is not a frictionless process. The invisible "muckles" hide things Pettson needs, the chickens dig up the yard, and Pettson misunderstands what his non-human dwellers want. However, the household is always multispecies, and they are always making home together in a non-traditional way. They are making a queer household of oddkin.

What Nordqvist provides us with in *Pettson and Findus*, is a re-enchantment of the domestic sphere. As readers, we are introduced to a perfectly recognisable and precisely illustrated world, in which there is always more beneath the surface. Pettson shows us a version of multispecies homemaking that is silly and queer, of which others might disapprove. However, this silliness is precisely what makes it possible for Pettson to be curious about his fellow homemakers and create a community of oddkin.

Bibliography

- Adorno, T.W. (1973). *Negative Dialectics*. (Transl. E.B. Ashton). London: Routledge.
- Bennett, J. (2010). *Vibrant matter: A political ecology of things*. Durham, NC: Duke University Press.
- Bennett, J. (2012). Powers of the Hoard: Further Notes on Material Agency. In Jeffrey Jerome Cohen (Ed.), *Animal, Vegetable, Mineral: Ethics and Objects* (pp. 237–270). Santa Barbara, CA: Punctum Books.
- Bennett, J. (2016). *The Enchantment of Modern Life: Attachments, Crossings, and Ethics*. Princeton, NJ: Princeton University Press.
- Deleuze, G., Guattari, F. (1988). *A Thousand Plateaus*. London: Athlone.
- Derrida, J., Mallet, M-L. (2010). *The Animal That Therefore I Am*. New York: Fordham University Press.
- Felski, R. (2008). *Uses of literature*. Oxford: Blackwell.
- Flegel, M. (2015). *Pets and domesticity in Victorian culture: Animality, queer relations, and the Victorian family*. New York: Routledge.
- Forrester, K. (2020). Nature Unnested: Kin and Kind in Switched Egg Children's Stories. *Barnboken: Tidskrift För Barnlitteraturforskning* 43, 1–20.
- García-González, M., Véliz, S., Matus, C. (2020). Think difference differently? Knowing/becoming/doing with Picturebooks. *Pedagogy, Culture & Society* 28(4): 543–546.
- Goodwin-Andersson, E. M. (2016). "One translation fits all? A comparative analysis of British, American and transatlantic translations of Astrid Lindgren and Sven Nordqvist" (The University of Edinburgh, PhD thesis).
- Gossas, C., Axelsson, M., Norberg, U. & Van Meerbergen, S. (2015). En katts resa: Pettson och Findus på norska, tyska, nederländska, franska och spanska. In Valérie Alfvén, Hugues Engel, Charlotte Lindgren (Eds.), *Översättning för en ny generation* (pp. 61-71). Falun: Högskolan Dalarna.
- Haraway, D. (2010). *When species meet*. Minneapolis, MI: University of Minnesota Press.
- Haraway, D. (2016). *Staying with the trouble: Making kin in the Chthulucene*. Durham, NC: Duke University Press.
- Halberstam, J. (2011). *The Queer Art of Failure*. Durham, NC: Duke University Press.
- Jaques, Z. (2015). *Children's literature and the posthuman: Animal, environment, cyborg*. New York, London: Routledge.
- McKeithen, W. (2017). Queer ecologies of home: Heteronormativity, speciesism, and the strange intimacies of crazy cat ladies. *Gender, place and culture: a journal of feminist geography*, 24(1), 122–134.
- Moslund, S. P., Boscagli, M., Bøgh Thomsen, T., Caracciolo, M., Graulund, R., Karlsson Marcussen, M., Karlsson Pedersen, M., Karlsson Pedersen, M., Marcussen, M. K., Morton, T., Oulanne, L., Pedersen, M. K., Pultz Moslund, S., Sellberg, K., & Skiveren, T. (2022). *How literature comes to matter: post-anthropocentric approaches to fiction*. Edinburgh: Edinburgh University Press.
- Nikolajeva, M. (2016). Recent trends in children's literature research: return to the body. *International Research in Children's Literature* 9, 132-145.
- Nikolajeva, M., Scott, C. (2001). *How picturebooks work*. New York: Garland Pub.
- Nodelman, P. (2019). Fish is people. *Bookbird: a Journal of International Children's Literature*. 57(2), 12–21.

- Nordqvist, S. (2003). *Pettson goes camping*. (Transl. Martin Peterson). Stroud, UK: Hawthorn Press.
- Nordqvist, S. (2005). *A Rumpus in the garden*. (Transl. Peter Person). Stroud, UK: Hawthorn Press.
- Nordqvist, S. (2007). *Pancakes for Findus*. (Transl. Julia Marshall and Penelope Todd). Stroud, UK: Hawthorn Press.
- Nordqvist, S. (2008) *When Findus was little and disappeared*. (Transl. Nathan Large). Stroud, UK: Hawthorn Press.
- Nordqvist, S. (2017) *Findus rules the roost*. (Transl. Nathan Large). Stroud, UK: Hawthorn Press.
- Palmer, H. (2022). *Queer defamiliarisation: writing, mattering, making strange*. Edinburgh: Edinburgh University Press.
- Weber, M. (1956). *The sociology of religion* (4. ed.). Methuen.

Author information

Arwen Rosenberg-Meereboer

ORCID: 0000-0002-1942-2495

e-mail: ameerebo@abo.fi

Arwen Rosenberg-Meereboer is a doctoral candidate in philosophy at Åbo Akademi University in Finland. She works primarily on the topics of post-humanism/ "new" materialism in connection to literature. She has worked mainly on European children's fiction. Her focus is in environmental and new-materialist ethics.

MATTER

journal of new materialist research

Universitat de Barcelona

ARTICLE
ISSUE 8

The journey of late diagnosis of autism from an autoethnographic, neuroqueer, affective and performative perspective

El viatge de diagnòstic tardà d'autisme des d'una perspectiva autoetnogràfica, neuroqueer, afectiva i performativa

El viaje de diagnóstico tardío de autismo desde una perspectiva autoetnográfica, neuroqueer, afectiva y performativa

Tània Codina (<https://orcid.org/009-0006-1710-3323>)

Universitat Oberta de Catalunya

Date of submission: September 2022

Accepted in: July 2023

Published in: July 2023

DOI: <https://doi.org/xxx/xxx>

Recommended citation:

Codina, Tània (2023). The journey of late diagnosis of autism from an autoethnographic, neuroqueer, affective and performative perspective. *Matter: Journal of New Materialist Research*. Issue 8, 69-83. University of Barcelona. [Accessed: dd/mm/yy]. <https://doi.org/>



The texts published in this journal are – unless otherwise indicated – covered by the Creative Commons Spain Attribution 4.0 International licence. The full text of the licence can be consulted here: <http://creativecommons.org/licenses/by/4.0/>

Abstract

In this article, I present my journey of late diagnosis of autism employing autoethnography with video performance, affects and the concept and practice of “neuroqueering”. Within the framework of Performative New Materialism, the neurodiversity paradigm and Critical Autism Studies, I try to respond to the cultural narratives created by non-autistic authoritarian figures, generate a different point of view within Critical Autism Studies by correlating the autistic experience with affects, and give a step forward in changing how the autistic experience is culturally researched, written about and spoken of.

Keywords

Autoethnography; performance; neuroqueer; autism; Affect Theory

Resum

En aquest article presento el recorregut del diagnòstic tardà d'autisme des de l'autoetnografia amb la video performance, els afectes i el concepte i pràctica del “neuroqueering”. A partir dels Nous Materialismes Performatius, el paradigma de la neurodiversitat, els Critical Autism Studies, tracto de respondre a les narratives culturals creades per figures autoritàries no autistes, generar un punt de vista diferent dins dels Critical Autism Studies en correlacionar l'experiència autista amb els afectes, i fer un pas endavant sobre com l'experiència autista és investigada, escrita i parlada culturalment.

Paraules clau

Autoetnografia; performance; neuroqueer; autisme; Teoria dels Afectes

Resumen

En este artículo presento mi recorrido del diagnóstico tardío del autismo desde la autoetnografía con la video performance, los afectos y el concepto y práctica del “neuroqueering”. A partir de los Nuevos Materialismos Performativos, el paradigma de la neurodiversidad y los Critical Autism Studies, trato de responder a las narrativas culturales creadas por figuras autoritarias no autistas, generar un punto de vista diferente dentro de los Critical Autism Studies al correlacionar la experiencia autista con los afectos, y dar un paso adelante sobre cómo la experiencia autista es investigada, escrita y hablada culturalmente.

Palabras clave

Autoetnografía; performance; neuroqueer; autismo; Teoría de los Afectos

Where I stand

The research that I present in this article, explores my personal experience of late diagnosis of autism through the lenses of Affect Theory, the concept of neuroqueer, an autoethnographic and performative methodology. I use a theoretical framework based on Critical Autism Studies, New Materialism, and the neurodiversity paradigm to try to regain agency and to respond to, as Bakved (2022) says, the cultural narratives created by non-autistic authoritative figures.

This article begins by reviewing the list of concepts and theoretical fields that accompany me in my suitcase for the autoethnographic journey while reflecting on the importance of autistic autoethnography. Once the theoretical and methodological framework has been presented, you will find my autoethnographic and performative journey, concluding with some final reflections.

I am mindful of the fact that first-hand autistic experiences are ignored, particularly when they differ from societal expectations. This epistemic injustice is highlighted in research about autism, where autistic people are ostracized and not taken into consideration (Botha, 2021). As Spivak (1998) and Giraldo (2003) mentioned, referring to the subaltern subject, the autistic person speaks, but what they say does not have a dialogical status, since they do not occupy a discursive position from which to speak or respond. This leads me to the question: if the autistic subject can speak and respond, is he/she listened to?

I do not intend to offer the absolute truth about autistic people, nor speak on behalf of all of us. As a researcher, I am aware of my bias, since I will be able to account for certain aspects but not all of them (Liao, 2006 in Gandarias, 2014). I consider that there is no absolute objectivity but strong objectivity (Haraway, 2004) as an alternative to scientific objectivism and as a way of rejecting the universalizing tendencies of the epistemic authority of the Social Sciences

(Harding, 1992). Subjective and situated narratives are essential in research about social matters, where marginalized voices are and must be present (Bakved, 2022).

Let's pack for the journey: the theoretical frameworks that guided this work and why autoethnography

I imagine this part of the article as the review of a list when you prepare the suitcase for a long journey. Reflecting on the theories that I take with me, I have to start with Critical Disability Studies, a branch of Disability Studies that argues that instead of limiting the analysis of disability to material and economic dimensions (like Disability Studies scholars did) we should try to critically rethink and review the cultural, discursive, and relational aspects of disability experiences (Bakved, 2022). In this context, it is important to acknowledge that by the end of the 90s, Critical Disability Studies focused more on visible disabilities. That is when a large number of autistic people began to get connected, forming a movement that arose in response to a series of prevailing conditions: the discourse and praxis related to autism, which was (and still is) dominated by the pathology paradigm¹, the fact that this paradigm causes many autistic people to be stigmatized, unrepresented, dehumanized, abused, hurt, and traumatized; and the fact that when autistic people tried to address these issues they were met with hostility or violence (Walker, 2021). The majority of the Critical Disability Studies scholars adopted the Social Model of Disability that presents disability not as something inherent in the disabled person but rather in the way society is not adapted to the disabled needs. According to this framework we understand that autistic people are not disabled because there is something inherently wrong with them, but because society disables them (Shakespeare, 2006). Because of these circumstances, autistics began to recognize that they were an oppressed minority and they asked themselves

¹ The pathology paradigm frames autism as a form of medical pathology or disorder (Walker, 2021).

what kind of minority group they were. Judy Singer (1998) answered by creating the term “neurodiversity” and then another important concept was coined by Nick Walker: “neurominority”. The term “neurodivergent” was coined by Kassiane Asasumasu in 2000 (Walker, 2021).

