

Active Residues

Submitted by:
Ofri Cnaani(-David)

Supervisors:
Prof. Irit Rogoff and Dr. Emily Rosamond

Ofri Cnaani
Department Visual Cultures
Goldsmiths College University of London
PhD Visual Cultures/Advanced Practices

Declaration

I hereby declare that this thesis is my own work and effort and that it has not been submitted anywhere for any award. Where other sources of information have been used, they have been acknowledged.

Name:Ofri Cnaani-David.....

Signed:

Date:28 June 2022.....

To Tamara and Yamm

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Abstract

My PhD studies the aftermath of the museum collection to show how the removal of the object leaves behind the multiplicity of its conditions. As an entry point, I probe a set of questions that arise from a sequence of events that happen in the autumn of 2018. It's a story that begins with an error: in six short hours in September, a disastrous fire brought an end to two centuries' worth of treasures held in Brazil's National Museum. Only a handful of artifacts of the 20 million items that were housed at the museum survived the fire. At the age of algorithmic reproduction, it feels almost unimaginable that so many valuable objects were simply wiped off the face of the earth without leaving any digital trace. I propose that although the museum's objects no longer operate within their inherited institutional orders or colonial indexes, some of their constitutions, temperaments, and affordances are "dragged" with them from their original matter to the digital and information realm. The residues are unordered strata of matter, bio-form, and digital information that remained unclaimed by the institution. The museum's residues do not have form, like objects. Instead, they are the surplus of affects, tools, and affordances that arrive with the objects. They enunciate the futurity of the museum apparatus in its state of afterness. Museum afterness applies to the incomplete state between the "no longer" and the "not yet." Afterness is the state that comes after an event or an institutional structure has ended but the orders and relations that conditioned its existence are still active. I argue that the state of afterness not only stands for what comes after the institution but can potentially represent knowledge based on continuity of transformation between technical systems, matter formations, and biological life forms. Active Residues is a practice-theory research project where I use theoretical frameworks and performance-based methods to speculate on several "modes of afterness," which is how I define a set of modalities and practices stirred up in the wake of the museum that can become active sites for unlearning it.

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Introduction

Museum collections are deeply intertwined with colonial power. The European model of the collecting museum is rooted in separating objects from their original environments and developing a complex taxonomy that reorients those detached objects by forming a new system of belonging: the indexed collection. The products of a dominant culture, encyclopedic museums and national museums have become the subjects of various forms of critique that marked collecting as a form of political engineering. Above all, these critiques, put forth by artists, scholars, and political groups, highlighted the way museums offer a skewed representation of cultural heritage, the preservation of hegemonic and anachronistic culture in the museum, and the museum's role as a device for sustaining power relations between the state and its subjects. With the introduction of networked culture, optimists and digital enthusiasts hoped that new technologies may help adjust the institutional narratives and give rise to new public spheres that go beyond the nation and the collections it feels represent it. But contemporary computation presents an equally problematic idea of progress as the one perpetuated up by the museum. Recent critiques by scholars and activists propose that mass technological solutions, which are often based on extraction, separation, reorientation, indexing, and skewed representation, thrive on the kind of colonial practices that have been present in museum culture for generations.¹

I do not locate the epistemological and the political potential of collecting institutions in their capacity to adjust their narratives nor do I see it in their ability to adapt to digital platforms. Instead, I am interested in the potential that emerges after the museum: when its key operations, such as enforcing separation between artifacts and users and indexing objects, no longer function. As an entry point, I probe a set of questions that arise from a sequence of events that happened in September 2018 when, in six short hours, a disastrous fire in Brazil's National Museum brought an end to a collection of treasures built up over two centuries. The fire was the result of a technical error, but the museum's demise should be read within a wider political context of systematic austerity and diminishing power of the cultural sector. Only a handful of artifacts of the 20 million items housed at the museum survived the fire. In the age of ubiquitous

¹ Amrute Sareeta, "Tech Colonialism Today," keynote talk, EPIC2019, Providence, Rhode Island, November 10, 2019, <https://points.datasociety.net/tech-colonialism-today-9633a9cb00ad>.

documentation, it feels almost unimaginable that so many precious objects were simply wiped off the face of the earth without leaving any digital trace. After the fire, several digital organizations both private and public, from Google to the Wikimedia Foundation, joined the effort to digitally preserve what could be recovered of the lost collection. This became a complex and entangled operation that bound together state and municipal agencies, private data conglomerates, and global public agencies. Despite the attempts to retrieve the artifacts that survived, most of what was left after the fire—an unordered strata of matter, bio-form, and some bytes of digital information—evaded the museum protocols that preceded the fire, meaning they remained unclaimed by the institution. Even though the museum’s objects no longer operate within their designated institutional orders or colonial indexes, the disappeared, gone-digital remnants carry the museum’s capacities and agencies, ferrying them from the concrete museum to become a site of futurity and potential. The museum’s residues do not have form, like objects. Instead, they are the surplus of affects, tools, and affordances that arrive with the objects. They enunciate the futurity of the museum apparatus in its state of afterness.

Museum afterness applies to the incomplete state between the “no longer” and the “not yet.” Afterness is a temporal, spatial, and epistemological category. Temporally, afterness is the state that comes after an event or an institutional structure has ended but the orders and relations that conditioned its existence are still active. Afterness emphasizes how the end of an event or an institution is indebted to the things that shaped it but proposes that what superseded the event or institution allows critical access to the conditions that enabled it. In Brazil, the uncalculatable loss of Indigenous heritage during the fire was described as a “second genocide.” It demonstrated, once again, how current processes of privatization, austerity, and inequality of media representation support methods of governing that are based on loss, death, erasure, and elimination. As a spatial category, afterness applies to a collapse of an institution’s means of ordering objects, and, through them, knowledge. The museum’s spatial known structures—ordered artifacts, controlled storage spaces, display apparatus, and visitors’ movement in spacious halls—have all gone. But the collapse of spatial order lives through its residues. The museum’s residues no longer follow the rule of separation of objects that museums have ascribed to, instead offering a different spatiality that is based on direct, unordered contact between entities. The museum’s residues exist as matter, from ashes and dust to a meteorite; they live through the flesh, from seared skin to a collective tattoo project, and the social body, from oral

histories to social gathering, and extend through digital forms and metadata that survived after the end of the physical collection. The residues are scattered, they are spread through the city as ashes, circulate on the internet as digital copies, or reside in the affective lives of former employees. They often expose layers of ideology that were hidden as physical and organizational structures. The residues are no longer the museum, still not yet something else. As an epistemological category, afterness allows the emergence of a new knowledge formation. Afterness holds a political potential to reshape authority that is driven by a multiplicity of institutions, individuals, and other-than-human agents that allow resilience that is not based on scarcity and separation. It may sound counterintuitive to find futurity and institutional potential in the museum's ashes, and yet, finding a means of inhabiting the museum in its state of afterness in which its methods of ordering objects and histories no longer fully hold can be a powerful performative method of investigating the museum's futurity. The state of incompleteness after the institution is a crisis in a network of meaning and knowledge production. This thesis proposes that performance practices can work within those crisis points in order to reimagine institutional futurities.

Thinking Afterness with Performance

The question that drives this thesis is how the museum's afterness can become an active site for unlearning colonialism, using performance-based methodologies.

My discussion of colonialism is twofold. First, I am thinking about how the history of colonialism has inhabited the museum through its techniques of separation and indexing and by the way the museum enforces spatial orders based on colonial history and dedicated to the production of linear narratives. Second, this dissertation considers what has been described as digital colonialism: a new set of apparatuses which are encroaching upon the museum domain by a new class of techno-domination. The information-driven form of colonialism is discussed here mainly by observing the activities of Google and Microsoft in the cultural arena.

My practice-research work has to do with recognizing the residues that habituate afterness as a site. As a performance maker, I ask how it is possible for a performance practice to activate residues that survived after the museum. Specifically, how can the residues be activated as "survival mechanisms" that divert from an epistemic system that is based on scarcity and

datafication, and instead help develop an epistemic model that cherishes unordered continuity between matter, body, and data?

When I speak of residues I mean that which survived the museum in the material sense, but also the habitual, infrastructural, and epistemic residues that outlived the museum. In a picture that was circulated after the fire in the Brazilian museum, the undamaged Bendegó meteorite, which has been on display at the National Museum since the nineteenth century, is seen covered with dust that contains the rest of the museum. In this case, the dust is the collection. It was not only the actual physical matter that was covered the iron rock, but the gravel of wisdom, eras, organizational systems, educational themes, and personal histories. In another example, former employees responded to an Instagram hashtag and started to tattoo images of the museum or of the index numbers of their favorite objects that used to be on display in it on their skins. The residues move through the social epidermis and the affective network. A serial number that is now a tattoo is not only data. The complex relation to the museum, not as a collection or display institution but as a workplace is scarred on the moving body like the guise of an unsettled allegiance. Although the museum's objects no longer operate within their inherited institutional orders or colonial indexes, some of their constitutions, temperaments, and affordances are "dragged" with them from their original matter to the digital and information realm. Residues are never clean. They cannot be easily turned into data. They fail to complete a simple transfer from analogue to digital, or from material to immaterial form. The residues form an ecology of leftovers that habituate the space in-between eras and orders. The residues ferry the museum into a state of afterness but actively go against the protocol of separation that organize artifacts, object, and knowledge in the museum because they do not have a form like objects and are instead the surplus of affects, tools, and affordances that arrive with the objects. They are active formations. If the museum embodies the colonial history of separation, the residues emerge from histories of contact. Because they are scattered the residues represent new models of cultural modalities that are formed on unstructured alliances between body, matter, and data. They represent a state of inseparability, a collapse of indexicality. The residues' strength as a potential framework is precisely because they fail to fit within systems of ordered ethics and don't inaugurate a new paradigm of systematic reasoning.

I could have considered the end of the collection from curatorial or institutional perspectives, but as a practitioner, I entered into these concerns by way of performance. Over the

past decade, I have developed a body of work that looks closely at museum mediation practices in order to examine the disintegrating boundaries between experts and laypeople and rethink the infrastructures of institutional knowledge. I developed a set of intimate participatory performances that often took the shape of guided tours of the museum. I worked with institutional caretakers, such as volunteer docents, gardeners, maintenance staff, and the technical and IT teams to lead visitors on one-on-one tours of museums. These walks offered personal narratives or interpretations of canonical objects and their spatial and environmental manifestations and brought to the forefront the role of staff members as translators and mediators of institutional knowledge. Moreover, these participatory encounters brought people and objects together in conversation and used the museum space to practice modes of being with others differently. They operated as rehearsals in non-institutional political thinking. In other works, I intervened in ready-made apparatuses like the museum's audio guide, where I developed an audio guide for any museum, based on crowdsourced museum reviews on TripAdvisor to comment on solutionism in the cultural sphere. Whether I was working with tours, audio guides, information signs, orientation maps, or the museum Wi-Fi network, the performances were camouflaged as institutional devices, in order to rethink knowledge structures and production. For example, in *Frequently Asked* I worked with group of seasoned volunteers at the Israel Museum or a cohort of gardeners in Brazil in order to lead museum tours that splice their personal and institutional knowledge. In a piece titled *We, Work* I filmed works from a collection of social realism art that never leaves the storage facility of the museum, and intertwined these with oral testimonies where locals discuss their precarious working conditions. In a recent piece I used an AI text generator to plot alternative histories to a newly opened museum. Some performances questioned hegemonic knowledge by intervening in its forms of delivery; other ones commented on the economy of the museum experience under neoliberal reasoning and shifting institutional identities and funding models in the age of algorithmic governance. Together, this set of institutional invocations refuse the stories that museums tell. Methodologically, the performances were not invested in retrieving histories through specific objects in the collections or proposing counter-stories by giving agency to the collections' lacunae. Instead, they activated the institutional mechanisms in order to disassociate objects from their colonial becoming and approach them as catalysts to rehearse a different conversation between people and objects. By looking at my performance practice as a methodology, I ask

what can be done with performance—what if a performance weren't oriented toward presentation but toward a process of situating knowledge? The performative encounters are potential modulations that are not yet ordered as possibilities and therefore can't be regulated. By using performance as a means to inhabit and interrogate the museum's afterness, the event of the fire becomes an event of discursive disorientation.

My original contribution to knowledge can be defined in three ways. First, by expanding the critical notion of afterness from a temporal and historical concept into a spatial and epistemological site of political imagination. The proposition that the outlived remains of something that has ended are intricately indebted to the thing they have outlived has been established through various important terms that will be shortly discussed. My approach to afterness exceeds historicity. It defines afterness through multiple dimensions (temporal, spatial, material, technological, and affective) and marks the residues that habituate the afterness as potential site for unlearning coloniality.

Secondly, I see performance practices as a method of attuning the museum residues, and propose that a performance practice can be a research method. Approaching afterness with performance allows it to move from a temporal-spatial definition, which gravitates toward materiality in the case of the museum, and think about it as an active field of relations. Because the residues fail to fulfill the museum protocols, they remain unclaimed by the institution. My work recognizes this vacancy and reclaims the residues as protocols for relations. The relational nature of the residues and the performative quality of the research foreground their potential to nurture a set of non-hierarchical, and non-human-centric performative modalities and speculative practices that I call "modes of afterness." The modes of afterness presented in the thesis can be understood as different ways to rehearse disengagement from the binary thinking that separates the living from objects and the linear thinking that posits past, present, and future as trajectories that cannot be rethought. Working with performance can advance the act of imagination that is needed here, one that will allow us to recall that the political realm could be different, not only one that consists of the collectors and the collected, grantors and claimants of rights, but a shared world.

Thirdly, my research aims to activate a gap in the contemporary decolonial literature. Within the field of museum studies there is an established body of work that traces the history of

the museum alongside that of colonialism.² In recent years, a growing critique made by scholars and digital activists has shown how contemporary computation presents an equally problematic idea of progress, proposing that recent technological solutions thrive partly on colonial practices. My writing highlights how recent technological applications that are rooted in colonial principals have been exercised in museums for generations. I focus on contactless technologies and data synchronization to support this claim. By showing affinity between museums and data-driven platforms I approach both of them as technologies of coloniality and suggest that placing the future of cultural institutions in the hands of tech corporations might look like an act of expanding access but is in fact proof of similar worldviews. This argument marks the potential of the state of afterness as a possible territory to reconsider political futures, and calls attention to the residues as a site for reimagining institutional practices that are based on habituation rather than dispossession.

I consciously avoid treating the National Museum in Brazil as a classic case study, as a mode of dealing with actuality and the probable. I am not looking at the causes of the fire, nor at its direct implications on the local community, and I do not wish to simply laud the museum's digital futures. My research method is closer to Charles Sanders Peirce's idea of abduction as a logic category that deals with potentiality and the contingent. Abduction proposes generating new rules as possible explanations to new observations. Brian Massumi notes that abduction is a creative mode of thought because it seeks modulations of contexts that are not yet contained in recognized possibilities that can be practically regulated.³ In my performance practice and in this thesis, I try to understand what this present moment of global political impasse and ecological catastrophe induced by the Covid-19 pandemic demands and to allow these conditions to speak and suggest methodologies. By not following a specific path of research or disciplinary knowledge, it became crucial for me to invent new methods and language.

² Chris Gosden and Chantal Knowles, *Collecting Colonialism: Material Culture and Colonial Change* (Oxford: Berg, 2001); John M. MacKenzie, *Museums and Empire: Natural History, Human Cultures and Colonial Identities* (Manchester: Manchester University Press, 2010); Hannah Turner, *Cataloguing Culture: Legacies of Colonialism in Museum Documentation* (Vancouver: UBC Press, 2020).

³ Brian Massumi et al., "Affect and Immediation: An Interview with Brian Massumi," *DisClosure: A Journal of Social Theory* vol. 23, no. 13 (2019): 113.

Mapping the Terrain

In choosing the term afterness I considered a range of different concepts referring to the notions of lateness, supersession, and posteriority that underscore the role of the past in shaping the present. The persistence of elements from the past that capture the present in the manner of a ghost, first introduced by Jacques Derrida in his book *Specters of Marx*,⁴ is then developed by writers such as Mark Fisher⁵ and others⁶ to the term “hauntology,” which describes how our present lives are preoccupied with temporal disjunction and nostalgia in front of what Fisher has described as the slow cancellation of the future. While afterness is no doubt haunted by the museum’s past, its temporality is more specifically entangled with its material’s past and present realities. The notion of “ruin” as a privileged emblem of modernity’s decline addresses a similar proposition that refers to the past as what could have been and to a future that never took place. Walter Benjamin saw in ruins “allegories of thinking itself,”⁷ a meditation on ambivalence. The term ruin has been used widely in contemporary practice and theory in relation to the relic as a portal onto the political history of the recent past and the destruction and decline of cities and landscapes in relation to technological progress, but it has also been applied to museums and monuments.⁸ The proposition of afterness crucially avoids the ready-made narrative of the ruins, because it is still ruled by a series of nostalgic readings of the loss of cultural memory. Christina Sharpe has developed the concept of the wake to illustrate how Black lives are animated by the afterlives of slavery. Sharpe does invoke the museum as a site of trauma, but her important work is situated primarily in racial discourse and might be less relevant to the extended discussion about the museum’s afterlife as a site of intervention.

Each of these terms engages with the way the past is reactivated in the present moment, and each has different merits in relation to the museum discourse, but what I mean by afterness is an attempt to hold on to the collapse of the spatial order to offer a framework that relates both to

⁴ Jacques Derrida, *Specters of Marx: The State of the Debt, the Work of Mourning and the New International* (London and New York: Routledge, 2011).

⁵ Mark Fisher, *Ghosts of My Life: Writings on Depression, Hauntology and Lost Futures*. (London: Zero Books, 2014).

⁶ Peter Buse and Andrew McConnell Stott, eds., *Ghosts: Deconstruction, Psychoanalysis, History* (London: Palgrave Macmillan, 2002); Merlin Coverley, *Hauntology* (Harpden, UK: Oldcastle Books, 2020).

⁷ Walter Benjamin, *The Origin of German Tragic Drama* (London: NLB, 1977), 177–178.

⁸ Walter Benjamin, *The Arcades Project* (Cambridge, MA: Harvard University Press, 2002); Douglas Crimp, “On the Museum’s Ruins,” *October* vol. 13 (Summer 1980): 41–57, 44; Robert Smithson, “A Tour of the Monuments of Passaic, New Jersey (1967),” *Robert Smithson, the Collected Writings* (Berkeley: University of California Press, 1996).

the activation of the past and to the spatial and material complexities thereof. My understanding of afterness as a temporality locates it soon after the event of discontinuation. This is important because the residues—the materials, information, and affect that inhabit the state of afterness—are still active at that point and can become a matter of change. Two other terms that can help galvanize the qualities of afterness are Antonio Gramsci’s definition of the interregnum⁹ as a period of crisis or an in-between time and Hannah Arendt’s term “empty space,”¹⁰ which describes the peculiar space between the now and the what is to come. Gramsci’s concept is important here because it refers to the crisis in a system of meaning and infuses an urgency. While I understand afterness as anything but an empty space, Arendt’s framework is important in the spatial consideration of the museum’s near past. The constellation of terms discussed above directly or indirectly refer to the past as a modern project. In order to turn my understanding of afterness to a framework that reflects on non-Western temporalities and spatiality, afterness holds together two opposite perceptions: on the one hand, it emerged as a response to the need to capture the immediate afterlife of an event or an institution through its temporal, material, and spatial dimensions, while on the other hand its epistemological contribution opens up to perception of time and movements that are non-sequential.

The term afterness hasn’t been used very much in the study of museums or contemporary art. The scholar who has developed the notion of afterness is the German literary scholar Gerhard Richter, who argues that the concept should be a key term in the thought and aesthetics of modernity. Afterness suggests that the present cannot fully emancipate itself from its predecessor, as it is complicated by the state of after to remain in the “latter’s ghostly and largely unacknowledged debt.”¹¹ Richter understands afterness as a guise of another temporality. He reads Jean-François Lyotard’s statement that “after philosophy comes philosophy. But it has been altered by the ‘after’”¹² to suggest that the very act of breaking with, and then following upon is a way of “retroactively constructing and fortifying that from which the break that set the

⁹ Antonio Gramsci, *Selections from the Prison Notebooks of Antonio Gramsci* (London: Lawrence and Wishart, 2007).

¹⁰ Hannah Arendt, *Essays in Understanding, 1930-1954: Formation, Exile, and Totalitarianism* (New York: Schocken Books, 2005), 158–162.

¹¹ Gerhard Richter, *Afterness: Figures of Following in Modern Thought and Aesthetics* (New York: Columbia University Press, 2011), 2.

¹² Jean-François Lyotard, “Foreword: After the Words,” in Joseph Kosuth, *Art After Philosophy and After: Collected Writings, 1966–1990*, ed. Gabriele Guercio (Cambridge, MA: MIT Press, 1991), xv–xviii. Cited in Richter, *Afterness*, 14.

movement of following into motion had occurred.”¹³ The after is thus understood as an altering unit, especially in relation to modern histories. Richter does talk about the museum as a concretized space of afterness, however, for my purposes, Richter’s understanding of museum as an exemplification of afterness is unsatisfying as it is too focused on the project of modernism and doesn’t answer the need to theorize the current moment, when the museum is facing several different kinds of afterness. Through the moment of the fire, I show how the museum is holding all sorts of afterness. One aspect of afterness is reflected in the way it replaces its mode of governance from a civil one to an algorithmic one; another aspect of afterness is how a system of austerity leaves behind a ghost model of a museum and collections that are put in great risk of disappearing; and a final aspect of afterness in a broader sense is evident when a museum seems to be perhaps less important than they used to be in establishing power and authority.

In developing the term afterness I am departing from the ways museum scholars often conduct their investigations about the relation between collection and power. Reading the triangular relationship between power, knowledge, and institutions as established in Foucault’s writing is central to museum studies literature. Foucault’s “Diagrams of Power” and institutions contribute to the idea of power as force and associated process of subject formation (subjectification) as devices of state sovereignty.¹⁴ Foucault’s ideas of cultural institutions and their devices to establish heritage as a way of protecting the ordering system of knowledge as devices constituting powers were well exemplified by Carol Duncan, who describes the museum as a space designed to practice rituals of citizenship.¹⁵ Tony Bennett’s idea of the “Exhibitionary Complex”¹⁶ establishes the tight connection between museums, power, and knowledge. Bennett describes the function of a museum’s audience as regulation through interiorizing an ideal and ordered view of oneself as seen from the controlling vision of power. I do not follow this literature very closely for the following reasons: first, because I want to think about afterness as something that can inhabit the museum but is not limited to the museum world and applies more broadly to question of governmentality, especially in a turn to algorithmic management. Second,

¹³ Richter, *Afterness*, 1.

¹⁴ Kevin Hetherington, “Foucault, the Museum and the Diagram,” *Sociological Review* vol. 59, no. 3 (2011): 457–475, 459.

¹⁵ Carol Duncan, “Art Museums and the Ritual of Citizenship,” *Exhibiting Cultures: The Poetics and Politics of Museum Display*, eds. Ivan Karp and Stephen D. Lavine (Washington, DC: Smithsonian Institution Press, 1991), 88–103.

¹⁶ Tony Bennett, “The Exhibitionary Complex,” *New Formations* no. 4 (Spring 1988): 73–102, 73.

I hope to broaden the way museum studies understand the relation to power in moments of austerity and shifts of power. With the political instability and rapid rise of nationalist governments in recent years we can identify a machine that works both with and against the logic of cultural institutions as a device of state sovereignty. My project wishes to capture also the afterness of a certain role museum played in state sovereignty that is no longer active.

Recent movements in critical museology attempt to address the problematic colonial pasts of museums through the decolonization and Indigenization of museums. As Ariella Aïsha Azoulay has recently claimed, “Unlearning means not engaging with those relegated to the ‘past’ as ‘primary sources’ but rather as potential companions.”¹⁷ My argument is that methods of reusing collectable objects in order to retell the narrative or identifying gaps in the archives or collection in order to undo the institutional order, have been exhausted. My PhD is inspired by Azoulay calling to look for potential, speculative practices and methods that are driven from companionship in order to unlearn the transgenerational knowledge formation of the past. Therefore, I insist on working with two terms in parallel: the first puts forward afterness as a knowledge category but the latter attunes to the active qualities of the residues. Because they are unclaimed by the institution, they have the potential to become a site of unlearning its own doing.

Afterness in a Shifting Notion of Collection

A contextual summary for this project draws on literature from performance, media, and algorithmic studies. Museum afterness not only refers to the museum as a project of modernity, but also to the current state of institutions facing a slow process of austerity, an endless demand to adapt to a market logic, and which are growingly governed by algorithmic management. The museum is an institution that has not yet collapsed, but in order to think through its afterness we need first to observe the shifts it is going through. I observed three shifts that have emerged from the current techno-cultural phenomena of the museum: a shift in the status of the institutional collection, from a single object-based collection to multiple data-driven collections; a shift in the visitor’s identity, from visitor to user; and a shift from the colonial museum to a model of digital colonialism.

¹⁷ Ariella Aïsha Azoulay, *Potential History: Unlearning Imperialism* (London and New York: Verso, 2019), 34.

From Collection to Meta-Collection: since the development of modernism, collections have been a manifestation of cultural superiority through access to rarity and through systems of classification and examples of controlled knowledge.¹⁸ As museums are increasingly governed by an algorithmic logic that leads their management to focus on customer-oriented metrics, the notion of the collection is being reshaped. The term “algorithmic institution” was developed by Fred Moten and Stefano Harney to exemplify how the “logistical populations” immanent in the technical operation of enterprise databases grows into a relevant framework for analyzing the world of knowledge production. The history of museum collections and data systems draws many parallels, but museum collections are still seen mainly through the idea of rarity and valued for their quality, while in the current economy data becomes an asset by expanding quantity. How do the conditions of algorithmic authority implicate the act of collecting, and what is the appropriate framework to reimagine the collection in the age of large-scale computation? I argue that the collection is no longer solely attached to the idea of the object and so has shifted away from the singularity of one collection. Instead, the collection should be understood as a plural form, an interplay between many different kinds of active forms that create an increasingly complex spatial collection that is now composed of social, material, and technical actors. Recent examples from London museums show that data is collected from visitors’ physical experience but also from all the different digital touchpoints of that journey, including web, social media, ticketing, and mobile apps.¹⁹ Wi-Fi tracking and heat mapping technologies are increasingly common practices in museums, used so institutions could analyze visitors’ walking patterns and compare “museum highlights,” where visitors stop and the other moments when they “dwell.”²⁰ Visitors knowingly and mostly unknowingly share their location, dwell time, social connection, past purchases, and personal details. Sentiment analysis of visitors’ social media comments are used for predictive analytics for future programming, and smart mirrors are available for targeted advertisement and visitor profiling. Diverse machine-learning technologies are regularly used in the visitor engagement services, digital collections, and visitor experience departments. The data

¹⁸ Until the start of nineteenth century, the efforts to collect facts and objects of study were spearheaded by visionary individuals who were able to quantify and systemize collected array through simple and powerful classification systems.

¹⁹ James O’Malley, “Exclusive: Here’s What 3 Big Museums Learn By Tracking Your Phone,” *Gizmodo* (April 11, 2017), <https://www.gizmodo.co.uk/2017/04/exclusive-heres-what-museums-learn-by-tracking-your-phone/>.

²⁰ O’Malley, “What 3 Big Museums Learn.”

collected from visitors contributes to and enhances various data sets, or, if you may, data collections.

I would like to propose an epistemological effort that contemplates the abstraction of the collection within the living condition of massive data aggregation and suggest that the institutional collection no longer needs to be understood as a closed system that can be indexed, but rather as a set of interfaces between many collected artifacts and data points and as a social phenomenon, a connection between humans that thus form a new set of relations. It is important to my thinking of afterness as I would like to show that the event of the end of the collection should be approached in a plural form. Rather than codify or taxonomize the social or cultural and infrastructural knowledge I propose to understand them as a dialogue between humans and nonhuman technologies that is constantly unfolding and impossible to fix. Each collection (or data-aggregation system) is possibly mapped on its own terms and can be interpreted as a component within the larger whole, built from hard and soft systems that intermingle. This concept is akin to the notion of topological culture developed by Celia Lury, Luciana Parisi, and Tiziana Terranova, who write: “Connections here are not only relations between objects that already exist, but also connections between possible (but not yet existing) objects, described by the invisible contacts established between deterritorialized indices.”²¹ By shifting from the modern state model of the collection and presenting the collection as an example of topological culture, the collection, once a single entity, become a collection of collections, a meta-collection. Such a meta-collection is no longer appreciated by the set of its unique items or the superiority of its ordering system but by its interfacing capacity. Envisioning the collection as a multilayered structure or heterogeneity of orders that are based on relation and disparateness emphasizes that this “collection of collections” not only includes computational forms but also social, human, and physical forces. This manifold, unfixd configuration calls for new conceptual tools which I will use performance to observe.

The shift to collections in a plural form affects the concept of the museum on multiple levels. If the traditional museum collection is related to the idea of sovereignty, the meta-collection operates as subnational, national, supranational, and global infrastructures; if the

²¹ Celia Lury, Luciana Parisi, and Tiziana Terranova, “Introduction: The Becoming Topological of Culture,” *Theory, Culture & Society* vol. 29, no. 4–5 (2012): 16.

quality of the collection in its traditional form is valued by its scope and the singular quality of its artifacts, the meta-collection is characterized by its intermingling capacity; the traditional collection is fixed while the meta-collection is a set of unfixed modified assemblages. If the museum collection follows a taxonomy and can be indexed, in the meta-collection every independent collection can be indexed but as a “collection of collections” it can no longer follow one taxonomical system and represents the end of indexing. In the traditional case, ownership is assigned to the institution, while the meta-collection holds a combined, more fluid model of ownership spread between public institutions, private corporations, and personal data that belongs to users. In a traditional collection there is one original object, located in one site and therefore it preserves a dichotomy between original object and digital copy, whereas the meta-collection is multisided, responsive to a time of high reproducibility and so each object has multiple digital objects and digital links that connect and enact multiple infrastructures and so the object is treated as a continuous entanglement rather than a dichotomy. The meta-collection model focuses on relations between entities instead of mediation on objects. The meta-collection activates relations between analogue and digital, hardware and software, materialized non-materialized and embodied as notions that continuously change from one moment to another and preserve an internal tension. Finally, in the museum collection the dichotomy between objects and subjects is more defined and the potentiality of subjectivation is anchored at the moment the public is exposed to an object, while in the proposition of the meta-collection, everything and everyone is both a collecting site and a collected phenomenon and individuation is a process formed by moving through the collection. The unfixed and relational nature of the meta-collection can inform the performative aspects of afterness in this project. It is especially relevant for chapter 1, where I discuss the end of the collection and its afterlives through user-generated and corporate platforms and chapter 2, where I conceptualize the proposition of the collection’s residues.

From Visitor to User: The public museum comes into being in the historical moment when the state begins to take control of the social order. The museum is constructed as a sign of that order. Visitors begin to see the museum as a repository of their national inheritance, as part of their civic identity. Simultaneously, the museum becomes an institution crucial to defining the civic sphere and helps constitute civil society, where private experience meets common

judgment.²² The algorithmic turn represents a shift in mode of governmentality, where the citizen of the nation-state is now recognized as a user of a global corporate economy. The traditional power apparatuses of national governments are now confronted with the global reach of digital providers. At the same time, affective capital, such as desire and identification, fear and rejection, turns into the most decisive currency determining the fate of new technologies and their associated economies.²³ On the individual level, algorithmic governance represents a repackaging of a person's rights and obligations. The user's rights are now defined by a terms and conditions agreement that characterizes the rights for legal use but ignores fundamental civil rights. Users' relationships with corporations are based on conditions of userships, which make it clear that users can't ask for protection, lose the right for disobedience, do not enjoy legal representation, can't ask for trial or appeal, and their freedom of speech is conditioned by the company's changing regulations. These are total relationships that entail giving away one's rights, as a unit of meaning and as a legal unit.