The Autism Rights Movement’s development of terminology introduced the concept of neurodiversity as a framework. This framework views body-mind differences, such as autism, as natural forms of diversity (Mallipeddi and VanDaalen, 2021). It claims that just as humanity is diverse in ethnicity, gender, and other characteristics, it is also diverse in terms of neurocognitive abilities, and autistic individuals are considered a neurominority. It is not just a diversity of the brain; rather, mind, brain, and corporeality are interrelated in a unique and complex system, thus, neurodiversity refers to the functionality of the whole body/mind (Walker, 2021).

Then the concept of the “neurodivergent” was coined to refer to people whose mind functions significantly different from the dominant societal standards of normal. We must avoid viewing neurodiversity through an essentialist lens whereby each individual is neurotypical or neurodivergent because they were born that way (this approach is understood as neuroessentialism) (Walker, 2021). I also find it crucial to explain that neurotypicality is not a biological reality, but a social construct that states what “normal” should be. In the same way that society dictates heteronormativity, it also signals neuronormativity, so neurotypicality does not exist per se. Rather, there are neurotypical people whose neurology resembles more closely the idea of how people should behave (Yergeau, 2018).

Thus, there are opposing points of view regarding the biopsychosocial phenomenon of neurodiversity: the pathology paradigm and the neurodiversity paradigm. The first one, like I have briefly mentioned, assumes that divergences from dominant sociocultural norms of cognition and embodiment represent a deficit or a pathology, dividing the spectrum of human

cognitive/body performativity between the normal and the “other,” with the normal seen as superior and desirable. The second paradigm understands neurodiversity to be part of human diversity, subject to the same social dynamics as ethnicity, gender, and sexual orientation, including dynamics of social power, inequities, privilege, and oppression (Walker, 2021).

These opposing paradigms define autism, so a critical perspective must take their roots into account and shift towards a neurodiversity paradigm. As Audre Lorde (1984, cited in Walker, 2021) put it at a feminist conference: “the master’s tools will never dismantle the master’s house” (p.20). She explained that we are in a system and when we play by the rules of the game, we inevitably reinforce that system, even if we don’t want to. This can be applied to the autistic community and its struggle for empowerment, as the tools of the pathology paradigm will never empower us in the long run.

Furthermore, Critical Autism Studies originated from the need to research the autistic experience, examine, and critique social concerns through the lens of neurodiversity and to challenge deficit-based and pathologizing discourses on autism, within Critical Disability Studies (Roscigno, 2021).

As Sencindiver (2017) defines it, New Materialism is an interdisciplinary, theoretical, and politically committed field of inquiry that emerged as part of the post-constructionist, ontological, or material turn. Coined by authors like Karen Barad, Rosi Braidotti, Elizabeth Grosz, Jane Bennett, Vicki Kirby, and Manuel DeLanda. Cano Abadía (2015) proposes New Materialism as a way to escape the binarisms in which our identities are trapped, by not only showing the cultural mechanisms that are put into operation to configure them, but also to show that culture and nature are so intertwined that they are not separable realities. Neuronormativity acts in the same way on our body/minds as heteronormativity does, a key concept arises to understand, as we see with the New Materialisms, that the limits between minds, bodies, and material spaces are not as

concise as we thought: they are rather neuroqueer. This term was first conceived as a verb (neuroqueering) referring to the practice of “queering” (subverting, challenging, or freeing oneself from) neuronormativity and heteronormativity simultaneously. In other words, examining how socially imposed neuronormativity and heteronormativity interrelate with each other (Walker, 2021).

Affect Theory arose from the realization of how new forms of domination and marginalization resulting from globalization, corresponded more to emotionally-moved drives rather than to rational instrumental ones. It incorporated Foucault’s contributions in genealogies and power technologies, gender theory and poststructuralist approaches. The “affective turn”, coined by Tricinetto and Halley (2007), suggested how we could rethink the relation between the social and the subjective. Then, Gregg and Seighworth in *The affect theory reader* (2010) related affects to “the ability to affect and be affected, and to mark the belonging of the subject in a world of encounters and disagreements that they inhabit and that inhabits them at the same time” (Moraña, 2012, p. 318). Affects were defined as a way to describe visceral impulses that are distinguished from conscious ones (Moraña, 2012).

In the search for new ways to narrate myself and to reflect on the autistic experience, I began taking into consideration Affect Theory. By doing so, we can consider how affect is relational and occurs between humans and non-humans, individuals and society, body and culture, organic entities and machines. We affect others and others affect us since affect is always distributed. We feel and are affected in the relationships we have with others.

From the point of view of neurodiversity and Critical Autism Studies, we can connect autism and New Materialism by understanding the fundamental error of the pathology paradigm in its failing to consider the subjectivity of the observer’s point of view. When we engage in knowledge production practices, we always do so as part of a larger material configuration,

because we always constitute and are partially constituted by what we observe (Gamble, et al., 2019).

Affect Theory plays a role in how we, as disabled people, interact with the world, how we affect others and how others affect us. For these reasons and for those that I will add later, autism research should be carried out by autistic researchers, abandoning the idea of neurotypical people studying autistic people. If we adopt new ways of approaching and understanding knowledge production concerning autism, we will be able to create new bodies of knowledge about our own experience. As I mentioned earlier, citing Walker (2021) and Lorde (1984), we are not going to dismantle the master’s house with his tools: we must look for new words, new horizons and new ways to create autistic knowledge. For this reason, it is vital to understand the theory that Critical Autism Studies draws from, in the same way that we understand intersectionality, bearing in mind the fact that disability in general and neurodiversity in particular, have received very little attention within the intersectional literature. We must keep in mind that autistic individuals are intersected with racism, misogyny, etc. Therefore, intersectionality is crucial to highlight the experiences and needs of marginalized groups within the autistic community (Botha & Gillespie-Lynch, 2022). By incorporating intersectionality into autistic knowledge production and discourse we may allow activists and scholars to examine how contextual factors of oppression may influence individual autistic experiences, neurodiversity, and ableism in society (Mallipeddi & VanDaalen, 2021).

Autoethnography is a research method that makes use of personal experiences to describe and interpret experiences, beliefs, and practices (Adams, et al., 2017). Thus, the researcher is the subject of research. Because of this, distinctions between personal and social, self and other, are blurred. And, in particular, autoethnographic performance is understood as the confluence of the autobiographical and the ethnographic

delineated by movement and critical self-reflexive discourse (Spry, 2001).

The phenomenon of autism was first recognized and named in the 1940s, not by Kanner but by a woman, Sukhareva (Manouilenko & Bejerot, 2015), up to the present day, there have been disciplinary discourses on autism that have been dominated by an epistemological viewpoint that ignores the subjectivity and experiences of autistic people. All of this has led to a point where the body of autism theory is constructed from a misguided collection of stereotypical concepts that dehumanize autistics and indicate that they lack the capacity for symbolic thinking and imagining, and that therefore, the experiences of autistic people should not be considered valid. As Yergeau (2018) puts it:

What is at stake here is who explains my story and roughly speaking who explains the story of people like me. What is important is who is the author of our individual and collective identities, who determines whether we are narrative creatures, whether we are living beings in rhetorical bodies, whether we can call ourselves human (p. 21).

According to the pathology paradigm then, autistic voices are disregarded, and as autistic researchers we can recover our agency by seeking new methodologies. We need methodologies like autoethnography to make our voices heard. When we connect theory with our personal experiences, we can see how these cannot be separated from each other. In the same way that we can't separate the brain from the body, I can't separate the way my mind processes things from the way my body interacts with the material world. Autistic stories told in our own voices have the potential to be powerful forms of resistance and, like other marginalized communities, we can find in autoethnography, a way not only to explain our stories but also contextualize them (Yergeau,

2018). Autoethnography is therefore a way of recovering the space for autistic stories and experiences, told by autistic subjects, with a cultural voice, capable of complex rhetoric (Barkved, 2019). In the context of the autistic experience, autoethnography offers us the opportunity to connect our autobiographical narratives with reflections and interpretations of those narratives (Walker, 2019).

My journey

The autoethnographic part of this research focuses on a selection of my own experiences, which are relevant to autistic ways of being, and offers new insights into what the autistic experience is, while at the same time keeping in mind that this work is based solely on my subjective experiences and does not attempt to be fully representative of the experiences of others. Inspired by Amanda Baggs' video performance titled "In my language" (Baggs, 2017), I assembled a seven-minute video performance titled "Undoing the mask"² by placing layers of clay on my face and then removing them and cleansing them with water.

If I had to describe my time between elementary and middle school in two words these would be: loneliness and confusion. As social interactions in elementary school became more complex and demanding, my sense of being different increased and I kept feeling that my classmates had been given a manual to help them navigate the world but, on the very day it had been handed out, I had stayed home. I felt that we had nothing in common, that for them playing and interacting seemed to come naturally, and every time I tried to approach them I sounded forced and robotic. Just as I became aware of my bonding difficulties, my classmates were also aware of these differences and soon the bullying started. No classmate would talk to me, no one wanted to pick me for group work, and during every recess I was left in a corner by myself. As the school years went by, I began to normalize it, thinking that it was normal while I was "defective". I didn't understand them nor did I have anything in common with them, but I

² Which you can view at:
<https://www.youtube.com/watch?v=3AaX7PZoFxU>.

wanted to be like them, I didn't want to be always alone. Understanding neurotypical ways of socializing did not come naturally to me, but trying to "look normal" was a matter of survival. These performative actions that many autistic people do to try to fit into neurotypical standards are known as "masking" in the autistic community. Reflecting on this painful part of the journey, I can't help but understand these performative actions, where you first mask what you really are to later undertake actions to fit in, as if moved by affects. It was about reconfiguring how your body moves, how it interacts with the surrounding material world. At this point, it becomes indispensable to remember what Preciado (2004) indicates when talking about how the performative action can become the narration of one's own experience, that appears as a theatricalization. It was after realizing the performative character not only of my gender but also of neuronormativity, as constructs and not as essences, that I decided to interwire this autoethnography with a video performance on the creation and dismantling of this performative mask. In adopting the autoethnographic methodology and, performative autoethnography I not only recalled my journey and connected it with the sociocultural context or reflected on the affects that accompany it, but also experienced the body situated in time, history, and place (Sughrua, 2019).

As we have seen with the concept of neuroqueer, neuronormativity and its effects on affects are similar to those of heteronormativity. This became clear after reflecting on how gender expectations were not natural for me, but seemed rather to be a performative construction. We should stop here to remember that autism discourse has been intertwined with (male) gender since Kanner's foundational case studies in 1943, Wing's 1981 epidemiological study, or Baron-Cohen's "extremely male brain" concept. Because of this, autistic experience has been stereotyped as masculine, as have current diagnostic methods (which are based on the stereotype of seeing autism as a "male condition") (Moore et al., 2022). This explains how people socialized

as women, who are told to inhabit space on the margins and be quiet, have less chances of being detected than people socialized as men (Millan Lopez, 2021).

In society in general, not only within the autistic community, women are pressured to be more social than men, and if the individual is autistic, these social pressures are amplified (Milner et al., 2019). In *Gender Trouble*, Butler (2007) problematizes assumptions that gender precedes behavior, explaining how this is performatively constituted from stylized and repetitive acts, such as gestures, movement, and clothing. These acts have been recognized as male or female, discursively produced within a heterosexual matrix that gives rise to a hierarchical binarism of male dominance. In this context, not performing gender well and doing gender badly implies being punished (Moore et al., 2022). At the same time, when autistic people mask, they start a performance in the way they speak, move, dress, to "pass as normal". Because not performing yourself as "normal" means you are "othered" by the neurotypical hegemonic standard.



Figure 1
Video performance frame

In my video performance the actions taking place are understood as a way of positioning the body in narration. A way of understanding that, in the action of masking, mind and body are interconnected. The first step is constructing a mask with clay that represents the work in modifying my actions and

movements to pass as neurotypical: to be seen as normal. Implying that this was a process of many years and not always a conscious one. In doing so, I am not only constructing my neuronormativity mask, but also constantly constructing my heteronormativity mask, and making visible my gender performativity. As such, there is a similarity between the construction of autistic femininity and the mask (masking) and gender performativity, in that many autistics perform consciously and in a very studied way the behaviors that are attributed to their gender, constructing a mask that is difficult to see, because it connects with the feminine artifice (Moore et al., 2022).

The next part of this journey took place when I started college. I remember this time as a set of memories between depressive episodes and suicidal ideations, between antidepressants and anxiolytics, modifying that mask that accompanied me to try to mitigate my flaws: not understanding social conventions, not being able to maintain lasting friendships, putting myself in dangerous situations for not understanding social signals, getting in and out of abusive relationships, and continuing to feel different without knowing why.

I took a Master's degree for secondary school teachers and then a second Master studies. In the middle of the latter, I signed up for a course for teachers on autism. Before this, being autistic merely crossed my mind, and when it did, it was followed by the thought: "it is impossible for me to be autistic because I have empathy, and autistic people are known for not having empathy". As I started the autism course, and began to read suggested readings, I felt it spoke to me and my life experiences. It ended up turning my whole life upside down. Suddenly, my mind wanted to gather all the information, trying to remember all the cues that were evident but somehow missed by everybody. I remember that I was shaking, as if my body, all my being, knew I just stumbled upon something that was about to change my life.

If we pause for a second in this journey to reflect again on the video performance, we can see

how I tried to express this moment of realization, a moment I felt with all my being as a decisive point, a point of no turning back. This will later take me to realize all the ways in which I was performing.



Figure 2
Video performance frame II

I had not been officially diagnosed yet, but I knew it, and I began what I can only describe as a grieving process. I was first hit with great sadness when thinking about my pre-diagnosis self. And as it happens to many autistic women with a late diagnosis, I had a great sense of guilt ("how come I didn't find out sooner?") (Millan Lopez, 2021).

One of the disabling situations that we face is the difficulty of access to a diagnosis, since it not only excludes the person from the services he/she should receive in his/her environment, but also keeps him/her uninformed. In the terms of the Social Model of Disability, autism is not a disability by itself, but we, autistic people, are disabled by the barriers of a disabling society (Walker, 2021). One of the main reasons why many autistic women are diagnosed as adults is that they become aware of it themselves (e.g. through a college class) and then seek formal validation (Mallipeddi & VanDaalen, 2021). Not fitting within the autistic stereotype of an "extreme male brain" (Baron-Cohen, 2002, cited in Mallipeddi & VanDaalen, 2021) puts you in a place of vulnerability: you do not have easy access to a diagnosis for socioeconomic reasons, you may find out you are autistic in

your mid-twenties, you may not be white or cis, etc.

Having my diagnosis did not end my confusion: on the one hand, I felt that I had been provided with a frame of reference for learning and improving my well-being, feeling hope, strength and pride in the diagnosis. On the other hand, however, I fell into an identity crisis. If I am not my mask, then who am I? Am I something more than all these symptoms? I did not want to stick to the symptomatic classifications of the diagnosis or the DSM-5, as I needed to find new ways to narrate myself. I wanted to connect with the autistic community as a way to start building on new grounds. This need – to connect with those who are similar to you – is grounded in affect. I can describe it as being home after a long journey far away (mine was twenty-four years long), and meeting your people again.

It was then when I found the way in which many autistic women, diagnosed as adults, narrate themselves through the neurodiversity paradigm: I felt that I had found narratives with which I could thrive. These stories empowered me, not in the sense that they changed my autistic behaviour, as the pathology paradigm and most common therapies would wish, but to see myself ready to accept my differences.

This shift is present in the video performance when I begin to take off the mask and cleanse it with water in order to dismantle it. This was one of the great affective movements of the journey: If I'm not only my mask and my "symptoms", I will have to find new ways to narrate myself from the perspective of growth and acceptance. But another question arose: if I leave my mask behind, will I be heard, will I be taken seriously, how will I cope with possibly being othered by people?



Figure 3
Video performance frame III

However, I comprehended how important it is to make autistic voices heard, as Milton's (2012) theory of dual empathy proposes: one group of people will always find it difficult to put themselves in the place of another group's experiences, because they have different experiences. Therefore, they will always find it difficult to empathize with each other. When we think about it through the lens of autism, we see how autistic people experience and express emotions, communicate, interact with others, form relationships, embody, and experience the world around them in very different ways than non-autistic people do. This is not to say that autistic people do not have emotions or empathy, these are just expressed and experienced differently. These divergences can make it difficult for non-autistic people to recognize what emotions and empathy look like in autistic people, because they experience them differently which often causes them to interpret autistics incorrectly.

At the same time, autistic people have little knowledge of non-autistic culture and its social communication, as it is just as difficult for autistic people to empathize with, and understand, non-autistic people, as it is for non-autistic people to understand autistics. This mutual lack of knowledge creates an empathy gap, which is a problem for both groups. Non-autistic ways of communicating and empathizing are seen as typical, expected, and

accepted as normal and correct. In contrast, atypical and unexpected forms of autistic communication and empathy are rejected as different or incorrect; they are pathologized. Although the gap is experienced by both groups, there is an inequity in the level of impact it has on them both (Milton, 2012).

We, as autistic, are applauded when we show “no signs of being autistic”, but at no time are non-autistic people expected to understand, accept, or adopt autistic perspectives or culture. The problem of dual empathy highlights the lack of empathy of non-autistic people for autistic people, their experiences, and their culture (and the other way around). This lack of empathy from the majority of society leads to the marginalization and stigmatization of autistic people. Society defines itself as inclusive, but often basic services are denied and natural autistic behaviours are pathologized (Milton, 2012).

It should be highlighted that currently, autistic people are the ones who make the effort to understand non-autistic people (Milton, 2012). As Sinclair (1992) indicates:

(...) don't try to change me to fit into your world. Don't try to confine me to some tiny part of the world that you may have changed to fit me in. Grant me the dignity of knowing me on my own terms: recognize that we are equally strange to each other, that my way of being is not merely a damaged version of yours. Question your assumptions. Define your terms. Work with me to build more bridges between us (p. 12).

How vulnerable it may be to unmask and stop pretending, when you are the minority and when embodying as a “normal” person is expected? But after all these fears, there is hope and bravery: to not stand in a victimizing point of view, but in one of change. As we reflected earlier with the new materialist turn, and as Haraway (1988) anticipated, we can embody our autistic selves as we are, and as we do, in the way that thinks the material, the body, the flesh, and the discursive together. By

being as I am, I am also doing. I am deconstructing neuronormativity and constructing a new autistic discourse, and performing-contemplating the material-discursive practices of adapting my body to my needs and surroundings (e.g. by wearing sunglasses to protect myself from light and ear defenders).

All of this is not just about accepting our differences and demanding to be accepted. It is not only about taking off the mask to make my neurodiversity visible, not only about fighting for equality as a minority, or about enjoying the diversity of our bodies/minds, but also about finding ways to increase this neurodiversity and explore its full potential. I realized the power in neuroqueering my identity when I examined my internalized ableism and found how I had consciously performed my gender. I saw how fighting internalized heteronormativity was quite similar to fighting internalized ableism and how if you are “weird” to society (because you are autistic, for example) you are weird in relation to heteronormativity (because heteronormativity dictates the right and wrong ways to be). Both heteronormativity and neuronormativity tell us that there are right ways to embody your body/mind, right ways to talk or walk “like a woman”, etc. They impose rigid standards on the ways we embody ourselves (Walker, 2021).

As women are taught submission and are not allowed to occupy space or put barriers in their own personal space (which are embodied practices), men are taught that they have to occupy as much space as possible all the time (which cuts off their possibilities for tenderness, etc.). I quickly understood that, since these standards are so rigid and absolute, I cannot deviate from one without deviating from the other. If I start moving and freely living as my autistic self, I will also deviate from conventional feminine ways of embodiment. If I act as it is natural for me, I am challenging heteronormativity. When I give myself permission to move as I like I recognize that the autistic mask was also the mask performing as a cis woman. So, in being autistic, in neuroqueering, I liberate myself from imposed

neuronormative and heteronormative styles of cognition, consciousness, and embodiment (liberating the psyche and the way it is embodied).

I find power in not considering myself “broken” because of my lack of ability to relate appropriately to the world around me or, in the way that is expected. So, if I leave the mask behind, it is not only to try to survive without it, but to be able to move forward and thrive. Instead of being distressed by my hypersensitive sensory perceptions, I cover my ears with ear defenders; if I need to rock myself back and forth in public to regulate myself, I will do it, and I do not need to force myself anymore to look into people’s eyes while in a conversation. In doing so, I am learning to value and nurture my body/mind by trying to do what it needs to do, what it is, instead of forcing appearances of normalcy. Neuroqueering is about being able to access a wider range of options of what your body/mind can do and about reclaiming and exploring your embodiment and affects with the world that surrounds you.

Walker (2021) claims that the current state of autism-related discourses, theory, and praxis in academic and professional spheres is deplorable and reflects a level of ignorance that would be shocking in most academic circles today if it involved any other historically oppressed group. In academia, the autism discourse is dominated by non-autistic voices based on the pathology paradigm. Whereas substantial change for the better will only come if the pathology paradigm is abandoned and a shift is made towards the neurodiversity paradigm. Autism should be written and researched by autistic authors and researchers, since to speak of autism is to speak of autistics and therefore, we should not be left out.

New Horizons

There is potential in individual experiences that become political – when performative artistic practices transform the limits between private and public spaces (Preciado, 2004). Reflecting on the experience of making this autoethnographic piece, I find engaging with alternative methodologies a powerful way to create new spaces for non-represented voices (not only autistic ones) in a more open way. I understand performing my autistic self as the creation of a political space. A place to stand and invite other autistic (or non-autistic non-represented voices) people to embody themselves as they need. A place of compassion and community. But I do not want you, the possibly non-autistic reader, that went on this journey with me, to leave feeling that I hold resentment against neurotypical people. I would rather like you to feel that there is possibility in change. There is power in the possibilities that can happen if you think critically about the hegemonic autistic discourse present in the majority of media releases about autism, or in the majority of studies on autism. Do ask yourself: is the professor that gives the lecture on autism autistic? From which paradigm is s/he speaking? If the autistic character of a movie or TV show is not played by an autistic actor, what kind of unidirectional view on autism are they portraying? I ask you, as I ask myself, to root in the never-ending possibilities of human-non-human diversity. I ask you to listen to autistic voices and experiences and to take part in the construction of a bridge between all kinds of neurodiversities.