In the museum context, the shift from the figure of the visitor-citizen to that of the user can be studied through the model of the national museum, as it reflects on the museum's capacity to be a tool of citizenship. Traditionally, the role of a national museum as the repository of a nation's culture is to connect the past to the present through recounting stories about the artifacts of past cultures. Thus, controlling the museum is a way to control the representation of the community and its highest values and truths.²⁴ The reality of an algorithmic-driven art institution, where museums operate in ways reminiscent of data centers,²⁵ is that questions of identity and solidarity transform into questions of algorithmic regulation.²⁶ The notion of a museum's "usership"²⁷ runs up against the contemporary order of expert culture. It also

²² Seph Rodney, "The Evolution of the Museum Visit, from Privilege to Personalized Experience," *Hyperallergic* (January 22, 2016), <https://hyperallergic.com/267096/the-evolution-of-the-museum-visit-from-privilege-to-personalized-experience/>.

²³ Helge Mooshammer and Peter Mörtenböck, "Introduction: Data Is Not a Property but a Relation," *DATA PUBLICS: Public Plurality in an Era of Data Determinacy*, eds. Helge Mooshammer and Peter Mörtenböck (London and New York: Routledge, 2020), 5.

²⁴ It also has an important role in modeling the relative standing of individuals within that community: "Those who are best prepared to perform its ritual—those who are most able to respond to its various cues—are also those whose identities (social, sexual, racial, etc.) the museum ritual most fully confirms." Carol Duncan, *Civilizing Rituals: Inside Public Art Museums* (London and New York: Routledge, 1995), 8–9.

²⁵ Mike Pepi, "Is a Museum a Database?: Institutional Conditions in Net Utopia," *e-flux journal* no. 60 (December 2014), <https://www.e-flux.com/journal/60/61026/is-a-museum-a-database-institutional-conditions-in-net-utopia/>.

²⁶ Pepi, "Is a Museum a Database?"

²⁷ Stephen Wright, *Toward a Lexicon of Usership* (Eindhoven: Van Abbemuseum, 2013), 1.

challenges the notion of spectatorship, as it suggests a utilitarian and opportunistic relationship with the material world.²⁸

Two perspectives focused on a museum visit can illustrate the shift from a visitor to a user. The first centers around Simon Sheikh's idea of the moment of publication, the moment of becoming public through exposure to art; the second is an annotation of the same shift through a move away from expert knowledge to user reviews, focusing on the convention of the guided tour. The guided tour and the moment of publication represent canonical approaches to museum knowledge production that have been reshaped through the conditions of the algorithmic turn. In the age of hyper connectivity, enhanced by social media, the moment of publication is not only produced and monetized but also now spread over time, space, and emotions, dispersing the time-and-space unity described above into a much longer, more fragile, buffered moment. André Lepecki suggests that the ways the neoliberal visitors-consumers feel or narrate their experiences is what constitutes the "neoliberal dis-experience." Emerging from almost three decades of the experience economy, the dis-experience is "producing, monetizing, and minutely controlling what constitutes 'experience,' and generating the semantics and the communicational infrastructure that participants-consumers use to transmit and share those experiences."²⁹ The extended moment of dis-experience can linger between the first engagement looking at the social media posts of previous visitors, then the museum visit itself, and up to the production and publication of new media that is circulated back to social media platforms. The audience member as the one who witnesses has been replaced by or expanded into the one who shares a story with others, broadcasting the dis-experience. The longer the engagement lasts, the more productive the data it will produce from a single visitor. The now fractured moment of publication also inhabits nonvisible and nontangible apparatuses and challenges the modes of the categorization of such an event. The fragility of the visit becomes present in the works of artists who use their phones for texting, documenting, or taking selfies as part of their choreographies, which take place inside the museum space.³⁰

²⁸ Wright, *Toward a Lexicon of Usership*, 1.

²⁹ André Lepecki, *Singularities: Dance in the Age of Performance* (London and New York: Routledge, 2016), 170.

³⁰ Harold Offeh's *Selfie Choreography* explores how actions and movements, especially in the museum space, can be developed for and mediated by the device that has become an extension of the human body. In Anne Imhof's *Sex* the dancers regularly crouch, mobile phone in hand, to receive texts—the work's score—from Imhof. The dancers, who constantly play with their phones, blend in with the audience members who move around the museum space, constantly documenting, sharing, and uploading images live. Imhof takes these familiar contemporary communication gestures that are no longer separable from the event of the performance and breaks down the

During that extended moment, the museum's viewer is also being viewed, tracked to provide algorithmic information for both corporations and the museum itself about his or her location, interests, and personal data.³¹ The user's identity travels with them to the museum and will be added to the corporal, spatial, and financial information automated during the long moment of publication that determines what visitors see online and maybe soon also what they see onsite. The fragile and extended moment of becoming public becomes also a moment of collecting. It is a moment of prying, both highly subjective yet used for profiling. Processes of data collection during the museum visit are hard to note, but several contemporary artists have been addressing the subject of data collection in museum environment in their work, as well as the presence of the mediating device, and the constant distraction it promotes.³²

In the case of the museum's moment of publication, the production of knowledge and its publics become associated with information mobility and new standards of logistics. The shift in knowledge consumption and production convention is highlighted through a major shift in the figure of the expert. Take, for example, the guided tour, a central museum practice. In 1989, artist Andrea Fraser was the first to shed light on the tour as institutional apparatus. Fraser suggested that Jane Castelton, the museum docent character she created, is "the museum's representative, and her function is, quite simply, to tell visitors what the museum wants – that is, to tell them what they can give to satisfy the museum."³³ Fraser does not offer a personal narrative; instead, she reveals a moment that affirms external power hierarchies. The artist situated her project within a set of questions that were originally produced by Foucault in his

normalized subject-object relations to propose instead a set of affective relations that run through bodies and things. She take the dis-experience into the central stage. Janet Cardiff & George Bures Miller use augmented reality technologies to overlap historic and fantastic realities and to estrange the known feeling of visiting a site, especially in the format of a guided walk, a convention that the artists often revisit.

³¹ The impossibility to divorce one's data is described by Joanne McNeil: "every single social site holds over me as collateral for my presence." Joanne McNeil, *Lurking: How a Person Became a User* (New York: MCD, 2020), 32.

³² In 2016, filmmaker Laura Poitras invited visitors to lie down while watching a film in her Whitney Museum show, only to discover later they have been subjects of ubiquitous surveillance throughout their visit, when their movements were captured by infrared camera and their electronic devices were detected. Artists Eva and Franco Mattes expose the museum communication and data collecting infrastructure by installing an open cable tray through the entire museum space. The tray carries electricity and internet cables. The cables move files that are created onsite via visitors' social media posts using a dedicated hashtag. A screen that is part of the installation displays images circulating under the hashtag and shows an instant portrait of the museum as seen by its visitors/followers. Artist Trevor Paglen and researcher Kate Crawford devote their work to study how machine are trained to "see" and categorize the world. When their work is displayed in the museum, they often capture live images of the visitors and apply facial recognition software on the faces of the visitors. The visitors have immediate impression of what the machine sees and how their own data is added to a training data set.

³³ Andrea Fraser, *Museum Highlights: The Writings of Andrea Fraser* (Cambridge, MA: MIT Press, 2007), 242.

investigations of the ways in which power as a discipline operates within the modern world. In Foucault's view, "the publicity of punishment must not have the physical effect of terror; it must be an open book to be read."³⁴ Foucault's writing marks the enormous potential encapsulated in the museum in establishing the identity of the subject as one that given and defined by power. By replacing physical terror with a book, Foucault proposes to understand discipline as a set of living systems or a series of non-discursive practices within the social field—whether they are sayable or visual apparatuses—they produce discursive elements that contribute to the constitutions of power.³⁵ The museum is not a distinct space of the state but a space of cultural codes where the citizen can become a stakeholder and develop a cultural literacy, which is always coded.

The hierarchical relations that characterize the visit, where the citizen-visitor is being told a national narrative by an expert, is seemingly dismissed by the neoliberal culture of horizontal exchange, and the age of user-generated content that is celebrated by platform capitalism. The balance in knowledge authority between the expert and visitor is best captured via the phenomenon of user reviews.³⁶ A close reading of TripAdvisor's museum section offers a glance into the world of museums from the eye of the beholder. From "loved it" to "very good air-condition," from the "building is better than the contents" to "we enjoyed our visit but are disappointed in the very limited menu at the café." Many reviews move seamlessly between gallery rooms and service areas and approach the museum as an enterprise. Through the review, the "lifestyle museum" is seen as a successful neoliberal project where art, food, education, real estate, and entertainment are packaged together.

The museum as a state project no doubt had a voice. It was often coded and manifested through many devices but always heard as expert authority. The process of becoming a subject of the state through culture involved learning to listen to that voice. In this system, this rationale, the few had a voice and the public's role was to listen. In contrast, digital platforms are rooted in

³⁴ Michel Foucault, *Discipline and Punish: The Birth of the Prison* (London: Penguin Books, 1991 [1975]).

³⁵ Kevin Hetherington, "Foucault, the Museum and the Diagram," *Sociological Review* vol. 59, no. 3 (2011): 457–475.

³⁶ Writer Orit Gat argues that mutual trust is at the heart of this system: "The reviews have the cachet of word of mouth recommendations, and even when considering their marketing-like language, they do not necessarily reflect the intentions of the brand in question. This subversive character of the user-generated reviews can be completely seamless and unintentional, since the reviews are often rooted in the gap between expectation and experience—and users seeing this gap as the content other people may look for." Orit Gat, "Art Criticism in the Age of Yelp," *Rhizome* (November 12, 2013), <https://rhizome.org/editorial/2013/nov/12/art-criticism-age-yelp/>.

the wisdom of the many. Testimonies written by users celebrate the multiplicity of voices but also change users' relation to authority, which favors personal experience and marks it as direct and authentic. The peer-to-peer trust is sometimes characterized by a lack of quality control and transformed into a media scene that includes machine-enhanced reviews and social media influencers. Interestingly, influencers are bringing back the authored voice of the expert, which no longer represents the disciplinarian power of the open book, but provide consumer-based content that brushes up against product placement. In such a process, "private companies extract value from the knowledge society, where the boundaries of who 'owns' what can never be clear."³⁷ To conclude, in the shift from the visitor to a content producer–user, power structures became even more elusive and therefore hard to oppose or resist. Users are more exposed to privacy breaching through data collecting and their experiences and opinions are converted into tradable assets.³⁸ Even if the museum objects remain the same, as does the structure of the museum visit, the change manifests not in object or text, but in the ways the individual experience is being used, and often abused. The aspects of audiencing and mediations are at the heart of chapter 4, where I study the multiple interruptions that characterize the state of afterness and rethink the possibility of meditating objects to audiences after the collapse of the institutional order.

The Ideology of Cultural Heritage: From Colonialism to Digital Colonialism

While the colonial past of large-scale museums is by now well-established, a study of the arena of digital collections suggests that the future of museums is actively reproducing this colonial ideology. Such an argument is crucial to the understanding of the potential of afterness as a decolonial framework that approaches data as relation, not property. This is specifically relevant to chapter 1, where I discuss the digital remains of the Brazilian collection, and to chapter 3, where I draw a comparison between spatial museum practices and digital platforms to show the continuation of colonial ideology. The term "digital colonialism" argues that the tech ecosystem

³⁷ McKenzie Wark explains that "in such process, finance both predicts and actualizes futures in which private companies extract value from the knowledge society, where the boundaries of who 'owns' what can never be clear." McKenzie Wark, "Cognitive Capitalism," *Public Seminar* (February 19, 2015), <http://www.publicseminar.org/2015/02/cog-cap/>.

³⁸ The term "cognitive capitalism" suggests new vectors of the production of wealth where intellectual activities are converted into tradable assets. It was coined by economist Yann Moulier Boutang and represents a commitment to living wage. Like Terranova, it was influenced by the Italian workers' tradition.

has extended the technical and architectural infrastructure of colonialism with contemporary technologies that are often based on data extraction, but also use of proprietary software, corporate cloud services, and centralized internet services to control and trade for their own profit. At the heart of this terminology is the assumption that the relationship between us and our data is a colonial, hierarchical relation.³⁹ It proposes that aspects of colonialism, like dispossession from land and property, exploitation of labor, and exercising extraterritorial governance are being replicated and often amplified by a new ruling class of information capitalism.⁴⁰ As the discussion about shifting from citizen to user has shown, the colonial practice of dispossession is being shifted from land property rights to a process where users are being dispossessed of their privacy by accepting the terms and condition of the new rules of usership.

I offer two perspectives to tackle the notion of digital colonialism in the elusive territory of the cultural field: the fast-growing field of digital care for cultural heritage, and museums' presence on the web, "powered by Google." Trafficking cultural heritage is nothing new. It ranges from the looting of archaeological sites, theft from cultural heritage institutions and private collections, and the displacement of artifacts during war. In this section, I explore how new technologies, spatial organizations, and infrastructural settings adopt old models of cultural appropriation and reproduce colonial power relations, and how corporations turn cultural production into a site of profit-making that is based on cultural dispossession. In both cases, the

³⁹ Sareeta, "Tech Colonialism Today." In this talk, Sareeta shows how Most technologies worldwide are developed and funded by a small and fairly homogenous group of people located primarily in Silicon Valley, which also defines what are the most urgent global problems that technology is here to solve. The exponential growth of the tech economy suggests that this small group of developers deploys a small set of algorithmic applications to administers major aspect of global human life. This extraction mostly focuses on data gleaned from the streams of information given as residents of all countries go online and connect with one another through applications whose terms of service demand they give up their personal and private information. Data-based technologies are not only centralized but, as shown by many researchers, exploitative. Mary Gray and Siddharth Suri show that this kind of labor is both hidden and organized in such a way as to keep the labor from being collectivized or adequately remunerated. Even while microwork is increasing and becoming a growing percentage of the global economy, writers such as Trebor Scholz and Alex Rosenblat have documented Uber drivers detailing the techniques companies use to classify workers as customers even while managing their labor through incentives and penalties in the same way an employer would. Labor researchers Aiha Nguyen and Alexandra Mateescu point out that, rather than being replaced by robots, workers' quality of life will be affected by algorithmic systems that surveil them. Everyday forms of exploitation are part of labor relationships in outsourcing programming, in gig economy work organized via apps, and in the multiple forms of labor that are hidden in making technologies appear to function without human assistance.

⁴⁰ For example, when useful data can be capitalized, an extractive relation is shifted from mineral and land to data extraction from the subjects, including their movements (spatial), habits (behavioral), financial activities (economical), and social ties (social).

seeming divide between the front end (onsite or online display, access, and narrative construction) and the more invisible systems of the back end (collecting and institutional policies, legal partnership agreements, classifications, and metadata) is at the heart of the tension between old methods of cultural domination and the ways it is reproduced by information technologies.

Digital cultural heritage: The notion of digital cultural heritage has been explored in depth by artist Morehshin Allahyari,⁴¹ who approaches the field of digital care as a manifestation of digital colonialism. A research project that emerged from the artist's own practice proposes a perspective of the violent aspects of care in the practice of digital conservation.⁴² In her research, Allahyari brings forward the notion of “violent care”⁴³ to exemplify how well-meaning organizations are invested in the conservation of the rare while neglecting the everyday socio-political realities in that part of the world, or by refusing to recognize the connection between such destruction and the so-called War on Terror, a product of Western governing. The regime of violent care operates with reference to two key criteria: rarity and nativity. Within the cultural arena, it often represents an Orientalist perception of these cultures, where the dominant style of thought created a picture of these societies as static, timeless, and spaceless. The images produced by this knowledge represent colonial subjects as recipients of European generosity. As much as digital media brings new ways of looking at and understanding rarity, it also represents, and refracts, earlier visual techniques.⁴⁴

Allahyari describes Western discourse that presents a “we”—the people of culture that are the saviors of “their” culture from “themselves.” Such an argument continues the classic model of cultural domination practiced in Western museums that identifies the Western world's responsibility to “take care” of objects from other territories as the local communities “can't do it themselves.” The linguistic examples show how Western governments, “global” organizations,

⁴¹ Morehshin Allahyari, “Physical Tactics for Digital Colonialism,” 2019, <http://www.morehshin.com/digital-colonialism-2016-2019/>.

⁴² Allahyari is most recognized for her projects *Material Speculation: ISIS* (2016), a series of 3D-printed sculptural reconstructions of ancient artifacts destroyed by ISIS.

⁴³ Violent care was coined by Thom van Dooren in the context of animal studies and developed by Allahyari. Thom van Dooren, “A Day with Crows - Rarity, Nativity and the Violent-Care of Conservation,” *Animal Studies Journal* vol. 4, no. 2 (2015): 1–28.

⁴⁴ For example, digital conservation brings forward data analysis and algorithmic-based image processing, alongside holograms, virtual reality, and interactive touch screens that continue the reality effects and object lessons of model-making, dioramas, and period rooms. These care technologies reproduce old ways of being in, and learning about, and telling the world and can be understood as a form of colonial continuity.

and tech companies reclaim the artifacts after destruction through a new kind of presence, but fail to see the violence of the recreated presence, only the violence of the absence.⁴⁵ The critical responses for this problematic assumption have led in recent years to a different vocabulary that portrays the act of salvation as “assisting” or “providing technology.” Here is, for example, the mission statement of Google Arts & Culture that reads, “we work *with* cultural institutions and artists around the world. *Together*, our mission is to preserve and bring the world’s art and culture online so it’s *accessible to anyone, anywhere*.”⁴⁶ The language of allies offers a “collective reconstruction” that help to preserve “our” global, shared, human heritage. Yet, the colonial assumptions that underline the new terminology maintain a divide between we/ours and you/yours. It assumes that “you” (the Other, the savage, the citizen of an under-developed country) are in need of “our” help as you “can’t take care of yourself.”⁴⁷

The cultural assumptions that are ingrained in the language of digital salvation are carried from the professional field of non-profit digital agencies and federal funding into the site of cultural heritage institutions where the digital objects meet the public. Here the digital objects become object lessons that constitute subjectivities. Haidy Geismar has shown how object lessons emerge in the ways in which “collections are placed together, framed, strategically narrated, contextualised in architecture, and in language, and sensuously experienced in order to generate a vision of ‘real life’: the material generation of a view of the world that we can believe as true.”⁴⁸ The introduction of digital objects into museums meditates upon how collections are made and remade over and over again. Object lessons are arguments about the world made through things and tools. The narrative of digital salvation is added like another layer in the story of an object and the lesson the public can learn from it.

⁴⁵ Allahyari proposes that the language of digital conservation takes two major voices—the language of “alignment” and the language of becoming an “ally.” Alignment offers up terms like “we,” “us,” “shared,” and “universal” that propose a common global history. Such language is based on a claim for universality as if “we are a human species, standing on one straight line of heritage and ownership.”⁴⁵

⁴⁶ Google Arts & Culture website: <https://about.artsandculture.google.com/>. Emphasis mine.

⁴⁷ For example, in an interview with Oakland-based digital heritage organization, CyArk, their founder proposes that working with CyArk “means that we have actually backed it up numerous times and stored a gold copy at the Iron Mountain bunker—it’s not going anywhere. In terms of data transfer, the infrastructure is a real stumbling block, at this point, the most secure and fool-proof way to get data out of Syria is to carry it out.” Makenna Murray, “Syria’s Heritage Gets a Helping Hand,” CyArk (February 11, 2017), <https://www.cyark.org/news/syrias-heritage-gets-a-helping-hand>.

⁴⁸ Haidy Geismar, *Museum Object Lessons for the Digital Age* (London: UCL Press, 2018), xvi

Powered by Google: Digitization efforts have long been treated as extensions and improvements of permanent preservation. I suggest that the process of digitization works simultaneously toward the future and the past. With technological advancements, from 3D modeling to specialty art cameras,⁴⁹ the effort to “digitize everything” has turned into a high-speed political and economic race. Museum collections were never only about objects, but mainly about access and political domination. Similarly, the race for digital accumulation in the cultural field is driven by a market strategy that helps turn culture into a site of profit. Dan Schiller and Shinjoun Yeo have shown how Google—a company whose stated mission is to “organize the world’s information and make it universally accessible and useful”⁵⁰—is quietly reorganizing cultural spaces on a global scale to incorporate them into its business of information.

Established in 2011, Google Arts & Culture currently hosts approximately 6,000,000 high-resolution images of artworks from around the world, with the objective of making culture more accessible. The fast-growing institution has emerged in a political and economic environment where cultural policy was reduced to entertainment and budgets tied to attendance metrics and social media presence. Such an environment makes it difficult for institutions to reject the offer of the Google Arts & Culture, which includes digital storage service, free use of the high-end Google Art Camera, and, of course, exposure and better searchability. These institutions usually look away from the fact that every image that enters Google’s database is an indirect asset for the corporation’s attention, and revenues.⁵¹ The mission statement that aims not only to speak in “we” but also expands on the Western fantasy to design an all-seeing, encyclopedic museum. Google’s attempt to get their hands on the world’s knowledge as part of their ongoing accumulation of “assets” takes its toll on public-funded museums around the

⁴⁹ The Art Camera is a robotic camera, custom-built to create gigapixel images faster and more easily. A robotic system steers the camera automatically from detail to detail, taking hundreds of high resolution close-ups of the painting

⁵⁰ See <https://about.google/>.

⁵¹ The legal partnership between Google and cultural institutions guarantees that the corporation never competes with the museums on ownership of objects, however, Google indirectly competes with them for web traffic. For example, if a person searches for art via Google they almost immediately begin engaging with a high-resolution image, courtesy of Google Arts & Culture. However, if, for example, someone searches for Van Gogh’s *Starry Night*, while the caption of the image credits the Museum of Modern Art in New York, where the painting is hung, it links to Google Arts & Culture, rather than MoMA’s website. In terms of attention and circulation, Google deals out the third party and keeps the user on their platform, thereby reducing the exposure of the museum’s website and other digital platform.

world, turning them even more dependent on private money, when they can no longer count on public funding. The fast-growing institution is becoming the new hegemony of viewing and learning, leaving behind the old experience as the museum as a site to be visited, in favor of the even bigger, stronger, richer, and, most importantly, concentrated cultural monopoly. The notion of universalism born of the European Enlightenment reappears as a new form of colonialism or the cultural face of economic globalization. In Google's "world of images," art is unified and devoid of conflicts.

The question of the colonial nature of the relationship between us and our data is also entangled with the question of what data is. Through a situated discussion of the complex politics of digital heritage, I wish to offer a critique of the position which proposes fixed ideas of data being new, digital, and directional.⁵² Instead, I approach data as a relation that defines access and is not only new and not only digital, but also and always political. As the state of afterness suggests, data comes into being only in a situation of exchange, in an encounter with additional elements. Or, as Helge Mooshammer and Peter Mortenböck write, data is "constituted in that moment of encounter as a means of expressing, describing and navigating this transitory situation."⁵³ The possibility of thinking of data with performance opens up the possibility to approach it as a prefigurative tool that uses its active capacities to form and articulate relation.

The three axes of transformation between the modern and data-driven cultural institution propose several infrastructural shifts through museum practices. With the notion of museum afterness, I suggest that the process of data coming into being requires some kind of interface that records and acknowledges our interactions with others, whether human or nonhuman beings. Our colonial relation to data should be situated within the context of the encounter that is produced. Understanding data as an intermediary of a new type of relation suggests an interface that can take on many forms, from individual memory to systems of cultural norms and values, as well as artistic interpretations. Mooshammer and Mörtenböck remind us that "as a differentiating relation, data is generated at the intersection of a moment of encounter and an interface recognizing and seeking to delineate the elements involved in this encounter."⁵⁴ Using

⁵² Nick Couldry and Ulises Ali Mejias, *The Costs of Connection: How Data Is Colonizing Human Life and Appropriating It for Capitalism, Culture and Economic Life* (Stanford, CA: Stanford University Press, 2019).

⁵³ Mooshammer and Mörtenböck, "Data Is Not a Property but a Relation," 14.

⁵⁴ Mooshammer and Mörtenböck, "Data Is Not a Property but a Relation," 14.

performance as a means to engage with the data that survived after the institution marks the potential of approaching it as critical encounter, performative modulations that are not yet ordered or recognized. Such critical encounters enable us to think beyond the terminology of extraction and abuse and recognize that data is something we need to understand as collectively generated, managed, and cared for. Through the three shifts I described above, an eerie feeling emerges in relation to new models of the algorithmic cultural arena. It seems that collecting institutions are haunted by their hegemonic past while being held captive by the seemingly magical data-driven future. Could this past have another future? I argue that it can be done by letting go of the idea of the museum as an organizing framework for culture. Instead of asking museums to fix their past or upgrade for the future, the notion of afterness proposes thinking about the museum's future in past tense.

Chapter Overview

This dissertation is comprised of five chapters, each of which weaves together theoretical material and practice in different ways. Chapter 1 studies the aftermath of the fire in Brazil's National Museum. It brings into focus the collapse of multiple systems and governance rationales as they are manifested in the model of the national museum. Thinking through a series of technical and bureaucratic malfunctions and their political background, this chapter begins with a consideration of the errors and the systematic failures that the fire made evident, marking how errors have the potential of bringing into being something that did not exist before. It offers a detailed study of the digital remains that survives the fire and concludes with a proposition that drives this entire thesis, which describes the incomplete state after the institution, as a state of "afterness." In it, the museum as a known space no longer exists, but lives through its residues that are no longer the museum, still not yet something else. I intentionally move away from the well-established field that studies the museum itself and instead reflect on the spatial entanglements that emerge in this present techno-political environment, where vertical institutions and horizontal networks form a complex techno-political assemblage. The opening chapter marks the need for theoretical frameworks and artistic practices to speculate on several "modes of afterness," which is how I define the set of modalities stirred up in the wake of the museum.

Chapter 2 focuses on the residues as placeholders for what has yet to collapse and that which cannot yet manifest. In this chapter, I annotate the leftovers and their complex relations to times and spaces that are plural and nonhomogeneous in an attempt to rethink the matter and temporality of remains in a way that goes beyond the specific conditions the Brazilian case exemplifies. The collection's aftermath shows how the removal of the object leaves behind the multiplicity of its conditions. The residual state, where everything is touching everything else, offers a different form of continuity between matter, technological infrastructures, embodied knowledge, political platforms, and social systems. The residues no longer respond to an inherited index produced by the violence of colonial thought. They represent a state of inseparability because they are incomplete, they fail to fit within systems of ordered value, and don't belong to a new model of systematic data reasoning. My writing about the residues crucially avoids the nostalgic longing of colonial order and is equally pessimistic about the technological solutionism of digital care. I argue that the residues' hold possesses some things that were unintentionally left behind in the combustive process. I show how the residues can be (re)activated and made use of in imagining a state after the institution. This chapter includes a series of short texts woven within it that capture the transition from matter or bio-form to the digital realm through the perspective of six entities. Moving from geological matter to digital signifier, these short texts, titled together "Testimonies of Things," also capture qualities of the in-between-ness where entities can no longer be defined by their material status.

Chapter 3 studies the relations between the state of afterness and the conditions of separation, contact, and accesses. This chapter examines how the canonical museum enforces two colonial histories: the history of contactlessness and the production of a synchronous narrative. I argue that recent applications of contactless technologies and data synchronization are rooted in the colonial ideology that museums have been exercising for generations. Written during various phases of the Covid-19 pandemic, this chapter studies the notion of contactlessness—from museum practice to the payment method and pandemic policy—not as a technology but as a condition. Throughout this chapter, I describe in detail a set of invented, performance-based research methods that became my way to pose questions on the changing conditions of contact. I argue that what's left after the museum burned represents new possibilities for relation between bodies, objects, and their data. Like the fire that burned the original objects, the museum's residues are spreading without order. The residues are coming

into being through contact and by that represent the collapse of a system based on separation. The unordered contact of the residues, where everything touches everything else, proposes a repositioning of knowledge production, which I call a mode of afterness.

Chapter 4 is dedicated to the audience. The withdrawal of the object opens up the possibility for audiences to disavow known methods of generating institutional knowledge and call for rethinking what methods can fit the active network of the residues. I argue that the multiple interruptions enacted by the event of the error represent a possibility of becoming through being an audience. In this chapter, I present two speculative methodologies of audiencing for the incomplete state of the residues. First, I look at the possibility of becoming an audience through collective witnessing of the state of incompleteness; collective witnessing means sharing and carrying with others the past that is not past. Then, I use as an example a recent study project that proposes a shift from mediation, a key term in museum education practice, to mutual navigation of the residual space. To move from mediation to navigation means replacing the mediation of objects from an institutional collection to the institution's public with the practice of navigation without an object, a transductive method of learning that underlies the uncertainty of the residual space as a shared mode of existence.

Chapter 5 takes the readers back to the burned museum. The question that drives the final chapter is how the potential of afterness can be actualized specifically through artistic practice. Throughout the chapter, I share my practice to propose that the potential of afterness to be actualized in space-time is through performative encounters. The encounters offer concrete, even if momentary, access to the afterness state through transmission and translation of the museum's afterlives as a shared urgency. The chapter focuses on *Leaking Lands*, a three-channel video installation that acts like a "digital séance" in three parts, where I use the digital remains of the Museo Nacional as sites of intervention. The work considers the digital collection as the multi-sited meta-collection that is enacted through conversations and collaborations with many stakeholders, from former employees to data activists and dance makers. I showed how the speculative qualities of the video *Leaking Lands* can become prefigurative, a form of using the remains of the past to make ready for possible, yet uncertain, futures.

Together, these five chapters offer an attentive study of the aftermath of the museum collection to show how the removal of the object leaves behind the multiplicity of its spatial, temporal, and ideological conditions. The initial set of questions that arose from a sequence of

events that took place in the autumn of 2018 are then expanded through literature from performance, media, and algorithmic studies to speculate on a set of techniques and practices for a state that comes after the museum, when things lose their grip. The dissertation considers the potential agencies of different techno-cultural forms that go against the idea of progress and opens up to unindexable particularities. My writing aims to hold space for rehearsing alliances between living, object, and data forms that are not rooted in the notion of separation and the politics of possession.

Chapter 1:

The Museum and Its Afterness

This story begins with an error. In six short hours in September 2018 a fatal fire brought an end to two centuries' worth of treasures in Brazil's Museu Nacional. Only a handful of artifacts of the 20 million items that were housed at the museum survived this colossal disaster. To give a sense of perspective, the collection of the British Museum holds eight million items. The fire that wiped out the nation's archive was described as "a lobotomy of the Brazilian memory."⁵⁵ An image of the nation, its lands, and its cultures, the immense encyclopedic collection included priceless archives of pre-Columbian and Indo-American cultures, the oldest human remains ever found in Brazil, and audio recordings of Indigenous languages, many of which are no longer spoken and may now be lost forever. Also, five million butterflies and other arthropods, a 12,000-year-old fossil human remain, thousands of ceramics from Indigenous Brazilian cultures, sarcophagi from Egypt, and a fresco from Pompeii that had survived the eruption of Vesuvius. A meteorite that hit Earth in 1785 survived the fire.

It feels almost unimaginable that so many valuable objects were simply wiped off the earth without leaving any digital trace. One would hope that contemporary technology would offer its most treasured artifacts a better chance of survival than the Library of Alexandria. In the age of algorithmic reproduction, when the automatic backup is the default standard on most digital devices, many commentators have argued for the right to be forgotten. At the same time, there are still many faults with the politics of digital memory. The story of the National Museum's loss suggests that the technological practices of saving and deleting are still entangled with geopolitical biases and cultural struggle for the right to be remembered. In the case of many Indigenous communities who suffered brutal acts of memory loss caused by colonialism, the fatal fire could feel like a second genocide. The economy of "remembering everything"⁵⁶ that often leads to hyper-documentation is still very much a first-world issue.