Acknowledgments

I would like to thank Mohamed El Boutrouki and Autoblog for their help in translating and proofreading this article.

Bibliography

- Adams, Tony., Ellis, Carolyn & Holman Jones, Stacy. (2017). Autoethnography. *The International Encyclopedia of Communication Research Methods*.
<https://doi.org/10.1002/9781118901731.iecrm0011>
- Baggs, Amanda (April 3, 2016). *In my language* [Video]. Youtube.
<https://www.youtube.com/watch?v=ySdPFRHE7zw&t=4s>
- Barkved, Kaytlyn. (2019). *Neuroqueer imaging: drawing an autistic autoethnography*. [student work, The University of British Columbia]. Open collections.
<https://open.library.ubc.ca/soa/cIRcle/collections/ubctheses/24/items/1.0406250>
- Baron-Cohen Simon. (2002). The extreme male brain theory of autism. *Trends in cognitive sciences*, 6(6), 248–254. [https://doi.org/10.1016/s1364-6613\(02\)01904-6](https://doi.org/10.1016/s1364-6613(02)01904-6)
- Botha, Monique & Gillespie-Lynch, Kristen. (2022) Come as you are: Examining autistic identity development and the neurodiversity movement through an intersectional lens. *Human development*. 66, 93-112. <https://doi.org/10.1159/000524123>
- Botha, Monique. (2021). Academic, activist or advocate? Angry, entangled and emerging: a critical reflection on autism knowledge production. *Frontiers in psychology*. 12, 1-12.
<https://www.frontiersin.org/articles/10.3389/fpsyg.2021.727542/full>
- Butler, Judith. (2006). *Gender Trouble: Feminism and the Subversion of Identity*. Routledge
- Cano Abadía, Mónica. (2015). Nuevos Materialismos: Hacia feminismos no dualistas. *Oxímora Revista Internacional de ética y política*. 7, 34 - 47.
<https://revistes.ub.edu/index.php/oximora/article/view/14416/17829>
- Gamble, Christopher, Hannan, Joshua & Nail, Thomas (2019). WHAT IS NEW MATERIALISM?. *Angelaki*, 24(6), 111–134.[doi:10.1080/0969725X.2019.1684704](https://doi.org/10.1080/0969725X.2019.1684704)
- Deleuze, Gilles & Guattari, Felix. (1987). *Thousand Plateaus: Capitalism and Schizophrenia*. University of Minnesota Press.
- Gandarias Goikoetxea, Itziar. (2014). Tensiones y distensiones en torno a las relaciones de poder en investigaciones feministas con producciones narrativas. *Quaderns de psicologia*. 16 (1). 127-140. <https://quadernsdepsicologia.cat/article/view/v16-n1-gandarias/1210-pdf-es>
- Giraldo, Santiago (2003). ¿Puede hablar el subalterno?. *Revista colombiana de antropología*. 39, 297-364. http://www.scielo.org.co/scielo.php?script=sci_arttext&pid=S0486-65252003000100010
- Goodley, Dan, Liddiard, Kristy & Runswick-Cole, Katherine. (2018). Feeling disability: theories of affect and critical disability studies. *Disability & Society*. 33:2, 197-217
<https://www.tandfonline.com/doi/pdf/10.1080/09687599.2017.1402752?needAccess=true>
- Gorton, Kristyn. (2007). Theorizing emotion and affect feminist entanglements. *Feminist theory*. 8 (3). 333-348. <https://doi.org/10.1177/1464700107082369>

- Gregg, Melissa & Seigworth, Gregory. (2010). *The Affect Theory Reader*. Duke University Press
- Haraway, Donna. (1988) Situated Knowledges. The Science Question in Feminism and the Privilege Partial Perspective. *Feminist Studies*.14, 3, pp. 575-599.
- Haraway, Donna. (2004). "Strong Objectivity"? *The Feminist Standpoint Theory Reader: Intellectual and Political Controversies*. 127. <https://doi.org/10.1002/9781405165518.wbeoss286>
- Harding, Sandra. (1992). After the neutrality ideal: science, politics and strong objectivity. *Social Research*. 59 (3), 567-587.
- Lorde, Audre. (1984). "The Master's Tools Will Never Dismantle the Master's House." *Sister Outsider: Essays and Speeches*. 110-114. https://collectiveliberation.org/wp-content/uploads/2013/01/Lorde_The_Masters_Tools.pdf
- Manning, Taylor. (2015). Obstacles, transitions and perspectives: an in-depth look at the spectacle of deviant bodies. [student work, East Tennessee State University]. <https://dc.etsu.edu/cgi/viewcontent.cgi?article=3888&context=etd>
- Méndez, Marzia. (2013). Autoethnography as a research method: Advantages, limitations and criticisms. *Colombian Applied Linguistics Journal*. 15. 279-287. https://www.researchgate.net/publication/260778406_Autoethnography_as_a_research_method_Advantages_limitations_and_criticisms
- Mallipeddi, Nathan & VanDaalen, Rachel. (2021). Intersectionality Within Critical Autism Studies: A Narrative Review. *Autism in Adulthood*. 00, (00), 1-9. <https://www.liebertpub.com/doi/10.1089/aut.2021.0014>
- Manouilenko, Irina & Bejerot, Susanne. (2015). Sukhareva—Prior to Asperger and Kanner, *Nordic Journal of Psychiatry*, 69:6, 1761-1764, DOI: [10.3109/08039488.2015.1005022](https://doi.org/10.3109/08039488.2015.1005022)
- Milner Victoria, McIntosh Hollie, Colvert Emma & Happé Francesca. (2019). Qualitative Exploration of the Female Experience of Autism Spectrum Disorder (ASD). *J Autism Dev Disord*, 49(6), 2389-2402. DOI: [10.1007/s10803-019-03906-4](https://doi.org/10.1007/s10803-019-03906-4)
- Milton, Damian. (2012). On the ontological status of autism: the double empathy problem. *Disability and Society*. 27 (6), 883-887. <https://doi.org/10.1080/09687599.2012.710008>
- Millán López, Daniel. (2021). *Guía autista: Consejos para sobrevivir en el loco mundo de los neurotípicos*. Lulu.
- Moore, Isobel., Morgan, Gareth., Welham, Alice, & Russell, Ginny. (2022). The intersection of autism and gender in the negotiation of identity: A systematic review and metasynthesis. *Feminism & Psychology*. 32 (4). <https://doi.org/10.1177/09593535221074>
- Moraña, Mabel. (2012). "POST SCRIPTUM. EL AFECTO EN LA CAJA DE HERRAMIENTAS". In Moraña, Mabel & Sánchez Prado, Ignacio. (2012). *El lenguaje de las emociones: Afecto y cultura en América Latina* (pp. 313-338). Vervuert Verlagsgesellschaft <https://doi.org/10.31819/9783954870530-019>

- Preciado, Beatriz. (2004). Género y performance. 3 episodios de un cybermanga feminista queer trans... *Zehar: revista de Arteleku-ko aldizkaria*, 54. 20-27
https://www.caladona.org/grups/uploads/2007/05/Genero_y_performance%5b1%5d.pdf
- Revelles-Benavente, Beatriz & González, Ana. (2019). *Género en la educación: Pedagogía y responsabilidad feministas en tiempos de crisis políticas*. Género, igualdad y justicia social.
- Roscigno, Robin. (2021). Critical Autism Studies, Race, Gender, and Education. *Oxford Research Encyclopedia of Education*. <https://doi.org/10.1093/acrefore/9780190264093.013.1604>
- Sencindiver, Susan. (2017). New Materialism. *Oxford Bibliographies*. DOI: 10.1093/OBO/9780190221911-0016
- Spivak, Gayatri. (1998). ¿Puede hablar el sujeto subalterno?. *Orbis tertius*, 3 (6), 175-235.
https://www.memoria.fahce.unlp.edu.ar/art_revistas/pr.2732/pr.2732.pdf
- Sughrua, William. (2019). *The Core of Critical Performative Autoethnography*. *Qualitative Inquiry*, 107780041983013–doi:10.1177/1077800419830132
- Sinclair, Jim. (1992). *Bridging the gaps: An inside-out view of autism (or, do you know what I don't know?) High-functioning individuals with autism*. New York. Plenum press.
- Singer, Judy. (1998). *Odd people in: the birth of community amongst people on the "autistic spectrum"*. *A personal exploration of a new social movement based on neurological diversity. A thesis presented to the faculty of Humanities and Social Sciences in partial fulfilment of the requirements for the degree of Bachelor of Arts Social Science (Honours), Faculty of Humanities and Social Science, University of Technology, Sydney, 1998. Submitted September 1998.*
https://www.academia.edu/27033194/Odd_People_In_The_Birth_of_Community_amongst_people_on_the_Autistic_Spectrum_A_personal_exploration_based_on_neurological_diversity
- Shakespeare, Tom. (2006). *The social model of disability*. *The disability studies reader*, 2, 197-204.
http://thedigitalcommons.org/docs/shakespeare_social-model-of-disability.pdf
- Spry, Tamy. (2001). Performing Autoethnography: An Embodied Methodological Praxis. *Qualitative Inquiry*, 7(6), 706–732.doi:10.1177/107780040100700605
- Ticineto, Patricia & Halley, Jean. (2007). *The Affective Turn: Theorizing the Social*. Duke University Press. <https://doi.org/10.2307/j.ctv11316pw>
- Yergeau, Melanie. (2018). *Authoring autism: on rhetoric and neurological queerness*. Durham, NC: Duke University Press.
- Walker, Nick. (2019). Transformative somatic practices and autistic potentials: an autoethnographic exploration. <https://www.proquest.com/openview/e80b77f7f73b23c3c3ffbf0d332d94cdb/1?pq-origsite=gscholar&cbl=18750&diss=y>
- Walker, Nick. (2021). *Neuroqueer Heresies: Notes on the Neurodiversity Paradigm, Autistic Empowerment, and Postnormal Possibilities*. Autonomous Press.

Author information

Tània Codina

ORCID: 009-0006-1710-3323

e-mail: taniacodinalopez444@hotmail.es

The author, who graduated in Fine Arts from the University of Barcelona with a specialization in painting, continued her studies by pursuing a Master's degree in Secondary Teacher Training and a Master's degree in Visual Arts and Education. It was during the latter that she received her autism diagnosis, which sparked her interest in research topics linking autism with visual culture or Affect Theory. Currently, she works as a high school teacher of Visual and Plastic Arts and is pursuing a second degree in psychology to further her studies.