⁵⁵ Dom Phillips, "Brazil Museum Fire: 'Incalculable' Loss as 200-year-old Rio Institution Guttled," *The Guardian* (September 3, 2018).

⁵⁶ Viktor Mayer-Schönberger recognizes the virtue of forgetting in the age of algorithmic reproduction when "remembering everything" becomes the default practice and argues that we, as society, are not losing enough data and failing to forget. For millennia, he reminds readers, "human beings have lived in a world of forgetting. It would be naïve to think that leaving behind such a fundamental part of human nature with the help of digitization and technology would be a painless affair." Viktor Mayer-Schönberger, *Delete: The Virtue of Forgetting in the Digital Age* (Princeton: Princeton University Press, 2011).

A fragmented and eclectic digital collection survived from the ruins. Next to small collections that were digitized by interest groups⁵⁷ is a sporadic collection assembled by users via Wikimedia Commons that includes photos of the collection captured by visitors on their personal devices. There is also a virtual tour, a Google Arts & Culture product, where users can digitally visit the no-longer-existing museum. In the absence of a systematic digitization effort at the museum, the fragmented collection that remains poses a challenge to the kind of fixed taxonomies and epistemic frameworks traditionally designed by the state. It looks sporadic or marginal, but this eclectic digital collection presents a new amalgamation and offers new qualities. This kind of hybrid collection, or digital recollection, can be an invitation to look at the ways different layers of data systems intermingled and refused the canonic institutional order and its indexing system, industry standards, and the forms of governance these orders represent.

Reading the triangular relationship between power, knowledge, and institutions as established in Foucault's writing can be useful in understanding the museum's ruin as an extension of state policy. But the case of Brazil's National Museum can provide a glance into a scenario where state sovereignty will no longer recognize the museum as an instrument of power. In a speculative market economy and late-capitalist model of nation-state, national collections and institutions often became a burden for the sovereign. Since national collections are no longer recognized as potential sites for either commodification or establishing political power, they are often subject to slow and consistent erosion, the result of a budgetary crisis that reflects a different set of priorities in the eyes of power. When the market becomes the disciplinarian of humanist historical discourse, such public collections often governed mainly by neglect⁵⁸ that is manifested through austerity, lack of care, and absence of community and leads

⁵⁷ The surviving digital images were either digitized by small interest groups, like different Indigenous cultural archives or available via different Google services; other materials were digitized by museum employees or fellow researchers.

⁵⁸ What does systematic neglect look like? In 2017, Brazilian President Michel Temer cut 44 percent of the country's science budget. At 3.2 billion reais (around 1 billion US dollars), it was the lowest the country has seen in at least twelve years, leaving some science institutions destitute for basic needs, such as money for their electricity bills. The Museu Nacional was so strapped for cash that year that when termites destroyed a wooden case holding a 42-foot-long dinosaur skeleton, the museum started a crowdfunding campaign to raise 15,000 dollars to replace it. This is not the first time in recent years that the world lost a vast collection: in April 2016, India's National Museum of Natural History in New Delhi was also destroyed in a fire. Nor is this the first time that fire has claimed an invaluable part of Brazil's heritage—in 2010, fire took down Instituto Butantan, a major biomedical research laboratory in São Paulo, destroying one of the world's largest collections of venomous animal specimens. "This is far from being a problem unique to Brazil," the paleontologist Taissa Rodrigues told *National Geographic*. "Collections worldwide are at risk, and unless we take good care of them, these kinds of things will happen again and again." (Michael Greshko, "Fire Devastates Brazil's Oldest Science Museum," *National Geographic*)

to slow collapse and decline.⁵⁹ That Brazil's National Museum is at risk is not a secret. Although the museum is officially in the process of rebuilding, the government took an active role in destructing the unofficial efforts for digital salvation, possibly in order to avoid fueling political flames.⁶⁰ To pay attention to the ending is to pay attention to the shifting of governing systems, to the standards of knowledge transfer, to the labor of their maintenance, to the politics and the potentialities of museum residues to become a new framework through which to understand our time. The end of collections entails the end of careers, communities, disciplines, and empires, and can highlight the wider political and intellectual environments that enabled it. Although the home of 20 million objects was dying long before it burned, a rich and diverse community of caretakers who were actively trying to save it existed; this was predominantly a labor of love led by a community of researchers, from linguists to entomologists, cultural and political activists, generations of students, curators, conservators, and many educators. The lack of minimal working conditions turned the museum for many to somewhere more than a workplace.⁶¹ The lens of an ending makes visible the perpetual care, safekeeping, and de-accessioning needed for collections to persist. Indigenous activists described the collection as a site for language, as home, as origin, as well as a site of struggle.⁶² Beyond the inner circle of employees, researchers, and Indigenous activists, the public institution centrally located in Rio de Janeiro was at the heart of so many economies, a place for many publics to coexist. A place where students could walk in and use the internet; an open door for homeless people and sex workers to use the convenience; and a place where one could simply escape the city, meet in public, take a break.

What remains when a collection is lost? As the case of the Brazilian museum unfolds, it brings to focus the collapse of multiple systems and governance rationales as they are manifested

[September 6, 2018]). Since 2014, the Museu Nacional hasn't received its full annual maintenance budget, equal to 128,000 dollars; in 2018, it received a paltry 13,000 dollars. In 2015, the Museu Nacional was forced to temporarily close its doors because it could no longer pay its cleaning and security staff.

⁵⁹ In recent years, the Brazilian government has spent billions on hosting the Olympic Games and major construction projects that generated kickbacks for politicians, but slashed spending on culture and education in the name of austerity.

⁶⁰ For example, the government cut access to the museum's digital database, which volunteers were using to help collect the lost data; took down images contributed by users and uploaded to Wiki Commons; and never responded to requests for publishing images commissioned by the museum in the past.

⁶¹ To use the terminology of tech, these caretakers' efforts were (unpaid) "passion projects." Antonio Carlos de Souza Lima mentioned in an interview with the *New York Times* that toward the end the museum didn't have money for toilet paper. Manuela Andreoni and Ernesto Londoño, "Loss of Indigenous Works in Brazil Museum Fire Felt 'Like a New Genocide,'" *The New York Times* (September 13, 2018), <https://www.nytimes.com/2018/09/13/world/americas/brazil-museum-fire-indigenous.html>.

⁶² Andreoni and Londoño, "Loss of Indigenous Works in Brazil Museum."

in the model of the national museum. Thinking with a series of technical and bureaucratic malfunctions and their political conditioning, this chapter begins with a consideration of the errors and the systematic failures that the fire made evident, marking how errors have the potential of producing poiesis. The event of the error, which turned the museum into an inoperative apparatus, produced its own residues. What are and where are the leftovers of the National Museum? How are the digital residues to be understood, engaged with, and entered into a relationship with? What is the notional place of residues in a global economy of circulation enhanced by algorithms? Can the conditions of the institution's residues of body, data, and matter become a field of new potentialities for practice and for thinking? Moving from the specific case of Brazil to thinking with its condition, the last part of the chapter is dedicated to the notion of afterness. In it, the museum no longer exists as a known space, but lives through its residues that are no longer the museum, still not yet something else. Afterness is a temporal, spatial, and epistemological category. It applies to the incomplete state between the "no longer" and the "not yet." Afterness works in relation to change the spatio-temporal conditions but is directly related to the ways the space was known or used. In that sense, afterness is always about retroactive production of exceptions. Timewise, it is located in the uncomfortable, incomplete space, after the institution but "not yet" in a different era. The museum and its collection aren't the main subject of the chapter. I have no direct historical or geographic proximity to the event: the fire, the museum, Brazil. Therefore, I have no intention to commit to the work of filling the gaps between events, or to address the what-happened inquiry. I also wish to turn away from the well-established field that studies the museum itself and instead to reflect on the new species of spaces that emerge in this current techno-political environment, where vertical institutional hierarchies and horizontal networks are entangled in a new political mesh. The invitation of being with the lacunae and presences of the residues holds a possibility of afterness as a space in which—in spite of the tragedy of the museum's loss—it is possible to articulate the museum's field of potential beyond its institutional form and become an audience of the state of incompleteness, after the museum.

The Event of an Error

Over 90 percent of the National Museum's collection was lost simply because there was not enough water in the fire hydrants to extinguish the blaze. An error. A signal for the disruption of

an orderly flow, errors invoke a sense of what normativity is, and, at the same time, enhance anxiety about its transgression.⁶³ Errors operate as units of detachment to the Enlightenment notion of linear progression; they act like breakages in the modernist ideal of free movement of bodies, objects, capital, and values; and they appear as an unwanted interruption in the late capitalist constant browsing in a web of information. The definition of what an error is and the idea of how it could be fixed are ways to define the system itself and its understanding of functionality. Thinking with the possibilities of the error, the 2018 fire is no longer understood as incidental, but as fundamental systematic neglect. Positioning the error as a simple mistake assumes its ability to be a marker of faults, but the error must be politicized. A short electric circuit and a dry fire hydrant can be counted as errors. This was a catastrophe. The fire wasn't caused by an unfortunate administrative error in the system, but by a major crisis of austerity that is framed as an error. An event exacerbated by austerity and possibly affected by climate conflict. The austerity was the grain of its undoing via the accumulation of simple but not innocent errors. The events were iterated in the context of a long-standing austerity that ended up manifested in a set of errors. That the National Museum was at risk wasn't a secret. The hardline austerity policies in the years preceding the inferno had seen a reversal in social programs and plunged the economy into a deep crisis, damaging public services, especially the country's already fragile health, education, and cultural systems. Errors are read or understood in relation to the political knowledge regimes they are a part of. In this case, the event of water shortage stands for the deterioration of public domains from cultural institutions to municipal infrastructure, and a rapid privatization of the urban landscape and natural resources. From the museum's ruins, a state of post-error, we can identify a shift in the mode of governmentality that is characterized by hyper-nationality, rapid privatization, accelerated extractivism, and a lack of recognition of the potential of cultural institutions.

The fundamentally political questions that errors pose also allow for a reengagement with errors as an inroad for critical and subversive engagement with power. In critical thinking, the notion of the error has the capacity to hold spatial, structural, temporal, and political problems and become a potential agent of thoughts against hegemonic modern sovereignty.⁶⁴

⁶³ Daniela Agostinho et al., "Uncertain Archives: Approaching the Unknowns, Errors, and Vulnerabilities of Big Data through Cultural Theories of the Archive," *Surveillance & Society* vol. 17, nos. 3 and 4 (2019): 422–41.

⁶⁴ Nanna Bonde Thylstrup, "Error," *Uncertain Archives: Critical Keywords for Big Data*, ed. Nanna Bonde Thylstrup (Cambridge, MA: MIT Press, 2020).

Poststructuralist thinking especially employed the notion of the error with other related terms such as anomaly, fault, and failure to offer a critical reading of the uncertain nature of memory institutions like archives, collections, and museums and the systems of hegemonic orders they represent. The unstable and flawed nature of archives and collections, that they conceal as much as they reveal, is central to the work of Michel Foucault and Jacques Derrida, and their many readers.

The error is a break within the ordered world. A minor act in nature and often a singular event, it has the capacity to push an operating system into an inoperative state. It is an a-signifying suspension that leads to systematic diffraction, but crucially also internal to the same system. Gilles Deleuze's writing on the way stuttering operates within language might be handy as it shares many qualities with the way the error relates to ordering systems. Deleuze extends the stutter beyond speech by arguing that stuttering in language makes language itself stutter, or makes a system strike against itself. Esther Peeren explains:

For Deleuze, the creative stutter is a figure of immanence; it is not a vacillation between or mix of different languages but operates within a singular language to modulate or "minorize" it. Rather than adding something external, it expands, rhizomatically, from within: "Every word is divided, but into itself (pas-rats, passions-rations); and every word is combined, but with itself (pas-passe-passion)." The critical potential of this immanence is signaled by the parallel Deleuze draws between the way stuttering takes language to its limit, putting it in touch with its outside and with silence, and the "state of boom, close to a crash" that creates space for radical new insight in "pure science" (109).⁶⁵

This line of thinking has been taken up by Isabelle Stengers, who invokes the stutter as that which, in science, can disrupt and destabilize "matter of fact" and "consensus."⁶⁶ The stutter then becomes a "counter-effectuation" that produces "active divergence"⁶⁷ and thus a mode of critique. Stengers suggests the stutter shifts from a form of interruption to staging interventions. The aberrant quality of the stutter seems to be resurfacing once again in the theme of the glitch. In his reading of Deleuze, Simon O'Sullivan equates the stutter to the

⁶⁵ Esther Peeren, "Stutter," *Symptoms of the Planetary Condition: A Critical Vocabulary*, eds. Mercedes Bunz, Birgit Mara Kaiser, and Kathrin Thiele (Lüneburg: Meson Press, 2017).

⁶⁶ Peeren mentions that Stengers's reading of Deleuze and Guattari's "What Is Philosophy?" "conjures an image of stuttering minorities. Their stutter is not dismissed or considered as affliction to be cured." Isabelle Stengers, "Deleuze and Guattari's Last Enigmatic Message," *Angelaki: Journal of the Theoretical Humanities* vol. 10, no. 2 (2005): 154, 158. Cited in Peeren, "Stutter."

⁶⁷ Stengers, "Deleuze and Guattari's Last Enigmatic Message," 163.

glitch as minor events that disprove and affirm the system at the same time: “the glitch is a moment of critique, a moment of negation, but also a moment of creation and of affirmation.”⁶⁸ The dual ability of the glitch to both break and make a world at once, made it, in recent years, the bearer of new critical potentialities, especially within in the transformation of old hegemonies into the world of digital image and computation.⁶⁹ Like the error, a glitch is an unpredictable change in the system’s behavior and its outcome is unpredictable. But unlike the stutter or glitch, the quality of an error, an a-signifying practice, is in the affective intensity that can’t be habituated, repeated, reproduced, or replicated. It is a singular moment of suspension.

In the binary logic of computation, the notion of errors, glitches, or bugs are becoming even more central. However, big data systems adopted a perspective where errors are no longer understood as operation stoppers or a mistake that needs to be fixed, but quite the contrary. In the data era’s epistemology, errors are signifiers of the systematic weaknesses that can contribute to the system’s adaptability and resilience.⁷⁰ The semantic of errors has been reshaped into an experimental mode of industrial innovation, where errors are believed to allow elastic and agile solutions, and leveraged for risk management. Error-based operations are specifically crucial for learning models to improve circuits of perception and judgment and detect faults and biases.⁷¹ Instead of being judged as operation-stoppers, errors are understood as a necessity for improvement. More than before, the error became a self-regulatory process. Luciana Parisi and Ezekiel Dixon-Román have shown how machines do not simply mirror the normative apparatus of knowledge reproduction; instead, computation

⁶⁸ Simon O’Sullivan, “From Stuttering and Stammering to the Diagram: Deleuze, Bacon and Contemporary Art Practice,” *Deleuze Studies* vol. 3, no. 2 (2009): 247–258, 249.

⁶⁹ See Legacy Russell, *Glitch Feminism: A Manifesto* (London and New York: Verso, 2020); Rebecca Schneider, “Glitch,” *Uncertain Archives*; Olga Goriunova and Alexei Shulgin, “Glitch,” *Software Studies: A Lexicon*, ed. Matthew Fuller (Cambridge, MA: MIT Press, 2008), 110–18; Tim Barker, “Aesthetics of Error: Media, Art, and the Machine, the Unforeseen, and the Errant,” *Error, Glitch, Noise, and Jam in New Media Cultures*, ed. Mark Nunes (New York: Continuum, 2011), 42–58; and Michael Betancourt, *Glitch Art in Theory and Practice: Critical Failures and Post-Digital Aesthetics* (London and New York: Routledge, 2017).

⁷⁰ Algirdas Avizienis, Jean-Claude Laprie, Brian Randell, and Carl Landwehr, “Basic Concepts and Taxonomy of Dependable and Secure Computing: IEEE Transactions on Dependable and Secure Computing,” cited in Bonde Thylstrup, “Error.”

⁷¹ Murad Khan writes that “distortion is conceived of as an aesthetic operation by which the circuit between perception and judgement can be exploited to open up the learned representations within the learning model. [...] The adversary manipulates a series of error-based operations constitutive of the learning model (backpropagation and gradient descent in particular) to formulate practices of contamination and deception.” Murad Khan, “New Anamorphisms,” *001: Aesthetics of New AI, a Reader* (London: The Serpentine Gallery, 2020).

based on recursive logic is designed to include both contingency and chance within itself because the temporality of cybernetic machines precisely admits that errors, incidents, and failure are part of the causal process of system learning.⁷² The uncertainty they produce no longer perceived as a thread but is endogenous to digital-age capitalism. Therefore, its pursuit via error-based operations promotes and strengthens neoliberal economies and practices.⁷³ The recognition of the error as a necessity weakening its ability to become an agent of questioning or critique. The critical potential proposed by Deleuze's reading of the stutter as a disorder that takes language to its limit is questioned by the all-encompassing ubiquity of big data computation. The modulative quality of data-driven governance replaces fixed enclosures with easily reconfigured networks, which are hard to observe and even harder to critique. The epistemological shift of ubiquitous computation challenges the possibility of errors to interrupt the structure and become agents of critique, to cause a system to stutter or to mark a way of knowing the system differently. The theoretical potential of destabilizing systems via errors requires a different modality.

Keeping in mind that the brutal reality of the multi-catastrophe is also framed as an error, I believe that the notion of the error also means some affordances. For example, the museum's poor conditions were precisely what opened up new ways of making sense of the institution to become "the museum of the people," a home for sex workers, a hub for free internet, and a host for political Indigenous activity. This is the kind of error that operates within a singular institutional framework rather than adding something external. The institutional device was erring against its official purpose. I'm interested in thinking again about errors "with performance," focusing on the unstable quality of liveness. In this case the unstable potential of the error lies in the idea that it can be neither preformed nor reformed.⁷⁴ It can only be captured in its aftermath. I return to the notion of the error in chapter 5, where I rethink it via my own practice. I show how the fact that people saw the museum as their own is also an "error" in the original national apparatus of a museum as a mean of disciplinarian power. Inspired by the many ways the museum was "misused" I started to occupy the hermetic space of the Google Arts

⁷² Luciana Parisi and Ezekiel Dixon-Román, "Recursive Colonialism & Cosmo-computation," *Social Text* (November 24, 2020), https://socialtextjournal.org/periscope_article/recursive-colonialism-and-cosmo-computation.

⁷³ Bonde Thylstrup, *Uncertain Archives*, 2.

⁷⁴ Schneider writes: "Given that, by definition, glitches can be neither preformed nor preprogrammed, they must irrupt both as live and as material in the otherwise seamless manufacturing of the real. Reminding us of the always potential aberrancy of liveness, glitches make a mess of the usual run of things." Schneider, "Glitch."

& Culture tour of the museum by bringing back “the people” into the computational space. Their personal memories and self-knowledge leaked into the corporate product that became a host for something else. By rejecting the pre-established encoding and establishing a mode of relation with others, the ambiguous specter became a potentially creative space. The connection between the error, an a-signifying suspension, and its actualization through the traces it leaves, has a potential of deterritorialization by losing the original organization and context, a process that holds a critical force. The practice of contending with the museum’s aftermath is guided by a search for the lived effect of the error as an event, the intensity that is carried after the moment of disequilibrium. The state of suspension provided by the error through its residues has no fixed form or recognizable protocol, but it can open a space for possibility. This possibility emerges in response to the need to learn how to witness and imagine a world that does not fully exist, through the fragile spaces between what is working and not working.

The Error’s Residues

Performance theorist Rebecca Schneider writes: “Error bears the potential of ruin, but ruin bears the promise of alternatives.”⁷⁵ Many commentators connected the figurative and abstract state of ruins and the Western museum.⁷⁶ To paraphrase Schneider’s proposition, I suggest that the error

⁷⁵ Schneider, “Glitch.”

⁷⁶ After the flames went out, leaving a devastated, scorched site, the Brazilian anthropologist Eduardo Viveiros de Castro addressed the fire as a project of devastation, “a creation of desert,” caused by an ongoing systematic process of deserting cultural and research institutions as a mechanism of national governing actively producing destruction of memory. Instead of rebuilding, he publicly wished the museum remained a ruin, a burned “memory of the dead things,” where the institutional ashes would become a monument. Viveiros de Castro’s proposition was quickly circulated in the digital sphere, becoming a thought exercise in anti-institutional ideas, while on site, as he predicted, preparations to rebuild the museum began the morning after the fire, under the tagline “Museu Nacional Vive.” Viveiros de Castro’s identification of the ruins as a site that embodies anxieties of the nation-state project, echoes the Benjaminian notion of ruins—a meditation on ambivalence that make us think of the past that could have been and the future that never took place. Unlike the colossal end, or the new beginning, the state of ruins constantly shifts and deterritorializes the utopian imagination and acts as portal to the collapse of two temporal moments together. As such, the ruins’ own potential and materiality cut through time and destabilize the chronotopes to which they belong. Within museum cultures, the concept of ruins brought to mind Douglas Crimp’s seminal 1980 article “On the Museum’s Ruins,” which suggests that analyzing the museum involves the replacement of those unities of humanist historical discourse such as tradition, influence, and origin with concepts like discontinuity, rupture, threshold, and limit. Writing the end of the collection with Crimp in mind entails looking for the acts of slow violence and disruption that lie beneath the acts of salvation and repair. In the case of the national museum, these aren’t only the literal ruins of 2018, addressed by Viveiros de Castro. These are ruins strata formed by the colonial past, the violent discontinuity caused by providing coherent model of citizenship, and the museum’s slow decay as a result of lack of care. The bigger the museum, the better the wreckage. Like in Robert Smithson’s words, they have always been “ruins in reverse.” The museum’s ruins are the roots of its own destruction. See Eduardo Viveiros de Castro interviewed by Alexandra Prado Coelho, *Ípsilon* (September 4, 2018),

bears the potential of its residues. Occupying the domain of the accident, the error operates in the dimension of the event—an immanent and particular set of relations that is provoked by the encounter and collision of various forces. The event is the productive potential of those same forces. Residues are errors actualized. At the same time, the residues are errors' virtual state. To use Schneider's words, they bear the "promise of alternatives."

The residues are both the actualization and the virtual. They exist as matter, they live through the flesh and the social body and operate through data systems. The residues are the actual and virtual post-error form of the body-data-matter, which is always unstable. Through the domain of the residues, the error keeps modulating. With the continuous quality of its residues, the a-signifying rupture of the error can become a process or knowledge formation, as O'Sullivan has argued: "For Deleuze and Guattari, an a-signifying rupture is a process by which the rhizome resists territorialisation, or attempts to signify, or name it by an over coding power. It is the process by which the rhizome breaks out of its boundaries (de-territorialises) and then reassembles or re-collects itself elsewhere and elsewhere (reterritorializes), often assuming a new or shifted identity."⁷⁷ The residues are carried over multiple surfaces including across institutional contexts, infrastructural forms, and media archaeological techniques but are always estranged for their original stable form. Reading the notion of the error through its residues provides an invitation to undo its direct relation to the inherited system of fixed knowledge that the error interrupted (in this case, the museum) and instead, investing in its potential of reterritorialization. This means considering the remains as "actioned situations"⁷⁸ that continually pass from one milieu to another, and essentially become a form of material and temporal communication.

The residues maintain a complex relation to time that accesses past, present, and futures at the same time. They don't operate simply as old or new but propose a complex mnemonic relation that acts as interim between times. The museum residues are relational entities. They

<https://www.publico.pt/2018/09/04/culturaipilon/entrevista/eduardo-viveiros-de-castro-gostaria-que-o-museu-nacional-permanecesse-como-ruina-memoria-das-coisas-mortas-1843021>; Walter Benjamin, *The Arcades Project* (Cambridge, MA: Harvard University Press, 2002); Douglas Crimp, "On the Museum's Ruins," *October* vol. 13 (Summer 1980): 41–57, 44; Robert Smithson, "A Tour of the Monuments of Passaic, New Jersey (1967)," *Robert Smithson, the Collected Writings* (Berkeley: University of California Press, 1996).

⁷⁷ Simon O'Sullivan, "The Production of Subjectivity," *A.C.A.D.E.M.Y.*, eds. Irit Rogoff and Angelika Nollert (Berlin and Frankfurt am Main: Revolver, 2006), 238–244.

⁷⁸ Jussi Parikka, "Remain Scattered," *Remain*, eds. Ioana B. Jucan, Jussi Parikka, and Rebecca Schneider (Lüneburg: Meson Press, 2019), 5.

allow intra-activity between matter, flesh, and information that keep mutating in relation to dynamic forces. Most importantly, the residues are a network of conditions. With the removal of the object, be it a material, digital, or performative object, we are left only with the multiplicity of its conditions. The residues are a network of conditions, as they reveal the systems of affordances of existence of an entity that is no longer around. Therefore, approaching the museum's residues must go beyond the collection of objects and media that survived the fire and be expanded toward aspects of labor and infrastructure, repair and maintenance, education and research, local histories and myths. The residues allow us to look once again at the conditions that are not so easily discoverable at first sight. Thinking with the residues, as a bundle of time and matter and as a complex constellation of conditions, is an invitation to contend with a national collection and its discontents through the act of (re)collection. Some of the writers I referred to, mainly from media and performance studies, address the notion of the remain more specifically. At some points, I use the terms residues and remains interchangeably. However, in my project the framework of the residues takes a central stage. While the remain represents a state of remaining, the residue is whatever remains after something else has been removed. My project at large is looking at the material and theoretical conditions that survived after the removal of the object.

The story of the fragmented digitized collection from the Museu Nacional can do a lot more than help index the insects pinned in a drawer or those fish in jars. It presents an opportunity to look at the diffused processes of mass digitization and the techno-political standardization that is associated with it, or the lack thereof. A mapping of the digitization efforts produces several observations regarding access to knowledge, shifting models of national narratives, and the priorities of major tech companies as well as local government. The fragmented and non-coherent collection that “survived” the fire is preserved in different formats, hosted by a variety of data services and indexed separately as each followed a different logic and motivation. Within the digital realms, there are two major kinds of residues that survived the ruins. The first, Google Arts & Culture's tour of the museum, is a large-scale, semi-automated digitization system that was developed and is owned by a mega-corporation using the same devices and mapping techniques to document cities, tourist sites, and museums. The second is a user-generated documentation system that represents the institution and its holdings via the eyes of museum visitors. The images from the collection captured by visitors are stored on their

personal devices or their cloud services and shared via social media. They are a portal to other data they have been slowly aggregating: other images they saw, texts they read, locations they checked in at, a personal library organized by geolocation or facial recognition software, social networks, and other data points. With the understanding of the residues as an active formation, my analysis of the digital data that survived the fire in the following pages considers the possibilities that open up from encountering these remains.

From Collection to Recollection

Well aware of the lack of digitization and the dire maintenance of the collection, employees and scientists who worked at the National Museum made independent efforts to document its holdings,⁷⁹ but it was only a drop in the water. The digital presence of an institutional collection is never only a technical process. It is framed by the geopolitical conditions, the infrastructural conditions, the professional discourse, and sometimes even by the definition what a should be considered a memory institution.⁸⁰ The first edit on Portuguese Wikipedia regarding the fire at the National Museum was made by an anonymous user at 8:40 PM (UTC) on the night of the fire on September 2, 2018, minutes after the television reports began. An hour and a half later, an entry dedicated to the fire itself was created.⁸¹ In the following hours, three call-outs for photo contributions were made.⁸² The collection's Wikipedia page, which was once only updated by

⁷⁹ One such group is Etnolinguística, which is run by two Brazilian linguists who have been working for years on digitizing examples from the Curt Nimuendajú archive. See <http://www.etnolinguistica.org/>.

⁸⁰ When I spoke with João Alexandre Peschanski, an avid Wikipedian who is highly involved in the non-institutional digital salvation of the collection, he began by framing these efforts in the geopolitical conditions of the Global South. Peschanski highlights the difficulties to create dialogue with other museum enthusiasts, who often fail to appreciate the severe conditions of libraries and archives in the Global South due to lack of infrastructural support. Additionally, there is an ongoing misunderstanding of what should be considered a museum. Following Western definitions, too many of the South's cultural centers are not even considered museums. Peschanski finds the negotiation with the Western categorizations as sensitive as the negotiation with the local authorities. So far, Portuguese-speaking Wikipedia contributors formed about thirty new museum entries. The entries are crucial to Brazilian museums as the institutions can't afford digitization and the region's histories and material cultures are fading.

⁸¹ By longtime Wikipedian DarwIn.

⁸² One of these was by local students from the museology course at UNIRIO (the Federal University of the State of Rio de Janeiro), who instated a salvage mission of their own. The students called out for the research community, former students, and "everyone who possesses images (photographs, videos, and even selfies) of the collection and exhibition spaces" to share them. At some point, they even reached out to former students and researchers and asked if they could share the photocopies they made when they were studying the collection. <https://www.nationalgeographic.com/science/2018/09/news-pictures-museu-nacional-fire-aftermath-natural-history/>

dedicated contributors, started to circulate globally.⁸³ The digital collection hosted by Wikimedia Commons, which held only couple of dozen images prior to the fire, now contains thousands of images, many of which are personal views of the museum taken by visitors.⁸⁴

The analysis of the digital residues of the Museu Nacional through Wiki Commons' ghostly collection gives us a sense of a collection as it had been viewed, understood, and mediated not by museum scholars but rather via the eyes of its subjects. Here is a stray cat purring between two columns with peeling paint, there a photo of an Indigenous hunter—the very low-angled photo, clearly taken by a child, exposes a leak in the upper corner that was fixed with layers of brown packing tape. The museum's lawns in the winter, the same lawns in the summer, and multiple copies of the same shot that were never deleted. Some young students who belong to a current generation that never deletes, uploading multiple images of the same shot, offering a personal testimony against institutional amnesia. It is a faster, non-selective, direct impression that does not recognize the institution and its collection as a defined category. To use André Lepecki's understanding of audiencing, it is a form of becoming an audience by moving from being a witness of the institution to offering a testimony to others by becoming a narrator of a personal experience: "Their memories, because experiential, because personal, become both profoundly emotional-singular as much as they become also profoundly lucid-social."⁸⁵ The act of recollection is formed by sharing impressions with others—other stories, and other histories.

Large museums follow the same standard guidelines when they digitize objects in their collections: a single item per image, either a solid color or a black-to-white gradient background, and two light sources to avoid massive shadows. The images of objects from the National Museum on Wiki Commons fail in each of those categories. In one image, an Egyptian mummy looks directly at the camera through its glass cabinet. On the surface of the reflective glass, the

⁸³ The Wikipedia community soon amplified this, and on the following day, a call-out from the Wikimedia Foundation went out on social media: "Add your photo to the sum of all knowledge," they wrote, and Katherine Maher, executive director of the Wikimedia Foundation, said "we're asking people everywhere to join our global community and help the world recover from this collective tragedy." Twitter post from the Wikimedia Foundation, October 3, 2018.

⁸⁴ A detailed account on the development of the Wikimedia Commons campaign was written by Wikipedia Education Program leader in Brasil, João Alexandre Peschanski on September 10, eight days after the fire: João Alexandre Peschanski, "After a Catastrophic Fire at the National Museum of Brazil, a Drive to Preserve What Knowledge Remains," Wikimedia Foundation (September 10, 2018), <https://wikimediafoundation.org/news/2018/09/10/national-museum-brazil-fire/>.

⁸⁵ André Lepecki, *Singularities: Dance in the Age of Performance* (London and New York: Routledge, 2016), 173.

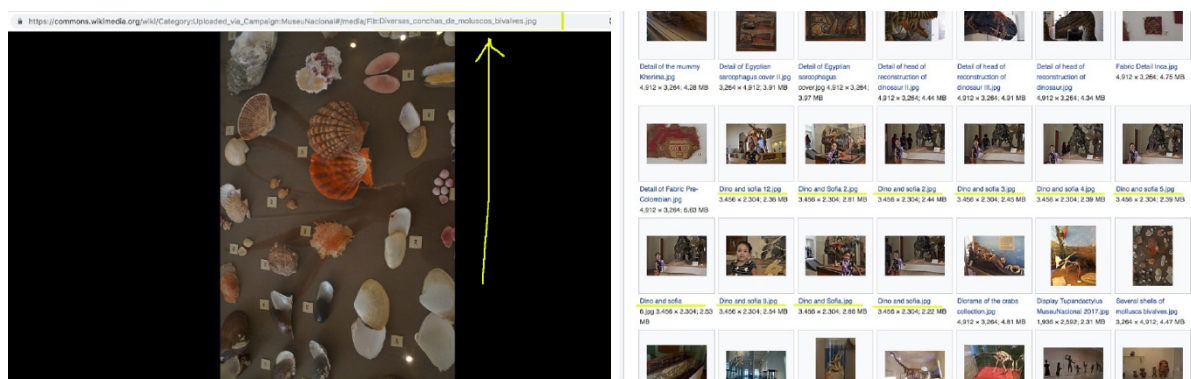
cabinet's light fixtures blend with the reflections of some parts of the neighboring vitrines, and the back of the mummy is reflected in the mirror in the back of the cabinet. Also in the frame: a flipped image of a woman's flip-flop and the shadows of her hands, both of which probably belong to the person who took the picture. A disorienting collage made of multiple reflections. By looking at the image we can also know it was daytime, and it was summer. The photo was poorly taken by a nonprofessional and contains a lot of visual noise that makes it hard to look at the object. In another image, thirteen butterflies from the Brazilian Amazon are pinned in three rows onto white cardboard. The white background is neatly framed and boxed in a plexiglass crate. A large window is reflected on the glass box, letting in the lush Brazilian greenery, which leaks back into the colorful taxidermy wings, while the silhouette of the photographer's hand joins the final collage. These are local images, dictated not only by the time of day and the season, but also by the technical skills of the photographer, as well as their physical and cultural perspectives.



Figure 1.— Upload to wikimedia commons via MuseuNacional campaign. Retrieved December 5, 2019, from: https://commons.wikimedia.org/wiki/Category:Uploaded_via_Campaign:MuseuNacional Screenshot by author.

The only recorded survivors of an enormous collection are subjective, partial, and disorienting—the front and back of the object are seen together, up and down merge into a new collage caused by amateurism. By failing to “perform” the standard museum image, they expose the discomforts of museum practices like ordering, displaying, and safeguarding of culture which are reflected in its sanitized images that are also technically out of reach. The dispossessed images represent political unrest and become a site of struggle. The user-generated images are individual accounts of those who visit the museum and share their own images as they are:

partial, anecdotal, broken, but also connected to other friends, families, places, and spaces, as well as to other phones, IP addresses, and portals. The images gain a different agency through their connection to living once lived, to ancestors once occupied. They are silent images of languages once spoken. In their technical and social images they form an “unordered” collection that operates as a kind of personal and social recollection. The documentation process acts as a post-production center, where the images constitute a montage of memories. The images’ partiality, uncertainty, and high level of subjectivity encapsulate them as “living archives” that provide a space for erased, forgotten, neglected, and new memories.⁸⁶ The information they contain is carried over multiple surfaces and the final result fails to split subject and object. The resulting media represent a struggle to remain, an urgent need to share—not merely as an act of broadcasting but as a deep act of being in touch with a place, its people, and its cultures. By refusing to split subjects from objects and by sharing images that are as unsorted and unprofessional as lives are, multiple collections represent a form of coming together as a relational mode that is a constant act of belonging and un-belonging.



File Names: Bivalve mollusks shells.jpg,” and “Sofia and Dino11.jpg.”

Figure 2,3–. Upload to Wikimedia Commons via MuseuNacional campaign. Retrieved December 5, 2019, from: https://commons.wikimedia.org/wiki/Category:Uploaded_via_Campaign:MuseuNacional Screenshot by the author.

The file names in the scattered collection are all different. Each file, named by its contributor, represents a subjective order and methodology of organizing knowledge. One is named “Bivalve mollusks shells.jpg,” the other “Sofia and Dino11.jpg.” Who was Sofia? Whether her parents were data activists, museum employees, responsible archivists, or

⁸⁶ The Uncertain Archives research group originates at the Department of Arts and Cultural Studies, University of Copenhagen, and is dedicated to thinking critically about the unknowns, the errors, and the vulnerabilities of archives in an age of datafication, see <https://artsandculturalstudies.ku.dk/research/focus/uncertainarchives/>.

nostalgists, the primary-school-age Sofia and her purple stuffed monkey with long arms are now main protagonists of the national Brazilian collection, with a few dozen images named after her. The remaining collection erases and highlights simultaneously, remembers and forgets at the same time, and offers its own logic as a site of collective witnessing. The personal file system goes against any grand attempt at classification and joins a whole media archaeology of failed classification, whether the failure is acknowledged or not. The surviving digital collection encapsulates an emancipatory potential that refuses known indexing and offers an “uncivilized” body of images.



Sofia

Figure, 4. -. Upload to Wikimedia Commons via MuseuNacional campaign. Retrieved December 5, 2019, from: [https:// commons.wikimedia.org/wiki](https://commons.wikimedia.org/wiki) Category:Uploaded_via_Campaign:MuseuNacional. Screenshot by the author.

This incidental digital collection produces its own relational interpretation—the sporadic and rather chaotic collection shift into the realm of representation as viewed by their own viewing subjects. Media archeologist Jussi Parikka notes that the “double meaning of remain is that which is left behind as enduring legacy that is archived but also that which is left out of the classification or the archive. In other words, to remain and the remainder can paradoxically refer to what is being left as acknowledged but also as the unacknowledged.”⁸⁷ These are vulnerable images, as they emerge from a life lived and experienced, and therefore they “split” the collection’s original context and produce a new form of collection that is about heterogeneous multiplicities that bleed out of cumulative lists.

⁸⁷ Parikka, “Remain Scattered,” 5.

As such, the act of bringing (the collection) back to life is a process of simultaneously doing and undoing the collection. It actively brings into consideration the known divisions between live and recorded and between what is alive and what is not. The act of recollection is an active work of fabulation of gaps and uncertainties. If museums are representation machines that unify knowledge, then crafting a representation of the collection through the eyes of its visitors is a process that is always in a state of multiplicity, a document that is formed by circulation technologies and is distributed, not set in place. This form of “speculative documentation” is relational and operates more like an environment than a system of categories, a political-aesthetic event of shared experience. The uploaded photos become an event of evidence that trace both the institutional representation system and its destruction.

The uploaded photos are traces where, to paraphrase Rebecca Schneider’s statement on performance, the dead that can take place live and the live can take place among the dead, “befuddling distinctions between animacy and inanimacy that have differentiated medial technologies from live bodies in the past.”⁸⁸ The photos are traces of traces, remains of remains. Encyclopedic national collections, in Brazil and elsewhere, are toxic witnesses to genocidal practices and histories of colonial dispossession and erasure. In that sense, the fire at the National Museum is an erasure of erasure that replaces systematic remains with sporadic residues. Such residues are encounters with the “double dead,” as captured and interpreted by the descendants of histories of erasures. The digital residues can hold different ways of operation: of being, doing, and thinking with others, dead or alive. Thinking with Lepecki’s understanding of the act of witnessing as the capacity to share, transmit, and narrate a lived event,⁸⁹ the act of collecting the residues becomes an act of collective witnessing. In chapter 5, I bring back the user-generated collection, this time as a site of intervention, as part of *Leaking Lands*, a three-channel video installation I made in the digital remains of the National Museum. Back in the studio I used the uploaded pictures as source material after printing them in postcard size. I rearranged the photographic sources, stitched them together, or reinvented the images. Sometimes I collaged different things together, other times made cuts or tears in the paper to hide and reveal its photographic materiality, or else reorganized the space of the page by folding or relocating parts of the image. Through the physical gestures, the images keep mutating and grow in a never-

⁸⁸ Rebecca Schneider, “Slough Media,” *Remain*, eds. Jucan, Parikka, and Schneider, 72.

⁸⁹ Lepecki, *Singularities*, 178.

ending process, where materials and images intermingled and refused to be catalogued as a single form in a single site. Each image in this collection is a legion.

From Collection to Correlations

Alongside the grassroots digitization efforts at the Museu Nacional, one can also visit the museum digitally using the Google Arts & Culture tour, which invites users to “revisit or discover the museum digitally by experiencing the treasures that once adorned its galleries and use Street View to walk through the majestic space.”⁹⁰ A close study of the relationship between Google’s art initiative and museums raises a series of concerns regarding the ways corporate documentation sustains existing power structures, replicates colonial knowledge formation, and amplifies capitalist-colonialist data systems by a new ruling class of information capitalism.

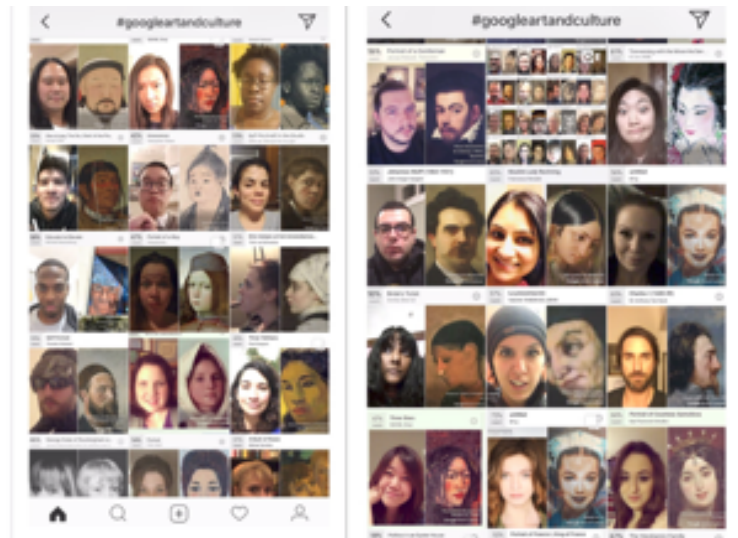
With over 45,000 objects now available for digital viewing, and expanding every year, the Google Arts & Culture collections, established in 2011, are growing dramatically. It took a few years for museums to standardize the collaboration with Google in terms of intellectual copyright and ownership. Google Arts & Culture is a non-profit organization. It offers museums tools to capture, analyze, and store their digital collections for free⁹¹ and does not make direct profit from partnering with museums.⁹² It was also the first time the mega-collection was “put to work” to start “yielding” data that could be matched with other data collections like users’ faces, location, social networks, and interests, to name a few. What does it mean that cultural histories are stored, presented, and organized by a giant corporation whose business model is based on data mining? The short-lived art selfie app gives a possible sense of how the data sourced via the digital art collections can be put to work for analyzing personal data and producing statistical knowledge. In January 2018, the app, which allowed users to take a selfie and to find their art doubles, became the most downloaded app in the iTunes store. Within days, the app processed countless selfies that it matched with images from Google Arts & Culture’s partner museums.

⁹⁰ Google Arts & Culture’s section on Museu Nacional: <https://artsandculture.google.com/project/museu-nacional-brasil>.

⁹¹ Museums can use Google’s toolset to tell rich stories about their objects using deep zooming, annotations, long-form storytelling, and 360-degree gallery views, among other services.

⁹² Google isn’t competing with museums on ownership of objects, but it is indirectly competing with them for attention and web traffic. In 2018, Google reported soaring ad revenue on mobile search with a new model of Google search integration. Implementation of thousands of new data objects via the collaboration with museums can be a good example of how search integration works.

The app improved the art collection’s searchability and encouraged users to engage with a new product while collecting data on them.



Google’s Art Selfie App

Figure 5. –. Google Arts & Culture—
Art Selfie App © 2017 Google.
Retrieved May 2019, from: Instagram
#googleartandculture search result.
Screenshot by the author.

The app was quickly criticized, however, for employing facial-recognition algorithms, which are famously bad at parsing non-white features; reproducing what digital activist Joy Buolamwini has coined a “coded gaze.”⁹³ The app “matched” numerous portraits of people of color with stereotypical imagery depicted by the gaze white men: slaves, servants, or, in the case of many women, sexualized or eroticized imagery. Because Google mainly cooperated with Western museums, there is a small number of images of people of color in the Google image pool, meaning the search is less impactful and exemplifies what Safiya Noble called the “destiny of being linked to the status of the group.”⁹⁴ Researches show that facial recognition, the specific technology used by Google for the app, treats racial minorities unevenly and the consequences thereof take a variety of forms.⁹⁵ Another aspect of colonized or biased data is connected to the

⁹³ “Joy Buolamwini, a black technologist and the founder of the Algorithmic Justice League, which seeks to raise awareness of algorithmic bias, called it Coded Gaze. For *TechCrunch*, the writer Catherine Shu reported that nonwhite users were being confronted with ‘stereotypical tropes that white artists often resorted to when depicting people of color: slaves, servants or, in the case of many women, sexualized novelties.’ In response, Google cast the blame not on its facial-analysis algorithm but on art history. The app, the company told Shu, was ‘limited by the images we have on our platform. Historical artworks often don’t reflect the diversity of the world. We are working hard to bring more diverse artworks online.’” Adrian Chen, “The Google Arts & Culture App and the Rise of the ‘Coded Gaze,’” *The New Yorker* (January 26, 2018), see <https://www.newyorker.com/tech/annals-of-technology/the-google-arts-and-culture-app-and-the-rise-of-the-coded-gaze-doppelganger>.

⁹⁴ Safiya Umoja Noble, *Algorithms of Oppression: How Search Engines Reinforce Racism* (New York: New York University Press, 2018), 26.

⁹⁵ Computer scientists Timnit Gebru and Joy Buolamwini have discussed the design of facial recognition technologies that cannot recognize melanin. See their conversation at MIT Media Lab here: <http://gendershades.org/>.

consequences of forgetting as shown on a national level before. Viktor Mayer-Schönberger shows how the lack of data equality also plays out in the realm of what is remembered or forgotten, both on the individual level and on a national-cultural level.⁹⁶

The skewed representation of art and of the history of art can be unpacked in more than one way. It is situated within a wider field of critique of digital governance that studies the ways data is collected and processed. The Eurocentric aspect of Google's collection, as well as the aspiration to become a "global museum" can be understood on several levels. First, the already existing biases in museum collections are amplified by collaborating with European museums, many of which hold vast collections, backed by solid infrastructure and archive methodology that supports digitization, maintain a high symbolic capital, and host large number of annual visitors. Google's collaboration with encyclopedic museums like the British Museum in London or the Metropolitan Museum in New York is not only a nod of agreement with the colonial traditions they represent, but also an opportunity for these biases to be transferred on to the digital realm.

The tech ecosystem has replicated the technical and architectural infrastructure of colonialism with contemporary technologies: proprietary software, corporate cloud services, and centralized internet services to control and trade for their own profit. But postcolonial computation concerns go beyond the infrastructural and into the imaginative. They also involve aspects of participation and intelligibility, in the contexts of cultural encounter, particularly in terms of contemporary globalization and its protocols.⁹⁷ When looking at the cultural arena, we can identify the prioritizing of Western collections whose holdings are based on colonial history, as well as the clear preference for Western museums as first partners. The philanthropic nature of Google Arts & Culture doesn't include digitization of museum objects, only a non-monetary exchange with existing digital collection. A fact that leads to a euro-centric focus on well-funded institutions, which as a result are, once again, widely represented in the so-called "global museum."

⁹⁶ Viktor Mayer-Schönberger recognizes the virtue of forgetting in the age of algorithmic reproduction when "remembering everything" becomes the default practice and argues that we, as society, are not losing enough data and failing to forget. For millennia, he reminds readers, "human beings have lived in a world of forgetting. It would be naïve to think that leaving behind such a fundamental part of human nature with the help of digitization and technology would be a painless affair." See Viktor Mayer-Schönberger, *Delete: The Virtue of Forgetting in the Digital Age* (Princeton: Princeton University Press, 2011).

⁹⁷ Paul Dourish, Lilly Irani, and Kavita Philip, "Postcolonial Computing: A Tactical Survey," *Science, Technology, and Human Values* vol. 37, no. 1 (2012): 3–29, 5.



Figure 6. —. The Museum of the World—a collaboration between the British Museum and Google Arts & Culture. © 2016 Google Arts & Culture. Retrieved May 22, 2019, from: <https://britishmuseum.withgoogle.com/>. Screenshot by the author.

A nuanced example can be seen through the initiative’s first collaboration with the British Museum to offer a new digital platform titled The Museum of the World. On its website, in a page dedicated to the collaboration with Google, the British Museum invited users to have an “interactive experience, featuring some of the most fascinating objects in human history.”⁹⁸ Once a user reached the project’s dedicated site, a film-like title reads, “The British Museum presents...[flash title phase into]: Museum of the World! History connected.” The graphics take a central interpretative role, starting from ten bouncing colorful blobs nested together for few extra seconds. The real drama begins when those tiny paint puddles burst into thousands of vibrant dots, until the stellar explosion fills the entire screen with little dancing color points. Quickly, thin graphic lines start to connect data points like they were their own constellations emerged from the cultural supernova. The abstract presentation soon transitions into a dynamic diagram of time, geography, and cultural heritage, the Western taxonomy system. As it shifts from a networked universe to a to a diagram inspired by topography, the presentation offers the user a thematic search by categories like “art and design” or “living and dying” that constantly reassemble the dots and reorganize the knowledge based on the search. The data points moving abstractly across the screen can be read as data points of known Western representation schemes, organized by collectors of colonized knowledge in its current, neoliberal idealized image of the

⁹⁸ The British Museum collaboration with Google on the museum’s website: https://www.britishmuseum.org/with_google.aspx.

“network.”⁹⁹ The shift into digital agencies that aim to maintain the cultural institutions’ hold on symbolic power while gaining their own power as world makers.



Figure 7. —. My Met, My Life—Microsoft’s In Culture collaboration with The Metropolitan Museum, New York. Retrieved May 22, 2019, from: <https://www.microsoft.com/inculture/uploads/prod/2019/02/mylife-my-met.pdf>. Screenshot by the author.

The second leading player in the digitized museum field is Microsoft’s initiative In Culture, which the company vaguely describes as an initiative “celebrating innovation in art, music, sports, mixed reality, social good—and people who inspire us to make a difference.”¹⁰⁰ The phrasing is quite grandiose, offering a “digital renaissance” that would help “global audiences connect with art.” Here again, the model is not fully defined and is characterized by the desire to enter into new fields early, owning more data, using the collections in order to improve machine-learning and image-recognition technologies, as well as straightforward advertising. Microsoft is very active within the institutional sector, and the company is investing in various projects focusing on AI.¹⁰¹ For example, in a project called “My Life, My Met,” Microsoft collaborated with the Metropolitan Museum in order to “turn an Instagram feed into a work of art.” My Life, My Met uses AI to analyze Instagram posts and substitute the closest

⁹⁹ Wendy Hui Kyong Chun, “RNAL ARTICLE Networks NOW: Belated Too Early,” *American Studies* vol. 60, no. 1: Network Theory and American Studies (2015): 37–58.

¹⁰⁰ <https://www.microsoft.com/inculture/>.

¹⁰¹ In Culture currently offers audiences to “walk in painting using VR technologies and teaching the computer to produce one more Rembrandt masterpiece.” In Culture collaborated with Tate IK Prize to develop a program that uses machine learning to match images from the collection and current news. Microsoft also sponsored a Met and MIT hackathon, and since then continued to delve into artificial intelligence with the Met, in particular for a project in which the Met collaborated with the applied AI team at Microsoft on a proof-of-concept initiative called Art Explorer. This tool uses Azure Search’s cognitive search capability to enrich a user’s experience of the Met’s open access artworks by uncovering and providing new access points into the collection by enhanced cognitive discoveries, improved tagging, data enrichment, and analyzing of visual connections.

matching artworks from the Met’s open-access collection. No one would be surprised that the matching result to the Met’s famous Egyptian Temple of Dendur is an Instagram picture of the façade of Microsoft’s headquarters.

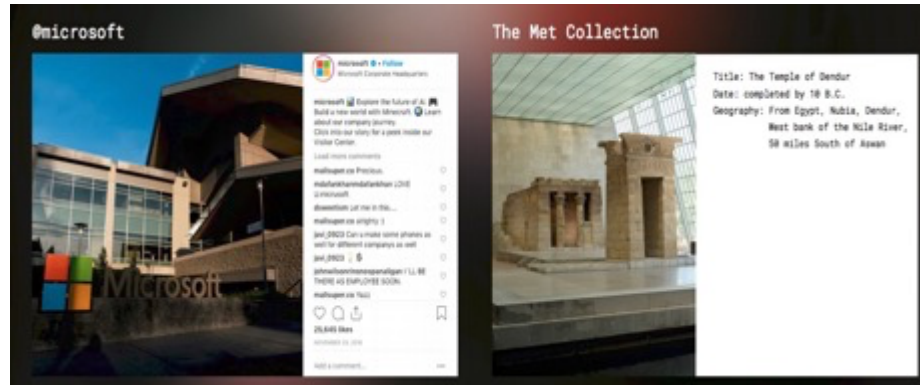


Figure 8. —. My Met, My Life—Microsoft’s In Culture collaboration with The Metropolitan Museum, New York. Retrieved May 22, 2019, from: <https://www.microsoft.com/inculture/uploads/prod/2019/02/mylife-my-met.pdf>. Screenshot by the author.

We should pay careful attention to the slow process of colonization of the digital sphere. It is not hard to imagine a near future where a privately owned nonphysical entity that provides storage solutions for millions of artifacts from around the world actively uses them as relational data points. But storage is not merely a site of materials but often more akin to “a place of complex mnemonic relations”¹⁰² that is never only practical or technical as it is often presented. As some museums are currently embroiled in the theoretical, legal, and logistical process of returning looted object to their original cultural heritage, the digital images of their entire collection are being captured by privately owned American companies that are slowly holding everything out there—and public knowledge is slowly coded into private data.

Within the growing phenomenon of the mass digitization of collections and the newly established standards of data storage by a third party, the act of capturing is slowly shifting from a technical procedure into a nonlinear, contentious practice. Once a digital image is included in a collection, and joins other files to become a bigger dataset, the essence of capturing shifts from the act of framing an image to that of framing attention. Capturing the attention of both the research community and the wider public is a science that has been mastered more by data curators than art curators. How can the age-old model of collecting and the practice of mediating

¹⁰² Giuliana Bruno, “Storage Space,” *e-flux Architecture* (November 2016), <https://www.e-flux.com/architecture/superhumanity/68650/storage-space/>.

it become informative when we move through the tangled reality where “solid things melt into the air, and clouds materialize as material infrastructure, when boundaries between experts and laypeople disintegrate, and where machine cognition operates on a par with human cognition on an increasingly large scale”¹⁰³ What can we learn from collections and the institutions that host them about the species of spaces that emerge in this new techno-political environment? Such spaces interlock vertical institutional hierarchies and horizontal networks in new political entanglements, yet to be framed. Bonde Thylstrup sketches a new ecosystem of knowledge connecting new tools and memory paradigms with inherited technical and ideological strands into subnational, national, supranational networks, without ever going through formal interstate systems.¹⁰⁴ The case of national collections that have been digitized and merged into a global art collection, a brainchild of a private initiative, characterizes the new configuration of mass digitization with equally flexible and adaptive infrastructures.

Current practices of data production, collection, distribution, and consumption raise a series of questions that go beyond physical archiving practices. To think about the politics of archiving is to recognize the historical roots of practices of data gathering, hoarding, and storing, while also remembering that “today’s seemingly streamlined interaction between human beings and our digital files and folders is every bit as messy, porous, and generative as archival encounters have always been.”¹⁰⁵ Museums were never neutral; neither are contemporary technologies. In tracing the history of datafication, Sabina Leonelli frames data as relational objects, not neural facts. Until the beginning of the nineteenth century, the efforts to collect facts and objects of study were spearheaded by visionary individuals who were able to quantify, systematize, and analyze fairly large amounts of data through simple and powerful classification systems.¹⁰⁶ Like the origin of collections, Leonelli shows that the early days of data systems were fundamentally private, and classification was essentially a system devised by wealthy individuals. The nineteenth century marked a shift when data as we now recognize it became institutionalized as social commodities: “[Data’s] intellectual, financial and political worth arose from investments, requiring regulation and oversight.”¹⁰⁷ Her survey of datafication history goes

¹⁰³ Bonde Thylstrup, *The Politics of Mass Digitization*, 22.

¹⁰⁴ Bonde Thylstrup, *The Politics of Mass Digitization*, 18.

¹⁰⁵ Bonde Thylstrup, *The Politics of Mass Digitization*, 18.

¹⁰⁶ Sabina Leonelli, “Data — from Objects to Assets,” *Nature* vol. 574 (October 17, 2019): 317.

¹⁰⁷ Leonelli, “Data — from Objects to Assets,” 317.

through the 1970s, when “almost every scientific field was building global, digitalized infrastructures for data sharing. The holy grail became the development of tools, such as computer models, that could crunch numbers at a previously unimaginable scale.”¹⁰⁸ Leonelli’s study is strikingly parallel to the history of collections. Bonde Thylstrup’s study of the politics of mass digitization connects these two histories. It is unsurprising that data harvesting and classification are currently going full circle back to private hands. Data is a sharable asset and its value and profit depend on use. Bonde Thylstrup describes large-scale digitization systems as messy and porous, and Leonelli concludes that exponent datafication and circulation is a fragile tendency: the more it moves around, the more vulnerable it is. Despite automation, both researchers show how data sets remain a human-centered process. We are always inside of what we make, and our technologies are inside of us.

Unstable and uncertain qualities are inherent to archival practices. As Safiya Noble states, “political struggles over the classification of knowledge have been with us since human beings have been documenting history.”¹⁰⁹ In recent years, uncertainty has become a mode of financial and political governance that implies a regime in which one could only ever govern through estimation. If modernity’s governance systems demanded scientific predictability, universality, and rationality, today’s globalized economies also celebrate uncertainties.¹¹⁰ The politics of knowledge play out in whose knowledge is captured, in what context, and how it gets deployed, where uncertainty is profoundly feared and yet simultaneously embraced as potentially disruptive. Bonde Thylstrup introduces the notion of uncertain archives:

The archive as a site of knowledge is fraught with unknowns, errors, and vulnerabilities that remain equally present in, and are indeed amplified by the sheer, constitutive scale of big data archives. In our view, the uncertainty endemic to archives is enhanced by the emergence of datafication, with its complicity in systems of neoliberal global governance, authoritarian regimes, and the massive dispossession that has been wrought by wars and climate change—a global context wherein uncertainty has become a function of disruption complicit with, rather than resistant to, power.¹¹¹

¹⁰⁸ Leonelli, “Data — from Objects to Assets,” 319.

¹⁰⁹ Safiya Noble, “The ethics of AI,” paper delivered at Digital Democracies Conference: Artificial Publics, Just Infrastructures, Ethical Learning (British Columbia: Simon Fraser University, May 16, 2019).

¹¹⁰ Nanna Bonde Thylstrup, ed., *Uncertain Archives: Critical Keywords for Big Data* (Cambridge: The MIT Press, 2020), 25.

¹¹¹ Bonde Thylstrup, *Uncertain Archives*, 25.

The issues raised by big data archives belong in the longer history of archives. Big data archives echo many of the techniques for organizing knowledge and archival subjects, between control and uncertainty, power and knowledge, and indeed, many writers have argued that while big data often appears to offer new, shiny, and automated methods that render older archival orders obsolete, big data in fact often repeats the epistemologies, injustices, and anxieties evident in previous archival orders.¹¹² At the same time, however, these highly networked systems operate on a planetary scale and challenge the definition of archives and collections, as data sets constantly multiply and shift form. Collections then become sites around which the wider infrastructures of their own production—both taxonomic and material—are put into question.

It is important to preface that unlike the Museu Nacional's highly subjective surviving ghostly collection of photos, the digital collection that is integrated into models of capitalized information aims to operate on the basis of objective measurements. The data being collected is appreciated through statistical measures that identify correlations and ultimately produce data that can be capitalized. In other words, if the former is based on relation, the latter is based on correlation. Even if a company like Google does not plan to collect direct profits from its cultural initiatives, digital collections constantly interact with other technical and social systems with distributed interfaces.

Afterness, Residues, Modes of Afterness

What's left after the fire is not a museum, yet not something else. It is a state that comes after the museum's operative structure has ended but while the orders that conditioned its existence are still active. It is an incomplete space that includes the physical and digital remains that were left behind as an enduring legacy that is archived but importantly also is left out of the classification system associated with museums and remained unclaimed by archiving systems. In this incomplete space of the museum's afterness the museum as a known space no longer exists, but it lives through its residues of what is left as acknowledged but also as the unacknowledged. The state of incompleteness, after the institution, represents a crisis in a network of meaning and knowledge production. It is a crisis enacted by the interruption of an error but sustained by the

¹¹² Bonde Thylstrup, *Uncertain Archives*, 18

intra-activity of its residues that are active in a space that has not yet collapsed and is still to manifest.¹¹³ Such a process is marked by the shift from witnessing “what happened” to reentering the space of the museum through the mutual vulnerability of its residues.

It is important to define afterness, and to spell out its relation to the residues, while differentiating it from what I’ve termed “modes of afterness.” As established in the introduction, afterness is a temporal, spatial, and epistemological category. The many examples in this chapter show how the demise of the museum ended the institution in familiar manifestations but survived by some unexpected social, technological, and structural phenomena that emerged from that very moment of the demis. An ad-hoc online archive, a virtual tour that lost its physical references, a social tattoo movement, the protests of Indigenous activists who lost their most substantial archive, physical remains that were found all over the city, the intervention of a media conglomerate that use its platform to tell the story of the museum’s end, or fragments from the museum databased that were copied without permission and shared on open-source platforms: these are the examples discussed in this chapter that show how the collapse of spatial order lives on as new political, spatial, and technological entanglements. The museum is a space wrapped in layers of ideology that is constantly framing several economies. Afterness emphasizes how the present cannot fully emancipate itself from the past but proposes that what has superseded allows critical access to the conditions that enabled it. These invisible affordances of the space are at the heart of the state that is afterness. Two examples of the affordances that lived after the institution ended are the unconditional commitment of the researcher community that lives on through the social and the symbolic realms and the collaborative modeling process that is leaning on dispersed pictorial, oral, and written knowledge in order to simulate objects that are gone but never gone-digital. These examples bring forward force field of emergence that does not have the clear beginnings and ends of linear temporalities and can’t be captured through a consistent spatiality. Through the framework of afterness, the museum expands spatially and temporally rather than drawing on its own specificity.

As a spatial category, afterness redefines access. Museum collections have been a manifestation of cultural superiority through access to rarity and controlled knowledge for

¹¹³ This idea of a time/space that is still to manifest draws on curator Patricia Margarita Hernández’s reading of Antonio Gramsci’s definition of crisis as an interregnum, described as caught between what has yet to collapse and that which cannot yet manifest. See Patricia Margarita Hernández, “Interregnum: between emergence and contamination,” https://artis.art/research_and_perspectives/interregnum.

generations. As these well-defined systems of access collapse they make room for connections between possible (but not yet existing) objects and other embodied, social and technical knowledge entities that can now be in direct contact. It is a change or a temporary blockage in the conditions of contact that redefines access to objects or data. Afterness comes after known patterns of spatial use were discontinued, while mental or ideological relations are made defunct. Afterness is situated in response to and against spatial and temporal expectations that are being taken away. Afterness is caught between what has yet to collapse and that which cannot yet manifest and is therefore charged with political potential.