MATTER

journal of new materialist research

Universitat de Barcelona

ALMANAC ENTRY
ISSUE 8

Sympoiesis

Simpoiesi

Simpoiesis

Camilla Bernava (ORCID: 0000-0002-4780-5936)
University of Naples L'Orientale

Date of submission: June 2023

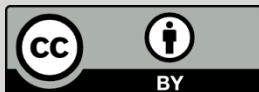
Accepted in: July 2023

Published in: July 2023

DOI: <https://doi.org/xxx/xxx>

Recommended citation:

Bernava, Camilla (2023). Sympoiesis. *Matter: Journal of New Materialist Research*. Issue 8, 84-87. University of Barcelona. [Accessed: dd/mm/yy]. <https://doi.org/>



The texts published in this journal are – unless otherwise indicated – covered by the Creative Commons Spain Attribution 4.0 International licence. The full text of the licence can be consulted here: <http://creativecommons.org/licenses/by/4.0/>

Sympoiesis

Recently, the debate on the relationship between complexity and ecological crisis has been enriched by the concept of “sympoiesis”, elaborated by the Canadian ecologist Beth Dempster (2000). The word derives from ancient Greek and consists of a suffix, *συν*, meaning “with”, and a noun, *ποίησις*, that is “activity”, “making”. Literally, sympoiesis means “making with”. Dempster formulated the concept of sympoiesis in generative friction with the model of autopoiesis, theorized by Humberto Maturana and Francisco Varela (1980), in order to offer an alternative heuristic tool for conceptualizing all the systems which do not present clear and definite boundaries and that, nevertheless, have a proper identity, such as ecosystems and natural-cultural systems. In these systems, the heterogeneity and complexity of their components challenge traditional analytical tools, especially those which insist on the importance of boundaries, as in the case of autopoietic theory. As Dempster puts it,

sympoietic systems recurrently produce a self-similar pattern of relations through continued complex interactions among their many different components. Rather than delineating boundaries, interactions among components and the self-organizing capabilities of a system are recognized as the defining qualities. “Systemhood” does not depend on production of boundaries, but on the continuing complex and dynamic relations among components and other influences. The concept emphasizes linkages, feedback, cooperation, and synergistic behaviour rather than boundaries (2000, p. 4).

From this perspective, sympoiesis, as a concept, intends to develop Maturana and Varela’s work (1980), which distinguished between two different kinds of systems, by analysing the degree of their organizational closure within them, namely allopoietic and autopoietic systems. Allopoietic systems are

defined as non-living systems whose main feature is that their internal organization depends on external causes. On the contrary, autopoietic systems, such as cells and organisms, are living systems which are organizationally closed, that is, self-organizing and self-making. Following the classic definition given by Maturana and Varela, an autopoietic system is a system “organized (defined as a unity) as a network of processes of production, transformation and destruction of components that produces the components which: (i) through their interactions and transformations regenerate and realize the network of processes (relations) that produced them; and (ii) constitute it as a concrete unity in the space in which they exist by specifying the topological domain of its realization as such a network” (1980, pp. 78-79). Therefore, autopoietic systems could be defined as autonomous, individual, self-referential living systems.

In this context, the main conceptual contribution the concept of sympoiesis has introduced is the possibility of thinking of organization not only as the result either of external forces or of internal ones, but as the result of a dynamic interplay between them. This shift in thinking organization is not confined to the natural sciences realm but has important ethical and political consequences. In fact, according to Dempster (2007), natural systems have traditionally been understood through reductive and organicist lenses, which have applied a boundary logic to manage their complexity. However, relying on boundaries enables separation of a system from its environment, promoting a tendency to disregard all the complex relationships that make up the environment as irrelevant. In this sense, introducing organizationally ajar systems permits to blur a clear-cut splitting between the system and the environment and to conceptualize hybridity and heterogeneity as relevant features of complexity. Therefore, it comes out that thinking without boundaries is a way of overcoming both the economic and anthropocentric logic that pervades ecology theory and practice.

The features of heterogeneity and complexity that the concept of sympoiesis emphasizes have been recently quoted and engaged with by Donna Haraway (2016) in her effort to overcome the human exceptionalism that permeates the Anthropocene master narrative. Far from having only one main character, such as one finds in the stories of the Anthropocene and Capitalocene, her proposal for Chthulucene sympoietic stories affirms complex worldly entanglements and assemblages that are generally neglected or subsumed. It is not simply the Anthropos that did it all, but a multiplicity of bacteria and critters who make up the world (Margulis & Sagan 2002). These multispecies stories cannot be told adopting traditional mimetic and organicist narratives, they need to be told differently: “It matters what matters we use to think other matters with; it matters what stories we tell to tell other stories with; it matters what knots knot knots, what thoughts think thoughts, what descriptions describe descriptions, what ties tie ties” (2016, p. 12).

Thus, such as in the presentation of the rhizome by means of the wasp-orchid relationship image given by Gilles Deleuze and Félix Guattari (1987), sympoietic stories aim to unveil the moment in which indiscernibility is not reduced to identity. Criticizing the mimetic and reductive visions of evolution that employ this image to prove a functionalist and teleological paradigm (cfr. Ansell Pearson 1999), Deleuze and Guattari wrote that the wasp and the orchid do not form an organism, they are not functional parts of a greater whole which subsumes them, rather they are in a relationship of differential becoming:

The line or block of becoming that unites the wasp and the orchid produces a shared deterritorialization: of the wasp, in that it becomes a liberated piece of the orchid’s reproductive system, but also of the orchid, in that it becomes the object of an orgasm in the wasp, also liberated

from its own reproduction. A coexistence of two asymmetrical movements that combine to form a block, down a line of flight that sweeps away selective pressures. The line, or the block, does not link the wasp to the orchid, any more than it conjugates or mixes them: it passes between them, carrying them away in a shared proximity in which the discernibility of points disappears (1987, pp. 293-294).

In a similar vein, Carla Hustak and Natasha Myers (2012), drawing on the work of Deleuze and Guattari, focus on the *involutionary momentum* of this relationship, amplifying the playful, creative and affective dimensions of the encounter between plants and insects. Engaging with these aspects, which are not recorded by the evolutionary memory, permits working “athwart” to the dominant functional and economic logic of ecology, restoring other narratives of the natural world and multispecies relationships. For Hustak and Myers, this is a way of elaborating alternative affective ecologies, “in which ecological niches and the milieus that contour the gaps between bodies teem with energies, affects, and propositions” (2012, p. 105).

Following this path, sympoiesis is a way of seeing the world that overcomes the idea of organismic unity, while producing a shift in the direction of an entangled ontology (Barad 2007). If traditional ontologies have ordered the existent by adopting anthropocentric lenses and resorting to a binary logic that foregrounds human agency only, a sympoietic approach has the potential to restore multiplicity. Sympoietic stories, then, concern the critters that comprise the world, disaggregating and diffracting the human exceptionalism that permeates our narratives. Hence, sympoiesis is not merely about defining a system (may it be natural or not) as sympoietic. It is rather about elaborating a different way of engaging with the existent, becoming-with the multiple, heterogeneous, and amorphous agencies that de/compose it.

Bibliography

- Ansell Pearson, K. (1999). *Geminal Life: The difference and repetition of Deleuze*. Routledge.
- Barad, K. (2007). *Meeting the Universe Halfway*. Duke University Press.
- Deleuze, G., & Guattari, F. (1987). *A Thousand Plateaus: Capitalism and Schizophrenia*. University of Minnesota Press.
- Dempster, B. (2000). Sympoietic and Autopoietic Systems: A New Distinction for Self-organizing Systems. In J. K. Allen & J. Wilby (Eds.), *Proceedings of the World Congress of the System Sciences and ISSS 2000*. Presented at the International Society for System Studies Annual Conference, Toronto, Canada.
- Dempster, B. (2007). Boundarylessness: Introducing a System Heuristic for Conceptualizing Complexity. In C. S. Brown & T. Toadvine (Eds.), *Nature's Edge. Boundary Explorations in Ecological Theory and Practice* (pp. 93-110). State University of New York Press.
- Haraway, D. (2016). *Staying with the Trouble. Making Kin in Chthulucene*. Duke University Press.
- Hustak, C., & Myers, N. (2012). Involuntary Momentum. Affective ecologies and the Sciences of Plant/Insect Encounters. *Differences: A Journal of Feminist Studies*, 23(3), 74-118.
- Margulis, L., & Sagan, D. (2002). *Acquiring Genomes: A Theory of the Origin of Species*. Basic Books.
- Maturana, H., & Varela, F. (1980). *Autopoiesis and Cognition. The Realization of the Living*. Reidel Publishing Company.

Author information

Camilla Bernava

ORCID: 0000-0002-4780-5936

Email: cbernava@unior.it

Camilla Bernava is a Ph.D. student at the University of Naples L'Orientale. She holds an M.A. in Philosophy (Complutense University of Madrid) and a 1st level Master's degree in Gender Studies and Politics (Roma Tre University). Her research interests include feminist philosophy of science, feminist epistemologies, and the intersection of these fields with environmental humanities.

MATTER

journal of new materialist research

Universitat de Barcelona

BOOK REVIEW
ISSUE 8

Book review of *Visual Participatory Arts Based Research in The City: Ontology, Aesthetics and Ethics* (Eds. Trafí-Prats, L. & Castro-Varela, A., 2022)

Resenya de *Visual Participatory Arts Based Research in The City: Ontology, Aesthetics and Ethics* (Eds. Trafí-Prats, L. & Castro-Varela, A., 2022)

Reseña de *Visual Participatory Arts Based Research in The City: Ontology, Aesthetics and Ethics* (Eds. Trafí-Prats, L. & Castro-Varela, A., 2022)

Blanca Callén Moreu (0000-0001-7927-3586)
Universitat Autònoma de Barcelona

Date of submission: May 2023

Accepted in: July 2023

Published in: July 2023

DOI: <https://doi.org/xxx/xxx>

Recommended citation:

Callén Moreu, Blanca (2023). Book review of *Visual Participatory Arts Based Research in The City: Ontology, Aesthetics and Ethics*. *Matter: Journal of New Materialist Research*. Issue 8, 88-91. University of Barcelona. [Accessed: dd/mm/yy]. <https://doi.org/>



The texts published in this journal are – unless otherwise indicated – covered by the Creative Commons Spain Attribution 4.0 International licence. The full text of the licence can be consulted here: <http://creativecommons.org/licenses/by/4.0/>

The book *Visual Participatory Arts Based Research In The City: Ontology, Aesthetics And Ethics*, edited by Laura Trafí-Prats and Aurelio Castro-Varela is an invitation in the form of a catalogue of experiences, projects, and practices that operates as a sample of what was or is happening in a city around the world (Barcelona, Vancouver, Salvador, Salt, Milwaukee, or Manchester...), but could also happen. That's it: it is a catalogue of past descriptions but also an openness of possible futures.

This invitation is specially addressed to those who conceive of and inhabit the city in a "traditional" way, as a human settlement whose urban infrastructure (administrative, political, economic...) differs from rural centres, with a predominance of commercial, industrial, and service activities. From this vision, contemporary cities, in the heat of the machinery of the industrial revolution, became socio-economic attractors of rural populations in search of prosperity derived from modern development. The deployment of technical infrastructures such as transport systems, drinking, or wastewater, lighting, etc. materialized an urban planning approach where the city, even today, tends to operate as a stage for just human activity, thus privileging the development of human habitability over any other agent. The correlation between the growth and expansion of the economy concentrated in the cities and the very limits, scale and urban layout of the city itself, justified the domination of all non-human beings and elements that occupied its confines and peripheries.

Against the backdrop of this city's conception, inherited from modernity but still in force, Trafí-Prats and Castro-Varela's book joins a tradition of work that connects urban studies with STS (Social Studies of Science and Technology) to problematize this idea of the city as a stage for just human activity and to think of it (and inhabit it) as a semiotic-material assemblage made up of a heterogeneity of elements, both human and non-human, that blur the distinction between background and form, between stage and

action, in order to break with human exceptionalism, centrality, and privilege.