Although I developed the term in relation to the museum, it doesn't rely on the museum's specific practices and can be applied or expanded to other modern institutions. Afterness is a mode of institutional dis/continuation. The residues are a temporal and political *site* of afterness. The close reading of the museum's digital residues shows that the millions of items that burned should not be referred to as a fixed form. The museum as a known space no longer exists, but it lives through its residues that are no longer the museum, still not yet something else. The residues are an incomplete dynamic process of stabilization and destabilizing of matter, technological infrastructures, embodied knowledge, political platforms, and social systems. The residues present continuity and interactivity between forms.

Modes of afterness are the set of techniques, modalities, and practices stirred up in the wake of the museum. The state of afterness is an abstract conceptual formulation that needs to be situated within a specific condition or inquiry. Using tools from performance, I offer several practices, or a methods, in order to activate it. These practices are what I call modes of afterness. The state after the museum allows the diffraction caused by the error to form new alliances and multiple forms of knowledge that are generated through the intra-activity of the residues. Modes of afterness could be speculative methodologies, propositions, and modalities of working in the state of afterness. I mainly focus on the residual space to develop and rehearse different modes of afterness. Common for all case-specific examples is the drive to shift from being a passive spectator of the error to allow enunciation, fabulation, and narration of the conscious between objects, bodies, and the *techne* that carry their info. Modes of afterness often form alliances between human and nonhuman actors that formed through *lacunae* in the datafied space.

Conclusion

The event of the fire at the national museum is a complex example that has profound implications on local social and political changing conditions and can be used to embalm current techno-political affairs where canonic institutional hierarchies are inscribed in the horizontal network infrastructure. I use this example to lay the theoretical foundations for the term afterness and to observe the event's specific residues as a site of afterness. The afterlives of the museum, its residues are an uncomfortable but crucially important space to inhabit, as it requires struggle and labor to share the space of incompleteness, without knowing what form it might take, and to sustain it in the present. Lepecki reminds us that the transmission and translation of the story are ways of taking care of its afterlives through gathering the pasts and many futures in the "shared urgency of the collective now."¹¹⁴ Because afterness as a framework is somehow opaque, it constantly needs methods of transmission and translation that help situate the theoretical framework within specific techno-political concerns. In chapter 2, I offer a close study of the museum residues which are the main site of afterness in this project. Moreover, I understand them not through their "thing-ness" value but through their capacity to *do* things. I understand them as an active form, or as a congealing of agency. I rely on these active qualities of the residues when I put forth performance-based methods as preferred way to engage with the state of afterness, which always needs to be situated in the collective now.

¹¹⁴ Lepecki, *Singularities*, 176.

Chapter 2:

Active Residues

The previous chapter focused on the digital afterlives of the Brazilian museum. In this chapter, I consider the broader range of material, habitual, and digital residues and address three questions: How are the leftovers to be understood and engaged with? What are the methods to attune to the residues? How can these methods potentially serve as a cultural model that is formed on alliances? The residues are protocol of relations. They refer to the multiplicity of habitual, affective, and epistemic entities that outlived the museum's objects. They include the actual physical matter that turned into gravel but expand to the often unacknowledged instructions, spatial conventions, know-hows, and layered histories that remained after the objects. The residues ferry the museum into a state of afterness but actively go against the museum protocols of the index. They act as placeholders for what has yet to collapse and that which cannot yet manifest.

This chapter alternate between theoretical and artistic writing and uses the exchange between the two as a method of attuning and defining the qualities of the residues. I first compare museum objects to their residues to suggest that the museum embodies the colonial history of separation, while the residues emerge from histories of contact. By history of contact I mean that unlike museum objects, the residues no longer operate within inherited orders, but they are no fully detached from them. Some of their constitutions, temperaments, and affordances are “dragged” with them from their original matter to the digital and information realm. If the object's meaning is often derived from its differentiation and separation from other objects, the residual state proposes continuous contact between entities. Secondly, I suggest that the residues should not be understood through their past, as objects, but rather as an active formation. They moved from being a form to be in-formation. Finally, I suggest that the entities which survived the museum can become a new cultural modality that doesn't operate on the logic of center and periphery, but array of forces and relations. The strength of the residues as a potential framework is precisely because the residues fail to fit within systems of ordered ethics and don't inaugurate a new paradigm of systematic reasoning. Because scattered, the residues represent new models of cultural modality that are formed on unstructured alliances between body, matter, and data.

This chapter includes a series of short texts weaved in its midst, which capture the transition from matter or bio-form to the digital realm through the perspective of six entities. Their titles are Meteorite, Water, Ashes, Skins, JPEG, and Cursor. Moving from geological matter to digital signifier, these short vignettes tell the story of the fire and its afterlives. This series of short texts, titled together *Testimonies of Things*, also captures qualities of the in-between-ness where entities can no longer be defined by their material status. Each of the practice-writing intervention includes an image and text, as a one unit designed together.¹¹⁵ Unlike the museum storage spaces that preserve objects in the best condition, the six entities I describe act like leaking storage, where objects can no longer be preserved in their stable form. Instead, the elements become possible hosts for a theory of the residual state where different bio and data matters share space, and possibly agency, with other entities that have also lost their autonomy. The theoretical writing frames the residues as a knowledge modality and is based on an active “listening” to the short text that give specific, detailed accounts. The *Testimonies* texts are an artistic writing practice and emerged as a response to my understanding of the residues as an active form, and my proposition that performative interventions are needed in order to attune and explore them. Such writing marks the place of an absence between a possibility and an impossibility to testify the multi-catastrophe which is the end of the museum. I tried to capture various entities as they change from one form to another and use the writing to raise questions about the stability of location, systems of transfer, and the destination of the object. The texts aim to interrupt the reading routine of the academic reader, while providing materials for the theoretical work. Just as I try to think of the residues away from museum coherency, these six short texts (re)activate the formal academic text, which is a convention of another institution of meaning making. The written vignettes pull the past into a different picture that thinks of materials through their traces. This is not documentation of certain objects but the mix of fact and fabulation.

Defining Residues

The museum’s residues exist as matter: ashes, dust, meteorite, carbonized bones, mollusks collection in glass boxes, melted tray wracks, vitrines covered with soot, 780 old Brazilian coins

¹¹⁵ In order to keep the design flow of the six intervention and differentiate them from the academic writing, I chose to include the plates information as footnotes.

found in the debris after the fire, a semantic compactor, smoked pottery, and dead hard-drives. They live through the flesh, bio-form, and the social body: burned skin, smoked lungs, tears, two mastodon tusks, eyelids, Indigenous ritual, ancient medicinal practices, the security personnel's routines, staff encounters, lost jobs, ad-hoc communities, and the unpaid museum maintenance efforts which are an undocumented labor of love. And finally, they are extant also through data: metadata of lost items, JPEGs and mp4s, documentation on personal devices, hashtags, 3D scans, technical protocols, file names and index numbers, IP addresses, and digital platforms. The residues are the actual and virtual post-error form of the body-data-matter, which is always unstable.

Just as absence can sometimes be more meaningful than a presence, the invitation of being with the lacunae and presences of the residues holds the possibility of becoming an audience of the state of incompleteness. The collection's aftermath shows how the removal of the object leaves behind the multiplicity of its conditions. The residues no longer respond to an inherited index even though they carry traces of colonial thought. They fail to fit within past systems of ordered value, and don't belong to a new model of systematic data reasoning. My writing about the residues crucially avoids the nostalgic longing of colonial order and is equally pessimistic about the technological solution of "digital care" (or violent care) provided by corporate projects like Google Arts & Culture, which in and of itself is a colonial project that posits a problematic future for lost archives. The residues hold some things that were unintentionally left behind in the burning process.

The residues are an interruption in the institutional rationale and the fable of its origin. They can't be collected or exhibited. Although dynamic, they are not finalized or perfect and therefore will possibly fail the selection or curatorial process. Through various spatial apparatuses and narration techniques, the museum presents itself as a whole, as a self-contained system of meaning. The residues are defined by being left after something else. Therefore, they are also defined by their incompleteness. They are actively preempting the museum's mode of thinking, which is centered around a small but fully indexed world within a world. They are the incomplete version of this model. Importantly, the residues are not incomplete because they are still in the process of becoming complete. They are also not incomplete for the most part, as a quite unintentional form of refusal, as in quitting or turning to something else. Like the former, they are temporal but instead of moving toward wholeness, their movement inhabits the

incomplete state that comes after. They are not pre-complete. Their incompleteness is post-complete. Like the latter, their incompleteness is also an attitude. The incomplete residues suggest dropping off the entire concept of the indexed world toward a different mode of being, which cannot be indexed. They are improper structures and warped procedures. Because of that, they are not comprehensible. Denise Ferreira da Silva writes: “Without structure and its parts how are you to know what to improve? What needs improvement? What has already achieved it? Without a procedure and its result how does the whole subsist? How do the parts combine to produce an effect? What keeps on going on its own? And how? How can improvement take place without a what and a how?”¹¹⁶ The residues survived the fire, but they also survived the museum. They are improper structures that leave many of the questions of what and how open. They are confusing. But their ambiguity can possibly teach us something about surviving the dead hand of the past.

In the residual state, museum objects are not retrievable except as traces. But the residues can no longer trace their affiliation to the objects and therefore gain an independent, possibly original status. This suspension of the origin is foundational as it challenges the connection between originary and value. This status preempts the museum’s constitutional meaning system. The residues then become not only the conditions that survive after the object but the condition of the original that is already present at the moment of its constitution, as a museum object. The moment of collection is already a moment of difference and deferral.¹¹⁷

Although the residues are a direct result of the museum’s end, reading them through the theoretical framework of afterness they become accomplices to the museum’s destruction

¹¹⁶ Denise Ferreira da Silva, “Forward,” *All Incomplete*, eds. Stefano Harney and Fred Moten (Colchester, NY: Minor Compositions, 2021), 6.

¹¹⁷ Jacques Derrida’s notion of the supplement captures an element or activity that simultaneously completes a thing and sometimes may replace it, play the role of substitute for it, and therefore be a threat for it. The supplement, he argues is a “terrifying menace” in its indication of absence and lack but also “the first and surest protection [...] against that very menace. This is why it cannot be given up.” The sequence of supplements initiated by the object “itself” produces “an infinite chain, ineluctably multiplying the supplementary mediations that produce the sense of the very thing they defer: the mirage of the thing itself, of immediate presence, or originary perception. Immediacy is derived.... The play of substitution fills and marks a determined lack.” Derrida notes that “the indefinite process of supplementarity has always already infiltrated presence, always already inscribed there the space of repetition and the splitting of the self.” The supplement, however, is not an optional add-on to the original and not its direct replacement. Derrida radically argues it is the condition of the original, that is already present at the moment of its constitution. The moment of collection is already a moment of difference and deferral. The supplement doesn’t enhance something’s presence but rather underscores its absence. During supplementation something appear from one perspective to be whole complete and self-sufficient with the supplement acting as an appendage from another perspective it fills a hole within the interior of the original. The quotes and some of the text in this note from: Amelia Jones, “Presence in Absentia,” *Art Journal* 56, no. 4 (December 1, 1997): 11–18.

because they hold an existential alternative of not being a whole. The residues are enacted by the end of the museum model which represents some wholeness that is achieved through a closed system of classification but they are not the whole's parts. They represent a form of living with destruction. They are scattered like gravel or uploaded data files, sticky like dust to wet linens, and uncapturable like rage and disappointment. They are not puzzle pieces waiting to be matched, nor a clue in a mystery tale. They are not missing their own Garden of Eden, that is, the all-knowing museum. The residues survived after the museum but could not adapt to the platforms hosting them. Their migration between orders is not complete. Their improper structure insists on the impossibility of them ever becoming complete. If we are to ask where the residues possess agency, I argue that its origin is not only their incompleteness but through the way they embody their partiality.



1. Meteorite¹¹⁸

Pedra do Bendegó travelled from space to the Brazilian region of Bahia, where it rested still on the ground for several thousand years. An irregular mass, 5,360 kilograms of iron covered by a ten-centimeter layer of oxidation, it has numerous depressions on its surface and cylindrical holes parallel to its greater length. Part of its lower portion was lost during landing and left a smooth surface on one face. Besides iron, the meteorite also consists nickel, cobalt, phosphorus, and traces of sulfur and carbon in much smaller quantities.

Ever since it first came into contact with human eyes, the iron has been on the move again. A boy called Domingos da Motta Botelho was grazing cattle on a farm near what is now the town of Monte Santo when he first spotted the meteorite in 1784. Even considering the slow local movement of people and commerce, the news of the finding spread quickly. In 1785, the region's governor, D. Rodrigues Menezes, arranged for the meteorite to be transported to the city of Salvador, however, its weight made transportation difficult. The cart it was placed on lost control and the meteorite fell into a dry stream bed, 180 meters away from the spot where it was initially found. The meteorite didn't travel with the people, but the people started to visit Bendegó. The London scientific academy the Royal Society published A. F. Mornay's drawings of the meteorite in its periodical, *Philosophical Transactions of the Royal Society*, and the first reproduction of the metal rock started to orbit the visual sphere. Seventy years later, the meteorite was lifted and rolled to the National Museum of Brazil and stopped right by the door.

In the first room of the museum, past the armed personnel and the metal turnstiles, it rested on a pedestal for 130 years. Always the first thing in sight, the first image taken. Then the fire happened. No major damage. Standing still. Long lasting after the museum. The first room, behind the metal turnstiles, all covered with ashes from burnt neighboring objects. Images were uploaded and downloaded,

¹¹⁸ Figure 9. -. Discover the National Museum of Brazil—Google Arts & Culture. Retrieve June 18, 2021, from: https://artsandculture.google.com/story/RAVxwQA_-ABfJw. Screenshot by the author.

links were shared, posts were posted. Pictures transmitted up toward space and back down to the Brazilian earth. What are the means with which the earth sees? After the ashes and images rested, I clicked on the link and entered the museum again. I passed the two blurry-faced armed personnel and glided through the metal turnstiles. On my way to the staircase, I dragged my cursor around and above Bendengó, smearing glitches with depressions and cylinder-shaped holes, forming a geo-digital irregular mass of image-matter.

Active Residues

The museum's residues of body, data, and matter shouldn't be approached as an object form. I argue that the residues are much more than their former material status and should be understood as an active network of relations. Keller Easterling's ideas on infrastructural "dispositions" and Sara Ahmed's notion of emotional "stickiness" can help situate the conceptual proposition of the residues. The writers turn their focus away from appearance toward activities and potential agencies that often go undetected or unexplained. Disposition, Easterling writes, "is the character or propensity of an organization that results from all its activity. It is the medium, not the message."¹¹⁹ Easterling's concept of disposition provides access to the undeclared activities of material, spatial organizations and infrastructural arrangements. Although the residues, being the message, appear on the surface, they are rooted in a greater societal shifts. One may only recognize the ashes as the fire's residues, but the roots of the material traces are deeper. They are active under the surface: the new underwritten rules of public support, the environmental crisis, and the intangible change toward algorithmic governmentality. Easterling's writing is a study of the infrastructural principles that drive current shifts in spatial conditions. Unlike infrastructure, the residues are scattered and inconsistent, but I found Easterling's understanding of the disposition as active form suitable as it marks the residues not simply as physical remains. The idea of active form suggests that we should not approach the residues through their form or materiality but as "markers of unfolding potentials or inherent agency."¹²⁰ Understudying the residues as an active form is different from the notion of the modern "ruins" that presents more of a fixed relation between the past and the present and connects affect and object. The residues are not a closed system, but always "coming with." Easterling's idea of the active qualities that shape the physical realm is important in detaching our understanding of the residues as a formal

¹¹⁹ Keller Easterling, *Extrastatecraft: The Power of Infrastructure Space* (London and New York: Verso, 2016), 17.

¹²⁰ Easterling, *Extrastatecraft*, 17.

entity. The connection between Easterling's interest in infrastructure and Sara Ahmed writing about the politics of emotion is not obvious, but Ahmed's notion of "stickiness" is important in our understanding of exactly how the residues are active. Ahmed uses "stickiness" to understand the political circulation of emotion, language, and bodies. Ahmed's idea of affective adhesiveness is helpful when analyzing the qualities of the residues, which carry the potential of other life with them: "stickiness involves a form of relationality, or a 'with-ness', in which the elements that are 'with' get bound together. [...] Some forms of stickiness are about holding things together. Some are about blockages or stopping things moving. When a sign or object becomes sticky it can function to 'block' the movement (of other things or signs) and it can function to bind (other things or signs) together. Stickiness helps us to associate 'blockages' with 'binding.'"¹²¹ Like stickiness, the organizational dispositions are accumulative; they are the results of a series of entangled activities. With Easterling and Ahmed, I approach the residues not through their appearance but through the inherited agencies that are coming with the appearance and can't get unstuck. These are active, relational qualities that keep unfolding after the objects are gone.

The residues don't have form the way objects do. They are the surplus of affects, techne, and affordances that are dragged with the objects. They are active formations, the carriers of the know-how. In the case of the fire in the national museum, the objects were heated, melted, or burned, and the residues, whether physical or digital, aren't only what appears to have survived but their inherited agencies, entangled histories, and potential affordances. In their "leftover" form, apart from their material form, the residues are fragments, but they hold the potential of wisdom and access to the unknown. The museum was underfunded for a long time, but it was a safe home for many communities that co-exist under the same roof. In its dysfunctional institutional state, the museum became a safe space of co-existence. With the carelessness fire this precarious ecosystem shuttered. Rage is a residue. Fear is, too. Despair is a residue. The air quality after the fire is a residue, as is the hum of the broken air conditioner that short-circuited and started it all. The throb of exhausted tools that represent a greater systems of ordering knowledge on the verge of collapse. The residues are the multiple conditions and communities that are drawn together, within unequal power relations, around collections. Residues are not dead but exist in a level of silence. They are not past but need attuning in order to be recognized.

¹²¹ Sara Ahmed, *The Cultural Politics of Emotion* (Edinburgh: Edinburgh University Press, 2010), 9.

They have active potentials, but they are messy. They need an active method in order to engage with them.



2. Water¹²²

The line for the paddleboats was long. There were birthday tables decorated in matching colors and helium balloons. Young girls were posing in front of their cameras and tagging the Quinta. It was September, and spring was finally here. Quinta da Boa Vista was a farm surrounded by mangroves and swamps, but Elias António Lopes, who built a manor house on top of its hill, had to donate it to the Portuguese Prince. The gift was much appreciated. Up the hill, the manor became a palace, that then turned into a museum of mankind. Down the hill, swamps turned into roads, and lands were curved into lakes to decorate the view from the palace. Animals were brought in from many parts of the world to roam around it. Peacocks, toucans, and swans. Two man-made containers of wonders and pleasures, open to some bodies. Then the fire happened. Uphill, worlds were burning fast, wing by wing. The first responders fighting the fire were hindered by insufficient water. The two fire hydrants next to the museum had no supply. An error. Everything slowed down. Never-ending minutes in the head of Colonel Roberto Robaday, who had to act fast. How do you extinguish a fire without water? It took two more hours until the firefighters started to pump water from the swamp. The Pedalinhos lake, where peacocks were piercing, and toucans were singing, and the swan-shaped paddleboats were always waiting. Facts and fables were rigged. Hoses and gate valves rolled and clicked, stretching the water between two containers of wonders.

¹²² Figure 10. –. “o que é pedalinho” Google search. Retrieved January 23, 2022, from: https://www.wikiwand.com/id/Perahu_pedal. Screenshot by the author.

For some time, the pressure in the fire hydrant was low, but the high pressure of real estate and industry developers didn't stop pumping, bringing the system to the brink of collapse. This is a dry season for fire hydrants, and water pumps, and local reservoirs, and natural watersheds. For some time now, bodies of water have slowly been dehydrating under official priorities. For modern water, dry became a condition. The museum was an old building. An old building with all sorts of old lives, old debts, and no liquid assets. The government support dried out long ago. The city was busy building a brand new "museum of tomorrow." It was a question of liquidity. Fire was the method.

Dragging Affordances

The state of the residues is made up of visible and hidden entanglements, temporal configurations, data, events, affects, and values that are informed by patterning shaped from changes in orders that now can't get "unstuck." Residues are never clean. Limitations and affordances from other lives are always dragged with them on the supposedly revolutionary present.¹²³ Following Ahmed's stickiness I suggest that the dragging movement of the residues is a representation of histories of contact between bodies, object, and information. Thus, afterness is a temporal affect that "emerges from previous histories of contact."¹²⁴ Unlike the museum that is based on practices of separation of objects from their original environments and from one another, afterness emerges from the accumulation of cultural transactions and the meaning and affective resonance that is collected during this process. The active, unorder and adhesive qualities of the residues emerge from the collapse of the museum's system of orders, and represents entangled histories of contact that are no longer available to trace.

The traffic of the residues along the economic, affective, and visual flow is slowed down by the deep past and colonial past. The residues' state of afterness represents the failing to arrive into a new state. Their afterness is a mode of becoming-with. I shared an image of the Bendego meteorite as seen on the Google virtual tour. The mass of iron was reshaped by the movement of the cursor that was smearing glitches with depressions and cylindrical holes and forming a geo-digital irregular mass of image-matter. I want to drag the geo-digital image into the chapter in

¹²³ Elizabeth Freeman discusses the notion of temporal drag through the concepts of chrononormativity, the use of time to organize individual human bodies toward maximum productivity; temporal drag, the visceral pull of the past on the supposedly revolutionary present; and erotohistoriography, the conscious use of the body as a channel for and means of understanding the past. Elizabeth Freeman, *Time Binds: Queer Temporalities, Queer Histories* (Durham, NC: Duke University Press, 2010).

¹²⁴ Ahmed, *The Cultural Politics of Emotion*, 265.

order to look at the immaterial and material knowledges that remain unclaimed after the event of error.

The residues' movement is not smooth. They are not easily transferred between physical and digital, past and future. They are dragged and that dragging movement, a digital heavy lifting, also slows them down. The residual state carries information through transductive movements, fluid mutations, and transformations. They are constantly "in-formation."¹²⁵ It proposes a space that goes beyond the physical-digital binary. The uncertainty of the residues allows access to other times, like the museum deep time, or colonial time, and speaking from the mouths of many: the living and the dead, the collectors and the collected.

The unstable state of the residues makes it easier to note the affordances they drag with them and highlight their potential to reside in-formation. The residues are not what's left after the end of the object, but the field of potentialities that emerge from it, after the museum. New kinds of connectivity can emerge from this field of potentialities.¹²⁶ The system of continuous transformation not only presents the afterlife of ordered culture, but also offers a different form of continuity that is organized around transformation. Always dragging other forms of life and culture that stick to them, the residues are affected by the deep movement of institutional histories, behaviors, and norms that run under the surface of appearance.

¹²⁵ By transduction, according to Gilbert Simondon, "we mean a physical, biological, mental, or social operation, through which an activity propagates from point to point within a domain, while grounding this propagation in the structuration of the domain, which is operated from place to place: each region of the constituted structure serves as a principle of constitution for the next region." Gilbert Simondon, *L'individuation à la lumière*, 30, quoted in Muriel Combes, *Gilbert Simondon and the Philosophy of the Transindividual* (Cambridge, MA: MIT Press, 2013), 6.

¹²⁶ In their writing about cultural topology, Celia Lury, Luciana Parisi, and Tiziana Terranova propose that the dislocation and the promiscuous circulation of cultural residues represent "relations of continuity and discontinuity are being made and unmade by describing the emergence of new kinds of connectivity, orderedness and limits... that characterize contemporary culture." Celia Lury, Luciana Parisi, and Tiziana Terranova, "Introduction: The Becoming Topological of Culture," *Theory, Culture & Society* vol. 29, no. 4–5 (2012): 7.



3. Ashes¹²⁷

Through Rio de Janeiro's night sky, ashes flew up to the air and fell on the ground. Burnt anthropoids and ancient cockroaches dropped in backyards. Employee surveys and rejected paperwork fell quietly on stoops and balconies, like foliage. Index cards landed on the neighbor's front porch. Burnt particles from other lives took local flights, and touched down much closer to home. Ashes scattered and spread out the word, like silent witnesses carried by the whispering wind.

Pedro Luiz loves ashes and sarcophagi. Ashes are the best storytellers and sarcophagi are the best mystery. An expert on Egyptian monuments, he was brushing dust for a living. If you can call it a living. His work at the National Museum was like living in a giant, Russian doll-shaped sarcophagus. A memory chamber of all sorts of things that were once alive and are now kept in jars and glass cases, registrar forms and long lists, catalogues and exhibition shots, and photocopies. Many photocopies. Also, slides and films, tapes and floppy disks, and CD-ROMs and memory sticks that sometimes reminded him of specters. Moving between rooms and boxes, he imagined his workplace is a giant beast fed with dead life-forms and memory forms, each has a copy. But for Pedro, death is where life is, so life was good.

For a while now, Pedro has been using his tools to excavate his own workplace. Coffins and amulets, staples and line levels, and spectral memory sticks. New ashes consumed old ashes, new death consumed old death. The matter that recorded the evidence of violence is devoured by its own materiality. Necro-metabolism. Pedro brushes, measures, and puts things in boxes. He thinks of the Sanöma people, who live in the Yanomami land, who destroy the marks of the dead by consuming their corporality. The meticulous practice of remembering in order to forget include

¹²⁷ Figure 11. –. Engle, Douglas, A fragment of a damaged stone slab recording the deceased, 11 May 2019, photo. Retrieved June 18, 2021, from: <https://www.bbc.co.uk/news/world-latin-america-48023691>. Screenshot by the author.

drinking the liquids that came out of the deceased, pulverizing their bones, consuming the ashes, and eating the rest, mixed with banana porridge. The dead have a right to be forgotten. Their own deeds—forget them; their own lives—erase them; their belongings must be burned. The metabolic system is a hell of a mnemonic device. Pedro sticks boxes in rooms. A colleague tells him, “The original pieces that were there are part of our conquest through the struggles of our loved ones who are not here. Now we have memories, more than we live because they are live for us.” And Pedro thinks of living with them, with us, dead or alive. Ashes, ashes, we all fall down.

What survived in a digital form gives us a glance into the way collections are situated in new forms of algorithmic governmentality. In the introduction I presented three axes of transformation between the modern and data-driven cultural institution proposed infrastructural shifts through museum practices. The shift between collection to meta-collection represents an institution that no longer focuses on material collecting but on the collecting and leveraging of data; the shift in mode of governmentality, where the citizens of the nation-state are now recognized as users of a global corporate economy; and finally the harnessing of the material world to create political cultural knowledge, which I describe as a shift from colonialism to digital colonialism. Although these greater shifts are not directly activated by the set of events in the Brazilian museum, it is important to briefly situate them in the local case as part of my understanding of the residues not only as material remains of objects but as active entities that work in relation to the broader institutional shifts that shape the cultural institution from underneath.

The violent aspects of caring for the object travel from physical to digital lands as both the looted object and its representation are controlled by the museum. The case of Brazil’s national museum provides an important example. In an interview with cultural anthropologist João Pacheco de Oliveira, who specialized in Ticuna culture, the anthropologist made a plea for Western institutions to share digital images and metadata of looted Brazilian objects.¹²⁸ The lack of access of communities and local museums to the digital files held by Western museums mirrors how power relations are maintain between North and South and how aspects of

¹²⁸ The anthropologist made clear that there is no expectation for the physical objects to be returned, as the museum won’t even have the facilities to host them.

disposition converged from the material arena in the digital one. For Indigenous communities, the fight for owning their own representation is shifting into the digital realm.

The burnt museum that survived as a Google-powered virtual museum is a second example of digital colonialism, where artworks are exhibited, histories are told, and cultural memories are assembled on a foreign platform. The fast-growing institution is becoming the new hegemony of viewing and learning, leaving the old method of site visits as secondary to even bigger, stronger, richer, and, most importantly, concentrated culture monopoly. The notion of universalism born of the European Enlightenment reappears as a new form of colonialism or the cultural face of economic globalization. In the Google's "world of images," art is unified and devoid of conflicts. The Indigenous objects that were looted are now twice removed: first to the museum that was built by a European colonizer and then by google who are the American digital colonizer. The poetic justice done on the platform to expose Indigenous material culture into a greater public feels bittersweet as it calls for diversity through images while actively improving its "zero-click search"¹²⁹ technology that ensures users will never leave Google's site. The celebration of foreign cultures through the presentation of a small number of images not only erases its complexity but also enhances a sense of form of digital tourism, a saturated colonial gaze that identifies the visual legacy of Amazonian cultures as "exotic" and emphasizes a sense of their "otherness."

The other two shifts between collection to meta-collection and between the identity of the citizen-visitor into identity of the user are can also be understood through its residues. The former visitor, now content-producer, is at the heart of the user-generated Wiki collection where people who either visited or worked in the museum congregated through the Wiki platform to share and commemorate the museum. The links they all shared became the only alternative museum collection after the fire. This is an important example of how the user identity gave agency to users to act in response to the helplessness they felt in the national arena. We should not forget, however, that the images that were circulated between devices, commercial platforms, and social media converted into tradable assets where individual experience is used for financial gain. Lastly, the digital afterlife of the museum, carried through individuals and corporations, also reflects the status of the collection: how it is now a set of interfaces between digital artifacts,

¹²⁹ Around 50 percent of Google searches don't lead to a single click on either a paid advertisement or an organic search result.

databases, material relics, and many data points on various platforms. The event of the fire, although it shifted the site of data collection, still suggests that each institutional collection is a hosting site for multiple collections.

The residues unfold potentials or inherent shifting agencies. They drag with them to the space “after the museum” organizational dispositions that are the results of a series of entangled activities and cultural shifts. My work proposes a shift in focus from objects to relations developed in response to the shifts in museums’ status discussed above. Such a theoretical shift enables the loosening of the fixity, distance, and perspective that went with the classical division between subject and object.¹³⁰ The potentials of the residues as agents of this shift become crucial exactly because they are always relational. They drag with them the relationship between potentials. Reading the end of the museum through the potential of the residues and what they drag around with them marks a possible emergence of new kinds of connectivity that go against the classic system of indexical order and instead open up to an infinite variety of “Escher-like system[s] of exclusion and inclusion.”¹³¹ The residues mark a possible movement of the collected objects out of the museum and into the environment.

¹³⁰ Scott Lash, “Deforming the Figure: Topology and the Social Imaginary,” *Theory, Culture & Society* vol. 29, no. 4–5 (2012): 261–287.

¹³¹ Lury, Parisi, and Terranova, “The Becoming Topological of Culture,” 6.



4.Skins¹³²

Tropical climate is good for composting, not so much for mummies. But for 600 years a twenty-five-year-old woman was buried in a cave in Minas Gerais until Maria José de Santana, the owner of a coffee farm, discovered her in perfect condition. Her skin still stretched like a gift wrap over her body. It was the nineteenth century, so Maria gave her ancient young sister to Dom Pedro II, who added the gift to his collection. It wouldn't be the first skin that was given to Dom Pedro. Nor the first body. A Chilean man, who was buried seated was still sitting in a glass box. His knees are drawn under his chin, like a shy boy. His skin covers his body like a dry container.

Then the fire happened, leaving scars all over. Inside the hazy galleries, a new skin starts growing. Skins were leaving their toxic bodies, growing like a free creature inside the great halls, smells of killing. The skin of the young woman from Minas Gerais comes off her bones; the Chilean mummy peels a layer from its folded cover; the mummified cat sticks to the snakeskin; burnt skins grow their own living mesh; and people started to ink the museum on their own skins. MN 7712-V. New black ink on the arm of paleontologist Beatriz Hörmanseder marked the serial number of a crocodile fossil they were studying. 06-06. A Quaternary Geographer, Suzanna Matos shared her birthday with the museum. The ritual of marking started small and grew via the social epidermis into a small movement, #museunapele. Entomologist Ivyn Sousa tattooed her lab's window bars, where toucans regularly landed. Architect Marco Hermann who planned the roof renovation traced the blueprint of the museum façade. He kissed the ink before

¹³² Figure 12. –. Bióloga da sessão de Museologia do Museu Nacional. Museu Nacional na Pele, Projeto voluntário de tatuagem do Museu Nacional. Homenagem na pele de professores, funcionários, alunos e ex-alunos. Retrieved May 22, 2021, from: <https://www.instagram.com/p/BpcOb8AhupH/>. Screenshot by the author.

it dried. Their skins were faster than their words. A social skin was coming together, wearing the museum of mankind. The skin is witnessing. The rage is inked deep.

The Space-Time of the Residues

The residues cannot be fully indexed. How does one index the status of an out-of-focus photo of an owl against a wall painted blue that used to represent the sky in a museum diorama? What is the status of the index number of an object that no longer exists, but the number itself is now inked on the arm of a former student? Crucially, the decay of the index is not connected to the image quality, whether it is rich or poor, original or copy. The argument is focused on its status, buffered between entities and making use of an image or object as an apparatus of a certain governmentality defect. If the residues are both material and data, but also sometimes bio-matter, still not fully any of these, their status is unclear and therefore can't be simply put to use. This elusive status makes them a failure of the index logic. They are not unindexed, they are unindexable. Residues cannot be simply datafied. They refuse a data shift or a simple digital transfer from analogue to digital, or from material to immaterial form. The residues form an ecology of leftovers that is habituating the space in between eras and orders. Residues survived after the museum but could not adapt to the platforms they are hosted on. Their migration between orders is not complete.

The residues cannot be fully located. I carefully drag my cursor through the Google virtual tour. A mummy of a young woman, with her knees folded under the chin, seated on a Lazy Susan that never rotates. Boxed within herself, she is fitted in a clear plastic vitrine, where the Google camera, with its multiple lenses that wish to remain untraceable, is reflected. Also in the picture are two cursors: a hand that points one's attention to the object and an arrow going elsewhere. Daylight is coming in from the window, a yellow light from the vitrine, and the screen's blue light saturates the scene, making it impossible to white-balance. Where are we? Ancient technologies of preservation collapse into the modern ones and diffract into the digital capturing that often carry a new form of violence.¹³³ The location of the residues is not fully in

¹³³ The notion of violent care was coined by Thom van Dooren in the context of animal studies and developed by artist Morehshin Allahyari in the context of digital heritage. Allahyari argues that the notion of care is focused on the rare while ignoring the everyday. Thom van Dooren, "A Day with Crows - Rarity, Nativity and the Violent-Care of Conservation," *Animal Studies Journal* vol. 4, no. 2 (2015): 1–28.

the present but in another temporal and political space of afterness that is local but is the consequence of globally produced problems.

The residues don't operate simply as old or new but propose a complex mnemonic relation that acts as interim between times. The residues live in the deep time of the meteorite, the matter time of dust, the colonial time of data management, and media time of your personal device. As Rebecca Schneider has shown, they are active in many times, and in the meantime. The activation of the residues' nonlinear, multidirectional temporality happens *through* matter, data, and embodied forms. Put differently, the residues carry the weight of time.

The residues accumulate multiple meanings through their relation to matter. They are *a bundle of matter*. Schneider, as well as media archeologist Jussi Parikka, focus on the notion of the remains to propose that performance and media, respectively, keep living across time through matter, whether it is a bio-matter or geo-matter. Since both writers used the term "remains," I use it in the following section. Both terms—remains and residues—refer to what is left after the subtraction or removal of a part and are often interchanged. My decision to use the term residues in this project has to do first with common use in processes that are related to combustion and burning. Residues are specifically relevant to what survived from the encyclopedic museum because it implied to whatever may be left of a former whole, often a previously intact whole. In the story of the Bendego meteorite, the iron keeps living across time through matter and via the digital realm. In my creative writing I located both the past and the afterlife of the geological matter in media, or in the new hybrid space of the geo-digital. Parikka, on the other hand, locates both the past and the afterlife of media in geological matter. He notes that electronics are enabled by the extraction of minerals and their afterlife as media waste is turning back to synthesized matter. In performance, Schneider argues, the remains take a form of bio-matter. The performance's bodily remains are placed in a network of body-to-body transmission of evidence, affect, and enactment across generations. Through Karen Barad, Schneider understands the work of the remains as an "intra-activity": "matter does not refer to a fixed substance; rather, *matter is substance in its intra-active becoming—not a thing, but a doing, a congealing of agency. Matter is a stabilizing and destabilizing process of iterative intra-activity.*"¹³⁴ Following Barad,

¹³⁴ Karen Barad, "Posthumanist Performativity: Toward an Understanding of How Matter Comes to Matter," *Signs: Journal of Women in Culture and Society* vol. 28, no. 3: 801–831, 822 (emphasis in the original), cited in Rebecca Schneider, "Slough Media," *Remain*, eds. Ioana B. Jucan, Jussi Parikka, and Rebecca Schneider (Lüneburg: Meson Press, 2019), 94.

Schneider suggests that the remain can no longer be captured through the “inter” prefix acting between binary oppositions. The “intra” as prefix, she claims, disorients binary terms, such as live and dead or animate and inanimate, and instead, destabilizes fixed categories of matter and time. The destabilization of fixed category is echoed also in Jussi Parikka’s observation mentioned earlier that the residues are both what *left behind* as enduring legacy, and which is *left out* of the classification or the archive. Like Schneider’s performance remains, the museum’s residues are relational entities. Defining the notion of the residues through a dialogue with Parikka’s writing about media materiality and Schneider’s study of performance afterlife situates the residues as intra-activity between matter, flesh, and information that keep mutating in relation to dynamic forces.



5. JPEG¹³⁵

A fragmented and eclectic digital collection survived from the ruins. The images, all taken by small interest groups and visitors, are now stored on their personal devices or on cloud services and are shared via social media. The photos became a portal to the very different data they were slowly aggregating: other images they saw, locations they checked in at, a personal library organized by geolocation or facial recognition software, social networks, and other data points. Each file is named by its contributor. One is named “mollusks shells.jpg,” the other “Sofia and Dino11.jpg.” A new princess in what once was a palace, then a museum, and now a library of lossy-compressed digital images. Copies in motion, squeezed into a 1:10 ratio. Ripped many times over. Does a JPEG has a memory? There is also a virtual tour, a product of Google Arts & Culture, where one can visit the no-longer-existing museum. No more boxes and cabinets, the objects are now robbed of the capacity to be present. They are stored through the same interface as your street.

¹³⁵ Figure 13. –. Sofia and Dino, Upload to Wikimedia Commons via MuseuNacional campaign. Retrieved December 5, 2019, from: https://commons.wikimedia.org/wiki/Category:Uploaded_via_Campaign:MuseuNacional Screenshot by the author.

The residues maintain a complex relation with appearance. The unknown Sofia and her monkey made a quick appearance in the museum that might have made a short impression in the family WhatsApp group but nothing more. The long-extinct Dino came back into being through museum practices of recasting and was wowing audiences ever since. A *Maxakalisaurus topai*, the first large dinosaur fossil found and assembled in Brazil and the largest object in the museum's collection. The dinosaur was discovered by paleontologists from the National Museum in the region of the municipality of Prata, in the Triângulo Mineiro, in 1998. It was nicknamed Dinoprata. After the fire, the assembled Dinoprata saw its second extinction, leaving behind only a few bone-shaped metal casts, some photos, and many memories. But it is the persistence of Sofia's parents who made the two elements in the twelve uploaded photo files equally captured and represented. Their mutual moments of appearing and disappearing are snapped and eternal in equal measures. Schneider and Parikka show how performance and media stay active long after their presentation is over through the "sedimented acts and spectral meanings" of their remains.¹³⁶ The notion of residues refutes economies of frontal presentation (e.g. spectacle economy) and puts forward another kind of economy whose currency is not just in the act of viewing, or consuming images, but whose capital is also through resurfacing of protocols that holds things together and mutations that allow to connect elements that are kept apart. The case of the national museum and its aftermath holds a double role in relation to the question of appearance and disappearance. Generally speaking, the national museum is in charge of the production of cultural remains via processes of selection, indexing and display. Some objects are included, others are left out. Some information about an object is highlighted, other is erased. Collecting and curatorial practices constantly select the bits of culture that will remain and define under which category they will remain. The event of an error like the 2018 fire acts as a disruption in the museum's mechanism of representation, where objects that are selected to be remained of culture, were once again being robbed from the capacity to act as remainders.

The residues also maintain a twisted spatial relation to contact. In chapter 3 I will expand and problematize the intangible status of the residues. Here, as part of characterizing their qualities, it is important to note that although many of the residues can't be touched the way one touches objects, they offer a sort of promiscuous contact. The residues are neither matter nor form,

¹³⁶ Rebecca Schneider, *Performing Remains: Art and War in Times of Theatrical Reenactment* (London and New York: Routledge, 2011).

therefore, they cannot touch or be touched. Some of them are back in the Brazilian soil, while others circulate the internet or can only be captured in affective terms. After the fire, the museum's residues were spreading a new sort of promiscuous contact capturing the energy released in that breaking point. It is promiscuous because it allows everything to touch everything else. They emerge from previous histories of contact. Their unique spatial consistency also dictates the movement *in* the residual space.

Luzia, the oldest human remains ever found in Brazil, was originally presented in a hybrid display that combined the found skull and pelvis of the Paleo-Indian woman with a backdrop of an anatomical painting that represented the rest of her body. After the fire, the body was gone but Luzia's specters live on, circulated via media apparatus, material debris, and advance technological devices. Her image appeared in news reports, personal images, and her story is told on the Google site in the voice of a middle-aged man that feels like it was chosen from a text-to-speech catalogue. The debris in the "Luzia Room" is not only the remains of the small skull but also of the complex display apparatus made of paper, plastic, glass, and metal that became, in many ways, Luzia. A collaboration between LAPID 3D model lab and various researchers developed a mathematical 3D model composed of various photos, measurements, and stories. There was a strong desire to return Luzia into her object form. On a stereolithography 3D printer, Luzia was printed using debris and ashes obtained from the Luzia Room. In a picture release by the lab, the half-made Luzia is seen emerging from a printing device, now mainly made out of metal elements that survived the blaze and look inseparable from the machine itself. No longer a relic, post-fire Luzia is a mathematical model, a collection of oral histories, shredded displays, images that circulated the internet, and photographic panoramas. No longer on display, Luzia is a complex and inseparable system of display conditions, materiality, *techne*, and affect.

The residues no longer have the status of objects, but still carry some of the qualities of an object. Similarly, the residues cannot be fully understood as a *techne*, since they do not have a clear function or utility. In short, they don't follow any universal epistemology, as their meaning shifts, and must be interpreted in context. The residues differ from each other in terms of values and forms of existence and their meaning is in-formation, but the ability to interpret this kind of information within contexts is in fact varied, considering the residues' unusual mix of bio-form, material structures, and computational abilities, therefore they represent a cognitive assemblage.



6. Cursor¹³⁷

Screens remained on all night, measuring in real time the ever-growing black cloud above the palace. Talking heads were stuttering broken sentences that were not translated. Cursors moved forward and backward, typing words with such lightness, as if writing and deleting were equally painful. Sometimes, all one can do is watch the fire. The internet seemed to be working. DrawIn, the user who just created a Wikipedia page dedicated to the fire, got to the museum before the firemen. With others, he started copying the database, folder by folder, collecting the data from the ruins. By midday the database was suddenly gone. Things that are gone have less of a chance to ruin elections and the elections were only a month away.

In one room, Sala Kumbukumbu, dedicated to Afro-Brazilian cultures, they collected 1000 individual records. Kumbukumbu, a word that means “objects, people, or events that make us think about the past.” My cursor is scrolling down the database, then dragging me around the room. My cursor is a runner, a moving body without flesh, motivated by language. It stops at the room where the people are gone, and the objects are robbed, and the language is broken: Ob jject spe pleore v entst-hatma ke u sssst ink aboutttt thepasssst. My cursor is holding things together by keeping my words apart. My cursor interrupts. It tells me when action is needed. A tilted arrow, with an extra pixel on top, pointing toward the things that make us think about the past.

¹³⁷ Figure 14. –. Sala Kumbukumbu, Upload to Wikimedia Commons via MuseuNacional campaign. Retrieved December 5, 2019, from: https://commons.wikimedia.org/wiki/Category:Uploaded_via_Campaign:MuseuNacional Screenshot by the author

Residues as a Site of Afterness

How can a practical engagements with the residues generate new insights and modes of working? The residues are a material and theoretical site for the state of afterness. It is a place where corporeal, computational, and infrastructural theories meet and mingle in productive ways. Furthermore, it welcomes and celebrates the movement across human orders and nonhuman natures that necessitates rich, complex modes of analysis that travel through the entangled territories of the material and the discursive, the natural and the cultural, the biological and the textual. Although it specifically addresses the afterness of the museum fire, it opens up our thinking of afterness as placeholders for what has yet to collapse, including new forms of national museums, like the algorithmic institution that I discuss in the introduction. As we have seen, many of the same underlying conditions are true to both models, such as a diminishing importance of museums in wielding soft power. Although the conditions play out very differently in different contexts and in different parts of the world, we can notice the celebration of objects over discourse and the use of display for advancing a certain economic ideology as common across regions and settings.

The residues are a conglomerate of many agencies. They are a source of uncertainty. Exactly because they err the smoothness of the shift from collection to meta-collection, from citizen to user, and the difference between colonial collection and digital care. They are misfits of greater economic shifts. The unstable state of the residues makes it easier to note the affordances they drag with them and highlight their potential to reside in-information. The residues are not what's left after the end of the object, but the field of potentialities that emerge from it. In their writing about cultural topology, Lury, Parisi, and Terranova propose that the dislocation and the promiscuous circulation of cultural residues represent "relations of continuity and discontinuity are being made and unmade by describing the emergence of new kinds of connectivity, orderedness and limits...that characterize contemporary culture."¹³⁸ The system of continuous transformation not only presents the afterlife of ordered culture, but also offers a different form of continuity that is organized around transformation.¹³⁹ Although born to the after

¹³⁸ Lury, Parisi, and Terranova, "The Becoming Topological of Culture," 7.

¹³⁹ Brian Massumi, *Parables for the Virtual: Movement, Affect, Sensation, Post-Contemporary Interventions* (Durham, NC: Duke University Press, 2002).

state, their ability to offer new kinds of continuity and discontinuity allows the movement in them to be future-oriented.

The residual state carries information through transductive movements, fluid mutations, and transformations. It proposes a space that goes beyond the physical-digital binary. The residual information fails at being fully transformed into the digital realm and not conceived as the mere transmission of a coded message. Always dragging other forms of life and culture that stick to them—from a skull remade from memories, photos, and debris to a room reassembled remotely by data activists or collective resistance marked on the skin by individuals, many of whom have lost their workplace—the residues are affected by the deep movement of matter and infrastructure that run under the surface of appearance. If the museum is the representation of the ordered world, driven by certainties and separation, then the residues carry the potential of undoing order and coming to a state of inseparable contact. The fire was an event of destruction that also undid the grip of certainty.

Conclusion

The residues are the material and theoretical site of the state of afterness. As such, the residues are not an intervention but an interruption into the institutional story of creation and fable of origin. I have claimed that the residues are the network of conditions left after the object and therefore, should not be understood as an object, but as an active formation. As a site for further understanding and developing the framework of institutional afterness, the residues are important as they actively preempt the mode of thinking centered around a small but fully indexed world within a world.

I have studied the qualities of the residues as a site of afterness that is characterized by a strange sense of locality that operates across multiple temporalities and its relations of continuity and discontinuity are being made and unmade by describing the emergence of new kinds of connectivity, orderedness, and limits. The residues emerged from previous histories of contact but their relation to contact is doubled: while many elements are an untouchable state, theoretically speaking they unbound the order system and allow everything to be touch everything else. The residual movement is slow. The traffic of the residues along the economic, affective, and visual highway is slowed down by the deep past and the colonial past. I described the movement of the residues as “dragging,” as a representation of histories of contact between

bodies, object, and information. Their unique spatial and tactile consistency also dictates the movement in the residual space. As I will develop further, the movement inside the residual space is transudative, a movement that underlies the uncertainty of the residual space as a shared mode of existence. I have discussed the residues as an interruption, not only in the institutional order but also in its myth. The concept of interruption is also carried along the chapter in form, as the academic writing is riddled with vignettes of writing that aimed to perform stylistic and linguistic interruption in the sections called *Testimonies of Things*. It is important that the short texts also migrated between platforms and are used for lecture performances, a video installation, and academic conferences. I think with them and through them about the residues in a variety of contexts. Together with the theoretical writing they aim to capture the versatile qualities of the residues that are always in the in-between-ness where entities can no longer be defined in a fixed status.

I have discussed the specific case of the Brazilian museum fire in light of the three major shifts that underline the algorithmic museum and showed how colonial traditions are amplified through practices of collections that moved from object to data, which includes dispossessions of rights when the citizen-visitor becomes a user; and through practices of digital care that often carry the cultural inheritance of colonial thought into the digital realm. I highlighted how the possibility of the residues to hold agency for different techno-cultural forms goes against the idea of progress and is rich in unindexable particularities. In chapters 3 and 4, I will elaborate extensively on the spatial and temporal conditions of the residues that emerged from histories of contact and will propose methods of moving and navigating the inseparable consistency of the residues that is essentially transudative. In summary, the residual state not only stands for what comes after the institution, but can potentially represent knowledge based on the continuity of transformation between technical systems, matter forms, and biological life forms. The residues are matter that becomes digital through us, but we are not saving them, the active residues can save us.

Chapter 3:

The Contactless Condition and Its Afterness

Museums' artifacts are commonly cordoned off from one another and carefully protected from visitors' hands. After the fire, the ashes of the objects that were housed in the National Museum mixed together and rained on nearby houses. What was once a contactless state has now collapsed into a chaotic mess of contact. Through the fire, the institution's afterness became a form of making contact, where once there was no contact zone.

The state of "contactlessness" that was practiced in museums gains additional meanings in the contemporary museum via use of contactless payments and following the introduction of social-distancing rules during the Covid-19 pandemic. This chapter further explores the role of contact and the contactless in afterness, and questions how afterness interrupts the ways in which museum spaces routinely reinforce contactlessness. It examines how the canonic museum enforces two colonial histories: first, the history of contactlessness, and second, the production of a "synchronous" narrative of a particular moment. I study recent applications of contactless technologies data synchronization to propose that they are rooted in a colonial ideology that museums have been exercising for generations. Written during various phases of the pandemic, this chapter studies the notion of contactlessness—from museum practice to the payment method and pandemic policy—not as a technology but as a condition. I ask what does the contactless condition entail? How does afterness interrupt it? And what can be done with performance for exploring and engaging with the changing conditions of contact in the wake of the museum? Throughout this chapter, I describe in detail a set of performance-based research methods that became my way to pose questions on the changing conditions of contact. These are rooted in my research into the state of the residues. Like the fire that burned the original objects, the museum's residues are "spreading" without order. The residues are coming into being through contact.

The unordered contact of the residues, where everything touches everything else, provides an invitation to develop specific performance methods that are attuned to inhabiting afterness as a condition, and can activate the potential of the residues to reposition knowledge production, which I understand as a "mode of afterness." My interest in the contactless uses the museum setting as a departure point, but my project wishes to expand beyond the museum rather than remain tethered to the museum's specificity. I am thinking of the contactless as a political

condition that continues to adapt its properties in alignment with the current techno-political environment. Along the chapter I consider how spaces without contact, which keep bodies and objects apart, are used as a political power and ask how the conditions of afterness as a form of making-contact can become a site of knowledge production. Through a series of practice-based research projects, I ask how we can “get in touch” with the shifting living conditions caused by large-scale computation through what bodies know, and how this knowledge can be practice in the shifting conditions of afterness.

The chapter progresses in three movements: the first movement takes the museum as a site of inquiry to show how the colonial, disciplinarian institution has been managing contact as a way of administrating access and producing a coherent narrative by turning time into space. I share a study I have done with my students that uses performance-based methods to investigate data governance in the contemporary museum as a continuation of colonial spatiality. The second movement is focused on the city and is centered around recent technologies of contactless and auto-synch as orders of privilege. This discussion is grounded in two domains that currently shape public life—the financial field and the new aspects of “pandemic urbanism.” I share a collaboration with researcher Sarah Vowden where we looked at aspects of partial touch in contactless technologies. The third movement focuses on the museum’s residues. Here, I imagine the spatial temporality of the residues, where the possibilities of administrating contact and designing time collapse. The performance methods are crucial in order to access the potential of afterness to reorder knowledge. I present two methodologies that emerged from using performance as a way of attuning to the residues: re-embodiment of contactless as affective hapitcality, and the re-engaging with Museu Nacional’s digital residues with “pleasure practice.” These two methods are modes of afterness, they are speculative modalities that respond to case-specific examples of working in the state of afterness.

Holding Things Together

For ten weeks in early 2020, my students and I were studying the algorithmic aspects of contemporary museums. We used performance-based techniques as a research device to observe and analyze the “algorithmic museum.”¹⁴⁰ In the course, we followed a proposition that suggests

¹⁴⁰ Stefano Harney, “The New Rules of Algorithmic Institutions,” *Former West: Art and The Contemporary After 1989*, eds. Maria Hlavajova and Simon Sheik (Utrecht and Cambridge, MA: BAK and MIT Press, 2017), 455–76.

that the institutional “collection” no longer needs to be understood as a closed system that can be indexed but, rather, as a set of interfaces between many collected artifacts that thus form a new set of relations, often activated by the visitor. The meta-collection. From January to mid-March we were moving around, developing soundscapes, tracing crowd circulation, walking in museums with our eyes closed, annotating museum entry halls, or mapping the multiple forms of data the museum produces through analyzing the physical and digital messages that announce the museum’s data collection activities. We also met with data officers in various London museums, as well as researchers and academics who are looking into the ways museums are integrating AI systems into their daily practice and policies. The performative work was used to identify new spaces that emerge in this techno-political environment. This is informed by an ongoing study and reimagining of the liminal, non-tangible space between bodies (visitors, employees), the conceptual and architectural space of the museum, and its cultural products, what I call the “soft tissues” of the institution. Situated (in an organizational structure) between the education and outreach departments, the visitor experience department, and even the retail section, the role of mediation and programing in the museum is sometimes hard to define. Numerous differing agendas come together in the space of the soft tissues, which produces many social-technical protocols, rules, and regulations from safety issues and crowd control conventions to education, information, advertising, and accessibility. The soft tissues of the cultural institution are the connecting tissue between the viewer and the artwork, using visible and invisible apparatuses, making it a slippery object of study at best, while at the same time, possibly a ground to understand the museum’s infrastructures.



Figure 15. —. Cnaani, Ofri, A Sign at Tate Modern, February 12, 2020, digital photograph.



Figure 16. —. Cnaani, Ofri, A Contactless Donation Point at Tate Modern, February 12, 2020, digital photograph.

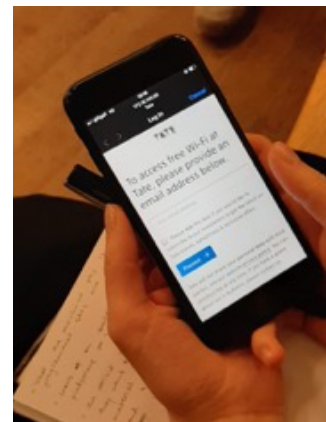


Figure 17. —. Cnaani, Ofri, Tate wi-fi sign at Tate Modern, February 12, 2020, digital photograph.

We were trying to build some sort of living lexicon of both gestures and terms that situate new modes of digital and data governance as a problem which is of and in the body. Such questions demanded inventing our own methodologies of working. We asked how can we “get in touch” with the shifting living conditions caused by large-scale computation, through what bodies know. We spent time observing and capturing the body gestures of the consistently distracted museum spectatorship. The spectatorship, we observed, takes place as internal cerebral and embodied attention but also constantly externalized, existing not just in the individual mind but directed outward and online too. While collecting gestures of museum spectators, we noticed how much the physical activities during a museum visit are focused around the fingers. At some point we felt our focus needed to be zoomed in, and we created an entire mini-collection of finger moves only, which we later developed into a “fingers choreography.” For Rebecca Schneider, a gesture is an act composed in and capable of reiteration, but also an action extended, opening the possibility of future alteration.¹⁴¹ The aim of our focus on the finger gestures was to make space for the body’s minor gestures. The fingers became mediators of the museum spectatorship. We noted how the museum audience becomes a new kind of mediator, embodying a visual and spatial experience, committed to document and archive everything they saw, felt, and thought through minor fingers movements tapping and gliding on a mobile device. The same fingers, gliding on the same device, turn the audience to producers of content while transmitting it out to the world as a form of communication with others.¹⁴² The fingers became an organ that assists in viewing, they have an active role in the mediation of internal experience, undertaking the task of documenting and responding to social duty. By mid-March, the Covid-19 pandemic started. No more fingers touching. The tips of our hands became a potential danger.

¹⁴¹ Rebecca Schneider, “That the Past May Yet Have Another Future: Gesture in the Times of Hands Up,” *Theatre Journal* vol. 70, no. 3 (September 2018): 286.

¹⁴² Claire Bishop observes how mediation become the core of museum spectatorship become in: Claire Bishop, “Black Box, White Cube, Gray Zone: Dance Exhibitions and Audience Attention,” *The Drama Review* vol. 62, no. 2 (Summer 2018): 22–42.



Figure 18. –. Cnaani, Ofri, Finger Choreographies, March 5, 2020, collage of two digital photographs.

Zooming back out, we reflected on how technology impacts visitors’ attention during what Simon Sheikh calls the “moment of publication.” The idea that spectatorship is a social activity is not new but for a long time it has been external to the museum model of viewership, modeled after an attentive individual experience. When the solitary moment of publication becomes a social event, it is done by tapping and swiping the touchscreen, the only object in the museum space visitors can touch. Attention and distraction have always been intrinsically intertwined and rarely exist as pure entities.¹⁴³ The separation between the two entities, much like the demand to blur the distinction between human attention and distraction are both modes of biopolitics. The neoliberal demand for multitasking between life, work, and social activities constantly requires humans to be *both* attentive *and* distracted. One must stay in constant contact. Today’s museumgoer is also a museum “user” who is expected to be in synch with other life aspects, while experiencing art and networking all at once. The continual demand to be both attentive and responsive is pressing but hard to capture. My students and I used various live methods to observe the movement between different modes of awareness. We embarked on

¹⁴³ See Bishop’s discussion of Jonathan Crary’s writing about attention in “Black Box, White Cube.” Bishop ties this dialectic relation between attention and distraction to the much broader context of industrialization. Crary has demonstrated that modernity gave rise to a dual concern for attention and distraction as a direct result of capitalism’s reformulation of human perception. It imposed a disciplinary regime of attentiveness (for example, in the vigilance needed to stay safe when using factory machinery), but simultaneously worked *against* this by also requiring the subject to adapt to ever-faster cycles of change, replacement, and obsolescence. Bishop, “Black Box, White Cube”; according to Crary, the roots of this process can be traced back to the Industrial Revolution. Jonathan Crary, *Suspensions of Perception: Attention, Spectacle, and Modern Culture* (Cambridge, MA: MIT Press, 1999), 12–13.

several poetic listening and sound walks to note how various museum functions, from the gallery to the bar and the shop, are forming continuous sound and light landscapes between the galleries and other commercial facilities. We also mapped the museum spaces. We looked at the changing temperature; direct engagement with digital screens; visual characteristics of the space; the location and style of texts that accompany the visit; the movement and flow of people; the spatial trajectory of groups; and, finally, the visual markers of the museum's invisible networks. We noted how the synchronous sense of the visit is ingrained in the design: the perception of limitless transition between inside and outside, as well as onsite and online is reflected in the physical conditions of a museum like Tate Modern with its big open spaces and frictionless movement between amenities. The quick changes in visitors' attention were studies of a series of bodily postures and gestures that were captured and "collected" by the students who worked in the permanent collection rooms. We built our own collection of gestures that were stored in our embodied memory. Each gesture was treated as a site that can help us unpack spectatorship's past conventions and future potentialities.¹⁴⁴ We later imitated, replicated, and repeated them. We also played with their scale and improvised with their temporalities. Finally, we choreographed them into a sequence that was taken out of the museum context and restaged in the public space. Then Covid-19 happened and museums became a space of no-body. Foyers and gallery halls became places for objects and networks, a closed circuit of nonhuman activities. The soft tissues of the institution were now in the service of its solid infrastructure and data networks. Public space, too, became a contactless zone. The tension between attention and distraction shifted into the flat arena of the screen, where private, professional, and social lives were only divided by swiping between platforms. Like our screens, we were caught behind glass yet urged to be touched.

¹⁴⁴ Rebecca Schnieder writes that every gesture "drags a specific and situated history with it, it simultaneously offers a possibility that response may bring difference, provoking change in multiple directions." Schneider, "That the Past May Yet Have Another Future," 268.



Figure 19. —. Cnaani, Ofri, Living Lexicon of Gestures, workshop with BA Curating students, March 5th, 2020, collage of two digital photographs.

One aspect I was specifically drawn to as we were developing that lexicon of gestures was the notion of contactless space: a space where touch or contact are prohibited is a central conviction in traditional museum practice. This is the space that is strictly preserved between a visitor and an artwork, between bodies and objects. Think of the many devices dedicated to making this space work, from wall texts to floor markings, visual signs and symbols, human guards, and technological apparatuses like security cameras and smart sensors. Or, instead, imagine the portion of the institutional budget dedicated to maintaining the legacy of such secured spaces. Touch was a significant feature of visiting museums in the past. In the late seventeenth and eighteenth centuries, visitors to the Ashmolean in Oxford or London’s British Museum were allowed to handle, rub, shake, and even taste the objects on display. Restrictions on how objects could be handled and by whom emerged over time and by the mid-nineteenth century only curators and conservators were able to enjoy physical interaction with the objects in the museum.¹⁴⁵ The demise of touch has been linked by some with modernity and its turn to observation, objectivity, the visual display of capitalism, and the equation of touch with “primitive cultures.”¹⁴⁶ Some argue that it is the move of museums from being restricted and elite to public and open that precipitates the prohibition of touch and brings about the reign of the visual spectacle of the museum. Touch was removed via people learning how to be “a museum

¹⁴⁵ “In-Touch: Digital Touch Communication,” *IN-TOUCH Project at the UCL Knowledge Lab, University College London* (blog), <https://in-touch-digital.com/2016/11/28/a-renaissance-of-touch-in-the-museum/>.

¹⁴⁶ David Howes and Constance Classen, *Ways of Sensing: Understanding the Senses in Society* (London and New York: Routledge, 2014).

visitor” through taking up various prestigious bodily techniques that displayed “the requisite degree of cultural competence”—“to stand at the correct distance from an art work, walking at a pace that is neither too fast nor too slow, and knowing what to ‘feel.’”¹⁴⁷ Changes in the social class of museum visitors have also been linked to the demise of touch: “The upper classes always had license to touch and their touch was deemed rational and non-damaging. On the few occasions when the lower classes could touch museum collections it was considered unruly and dirty.”¹⁴⁸

The students and I quickly noticed how the legacy that helped design traditional conceptions around touch still thrives within us all. Our conceptual schematics do not permit the blurring of boundaries between animate and inanimate, observer and artifact. We asked ourselves what if we started to attune to the contactless spaces, using our bodies as provocations or measuring tools. We noted things like: The distance between my eyes and the painting on the wall is two straight arms; the time it takes a security person to approach me if I walk along the security rope is about seventy seconds; the distance between the yellow line on the floor and the painting is exactly the measure of my head; the time to tiptoe along the white line around the room is 6:47 minutes; the distance between my shoulder and a fellow visitor is two armpits and an elbow. When trying to act out these thought exercises, we were stopped immediately. We noticed how sometimes our well-trained civilized minds stopped us from even thinking of performing the invented measuring system. This series of playful exercises heightened how the state of contactless is an apparatus in the museum’s meaning machine that is constantly threatened to govern the living.