This work, however, proposes an approach that is not so common in the field of urban STS studies. The contributions of all the fourteen authors who participate in the work are based on and draw from visual and participatory artistic research. This way, despite the fact that we can find some inspiring transdisciplinary incursions in art inside STS along with some Latour's works (2005, 2002) and his collaboration with different artists (Aït-Touati), curators (Weibel) and formats (exhibitions, scripts...), this book means an inspiring and questioning work that helps to expand and enrich the disciplinary limits of STS tradition. This book not only helps renewing the methods by which we (could) explore and inhabit the city – beyond the discursive and textual ones, but also those based on the technical and academic expertise – but all the visual, artistic, corporeal and community experiences that it compiles through the eight chapters and epilogue also contributes to renewing the ontological, aesthetic, and ethical dimensions of the city. Through community and participatory art, we can materialize and make tangible some common urban issues that are closely connected with what a city is (or could be) and what it is made up of; with how it is inhabited, perceived and experienced; and with how we relate to it and to those natural-cultural "others" who co-inhabit it. Thus, all the experiences collected in the book operate as experimental devices that evidence and problematize disputing, the urban "matters", the city's limits, its visions and occultations, or the "distribution of the sensible" (Rancière, 2009) in the city, which is also, by extension, the distribution and (re)distribution of the habitable.

From empirical-conceptual braids that attempt to distil or apply notions of social and philosophical thought FROM and TO artistic practices and everyday explorations, this book re-defines and re-enables the city and the way we experience it in four main aspects, some of which (the first two) are more in line with urban STS (Farías & Sánchez-Criado, forthcoming),

and the last two, more original and specific to the artistic field. Very briefly:

1. Cities as a more-than-human assemblage (impossible to reduce to human action) made up of relational entities that emerge in the action itself, as Actor-Network Theory has already been arguing. The city, far from being an anthropocentric settlement, with a clearly defined and reified identity, exportable as a “model” to other cities, operates more as an event or occasion, as an ontological choreography that overflows any attempt of universality and fixity. The city would rather be a situated pluriverse in which forms of existing and inhabiting it are continually contested and emerging.

2. Cities as the operators but also results of distributed agencies between humans and non-humans, between objects, people, and infrastructures. Hence, the city is not the material background of human subjectivities and their actions, thus reproducing the dichotomy between subjects and objects, but rather post-human aesthetic ecology where objects and spaces affectively mediate (affect and are affected) between past, present, and future times. This also implies displacing discourse and language as the primary form of thought, and incorporates the visual and material, the objectual, in an urban phenomenology that makes tangible oppressions and resistances that remained hidden from traditional technocratic urban planning and expertise.

3. Cities as a contested notion, territory and geography that, far from being solely configured from above, from technical solutionist and technocratic political planning that reproduces coloniality and neoliberalism (see the dichotomy centre-periphery), also emerges from the subaltern margins and in resistance. This promotes non-hegemonic relationalities where the right to the city does not mean mere access to consumption or property, but the collective right to habitability, to re-appropriate and to affirmatively infrastructure (as a verb, not a noun), based on dissent. The city then becomes an exercise of re-imagination and radical onto-aesthetic re-materialisation through the proliferation of encounters with the

minor, the everyday and the historically silenced (under-commons). To this end, participatory art is a privileged vehicle that contributes to create alternative imaginaries and narratives, common “fugitive worlds” (Harney & Motten, 2013) from excluded points of view and through (geographical and political) “peripheral” experiences: from and with objects, but also from and with those “others” that have historically been treated as objects.

4. Art and artistic research then contribute to re-materialise and feel the city, aesthetically, ethically, and politically, by creating atmospheres and sensorial experiences that enable a collective encounter between people and things. This artistic experimentation, far from the logocentrism of social analysis, does not seek to explain or represent the city but to sensitize the multiple bodies that co-inhabit it to facilitate the interconnectivity between them, between the living and the inert that constitute the urban tissue. From an affective materialist perspective, and this is one of the book’s major contributions, the various sensitive experiences proposed in each chapter function as artistic and experimental epistemic repertoires that attend to elements, dimensions, and issues – matters: materials and problems – that had previously been unappreciated. And, as a result, they can describe and perform the city, in order to speculate with/about it and thus open up other urban possibilities (at ontological, political, ethical, and aesthetic levels), that were not even thinkable.

Visual Participatory Arts based Research, and this is the most original contribution of the volume, thus becomes a speculative process of vital research and knowledge production FROM/WITH/ABOUT the city that creates collective events from which relations, affections, and sensations between bodies, spaces, and urban objects are intensified. And, from this vitalist materiality, this book contributes to expand, displace, and redistribute the sensitive in order to problematize and re-inhabit the city by other (artistic) means.

Although all the experiences of artistic research presented in the book are based on specific

cities affected by different problems, perhaps the best “reading” we can make of this work is to place it in dialogue with the different cities we inhabit and their contemporary problems. For example, if we situate ourselves in a city like Barcelona, inhabited by 1,656,725 people and 77,000 pets, which has suffered water restrictions since March, 2 this year and was visited by 9.7 million tourists in 2022 (who consume 5 times more water than any neighbour of the city), where there is a crisis of access to housing due to the touristification of the city, or where there are certain infrastructural limits (in terms of water, energy and transport)... How can experiences of research based on participatory visual art help to make the city more habitable for everyone, outside of productivism and neoliberal logics? How to re-sensitize neighbours and visitors, but also municipal stakeholders and politicians, to the effects and affections of their inhabiting and

transiting the city? How to articulate the interests and needs of permanent and floating populations? How can art and artistic research cultivate and promote radical forms of habitability, composition and re-spatialization that are more just for all, human and non-human? Or what would an institution like the “Municipal Office of Urban Ecology” look like (or how to generate common political infrastructures?), by incorporating visual and collaborative art-based research as part of its methodological repertoire? Because perhaps not everything is articulable or composable, but art and artistic research, as the book argues, might be a powerful tool and means to make appreciable and tangible, common matters that beset us at a time of ecological and economic crisis where cities, historically active agents of such crises, urgently need to rethink and remake themselves.

Bibliography

- Fariás & Sánchez-Criado (forthcoming). *Cities: stories of urban STS*. Editorial: TBD.
- Harney, S. & Moten, F. (2013). *The undercommons: fugitive planning and black study*. New York: Minor Compositions.
- Latour, B. & Ait-Touati, F. (2019). *Moving Earths*. Conférence-performance.
- Latour, B. & Weibel, P. (2002). *Iconoclasm beyond the image wars in science, religion and art*. Cambridge: MIT Press.
- Latour, B. & Weibel, P. (2005). *Making things public. Atmosphere of Democracy*. Cambridge: MIT Press.
- Rancière, J. (2009). *El reparto de lo sensible*. Chile: LOM

Author information

Blanca Callén Moreu

ORCID: 0000-0001-7927-3586

e-mail: blanca.callen@uab.cat

PhD in Social Psychology (UAB, 2010). Associate lecturer on the Psychology degree at the UVIC-UCC and UAB, and member of the CareNet research group (UOC). She has been postdoctoral researcher at the Centre for Science Studies (Lancaster University, 2012-2014). Working on the area of Social Studies of Science and Technology and collective political action, she has focused on material cultures and community responses to the ecosocial crisis. More recently, she has been doing research about (electronic) waste and cultures of repair in a context of climate crisis. She is also co-founder and member of Restarters BCN association.

MATTER

journal of new materialist research

Universitat de Barcelona

BOOK REVIEW
ISSUE 8

Haunting the Way in New Materialist Ecocriticism. Book review of *Spectrality and Survivance. Living the Anthropocene* (Grech, M., 2022)

Aguaitant el camí en la ecocrítica nuevomaterialista. Ressenya de *Spectrality and Survivance. Living the Anthropocene* (Grech, M., 2022)

Acechando el camino en la ecocrítica nuevomaterialista. Reseña de *Spectrality and Survivance. Living the Anthropocene* (Grech, M., 2022)

Sam Le Butt (ORCID: 0000-0001-7605-1291)

University of Bristol and University of Southampton

Date of submission: September 2022

Accepted in: July 2023

Published in: July 2023

DOI: <https://doi.org/xxx/xxx>

Recommended citation:

Le Butt, Sam (2023). Haunting the Way in New Materialist Ecocriticism. Book review of *Spectrality and Survivance. Living the Anthropocene*. *Matter: Journal of New Materialist Research*. Issue 8, 92-97. University of Barcelona. [Accessed: dd/mm/yy]. <https://doi.org/>



The texts published in this journal are – unless otherwise indicated – covered by the Creative Commons Spain Attribution 4.0 International licence. The full text of the licence can be consulted here: <http://creativecommons.org/licenses/by/4.0/>

Challenging the Specular Logic of the Anthropocene

As a scholar of ecocriticism, I often read about the ways in which the “Anthropocene”, as a term and a concept, works to an abdicatory logic: both in the violently unjust universalisation implied in *anthropos*, and the subsumption of the present to the future (Haraway, 2015, 2016). New materialism, recognising the “Anthropocene” as a narrative with profoundly material implications, has argued that to both decentre *anthropos* and recentre the present, material agency (in mutual constitution with discursive practices) must be recognised (Barad, 2007; Bennett, 2010). However, when these theories are applied in ecocriticism, they can often get bogged down in rerouting material processes through textual paradigms, without explicitly linking the “solution” (material agency) back to the “problem” (the futurist and anthropocentric violences enacted by the narrative of the Anthropocene) (see Iovino and Oppermann, 2014). This is what Marija Grech’s new book *Spectrality and Survivance: Living the Anthropocene* (2022) does with a clarity of logic – and prose – that makes it not only incredibly useful, but also profoundly refreshing.

Grech challenges the “double violence” of the Anthropocene (p. 126) through a materialist reading of the lithic trace, recognising it as both the “conceptual cornerstone” (p. 18) of the Anthropocenic paradigm and a compelling example of how human meaning is imbricated with the natural world (Hägglund, 2011, pp. 118–119). Grech employs a hauntological methodology to destabilise that most slippery of binaries, that between animate and inanimate matter (Chen, 2012), redeveloping the Derridean concepts of *différance*, spectrality, and survivance to unveil how textuality, metaphor, and biological and inanimate forms of matter “live on” in ways that are both “conceptually comparable as well as materially entangled” (p. 26) with each other. The place we end up in Grech’s conclusion may by now be familiar to many new materialist ecocritics: in spaces of entanglement “composed of complex material realities that ‘live on’”, (p. 115) independent from the jurisdiction of

anthropogenic agency; however, the journey to get there is both distinctive and illuminating.