¹⁴⁷ David Howes, “Introduction to Sensory Museology,” *The Senses and Society* vol. 9, no. 3 (2008): 259–67.

¹⁴⁸ Fiona Candlin, *Art, Museums and Touch, Rethinking Art’s Histories* (Manchester: Manchester University Press, 2010), 9.

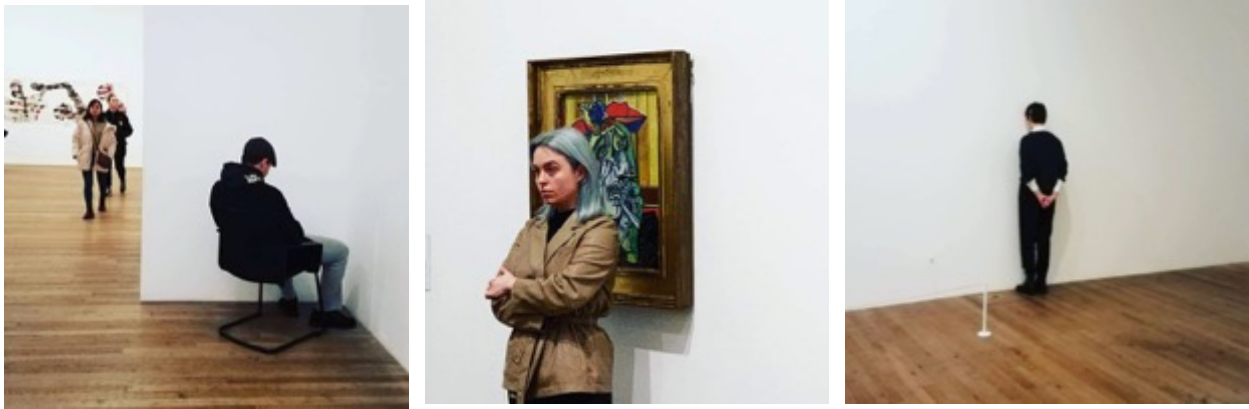


Figure 20. —. Cnaani, Ofri, Performance-based research at Tate Modern with BA curating students, February 8, 2019, collage of three digital photographs.

Museums are, of course, ideologically loaded spaces. We noted how a museum display crafts a small world of serenity and infinitum. It captures a moment that is frozen, but that never existed. The white cube is a blend of neutrality, objectivity, timelessness, and sanctity: “a paradoxical combination that makes claims to rationality and detachment while also conferring a quasi-mystical value and significance upon the work.”¹⁴⁹ It organizes all on the walls or under glass boxes. A world that is one straight arm away from our shoulders. Its contents are frozen in time, but somehow the movement of warm bodies gives it its rationale. Life is transmitted through the bodies of visitors moving around, constantly captured by the machine-learning heat map. It is almost as if the objects on display are animated for a moment by an external action, brought from lifelessness into life. Inside the contactless space, a memory is sparked, or a fantasy that is always completed in the wistful and transported mind of the viewer. Perhaps for a moment it touches the aura of liveliness, only to expose itself as lacking an aura, as dead. The contactless space is passively terrorizing the small world of the gallery.

The act of exhibiting is always a political one. Following the Foucauldian ideas on cultural institutions and their devices to establish heritage, the strict maintenance of the contactless space can be understood as a space that is protecting the heritage of knowledge from “the people,” that is, as a way of protecting the ordering system of knowledge as devices constituting powers. Museums are physical sites of epistemic power. The museum is a representation of the “ordered world.” In it, the exhibition, a small world that has been

¹⁴⁹ Bishop, “Black Box, White Cube,” 29.

meticulously pieced together, functions as an ideal space. For Denise Ferreira da Silva, the ordered world is rooted in separation and determination: separability, she claims,

is the view that all that can be known about the things of the world is what is gathered by the forms (space and time) of the intuition and the categories of the Understanding (quantity, quality, relation, modality) – everything else about them remains inaccessible and irrelevant to knowledge; and consequently.... Determinacy [is] the view that knowledge results from the Understanding's ability to produce formal constructs, which it can use to determine (i.e. decide) the true nature of the sense impressions gathered by the forms of intuition.¹⁵⁰

The museum in that sense is a device to represent and understand the world and its spatial display and regulations are crucial tools for separation and determinacy. The one who is bridging the contactless space is the one who is missing the cultural code, whether they are kids, the “uneducated,” or the “uncivilized.” In this equation, distance means safety. And body means threat. The lack of physical touch is foundational for the act of institutional display. Following this, objects from non-Western cultures are unique and welcomed but non-Western bodies are dangerous and unwelcome. Contactless is one syllable in a museum's racial grammar. The act of seeing substituting the feeling of touch. As they say, touching with one's eyes. As such, the moment of publication, presentation, and contemplation is a contactless moment. The museum as a disciplinarian device of the “civilized” public is constituted by the deprivation of touch. An illustrating anecdote is the fact that when the British Museum opened to the public in 1759, it was a concern that large crowds could damage the artifacts, and so visitors had to apply in advance to visit the museum. The knowledge monopolies accrued over history, realized through the exhibition of material artifacts, are fundamentally precarious.

Contactless techniques were introduced to UK museums in a different context when public institutions like the Tate, where I worked with my students, replaced their cash donation boxes with contactless payment devices that allow patrons to tap to donate using their contactless credit cards. Contactless, as a method of payment, can simply signal that a museum like Tate is eager to adopt up-to-date technologies to simplify their visitors' experience by introducing a synchronized payment platform that allows for a high value of smooth circulation and represents a desired life. Beyond being a payment method, contactless is a small addition to the algorithmic-driven institution. The updated version of the public museum is now marketed as a

¹⁵⁰ Denise Ferreira da Silva, “On Difference Without Separability,” *32nd Bienal de São Paulo – Incerteza Viva Catalogue*, ed. Jochen Volz and Júlia Rebouças (São Paulo: Fundação Bienal de São Paulo, 2016), 61.

life-long relationship between the institution and the individual, which can be incorporated into—and maybe help define—one’s “lifestyle.” Museums are now focused on personalized experience, and the visitor is someone who uses the museum in a variety of ways to fulfill particular, individual needs and desires.¹⁵¹ The shift from an object-focused institutional model to a visitor-focused one has much to do with the change in economic conditions. The new “lifestyle institution” has a high value in the circulation economy as part of the representation of a desired lifestyle.

As part of a research that looked into nontangible data enhance apparatuses, the notion of contactless once again proposed a certain affect and narrative that characterize the contemporary notion of the museum visit and challenges the modes of categorization of such an event. The more I looked into the contactless spatiality, the more I became interested in addressing the embodied and political aspects of the contactless space.

Contactless, Extraction, and Care

Contactless can be understood through the colonial perception of care for rarity. It suggests that part of the mechanism of conservation of the rare includes neglecting the everyday socio-political realities in the part of the world the object was taken from, or by refusing to recognize the connection between the act of destruction and enabled accesses to the rarity. Once again, the act of giving special attention to a chosen object is intrinsically intertwined with an act of distraction. Such an argument continues the classic model of cultural domination practiced in Western museums that identifies the Western world’s responsibility to “take care” of objects from other territories that arrived in the West via processes of cultural extraction. As an object is taken out of its physical and social situatedness, it is celebrated and essentialized, while the living bodies of the people who made and use it are put under a possible risk. The violent aspect of care manifests also on the side of the viewers, as their presence is marked as a threat. Items in these collections are in a contactless limbo, out of time and out of touch. Keeping them that way is not only a problematic perception of care but also a technique of relation, an arena where relations are played. The contactless limbo allows to loosen artifacts’ ties to their original cultures and grow new ones by narrating displaced objects according to the institution’s invented

¹⁵¹ Seph Rodney, *The Personalization of the Museum Visit: Art Museums, Discourse, and Visitors* (London and New York: Routledge, 2018).

spatiality and temporality. The contactless as a technique of relation means that objects are taken out of their socio-geographic context and become literally and mentally untouchable. Objects that belong to collections orbit in a seemingly vacuum space, out of time and in a safe distance from other objects and, crucially, from other bodies. Contactless is becoming a mechanism of erasing relations between society and its material culture and assisting in producing new relations where collected objects belong to a world of infinite collectedness. In the name of care, contactless techniques detach contact from objects' origins and keep it out of reach of the museum visitor. The history of contact, as well as the history of contactlessness is the history of extractivism and violence. The temporality of "care" locates the display objects and visiting bodies in the nonpolitical, abstract, "empty," timeless present. The collection is always between the important time of the past, where rare objects are traveling from, and the precious futurity of the "next generations," that objects are assigned to keep traveling toward. Too often, museum temporalities adopt the conceit of a pledge to the far future. In other words, touch is prohibited now, because that way our descendants in centuries to come will have access to these artifacts of a shared history. The presence of living bodies is identified with potential contamination of the eternal objects. The now become a threat. The more I looked into it, the more I noticed how the prohibition of touch and the freezing of time quantifies a continuous series of rooms filled with quantifiable things. Inside the small world of the galleries, time becomes space. The managing of touch and time became invisible and intangible form of control without inscription.

By looking only at the condition of avoiding touch in the museum setting, contactless procedures can be understood as a form of disciplining. I argue that contactless is not only disciplinarian method but rather that it is grounded in colonial relations that used authorized and prohibited contact in order to produce cultural hierarchies and maintain a version of history that privileges European narratives over Indigenous and other forms of local knowledge. Practices of dispossession of objects taken away from their cultural origin and the concentration of objects for the production of centralized cultural superiority are assisted by claiming and eliminating contact. Dispossession is a process that occurs through the use of both extra-economic and economic means, and by clearing the obstacles that hinder the process of accumulation.

Crucially, accumulation by dispossession directly affects the loss of rights.¹⁵² Contactless, thus, is an enabler. An extra-economic technique that clears the obstacle in the process of accumulation by dispossession. It is a secondary circuit that supports positioning power through colonial relations: accumulation of the rare by dispossession of both access and rights to societies' forms of material knowledge. Contactless is a soft infrastructural apparatus of capital accumulation based around a system of centralization of power that finds its place in the production of the museum space.

The history of collecting proposes that after asserting a direct contact with a colonized culture, its looted artifacts need to be maintained through avoiding direct physical contact and by producing a narrative that puts objects in touch with the greater context of the colonizer's culture. The administration of access to objects during the museum visit binds together the prohibition of contact and abstraction of time in a way that allows a coherent, contemporaneous, and synchronic narrative of a particular moment to emerge. It is the violence of chronological absolutism that is enacted by large-scale historical collections. Contactless is effective not only through spatial regulations but also through the production of a specific temporality.

The production of synchronous, standardized temporality as a colonial method of governing has shaped our managerial and technological culture as well as our collective imagination. Synchronization, Stamatia Portanova notes, "had a symbolic element embedded in it, and that was nevertheless presented as a 'common good of mankind' and as the aspiration of all the enlightened 'citizens of the world.'"¹⁵³ Portanova uses the term "syncolonialism" to describe the colonization of temporal perception through the imposition of a universalizing technological culture.¹⁵⁴ The colonial method of synched global connectedness has been exercised in various domains from universal time zones to train ledgers and continues to enable recent technologies like blockchain, which can be seen as the final stage in the long history of temporal standardization that separate artificial standard time from natural time. I argue that the recent applications of contactless technologies and data synchronization, rooted in colonial

¹⁵² David Harvey, *A Brief History of Neoliberalism* (Oxford: Oxford University Press, 2011), 178. Louis Moreno and Hyun Bang Shin, "Introduction: The Urban Process under Planetary Accumulation by Dispossession," *City* vol. 22, no. 1 (January 2, 2018): 79.

¹⁵³ Stamatia Portanova and Eviatar Zerubavel, "The Standardization of Time: A Sociohistorical Perspective," *American Journal of Sociology* vol. 88, no. 1 (July 1982): 1–23.

¹⁵⁴ Stamatia Portanova, *Whose Time Is It? Asocial Robots, Syncolonialism, and Artificial Chronological Intelligence* (London: Sternberg Press, 2021).

ideology, have been exercised by museums for generations. The artificial production of museum time is another method of a pathological practice of care that wrenches objects from their physical and temporal environment and instead positions institutions as masters of time. Under the spatial conditions of contactless and the temporal condition of syncolonialism, collected objects are kept together in a solid phase, solidified under the same temporal order of the representational code.

In recent years, the notion that museums have a skewed model of body relation has been much discussed.¹⁵⁵ My effort to analyze the bias against the body of the spectator through multiplex organizations that generate excessive structures of containment. When my students and I visited the British Museum, where the pediment in the entryway depicts the “progress of civilization,” the spatial conditions of the contactless and the chronological dictatorship of modernity were as evident as ever. As if the museum as a spatial configuration produces a monitored environment where “time is a unit, place is clearly demarcated, artworks are hung according to norms, lighting and air humidity is coordinated with conservation requirements”¹⁵⁶ that visitors readily accept and which anchors and their regulates perception. In the case of the British Museum, an example for an imperial collection that became a canon, the “progression of civilization” is enabled by contactless synchronized presence, producing homogeneous choreographic tempo that goes from a fixed concept to what the past is, toward a possibly predictable idea of what the future holds.

¹⁵⁵ Paul B. Preciado writes that the museum is a “factory of representation” that supports the “social prostheses of the royal body on which its sovereignty is built and negotiated.” Paul B. Preciado, “Inside the Museum’s Body,” *The Beast and the Sovereign*, eds. Hans D. Christ et al. (Leipzig: Spector Books, 2018), 101. Clémentine Deliss adds: “To identify the ‘somato-political’ dimensions (Preciado) of the museum leads back to the corpus of the archive and its collection, those organs that generate excessive structures of containment built on that which Ann L. Stoler succinctly defines as ‘imperial duress’ that is, ‘a pressure exerted, a troubled condition borne in the body, a force exercised on muscles and mind.’” Clémentine Deliss, “Walking Through. Thoughts on the Metabolic Constitution of the Museum,” *Exhibiting in an Educational Field*, ed. Julie Enckell Julliard (Geneva and Dijon: HEAD and Les Presses du Réel, 2019), 149. “Diana Fuss and Joel Sanders claim that it dates back to the European Renaissance when architects and designers saw the gallery as a ‘fixed theater of spectatorship’ intended ‘to regulate strictly the viewer’s range of motion and object of focus.’ As museum spaces gradually evolve over the course of the 18th century from private house museums into public institutions, those “unruly social bodies” who once engaged in playing, eating, drinking, in the museum were gradually removed. By the early 20th century, the curatorial trope is one of ‘disembodied opticality’, whereby seating no longer features beyond a short stop-off point along the scenographic circuit of the museum”. Deliss, “Walking Through,” 148.

¹⁵⁶ Deliss, “Walking Through,” 148.

Contactless as Technique of Relations

The contactless space is never a vacuum. Many of the presumptions of movement as power, body as danger, and purity as elite are encapsulated in the gaps, what seems like empty spaces. In them, there is a hyper-activity of governance and governmentality, a hyper-activity without a spectacle. Through those gaps, access is maintained and control is enforced. The gaps are where one can feel the grip of the desire to “hold things together,” so to say. The more things are held together, the more we become aware of how the work of holding them together is done by narration and produces a certain affect. Take the case of national museums: the drive to hold things together travels through the violent impulse to dislocate, collect, and order objects, binding many natures, lands, times, and forms of knowledge into one synchronous narrative. It is a process of double movement: the creation of a sequential timeline while disrupting the objects’ origins. The slow and affective process of holding a collection together, or turning objects into a system of meaning, takes shape through the objects being oriented toward each other, or producing a certain sense of belonging to the space through a production of historical and spatial fabulations, or affective narrations that tie objects and bodies in the same space. Within the soft tissues of the traditional institution, the orientation of bodies and objects is conditioned by the contactless.

In the last two decades, once-successful managerial, curatorial, and pedagogical museum practices have become integrated into a new set of invisible threads of holding things together. The new “lifestyle institution” has a high value in the circulation economy as part of the representation of the museum as an important addition to the desired way of living. In the new museum matrix, one cannot recognize a central location nor a single ideology, as the museum becomes an arrangement consisting of humans and machines, objects and subjects, spaces and places, habits and standards, policies and politics. In relatively recent times, modes of governance within institutional settings have increasingly been shaped by algorithmic architectures of organization. Algorithm-driven management translates into the hope that algorithmic data analytics can supplant disciplinary methods, spotting and responding to patterns as they emerge from data sets, rather than imposing measures upon them.¹⁵⁷ Algorithmic

¹⁵⁷ Mike Savage and Roger Burrows, “The Coming Crisis of Empirical Sociology,” *Sociology* vol. 41, no. 5 (2007): 885–899; and William Davis, “The Political Economy of Pulse: Techno-Somatic Rhythm and Real-Time Data,” *Ephemera: Theory and Politics in Organization* vol. 19, no. 3 (2019): 513–36.

governance details not only the application of computational procedures to issues of operative management, control, and decision-making, but it further describes the re-engineering of organizations to the demands of those procedures. Such modulations in institutional governance often lead to a preference of markets over governments, economic incentives over cultural norms, and private entrepreneurship over collective or community engagements. For example, the visitors' deep-rooted desire to touch objects became a market strategy, as museum shops often proffer items that give the visitors-customers the opportunity to touch and handle replica jewelry, textiles, and sculptures. Like successful multinational enterprises, large-scale museums operate across national-global and public-private lines, producing late-capitalist assemblages.¹⁵⁸ I am suggesting that the impulse to grip things together as a mechanism of control and identity hasn't been lifted from the museum sphere but its materiality and spatiality are more difficult to sense. In an elusive way, the spaces that offer the most range for movement are often exactly where we should look for the clues. Similarly to the new urban environment that is seemingly freeing from a concrete spatiality of control, the borderless art institutions, where one is welcome to meet, dine, and have fun, are constantly managed by invisible apparatuses.¹⁵⁹ The more invisible and intangible the bounds are, the harder to note the way things are held, or the harder it is to be able to feel within the airy binds where exactly new gaps are forming. The supposedly "free" museum is an illusion that relies heavily on regulation.

The shift from the museum as a project of modernity to the museum as an enterprise can be observed through the notion of contactlessness. Capitalism is an economic form that touches, it might be said, everything else—time, space, and human subjectivity.¹⁶⁰ But its contactless manifestation offers a special kind of grip that capitalizes objects through distance and allows access through unifying temporalities. In the West, contactless became a standardized operation of engaging with material culture, but the borders of touch remain troublesome. The spatial relations of the exhibition space show how contactless relations don't contradict the tradition of colonial capitalism that touches everything, but in fact supports its fantasy for frictionless motion. I propose that many of the recent contactless technologies, from the now-established

¹⁵⁸ Portanova and Zerubavel, "The Standardization of Time."

¹⁵⁹ Irit Rogoff reminds us that new forms of being "unbound" to materiality and spatiality are offered by the "borderless world" of finance and commerce, make us all the more bounded to and managed by those apparatus our life are. Irit Rogoff, "Unbounded—Limits' Possibilities," 2012.

¹⁶⁰ Esther Leslie, *Liquid Crystals: The Science and Art of a Fluid Form* (London: Reaktion Books, 2016), 68.

contactless payment to the recent example of track-and-trace systems introduced during the pandemic, are rooted in colonial traditions.¹⁶¹ While museum display conventions were not part of the development of these technologies, they contributed to the establishment of the contactless as a frame of thought and the need for synchronized narration as a complementary element in the coherency of that colonial order.

Contactless spatiality and synchronous temporality were and remain managing tools to control and operate freedom of movement and to sustain xenophobic policies. In the next part of this chapter, I demonstrate how recent technologies present sovereignty that is modeled after big data, which mobilizes the physical, social, and political qualities of the contactless as a mode of governmentality of life and death. The epistemological framings and categorizations that used to model Western museums and rely on the colonial expansionist impulse that demands constant contact with unknown lands and cultures, are being reproduced through data-driven technologies that enable a governing technology that stays close enough to surveille, but never too close.

The interest in the contactless as a framework of thought informed my collaboration with researcher Sarah Vowden, whose work on contactless payment technologies led us to create a workshop that aimed to turn the physical space between body and object into a critical space for exploration. Vowden writes:

Contactless technologies have proliferated in urban environments, from the financial terrain of contactless payments, to wearable computing devices, biometrically guarded locks and travel cards. We can now glide seamlessly through the city, scanning hands without touch, admitted entrance without the fumbling of keys, and wearing our credit cards on wrist-bound watches as new gestures of the everyday transaction emerge. Contactless is realized through the stitching of multiple technologies in the urban fabric; from the mobilisation of radio waves in near-field communication, radar, infrared biometrics, to the humble barcode. Contactless is spatial fantasy, a condition that recalibrates contact in the urban milieu through technological and algorithmic mediation.¹⁶²

¹⁶¹ Miriyam Aouragh et al., “The Extractive Infrastructures of Contact Tracing Apps,” *Journal of Environmental Media* vol. 1 supplement (2020): 9.1–9.9. See also Miriyam Aouragh et al., “The Long Tail of Contact Tracing,” *GitHub/Institute for Technology in the Public Interest* (April 10, 2020), <https://github.com/DP-3T/documents/issues/118>.

¹⁶² Sarah Vowden, “Contact/Less: 4cm and The Body in the Everyday Transaction” (MA dissertation, department of Research Architecture, Goldsmiths College, University of London, 2018).

Contactless seeks contact, yet not of the fleshy kind; it always retains a critical distance from the body and a careful calculation of the threshold of touch.

Using near-field-communication technology, contactless cards produce an electromagnetic induction through an internal antenna and data is transmitted via radio waves between the card and the payment terminal at a maximum distance of 4 centimeters. It is this critical space in which multiple scales of contact take place; the prosthetic tendency of contactless as an extension of the body, the reduced social encounter, and a lexicon of gestures determined by its different technological mutations (the card, the watch, the mobile phone). In our collaboration, the 4 centimeters used by near-field technology became the distance where our two research practices converge. We noticed how touch is not wholly removed from a contactless transaction: the strictly non-touch, the almost touch, the tap, all produce an ambivalent physical encounter that destabilizes classical notions of touch and the sensory engagement of monetary as well as cultural exchange. Yet, contactless is not merely defined by the transaction. It is a condition, an embodied discipline, and an indication of the wider applications of technological mediations into the logics of frictionless movement. Its technological application has proliferated beyond the monetary exchange, and is now reshaping industries including retail, security, and air transport and redefining user experience. Nonetheless, we must not forget its ideological roots in the centers of banking and commerce as well as the center of institutionalized coloniality. Contactless is the space that holds.

The first workshop we planned centered around the bodily exploration of 4 centimeters. It included mapping a partner, while keeping the distance of 4 centimeters (two bodies hold between them objects like apples or ping-pong balls to materialize the 4 centimeters). It was followed by an attempt to map the room with one's own body while keeping a safe distance of 4 centimeters and without ever touching any physical object. Ironically, the workshop designed to be held at the ICA in London as part of the symposium *Choreographic Devices* was canceled due to the Covid-19 outbreak. Social distancing quickly offered a recalculation of the contactless condition, while new measures of closeness were introduced. The reliance on technological mediation for keeping in touch was something to adjust to, and the protocols of touch avoidance were updated. We were intrigued by the new choreographic space of online exploration and its meaning for the concept of contactless as we pondered how the physical limits of isolation are recalibrated by the technological. When the pandemic happened, advance registration for

participation became an industry standard for track-and-trace purposes. This obsolete concern came forth again, now with a concern of harming other visitors. In other words, contactless became a technique to hold things together.

In this collaborative work on contactless, Vowden and I deployed a variety of research methods: we organized performative encounters, edited a reader, and wrote and edited a video essay. We sought the term's affordances beyond its technological applications, as the terminology of contactless lent itself to magnify some of the relations between skin and surface, between touch, exchange, and technological mediation, as well as between bodies navigating institutions or the urban terrains. We thought that contactless as a condition proposes a thread that navigates along with somatic and spatial knowledges. We looked at the condition of partial touch of contactless technologies as a new site of choreo-spatial epistemology. We were interested in the ways bodies are already shaped by past histories of contact. We read this through the micro distances we calculate with our bodies, a set of sensorial attunements of the almost-touches in everyday life.

Contactless technologies have first entered the financial terrain of small payments, reducing the transaction to the waving of a card over the payment terminal, or at the touch of a thumb with biometrics integrated into mobile phones, forming a new material encounter of the everyday transactions. It is a critical space in which multiple scales of contact take place as an extension of the body and a lexicon of gestures designed by technological modifications are performed. Vowden and I were interested in the 4 centimeters, in how touch is not wholly removed from what is called a contactless transaction. Yet contactless is not merely defined by the transaction. It is a *condition*, an embodied disciplining of the body and an indication of the wider applications of contactless as a technological mediation into the absence of touch, and the logics of frictionless movement through the cityscape.

The following passages are taken from a text that is used for a video essay¹⁶³ that Vowden and I created collaboratively. Reflecting on the financial origins of contactless, we wander through the streets of the City of London's Square Mile, navigating the urban landscape refracted by the screen, as we are confined to our homes, and noted the new language of distance and proximity that emerged. The language traced our research work that included bodily exploration,

¹⁶³ Ofri Cnaani and Sarah Vowden, "Measures of Closeness: A Contactless Lexicon of Gestures," video essay, forthcoming in *Journal of Embodied Research*, <https://vimeo.com/439380538>.

scoring, mapping, and strolling. It is a language used while being locked in our rooms and creating together while never physically meeting. It is the language that traces back to early colonial discourse of desired objects and dirty bodies. The contactless moment is inseparable from past “histories of contact,” that, according to Sara Ahmed, allow “the proximity of a racial other to be perceived as threatening, at the same time as it reshapes the bodies in the contact zone of the encounter.”¹⁶⁴ The contactless solutions of the current data positivism era represent a “softer” version of non-touch that is nonetheless still activated by the matrix of coloniality. The text was written to be spoken and recorded, not read, but I decided to present excerpts in the way we crafted it, as it offers some hybrid writing forms that always come close but never really become one.

The distance between my eyes is four fingers.

The distance between my shoulders to my screen is two straight arms.

The distance between my lips and the camera is a tongue, three fists, and a middle finger.

The distance between my chair and the wall is one arm’s length and two dancer poses.

The distance between my keyboard and Sarah’s chin is 9,855,000 handshakes but only 6,570,000 air hugs.

Contactless grapples with the absent language of the non-touch. Michel Serres repositions touch as a sense that extends beyond the epidermal limits of the skin; there is always an excess in touch, yet, Serres writes, “there is no word corresponding to touch to designate the untouchable or intangible, as there is for the invisible which is present in, or absent from what is seen, complementary to it, although abstracted from it, and incarnated in its flesh.”¹⁶⁵ For Serres, there is an absent language of untouchability, and in this sense, we may think of contactless as a temporary placeholder for such a term.

This space of untouchability is reframed by Karen Barad through the fundamentals of quantum physics, questioning what it means to touch beyond close proximity. Barad proposes that no material can ever really be “touched,”¹⁶⁶ but is the electromagnetic interaction of particles devoid of physical contact, thus the sensation felt of the surface of any material can be read as

¹⁶⁴ Sara Ahmed, *The Cultural Politics of Emotion* (Edinburgh: Edinburgh University Press, 2010), 194.

¹⁶⁵ Michel Serres, *The Five Senses: A Philosophy of Mingled Bodies (I)* (London and New York: Continuum, 2009), 3.

¹⁶⁶ Karen Barad, “On Touching—the Inhuman That Therefore I Am,” *Differences* vol. 23, no. 3 (2012): 209.

the electron repulsion between the atoms of your fingers and the object. Therefore, touch, for Barad, relies on the calculation of this space of an almost-touch, whether that is at the quantum or the social scale. Barad's radical reading of the measure of closeness invites us to look at new conditions of intimacy and proximity as they are being shaped by technologies of the "near field." Near field, a set of short-range wireless technologies, represent one measure in a set of new spatial scopes that ranges between the nanoscale to the interplanetary internet and reshape our system of spatio-temporalities. The near field captured the blurred space of the "almost touch." The space of Barad's "almost-touch" is a political space; we can observe how embodied knowledge is constantly being produced by shifting spatial, social, and political conditions.

The distance between you and me when we walk to the shop is your left arm, and my right arm if we didn't trim our fingernails.

The distance between my shopping bag to your back, when we stand in the queue is four sets of elbow bumps and a ring finger.

The distance between my mouth's breath and your lips is two masks thin. I can smell you.

The distance between my next word and your ear is 17 air kisses.

The distance between my blanket and your basket is a full body stretched and a bunny hop.

Dismantling the classical hierarchy of the senses, Tavi Meraud's consideration of intimacy and touch is viewed through the optical phenomenon of iridescence,¹⁶⁷ where surface isn't a concretion, but an accretion. Such an approach to the surface suggests a collapse between appearance and reality and defines contact as "really apparent, or apparently real." Meraud reframes intimacy as a form of spatiality that "organizes our experience of space and of surface" by the logic of proximity and questions the instinctive association of intimacy through proximity, adding that the "metrics of how much of my private sphere comes into contact with that of another, is rather a foil for an even deeper sense of spatiality, that of interiority." Instead, they propose a transformation toward accentuating the inner aspects of intimacy, focusing on the drive toward locating the real implied by this interiority. In contactless, intimacy collapses into

¹⁶⁷ Tavi Meraud, "Iridescence, Intimacies," *e-flux journal* no. 61 (January 2015), <https://www.e-flux.com/journal/61/60995/iridescence-intimacies/>.

the micro-space of the 4 centimeters. Like iridescence, contactless is touch beyond the real and of the flesh, a newly defined space of interaction that molds our bodies into new spatial configurations.

The distance between my dog and my hand is as far as I can see, and a chip.

The distance between my key and the lock is the length of my big toe.

The distance between my belly and the seatbelt goes through my digital credentials. The distance might change by the color of your skin.

The distance between my forehead and the duty-free goes through heat measures.

The distance between my credit card and your coffee is 4 centimeters wide, which is exactly two thumbs touching.

At a time of social distancing, the world obsessed over a new politics of touch as we moved through the city with recalibrated choreographies of distance. The 4 centimeters swelled to the 2 meters—the distance between bodies suggested to suppress transmission of Covid-19 as articulated by the UK government and demarcated on signs erected all over the city. In the supermarket, we oscillated between these scales of acceptable touch as we moved with avoidance down aisles, and at the till waved our contactless cards or devices at the safe distance of 4 centimeters. In an article written during the Covid-19 pandemic, Paul B. Preciado, adopting the Foucauldian notion of the body fabricated as a political project, discusses how recent technological and spatial models of sovereignty are now manifested much closer to the skin. The narrow space between the skin and the apparatus becomes a new political territory by transmitting xenophobic policy managed by technology: a “new territory where the violent border politics that we have been designing and testing for years on ‘others’ are now expressed taking the form of containment measures and of a war against the virus.”¹⁶⁸ Preciado inspires a notion of sovereignty modeled after big data which mobilizes the physical, social, and political qualities of the almost-touch space as a management tool. With Preciado’s framing, we can see how the borders of touch for the citizen-user are always troublesome and negotiable. When the state of contactless is framed not only as a technological development, but as a condition that

¹⁶⁸ Paul B. Preciado, “Learning from the Virus,” *Artforum* (May 7, 2020), <https://www.artforum.com/print/202005/paul-b-preciado-82823>.

fabricates the body as a political project, we begin to notice how contactless is a techno-political extension of the skin. As new skins emerge through the weaving of technological infrastructures in the urban milieu, and contactless is an extension of this socio-sensorial management of bodies.

Even before the 4 centimeters or 2 meters of contactless spaces, the body was always used for measuring distances, like the ancient common cubit measurement from the bottom of the elbow to the tip of the middle finger. In the pandemic, borders become much closer to our bodies, they land on our doorway, divide our beds. These new borders also extend beyond the limits of the skin. In a contactless urbanism, the space between skin and screen becomes thicker, a hybrid space, a patchwork of technologies from optical scanning to temperature sensing and barcodes that blur the phenomenological, cultural, emotional, and financial realms of contactless technologies.