The book begins with Grech exposing the futurist logic of the Anthropocene as “specular”, one that creates “a vision of the present that is haunted by the future memory of itself as past” (p. 5). This “future-retro-vision” is structured around an absence of the human that must remain present, as the Anthropocene is reliant upon on a humanoid figure of the future reading “geochemical traces in the earth’s strata” (p. 18) and interpreting them within as “elegiac immortalisation[s] of human civilisation” (Weisman, 2007). In this way, apocalyptic narratives that imagine a world of human extinction end up preserving ways of knowing that structure our current cultural paradigms, transported into the future to enable this speculative “alien scientist” (Weisman, 2007, p. 154) to interpret traces such as radioactive isotopes as marks of human activity. Grech spends the introduction critiquing the idea that such narratives can inspire environmentalist action, writing that the human perspective narrating such stories implicitly promises the survival of Anthropocentric knowledge systems, enacting a cyclical logic in which Anthropocentrism and its attendant problems are not challenged. Those of us in Anthropocene literary studies are all too familiar with this trope: it structures large swathes of eco-fiction, from classics such as J.G. Ballard’s *The Drowned World* (1962) to more recent stories such as Cormac McCarthy’s *The Road* (2006) and Megan Hunter’s *The End We Start From* (2017). Though these fictions present shocking future imaginaries of a climate-ravaged earth, each is narrated by an individualised (often White) character who acts as a “transported avatar” of the reader into that future, allowing them to play out fantasies of survival. When Grech states her aim to engage with narratives that do not rely on the survival of the human as a way to circumvent the “future retrospectivity” (p. 5) of the Anthropocene, then, she is also speaking to the term’s exclusory logic, of who gets to survive in these futures.

To take the *anthropos* out of the Anthropocene, Grech zeroes in on the “lithic trace” as one of its essential concepts, deconstructing its Anthropocentric semiotic role

and instead establishing its constitution by entanglements of materialist agencies. She does this by route of eco-deconstructive readings of Derridean textuality; it is this methodology that underpins the usefulness of Grech's work to literary scholars. Where most new materialists focus on the materialism of textuality, Grech unpacks the textuality of materialism. This in no way steers us back to social constructivism or the dreaded representationalism (Barad, 2007, p. 46), but instead gets down into the mechanistic minutiae of metaphor, text, and sign, via the Derridean hauntological concepts of *différance* and survivance, to restructure the lithic trace into something truly material. In this way, Grech achieves her aim of revealing the "inherent non-simultaneity of presence in the entanglement of different forms of life and matter" (p. 8), a considered challenge to specular futurism.

Grech builds her theories carefully. Following her narratorial critiques in the introduction, she uses chapter one to explicate the specular logic of the Anthropocene through material practices including the Svardbard Seed Vault and the Frozen Ark, writing how these initiatives preserve Anthropocentric scientific and cultural systems of thought about how life is organised alongside their cryobiotic material. Grech then highlights how those frozen embryos draw attention to the "spectrality of living" (p. 24) in that they "deanimate living tissue" (p. 53), revealing a porosity between animate and inanimate states of matter. This materialist analysis enables her to go on to build her hauntological view of the present, by recognising that within life is always contained the "spectre of the other" (p. 56), revealing its material embeddedness of that which lies "outside" of it.

A Différent Kind of Trace

Chapter two is where Grech does most of her heavy theoretical lifting, weaving together Derrida and Karen Barad by way of eco-deconstructive work done by Vicky Kirby (2001). Using Barad's theory of intra-active entanglement of discursive practices and material phenomena, which performatively constitute each other through diffractive mechanisms (2007), Grech unpacks Derrida's textuality and its non-anthropocentric promises. Working with the newly translated *Life Death*

seminars (Brault & Naas, 2020), Grech reveals how, just as metaphors always materially implicate that which they represent (Barad, 2007, p. 69), textuality and life are governed by the same processes of *différance*, i.e., the movement of sameness and difference, consisting of the constant "inter- and intra-active mediation and negotiation of these structures and processes with that which supposedly exists outside of them" (p. 77). This reveals the spectrality both in textuality and different living and non-living forms of matter, in ways that always "implicate them in that which they supposedly are not" (p. 79). Having established her hauntological logic, Grech then applies this to the lithic trace of the radioactive isotope.

In chapter three, Grech applies her hauntological paradigm of textuality to construct her idea of the "material survivance" of radioactive materials and how they "live on" in the earth's strata. Her concept of survivance is formulated through Derrida's ideas of the biodegradability of text (2013): that the spectral "life" of the text (spectral in that it lives on beyond the parameters of the organic and inorganic), is constituted by maintaining an equilibrium between its break down and assimilation into culture, and its resistance to this through the singularity of its existence. The text's survival—and that of the singular linguistic sign (Peterson, 2018)—is therefore predicated on this intra-active balance (Derrida, 1985). Grech's posits Derrida's term "survivance" as a generative shorthand for this relationship, applying it to the processes by which all biological and inanimate matter "lives on", its ongoing existence constituted through intra-active exchange with its environment and cohesion of its own borders.

This becomes explicitly material when applied to the radioactive isotope, which literally "lives on" through its decay, by way of its half-life. In chapter four, Grech performs a materialist close-reading on isotopic intra-activity, describing how isotopes live on in the mutations they enact on their material and bodily surroundings and the chemical changes they themselves go through. Grech holds them up as a particularly potent example of how all things exist through this intra-active survivance—and how this can fundamentally challenge the Anthropocentrism of the lithic

trace as human signature. At the beginning of the book, Grech critiques the evocation of Chernobyl as “an immersive simulation of the future, an image of what will come in our wake” (O’Connell, 2020, p. 196) as a “future-retro-vision” governed by a cyclical, specular, and Anthropocentric logic; in chapter four she reconceptualises Chernobyl as an entanglement of complex material realities that “live on” (p. 115), affecting countless human and non-human lives due to the intra-active survivance of radioactive materials and their environments. Crucially, Grech widens out Masco’s idea of “mutation” (2006) as the ongoing biological and intergenerational effects of radioactive survivance to a more explicitly new materialist formulation including the mutations of inorganic matter and all social, economic, political, military, and technoscientific discourses which led to Chernobyl and have continued to ripple out since.

In her conclusion, Grech returns to this idea of the “double violence” of the Anthropocene: the colonial and imperialistic violence by which the industrial-capitalist world was brought into being (Yusoff, 2018, pp. 57-58) and then how the use of the term continually erases this history by constructing *anthropos* as a universalised referent. In light of Grech’s work, we can add another multiplication of violence, preserved via the static logic of future-retro-visions. At this point, Grech resituates her understanding of the Anthropocene in scholarship done by Bonneuil and Fressoz, Jason Moore, and Donna Haraway that work to undo some of these violences. Differentiating terms like Capitalocene and Plantationocene better account for “the vast economic, political, cultural, biological and geographical stratifications of power that many humans have been subjected to” (p. 126) and Haraway’s tentacular “Chthulucene” recognises the “myriad temporalities and spatialities and myriad intra-active entities-in-assemblages—including the more-than-human, other-than-human, inhuman, and human-as-humus” (Haraway, 2015, p. 160), in which we are forced to be “truly present” (Haraway, 2016, p. 1). The Chernobyl that Grech describes speaks to these theories of diffracted agency across complex actor-assemblages, but she has shown us *how we get there*, by recognising the

différance inherent in the survivance, or living-on, of both matter and text. Through this, Grech illuminates the “non-contemporaneity of the present” (p. 7) felt in the Anthropocene *without* rerouting it through a specular logic that preserves Anthropocentrism; by showing that the materiality of it is always constituted by “what it is not” (Derrida, 1982, p. 13). Not only does this challenge the futurism of the Anthropocene concept, but it also exposes the spectrality of matter, destabilising the boundaries that keep animate and inanimate matter apart.

A Methodology for New Materialist Storytelling

For my work in new materialist ecocriticism, Grech’s book provides a crucial methodological link to help explicate *how* narratives of complex material entanglements challenge the violences inherent in Anthropocene logics of exclusion, futurity, and stasis; i.e., through their engagement with potent examples of survivance and spectrality. My current research centres around finding such literatures, ones that narrate ongoing ecological crises of pollution and toxicity in ways that are new materialist, intra-active, and hauntological. Stacy Alaimo’s theory of “transcorporeality” and the literary examples she analyses (2010) are essential examples of this and Grech does well to acknowledge them. To offer some examples from my own work, I read Jeff VanderMeer’s *Annihilation* (2014) as a narration of the toxicological crisis of oil spills through the strange enmeshment of human and more-than-human forms. Another example is Max Porter’s *Lanny* (2019), which uses a mythological figure to narrate the hauntological intra-activities of rubbish with the different bodies, matter, histories, and systems of the English countryside. Both of these narratives tell stories of material entanglements without specular recourse to the human, however, as novels, they are both still reliant upon semiotic marks interpreted Anthropocentrically to generate meaning. They may not be as de-anthropocentrised as Grech’s lithic trace then, but if they provoke reconceptualisations of how we think and write about Anthropocene, this will have material-discursive repercussions of what “the Anthropocene actually turns out to be” (p. 130).

Bibliography

- Alaimo, S. (2010). *Bodily Natures: Science, Environment, and the Material Self*. Bloomington: Indiana University Press.
- Ballard, J. G. (1962). *The Drowned World*. US: Berkeley Books.
- Barad, K. M. (2007). *Meeting the Universe Halfway: Quantum Physics and the Entanglement of Matter and Meaning*. Durham, NC; London: Duke University Press.
- Bennett, J. (2010). *Vibrant Matter: A Political Ecology of Things*. Durham, NC: Duke University Press.
- Chen, M. Y. (2012). *Animacies: Biopolitics, Racial mattering, and Queer Affect*. Durham, NC: Duke University Press.
- Chrulaw, M. (2017). Freezing the Ark: The Cryopolitics of Endangered Species Preservation. In J. Radin & E. Kowal (Eds.), *Frozen Life in a Melting World*. Cambridge, MA: MIT Press.
- Derrida, J. (1982). Différance (A. Bliss, Trans.). *Margins of Philosophy*. Brighton, UK: Harvester Press.
- Derrida, J. (1985). Des Tours de Babel (J. F. Graham, Ed. & Trans.). *Difference in Translation*. Ithaca, NY: Cornell University Press.
- Derrida, J. (2013). Biodegradables: Seven Diary Fragments (P. Kamuf, Trans.). In J. Williams (Ed.), *Signature Derrida* (pp. 152-219). Chicago: University of Chicago Press.
- Derrida, J. (2020). *Life Death* (P. Brault and M. Naas, Trans.). Chicago: University of Chicago Press.
- Haraway, D. (2016). *Staying with the Trouble: Making Kin in the Chthulucene*. New York, USA: Duke University Press.
- Haraway; D. (2015). Anthropocene, Capitalocene, Plantationocene, Chthulucene: Making Kin. *Environmental Humanities* 1 May 2015; 6 (1), 159–165, Retrieved July 1, 2023, from <https://read.dukeupress.edu/environmental-humanities/article/6/1/159/8110/Antropocene-Capitalocene-Plantationocene>.
- Häggglund, M. (2011). Radical Atheist Materialism: A Critique of Meillassoux. In L. Bryant, N. Srnicek & G Harman (Eds.), *The Speculative Turn: Continental Materialism and Realism*. Melbourne: re.press.
- Hunter, M. (2017). *The End We Start From*. Picador.
- Iovino, S., & Oppermann, S. (Eds.). (2014). *Material Ecocriticism*. Indiana University Press.
- Kirby, V. (2011). *Quantum Anthropologies: Life at Large*. Durham, NC: Duke University Press.
- Masco, J. (2006). *The Nuclear Borderlands: The Manhattan Project in Post–Cold War New Mexico*. Princeton, NJ: Princeton University Press.
- McCarthy, C. (2006). *The Road*. New York, NY: Alfred A Knopf.
- O’Connell, M. (2020). *Notes from an Apocalypse: A Personal Journey to the End of the World and Back*. London: Granta.
- Peterson, M. (2018). Responsibility and the Non(bio)degradable. In M. Fritsch, P. Lynes & D. Wood (Eds.), *EcoDeconstruction* (pp. 249–260). New York: Fordham University Press.
- Weisman, A. (2007). *The World Without Us*. London: Virgin Books.

Author information

Sam Le Butt

ORCID: 0000-0001-7605-1291

sam.lebutt@bristol.ac.uk

Sam Le Butt (she/her) is an SWW DTP funded PhD researcher in English Literature and Environmental Humanities at the University of Bristol and University of Southampton. Her research focuses on the entanglements of ecocriticism and monstrosity, using feminist and postcolonial materialist ecocritical theories to uncover how monstrous bodies narrate ecological crises in contemporary literature. She is also a fiction writer, collage artist, and workshop leader.

MATTER

journal of new materialist research

Universitat de Barcelona

BOOK REVIEW
ISSUE 8

The Resilient Stain. Book review of *The Three Sustainabilities: Energy, Economy, Time* (Stoekl, A., 2021)

La taca resilient. Resenya de *The Three Sustainabilities: Energy, Economy, Time* (Stoekl, A., 2021)

La Mancha Resiliente. Reseña de *The Three Sustainabilities: Energy, Economy, Time* (Stoekl, A., 2021)

Amanda Boetzkes

Contemporary Art History and Theory, University of Guelph

Date of submission: June 2022

Accepted in: June 2022

Published in: July 2023

DOI: <https://doi.org/xxx/xxx>

Recommended citation:

Boetzkes, Amanda (2023). The Resilient Stain. Book review of *The Three Sustainabilities: Energy, Economy, Time*. *Matter: Journal of New Materialist Research*. Issue 8, 98-101. University of Barcelona. [Accessed: dd/mm/yy]. <https://doi.org/>



The texts published in this journal are – unless otherwise indicated – covered by the Creative Commons Spain Attribution 4.0 International licence. The full text of the licence can be consulted

here: <http://creativecommons.org/licenses/by/4.0/>

Allan Stoekl's *The Three Sustainabilities: Energy, Economy, Time* (2021) is a compelling analysis of sustainability in its fundamental terms. The book gives an account of its cultural history and the futurity it opens all while probing the underpinnings of the concept. Stoekl recasts an understanding of how the existential and systemic conditions of humanity converge at the very limits of the world and how these limits register the recursion of its end from a planetary beyond. The book charts the coordinates of "first-order" and "second-order" sustainability, to reach a formulation of "postsustainability" as a third-order form. Through rich argumentation, Stoekl deftly moves through issues of perspective, language, materialisms and the object world as he draws out the logic of sustainability and the failure of its parameters in models of energy, economy and time. The three sustainabilities are interleaved and mutually corroborating; taken together, they exert the philosophical complexity of the ecological paradigm while driving it out of the terms of second-order cybernetics from which it originates. Thus, while the book inherits its title from Félix Guattari's 1989-essay, *The Three Ecologies*, it articulates ecology (and its sustainability) *in and as the stain of human existence* on its economic and energy systems.

With the emergence of ecology, many arguments have been waged to overcome core concepts that underpin the humanities: the death of nature and the rise of the posthuman, for example. Subject/object dichotomies have given way to systemic perspectives. Sustainability occupies a curious position in relation to such ends and overcomings, insofar as it has been demystified as a shallow cultural covering that enables a closed economy rather than resolving global-scale ecological challenges. Yet it persists as a more excessive concept both in spite of and because of its framing in systemic terms. In this respect, Stoekl lays out all the implications and concealed assumptions about sustainability at a time when that term is easily hijacked by economic and energy schemas. He develops the arguments from his 2007-book, *Bataille's Peak: Energy, Religion and Postsustainability*, and from his informed position as the translator of Bataille's writings, to advance a critique of the moralism at stake in the discourse of sustainability, situating it in relation to the contradictory logic of the global fossil-fuel economy which would impel us to consume

scarce resources in order to expand infinitely, to the point of total destruction.

The return of waste by way of trash, CO2 emissions, extinctions and other marker horizons of environmental crisis all point to the ways that sustainability is restricted by its own technological and economic systems, leaving humanity in an impossible position, netted to entropy, green capitalism, or, at best, an energy-restricted Marxism. None of these account for the fundamental need to expend energy, however. The notion of sustainability therefore endures and recurs, not merely as a social or technological model, but as the unthought dimension of our energetic and economic systems. This is Stoekl's starting point: sustainability continues as a sliding signifier, a vehicle that carries thinking through the disproportions of scale provoked by the Anthropocene, the utopian and dystopian potentials of technology, and the material expressions that upend the cohesion of human meaning and worlds. Sustainability persists but what/who might it sustain, and for what/whom?

Stoekl makes a case for understanding it otherwise, offering a sobering yet satisfying theorization of sustainability as the return of humanity's energetically-charged waste from an omnipresent exteriority (the planetary future). In this, he links his long-term project of connecting Georges Bataille's notion of general economy to the theoretical anchors of posthumanist thinking. Emmanuel Levinas, Jacques Lacan, and Paul de Man are important touchstones by which he builds on the ethical and ecological philosophies of Gay Hawkins, Vinciane Despret, Lynn Margulis and others. Stoekl deftly manoeuvres the distinction between the face-to-face encounter with ecology—sustainability in the first-order as the warding off of the totality of an ecological end that constitutes a closed self—and sustainability in the second-order as the systemic efforts, technological, economic and ideological, to respond to the breach of the self by reinstating ordered and balanced exchange. The latter however, denies the totality of ecological death, of the passage of time, degradation and decay. Thus, third-order sustainability (postsustainability) entails a paradoxical position that Stoekl associates with resilience: the effort to embrace what should be resisted for the sustainability of humanity, and

to adapt to the unstoppable passage of time and life into total death.

The division of the book into three parts—energy, economy, time—corroborates the mutually defining systems that constitute sustainability in its restrictions and its heterogeneity. But this three-fold partitioning does not necessarily indicate an order of importance or increase of scale. As the argument unfolds, each thread of the triad captures an indivisible facet that informs human self-consciousness, cities, technosystems, and economic ideologies as we confront the planet's carrying capacity for the human species and life itself. The three sustainabilities hold together as a dynamic Möbius strip that is tarnished by the waste of humanity: we register as the residue of the future. Stoekl therefore submits an insightful recasting of sustainability and its discontents, that pushes the humanities beyond a moral imperative to imagine energy futures by way of alternative sources of energy (by which we could maintain a new form of stasis of energy input and output) or a thickening of social bonds (a move to intensify satisfaction within the limits that are already defined). Instead, he makes an original case for reflection on the situatedness of humans in the midst of uneven energy exchanges, exchanges that push our economies and our consciousness beyond the limitations of the individual and society. Such reflection is a Messianic turn of perspective, an anamorphic view of time, by which we can glance at our appearance to ourselves as the vibrant matter of our wasted future.

Stoekl animates this argument in and through figures, film scenes, novels, and literary flourishes. Through incisive accounts of the Technocracy Inc. movement, Louis Aragon's conceptualization of the statue in Paris, Le Corbusier's understanding of the solar city, Ernst Junger's elaboration of the energy worker, and William Mazarella's notion of *mana*, the reader begins to see the temporality of human energy exchanges quite differently. Sustainability is indeed a blindspot, a rotten sun that plagues us as much as it saves us, as per Bataille. But from the perspective of our ecological companions, Stoekl shows human sustainability in a different light, by questioning around the receding object of the question, what of the human remains after we can no longer sustain ourselves? Thus, the ecological predicament and the ends of the human

concrese onto sustainability, rather than sustainability enforcing a schema onto the living planet.

The ethical underpinning of the book, and its ambition to bring the reader's thoughts to the blindspots, disproportions, and raw violence that mark the first two orders of sustainability require an engagement with the true bi-directionality and paradox of ecological trauma. As Stoekl suggests "From Levinas, we can derive this bizarre observation: ecocide is impossible. The more we destroy the less we destroy. The more we make the world in our image, the less we do so. There will always be one more ecology, though it might not be to our liking," (66). In this sense, Stoekl's study of sustainability engages a terrifying hauntology. The challenge he poses is an instrumental question: if coming to terms with postsustainability activates levels of profound shame (for the ecocide and self-destruction) and fear (of the ecocide and self-destruction), what *collective* disposition will help us carry these thoughts in a lived way?

The argument inherits from surrealism and other political movements a spirit of a collective *bearing* of the limits of sustainability. At the same time, a big part of the contemporary human's internal civil war (which has external expression as ecological catastrophe) is the cultural exchange of political dispositions that absolve or lay blame as primary forms of deferral and denial of this predicament. From this perspective, we can reconsider Russian president, Vladimir Putin's 2021 invasion of the Ukraine as both a deferral of ecological crisis and an exertion of its restricted energy economy. It seems we are unconsciously archaic as never before in our global political forums. Might postsustainability secure its place and bearing in human consciousness in the midst of this ecocidal and misanthropic situation? What distinguishes Putin's ruinous reterritorialization with a postsustainable embrace of the future in ruins? For while second-order sustainability has so far endured, its capacity for a genuine adaptation in the manner of postsustainability is itself endangered by a political climate that returns us continually to a rigid "bare endurance" of humanity.

The terms of postsustainability as Stoekl defines it, rest on an identification with the other that can reverse to reveal the uneven system at

its paradoxical heart. For example, Derrida identifies with his cat as a primary mirror—or even more strongly, his shame chooses the cat—by which to anchor a reflection on his own animality and mortality. In energy terms, Stoekl outlines, we identify with the car, but then on a systemic level, cars run us and soon we are enmeshed in full-blown energy infrastructures. But, for Levinas, one does not choose one's other or even ethics: the Other chooses (calls forth) the ethical subject into being. In ecological terms, we are called forth as postsustainable by those glimpses of ourselves as an evolutionary accident that leaves a mark on our attempts at systemic order and balance. What calls us forth, here, is the dead and extinct Others, in the acknowledgment of ourselves as

a priori among the dead, and indeed, in a systemic assemblage with them. This is the postsustainable perspective that pulls us out of the mono-cephalous consciousness that resists the totality of energy depletion or the passage of time, and instead adapts to it as ecological heterogeneity. Birth and death, body parts (reproductive or non-productive) amalgamating and falling apart, meaning and absurdity, desire and its interruption, rhythm and catastrophic fragmentation all collide at the fringes of sustainability. From here, in the totality after human existence, a postsustainable consciousness emerges, and in this we can begin to think again about our ecological condition.

Bibliography

Stoekl, Allan. *The Three Sustainabilities: Energy, Economy, Time*. Minneapolis: University of Minnesota Press, 2021.

Author information

Amanda Boetzkes

e-mail: amanda.boetzkes@uoguelph.ca

Amanda Boetzkes is Professor of Contemporary Art History and Theory at the University of Guelph. Her research analyzes the relationship between perception and representation through the lens of aesthetics, the mediation of environments, patterns of human waste, and the global energy economy. She is the author of *Plastic Capitalism: Contemporary Art and the Drive to Waste* (MIT Press, 2019) and *The Ethics of Earth Art* (University of Minnesota Press, 2010). Coedited books include *Heidegger and the Work of Art History* (2014), *Artworks for Jellyfish and Other Others* (2022) and the forthcoming volume *Art's Realism in the Post-Truth Era* (2024).