As a new lexicon of closeness¹⁶⁹ emerged in the era of social distancing and isolation, our bodies have recalibrated to confine ourselves to the home and make measured calculations of distance to other bodies in the street. A new contactless futurity will inevitably emerge as the markings of feared contact during lockdown will remain etched in our movements. The desire to touch without touching will see contactless technologies mediate these new urban choreographies, reflected in the infrastructures of the smart city, which will become ever more synonymous with the accumulation of big data. As researchers in the fields of spatial and performance studies, our interests in contactless converge at the intersection of the body in a contactless urbanism; how the 2-meter distancing strategy that we perform in our neighborhoods is also the precondition for an increasingly embedded and panoptic strategy of contactless in our cities. The smart city also produces a new data-subject, and it is this entanglement of the embodied disciplines of social distancing and the technological mediation of contactless that promotes new ways of thinking of the urban during the pandemic.

The distance between my yawn and your clapping goes through Zoom's voice recognition.
The distance between your touchscreen and my fingers is 30 megabits per second if I sit in this room.

¹⁶⁹ The lexicon was developed as part of *Measures of Closeness*, a performance I co-created with Evann Siebens and Stella Geppert.

The distance between Evann's words in Vancouver travels on the submarine cable, from English Bay to the Panama Canal, the Gulf of Mexico, before it crosses the Atlantic Ocean. The distance between my typing fingers and the Vodafone servers is 5,689 tears and two swallows.

The distance between sleep pattern and your watch goes through your Amazon shopping cart. The distance between my lips and my next text message goes through Apple face recognition algorithm, and a smile.

As we are told that we must avoid any unnecessary contact with other bodies, objects, and surfaces, contactless provides us with a technological mediation to control and manage touch. Embedded infrastructures of contactless technologies are also increasingly compatible with enhanced surveillance measures, from the mobilization of biometric methods of identification in financial payments systems to government-tracked identification cards. Contactless infrastructures have been mobilized during the pandemic as both a management system of contact and movement and as a platform to extend surveillance strategies of the state. The pandemic thus reveals the collaborative potential of contactless devices and apps with state intervention and mass tracking. These infrastructures are unlikely to be backtracked after the pandemic; they will imprint themselves in the digital makeup of the city and take new forms as our bodies and our movements grow accustomed to new measured forms of contact. This is not merely the replacement of languages of touch, but a calculation of what and which kind of touch is necessary and desired in urban environments. Do we need keys to enter homes or is the wave of a hand preferable? Should high-value payments be made contactless? Should our smartphones become an extension of the surveillance state? Should my health data be used by a payment system app? The hybrid space of the non-touch is now at the tip of our every movement as we calculate our bodies' proximity to other bodies and objects in the urban milieu. We ponder how we will differentiate contact from technologically mediated forms of touch. What is an act that involves touch and what is a touchless act? Which gestures will never involve touch again? what are the future implications of a new contactless urbanism and opportunities for surveillance capitalism? And will the technological apparatus that substitutes fleshy notions of touch still be considered contact?

Desire for Frictionless Motion

Contactless as a form of digital capitalism exists in the intersections of data positivism and Western tendencies that constantly redefine the meaning of safety and accessibility. Reading Sara Ahmed is a reminder that “no thing” or “no body” has positive characteristics, which exist *before contact with others*: “It is not that a subject ‘gives’ meaning and value to others. Rather, subjects as well as objects are shaped by contact. Such forms of contact do not make something out of nothing: subjects as well as objects ‘accrue’ characteristics over time (a process which shows precisely how these characteristics are not a positive form of residence) that makes it possible to speak of them as prior to contact.”¹⁷⁰ Following Ahmed, if contact sustains the meaning of things, then the birth of the contactless as a condition also positions contact as something that can be given or taken by the use of power. In other words, contact pre-colonialism was imminent. Contact turned into a limited resource that can be taken or given. Interestingly, somewhere down the line there is a switch in the meaning of contactless from prohibition to luxury. Contactless shifted from restriction to a privilege. If the nineteenth-century museum prevented touch from the “primitives,” nowadays going contactless has become a status signifier for the economic elite. Not everyone can afford to live a contactless life.¹⁷¹ The right to contactless became parallel to the right to move freely.

At the heart of contactless technology lies the desire for frictionless motion, the fantasy of moving through an urban environment with no strings attached, without getting stuck. The all-too-known wish to lightly tap one’s wallet and swift thought the station’s gates before the train leaves the platform, entering an office without taking one’s ID out of the pocket, or checking in to a work environment without typing or even remembering a password. This kind of synchronization of body, data, and finance, enabled by contactless technologies, enhances a new

¹⁷⁰ Ahmed, *The Cultural Politics of Emotion*, 40.

¹⁷¹ “While contact tracing apps are proposed in a mode of rapid response, we pause and ask: What calculations are being made here? What values are placed on lives and exposures? As the epicentre of the pandemic crosses continents, we see how risks and losses are not equally shared across the world. For example, in much of the Global South, neo-colonialism (the ‘structural adjustments’ by institutes like the IMF and WB) meant the privatization of water, turning it to a profit commodity and therefore a source of conflict. To advise people to wash hands regularly with running water and soap while in many places water is sometimes itself contaminated and causing diseases is a cruel irony (Kamau 2020).” Aouragh et al., “The Extractive Infrastructures of Contact Tracing Apps.”

capitalist kinesthetic that is enabled by computation ubiquities.¹⁷² The fantasy of free movement is conditioned by the idea of what movement is.

Dance researcher André Lepecki notes that in non-Western and Indigenous societies the notion of movement is imminent. In the West, on the other hand, “the ideal fruit of freedom is ontologically, intrinsically fused and confused with the freedom of movement.”¹⁷³ Being free means being able to move freely. Because movement is external and granted, it is always conditional. The uncanny feeling of being told not to move freely as advised by authorities during the pandemic is a clear example for movement that is defined by the relationship between the individual and the sovereign. As such, repertoire of movements of the subjects of the nation-state is given to them by the state, as their natural movement. The subject’s level of freedom is measured by their ability to move freely, to gain access to properties and potencies, and, of course, to gain an advantage by moving faster than others. So-called “free movement” is in fact a way of using movement to exercise power. Such granted movement is also directional, with the ultimate move being forward and upward. The ideal of moving forward encapsulates the neoliberal rationale that binds individualism, kinetics, and capital.

Lepecki’s understanding of Western movement as a mechanism of control can be extrapolated to the contactless condition. In the kinetic arena, one’s power is defined by movement, access, and the ability to prevent movement from others. The history of colonialism and modernity are conditioned by the definition of who can be mobile, and who mobilized others, by taking from them their right of mobility.

Contact is similar to Lepecki’s proposal regarding movement in that it is presented by power as a limited resource that can be taken or given. At the same time, the tactile arena is more twisted. Touch was traditionally associated with access. In the museum sector, as museum spaces gradually evolved over the course of the eighteenth century from private homes into public institutions, those “unruly social bodies” who once engaged in playing, eating, and drinking in

¹⁷² Randy Martin’s writing focuses on the movement of capital within financial markets to the history of dance and drew parallels between choreographies of currency and bodily movement. Martin’s term “social kinesthetic” proposes that “the sovereignty of one body over others or one technical way of dancing over others establishes not simply a sovereignty for dance but discloses a conception of bodily sovereignty by which we can detect the contours of a social kinesthetic.” Kinesthemes, Martin claims, “demand a body to be many things at once.” Randy Martin, “A Precarious Dance, a Derivative Sociality,” *TDR/The Drama Review* vol. 56 (December 1, 2012): 62–77.

¹⁷³ André Lepecki, “Movement in the Confinement (or: Choreopandemia),” RIBOCA2 Online Series of Talks and Conversations, 2nd Edition of Riga International Biennial of Contemporary Art (RIBOCA2), 2020, <https://www.youtube.com/watch?v=XXVVbtQEDS0>.

the museum were gradually removed. By the early twentieth century, the curatorial trope is one of “disembodied opticality.”¹⁷⁴ Touch was no longer imminence, no longer a primary way of knowing the world. The right to touch became a privilege. The epidermis became a political arena.

Contactless is a form of managing the politics of the flesh. In the last decade, however, the privilege to “go contactless” is evidence of being close to power. The need to contact became an obstacle that must be cleared out of the way of capitalist accumulation. Contact became a burden. Direct contact slows us down. The lack of contact equals advanced mobilization: the faster one moves, the stronger they are; it is the same when one is advised to stop moving and stay in place. For example, during the pandemic the ability to stay at home was available for some, while others couldn’t afford it, as it was deemed “essential” for them to earn their living by being out in public space. The ability to avoid contact became a reflection of inequality. Although the meaning of contactless has shifted from contactless as prohibition to contactless as privilege, the idea that contact is not a given, but something that needs to be granted or taken away, echoes a similar rationale to Lepecki’s thinking about movement. The link between mobility and power conditions Western contact and movement never as transcendent but experimental exercise of imminence. During the pandemic, contactless technologies that were once synonymous with payment methods have been extended beyond the financial arena to hospitality, transportation, individual consumption, security infrastructure, as well as leisure and entertainment. To invoke Foucault’s note that “the body is the inscribed surface of events,”¹⁷⁵ it is the ability to avoid touch that has inscribed itself upon the skin. More than ever, contactless technologies and contact as a technology of relation condition the way one moves, engages, and knows the world.

The 4 centimeters of contactless technology, like the 2 meters of social distancing or the distance between viewers and artworks in museums, aren’t vacuum spaces. The contactless space is actively doing something when it is directing urban routines. In them, there is a hyper-activity of governmentality, a hyper-activity without a performance, biopolitics without a body. Through these micro spaces, access is maintained and control is enforced. The active magnetic fields produced by electric currents’ loop are looping also to one’s bank information, location,

¹⁷⁴ Deliss, “Walking Through,” 148.

¹⁷⁵ Michel Foucault, *Discipline and Punish: The Birth of the Prison* (London: Penguin Books, 1991), 27.

shopping history, credits and debts. Contactless spaces maintain active fields of commerce, spatial superiority, and value.

More than many previous forms of technology, the possibility to move without contact fulfills the fantasy of inhabiting a space without a body. But this freedom of movement is not only not free, it is also not without a body. The so-called free movement of the body within the urban terrain is enabled by an increasing synchronization of body and data. Data about our movement, health, social credits, and financial ability is no longer captured only by GPS monitoring or credit card tracking. The capitalist sensorium is now intimately circulating alongside our bodies. Data aggregation is going deeper into the somatic: into the soft tissues of the flesh and the quiet pulse of the blood flow and bodies are recast as nodes on vast information networks.¹⁷⁶ Data collection through the somatic enables corporeal control through remote network commands, automated responses, or self-management practices. The family of body-technological applications often described under the umbrella of “quantified self,” makers of self-tracking tools, blurs the lines between knowledge production and its consumption, data extraction and usage, external and internal monitoring, and between private and public information. The corporeal and the corporate collide into one nervous system. The large amount of information that is yielded from contactless movement highlights the fantasy of perfect synchronization of body, data, and built environment that unified our heartbeat with global temporality.¹⁷⁷

I suggest that the notion of contactlessness is enabled by syncolonialism. The production of synchronous, standardized global timeline colonizes the collective imagination. The assertion of power through the notion of syncolonialism provides a coherent perception that implies a globalized contemporaneity where all places and entities are equal, as if there were one unique present for all. Portanova argues that “the belief in the eternal necessity of temporal

¹⁷⁶ N. Katherine Hayles coined the term “somatic surveillance” to describe a type of surveillance regime where bodies are recast as nodes on vast information networks.

¹⁷⁷ William Davis uses the category of “pulse” to explore post-Fordism as a set of techniques for governing rhythms, both of the body and of technologies. He shows the real-time nature of post-Fordist life, where a chronic sensing of quantities becomes the basis of co-operation, rather than a judgement via measures. For example: “Data is collected via gym membership and use of wearable technology, and personalised improvement plans are produced for each employee, often using ‘gamification’ techniques of goal-setting, competition with other employees and rewards. The scheme is integrated with other HR systems, and produces a wellbeing data dashboard for managers to inspect.” William Davis, “The Political Economy of Pulse: Techno-Somatic Rhythm and Real-Time Data,” *Ephemera: Theory and Politics in Organization* vol. 19, no. 3 (2019): 513–36.

synchronization as indispensable for the preservation of social life is parallel to the belief in the eternal essence of its corresponding mode of production: modern capitalism.” In the same way capitalism captures our imagination and by perpetuating a modern dream of linear progress, “chronological obedience absorbs any disaccord with the temporality of the universal clock, making all body-minds move at the same metric beat.”¹⁷⁸ In the case of contactless urbanism, it is the perfect sync of body and data that enables frictionless motion, granting the privilege of freedom of mobility. The desire for a smooth flow of life is anchored in a contactless solution that relies on almost total access to both body and data. The data being extracted from an individual body provides information regarding location, banking status, and oftentimes physical activity is later reverted into its raw, abstract form. In an increasingly quantified society, often characterized by obsessive measuring, the body is used as proxy between various forces of the data economy.

One example of the sedimentation of the body-as-information is the common feature of auto-syncing, which allows data from your body to be automatically synced, without any action required. Auto-sync speeds up the transfer of our most private information into data and circulates it back to our ability to move around without being stopped. At the heart of the raw data governing form lies the notion of synchronicity, the alignment of all aspects of life into the same measurement units. The synchronous global clock, itself an imperial invention, is now aligned with people’s biological clocks, turning data points into raw data which is perceived once again as an abstract, universal temporality. Data is understood as the imminence form of governing where bodies, with their ability to move and feel, need to be removed in order to unlock data in its absolute raw state. Portanova notes: “consider the modern project of global synchronization as the compo(impo)sition of a unique temporal milieu, a homogeneous choreographic tempo that goes (or accelerates) from an immutable past towards a predictable future. In this sense, we can say that the main instrument of syncolonization can be identified with a particular conception and use of advanced technologies such as blockchains and AIs: innovation, as a sort of posthuman arrow thrown towards the unbearable openness of the future.”¹⁷⁹ Portanova’s notion of syncolonialism connects the colonial rationale of unified global temporality to current forms of algorithmic governmentality. The contactless, as a condition

¹⁷⁸ Portanova, *Whose Time Is It?*, 92.

¹⁷⁹ Portanova, *Whose Time Is It?*, 70.

rooted in colonialism, is enabled by the control of time and movement. It represents a repertoire of movements that is emblematic for current soma-techno-political modes of data governance.

Promiscuous Contact and Modes of Afterness

What can the contactless condition tell about museum afterness?

Contactless is an administration of access. The various ways it has been traditionally exercised in museums are currently being tested on behavioral and political levels.¹⁸⁰ I am thinking of the contactless as a political condition that is rooted in colonialism and continues to adapt its properties in alignment with the current techno-political environment. The state of afterness represents a different possibility. It emerges from the collapse of the museum's system of orders and represents entangled histories of contact between bodies, objects, and information that are no longer available to trace. In the final part of this chapter, I share two moments where I used my own practice to reframe contact and contactlessness as a mode of afterness. The pieces I share consider the body not only as a surface of inscription, as Foucault noted, but as an instrument of writing, to use Lepecki's words, "an inassimilable agent that constantly writes history back."¹⁸¹ Can the contactless become a technology of writing history back? First, I share the final iteration of my work with a group of participants to rethink the space of the almost-touch through the terminology of affective hapticality. Second, I annotate my collaboration with dance-maker luciana achugar to put forward the notion of pleasure as a form of intensified contact and as a method to engage with the residues of the Museu Nacional. The residues represent the ultimate collapse of spaces between objects and bodies. The shared space offered by the notion of hapticality and the engagement with residues through "pleasure practice" stage new relations between objects and bodies. It proposes a possibility of writing history back and

¹⁸⁰ Studies in the field of museology have shown how people, regardless of how much institutions may try to prevent this, always touch the objects on view. Although the institutional narrative always identified the act of touching objects with the naïve and the uncivilized, the data shows that all people touch objects. They always did. Touch is a form of knowing. A technique of relating to other things and other beings. On more political level, the recent demand to regain contact with objects that were taken and removed from their traditional cultures became a central debate in the museum world. The demand for repatriation of objects is a struggle that can be understood as a quest to renew direct contact with objects and bodies that are already shaped by past histories of contact. Objects that were robbed from their lands and were put on museum pedestals, detached from a cultural context. The colonial contactless is having a hard time keeping things together. The demand to be in touch with one's own culture is pressing. The invisible zones of the contactless space can no longer be regulated.

¹⁸¹ André Lepecki, *Exhausting Dance: Performance and Theopolitics of Movement* (London and New York: Routledge, 2005), 57.

re-positioning of knowledge production. The practice of afterness moves toward writing history back with touch, with feel, with pleasure, and without separability.

Contactless becomes a formal tool for understating the world through separation. Entering the contactless space with performance, I became interested in refusing the capitalist fetish for mobilization, slowing down instead of using contactless to move faster.

Affective Hapitality

The minor movements in the contactless space were what Vowden and I explored with students and other participants when we invited them to move together slowly while holding 4-centimeter-long objects. Sometimes we had to slow down in order to hold, we were nearing stillness. Over time, I became interested in the near-field contactless space as a space from which to reverse conditioning of contact. We noticed the slow collaborative movement that is required to hold space with others. We subjected ourselves to a space of no-contact but opened our bodies to the possibility of what Moten and Harney termed “hapitality,” the feelings you can tune into through others:

This is modernity’s insurgent feel, its inherited caress, its skin talk, tongue touch, breath speech, hand laugh. This is the feel that no individual can stand, and no state abide. This is the feel we might call hapticality. Hapticality, the touch of the undercommons, the interiority of sentiment, the feel that what is to come is here. Hapticality, the capacity to feel though others, for others to feel through you, for you to feel them feeling you, this feel of the shipped is not regulated, at least not successfully, by a state, a religion, a people, an empire, a piece of land, a totem.¹⁸²

Hapitality is a feeling that cannot be felt individually. It is a feeling that cannot be fixed to a territory, state, nation, or history. It is the feeling that emerges through contact and with others. Harney and Moten are thinking through what is underneath the processes of individuation, what does not need a moment of regulation, correction, settlement. Their notion of the undercommons, like movement, like contact, is what’s already there: “We’re already here, moving. We’ve been around. We’re more than politics, more than settled, more than democratic.”¹⁸³ Being shaped by

¹⁸² Stefano Harney and Fred Moten, *The Undercommons: Fugitive Planning & Black Study* (Minor Compositions, 2013), 105.

¹⁸³ Harney and Moten, *The Undercommons*, 19.

touch, by contact comes before any form of enclosure but also before any form of commoning.¹⁸⁴ If contactless is the spatial language of the colonizer that produces space that holds together by taking away direct touch, Harney and Moten send their readers to the slave trade ship, a space of no space. In it, excessive contact turns into a form of feeling for each other: “Thrown together touching each other we were denied all sentiment, denied all the things that were supposed to produce sentiment, family, nation, language, religion, place, home. Though forced to touch and be touched, to sense and be sensed in that space of no space, though refused sentiment, history and home, we feel (for) each other.”¹⁸⁵ Hapticality is a spatial, embodied, and political form of alternating the control of the spatial condition with the possibility of holding space for each other. The attempt to re-embodiment and reorient the contactless space toward hapticality can be understood as a *practice of afterness*. Through re-embodiment of the contactless space, and positioning it as a space of hapticality, contactless was inverted to be a site for communing, a possibility that may bring difference, provoking change in multiple directions.



Figure 21. –. Cnaani, Ofri, Contactless Condition workshop, March 15, 2020, collage of two digital photographs.

There we were, with one another, not in order to move forward but in order to be with slowness and stillness, as a possibility of knowing the other through the affective hapticality of the almost-touch and to allow a transversal movement in-between different temporal dimensions. Holding the space together evoked other tactile memories, what Ahmed described as “past histories of contact.” Thinking of the contactless as a space of affective hapticality is reversing it

¹⁸⁴ Kike España, “Hapticality,” Glossary of Common Knowledge, June 2020, <https://glossary.mg-lj.si/referential-fields/hapticality/hapticality>.

¹⁸⁵ Harney and Moten, *The Undercommons*, 98.

from its ability to be a conductor of individuation that assists some people to move faster, to get somewhere quickly or to gain access others don't have. Instead, contactless hapticality makes room for what we hold together and what we hold for one another. The micro spaces of the contactless become spaces of sharing a burden. We were close enough to smell each other's breath and sweat. To remember we have bodies, and they are tired. The set of exercises we practiced became a collective attempt to think of the contactless as a vital zone of experimentation. In those few moments, the last hours before lockdown, the 4 centimeters of the contactless space momentarily turned from a mechanism of surveillance of liberal democracy to a place of holding some shared space together, but with the qualification that this hapticality is far from being immediate, and is hard to hold for a long time. It offers a reading of contactless as a critical site that interrupts the efficient solutionism of banking, data, and new urbanity, instead proposing it as a space of knowing that refuses to be parsed: neither self-contained nor singular but intertwined, affective, irresolute in their connections. Then the pandemic happened. The world was closing and contactless living became the rule, not the exception. It was time to circulate back to the absolute state of contactlessness left after the museum burned down.

Pleasure Practice as a Practice of Afterness

I wanted to study the residues not for what they were but for what they can be. I wanted to know them not by order, but through pleasure. Pleasures, according to Ahmed, "are about the contact between bodies that are already shaped by past histories of contact."¹⁸⁶ Some forms of contact don't have the same effects as others, but Ahmed argues that pleasure involves an opening toward others. What happened if, instead of reversing the remains of the museum back to their original form and indexical order, I will use contact and pleasure as my entry point? What can be done with performance and with pleasure in a space with no-body? I was hoping that engaging with bodies and objects that were barred from contact through pleasure can reshape them and hopefully form a new relation between them and propose a new way to know them. Pleasure as a practice of afterness.

Leaking Lands is a video and performance work where I use the digital remains of the Museu Nacional as site of intervention. The piece is discussed in detail in chapter 5 but a single element of it is presented here as it is a case-specific example of using performance practice as a

¹⁸⁶ Ahmed, *The Cultural Politics of Emotion*, 194.

way of listening and responding to the changing conditions of contact enforced by the state of afterness. As part of the project, I invited Uruguayan dance-maker luciana achugar to collaborate. achugar has developed an embodied practice that she uses for making dance, teaching, and for ritualistic gathering. The practice is a tool for liberating ourselves from presupposed ways of being in our bodies. It aims to “unsocialize” us from a normative social behavior in order to get closer to a post-civilized utopian state, with a brain that melted down to the flesh, the bones, the guts, the skin. achugar sees it as a practice of growing a new body, as one would grow a plant—a utopian body, a sensational body, a connected body, an anarchic body—by becoming “uncivilized.” achugar writes: “I make work from the rage of being a Latin American living in the belly of the Empire in a post-colonial world [...] I make work as a practice of growing a body of work; a practice of growing a collective body with all the participants including the audience, and of growing myself a new body.”¹⁸⁷

As I showed before, the museum can be understood as a device to represent and understand the world—and its regulations are crucial tools for separation and determinacy. The museum as a disciplinarian device of the “civilized” public is constituted by the deprivation of touch. In it, the uncivilized who bridge the contactless space are considered to be missing the cultural code. But achugar is claiming back pleasure as an agent that constantly writes history back. Such practice means reversing the Euro-centric “nervous system” by being in pleasure. Or, more accurately, by “doing pleasure.” Working with other bodies of both professional and unprofessional dancers, achugar locates the core of her practice in staying and sustaining the elusive point of “not naming”—a somatic awareness practice to develop an embodied sensibility to let the body be fresh from a known language. Being in pleasure is being in the state of not naming.

let it be like an exorcism. an exorcism of the sound, and the feeling and the pain and the knowing, the stuckness and the not moving, the nodding and the holding, let it go, let it come out, let it free itself, allow the holding to let go let in the pleasure of finding all the spaces that are holding that are held that are not knowing, that are hiding. let them come out of the hiding. let everything that want to be spoken, be spoken. sounded out. breath out. felt out. Awwhhehahaha.¹⁸⁸

¹⁸⁷ See Luciana achugar’s website: <http://www.lachugar.org/mission>.

¹⁸⁸ This text by achugar is part of *Leaking Lands*, a video installation by the author.

For our collaboration, I selected several objects from the National Museum's collection that survived in 3D modeling. With achugar, I subjected the objects of display to a methodology of movement, to a practice of pleasure. I challenged achugar to engage with her somatic practice only by voice and to engage with objects without tactility. In each video segment, we started with a single object: a mammalian skull, a fossil, a mineral, an Indigenous object used for ritual, and an iconic classical female head made of marble. Using the 3D models, I started to wander through the back of the objects and "crawl" into their inner spaces. With achugar's guidance, the inner spaces of the objects became landscapes of caves and digital grottos, or bodily passages like veins or the digestive system. Like achugar approaches the body in its pre-lingual state, when sensations don't have names yet, I worked with the 3D simulation at the point in which the object is too close to be known. I zoomed in to the point it melted into the flesh, the bones, the guts, the skin. The object was no longer the cultural product designed for the gaze to look and know, an object that made its way to the institution through a culture of extractivism, then named, ordered, archived, categorized, compared, and contrasted. The digital ghost of the burned object now melts into the voice, circulating back to a pleasure point where body part and the partial object are no longer separated, but rather, fuse into a new state of being, they are performance-data-matter. At this point, one can no longer look at the object as a way of knowing it. Instead, being with the object is offered as a form of resistance rather than captivity. Through rubbing living and digital skins, or massaging the memories of a warm body, now only live through the voice and the texture of matter, now a digital ghost made of mathematical modeling, a potential act of healing becomes possible. The line of experimentation and inquiries I used in the collaboration with achugar approaches hapticality through un-bounding the body from its hierarchical organization toward a state of fleshy being. The momentary assemblages of body, matter, and digital are too closed or too far away to be captured through a system of categorization, which makes them harder to possess. It proposes that we think of the arrangement of bodies, matter, and technology not as a split but as a temporal alliance. This process happens in the acceptance of the screen as a social agent that can transmit closeness. The computer's skin as a way of manifesting an embodied relationship with an "other," and the establishment of a tactile and haptic encounter with ourselves through an "other." A space where others perform themselves through us not by giving up on reality but giving in with others. By taking achugar's pleasure practice into the machine-made space, the human body is no longer the hierarchical

organization or the privileged production site. The body is no longer a body, but a series of fragments and activities, some of which are generated by the nervous system, some by technological stimulation. Would turning into the unaccounted remains, with others, provide a form of haptic practice under the algorithmic rationality? Instead, they turn into a tactile vision, the micro proximities between the touching fingers and the touchscreen offer skin-seeing. A pleasure practice that gives the role of thinking through the epidermis. A friction of healing process that emerges from a zone of altered sensations. Those zoom-ins are not scanned spaces but a “speculated space” made by the machine, and I think about them as processes of healing, where the object can no longer be “looked at” from a critical distance. It can no longer be “known” or “utilized” to a specific type of indexing or “put to work” for a specific ideology. It can no longer only be viewed. Healing is coming through the melting of the body and digital fragments into to a performance-data-matter space that is yet to be known.



Zoom-ins in 3D models: not scanned spaces but a “speculated space” made by the machine.

Figure 22. —. Cnaani, Ofri, *Accidental Triggers*, 2019, color video with sound. Collection of the artist.

What remained after the fire can never be touched in a direct way, in the same way we touch objects. The short but catastrophic spatial interruption of the 2018 fire brought an end the perfect manifestation of the ordered world. With it, the abolition of contact as a mechanism of control and as a device of ordering became defunct. The residues no longer produce a coherent collection. Instead, with the fire, the museum’s residues were “spreading” a new sort of “promiscuous” contact capturing the “energy” released in that breaking point. It is promiscuous because it allows everything to touch everything else and produce a state of difference without

separability, complexity without order.¹⁸⁹ The promiscuous contact represents the potential leakage of information, the hole in the archivable, and the noise in the computable. The residues' imperfect edges represent spaces of reduced governmentality. These qualitative thresholds are spaces to envision modes of relations between thought and being.

Conclusion

This chapter examined how museums enforce two colonial histories: the history of contactlessness, and the production of a synchronous narrative. The chapter's concern lies in afterness' spaces without contact that keep the body and objects apart, but are often used for excessive governing while confused or offered as spaces of smooth and frictionless movement. Through a close reading of the museum visit and the current urban terrain and by offering methods of engaging with the museum's afterness, I traced a switch from contactlessness as prohibition, as it was practiced in the museum in the past, to contactlessness as privilege as it is practiced today in the smart city. The post-museum state is addressed in this chapter through the continuous contact of the museum residues. Unlike museum objects, the residues are never finalized and requires a method of engagements that is different from the one practiced in museums. I presented two methodologies: re-embodiment of contactless as affective hapticity by inverting it to become a site for communing, and re-engaging with Museu Nacional's digital residues with "pleasure practice," turning the digital remains from an institutional tool to a tactile site and potential site of healing. The two performance-based methods do not act in the same way. Hapticity activates the contactless not as a site of keeping apart but as a site being together in differences. The pleasure practice response to the potential of afterness to become a site of healing through promiscuous contact. Together, they represents two modes of afterness.

Writing about contact and contactlessness is writing about, in, and for the gaps. I wrote this chapter from the small fractures and being seduced by the gaps, committed to the slow work of fracturing attachments, when things are not fully adhesive but not yet separated, when one can hear the sound of the ungluing, which is common in the space of the not-quite but the almost touch. It is a quiet listening to the movement of the skin and the word, as for all our concerns there is always something that drops out.

¹⁸⁹ Ferreira da Silva Denise, "On Difference Without Separability."

Chapter 4:

Becoming Audience

In previous chapters, I traced the collection's aftermath to show how the removal of the object leaves behind the multiplicity of its conditions. Denise Ferreira Da Silva argues that inseparability has the capacity to release the thinking "from the grip of certainty and embrace the imagination's power to create with unclear and confused, or uncertain impressions."¹⁹⁰ The residual state underlines the uncertainty and vulnerability and can become an account of epistemologies that transform the standardization of knowledge as it is currently carried out by museums and archives as well as by technologies, digital media, algorithms, and data.

This chapter is dedicated to the audience. What happens to the audience after the museum? Now that it is no longer the audience of a collection, can the audience recollect itself elsewhere? The withdrawal of the object opens up the possibility for audiences to disavow known methods of generating institutional knowledge and call for rethinking what methods can fit the active network of the residues. The multiple interruptions enacted by the event of the error activate the potentials of afterness to reorder knowledge and a new relation to the audience. In this chapter, I examine two propositions for audiencing afterness. First, I look at the possibility of becoming an audience through collective witnessing of the state of incompleteness, after the collapse of museum protocols; collective witnessing means sharing and carrying with others the past that is not past. I describe two encounters of collective witnessing of the National Museum's aftermath through a shared visit of Google's virtual tour. Then, I use as an example a recent study project to propose a shift from mediation—a key term in museum education practice—to mutual navigation of the residual space. To move from mediation to navigation means replacing the mediation of objects from an institutional collection to the institution's public with the practice of navigation without an object, a transductive methodology of learning that underlies the uncertainty of the residual space as a shared mode of existence. This isn't to propose that mediation at large is obsolete but to claim that it become defunct in the residual space where identification of a middle space between entities collapses entirely. I use the term "transductive navigation" to discuss a future-orientated method that aims to free the political imagination,

¹⁹⁰ Denise Ferreira da Silva, "On Difference Without Separability," *32nd Bienal de São Paulo – Incerteza Viva. Catalogue.*, ed. Jochen Volz and Júlia Rebouças (São Paulo: Fundação Bienal de São Paulo, 2016), 59.

while situating local forms of knowledge. Crucially, my writing is not anchored in one locality, but focuses on the conditions of afterness as something that traverses multiple spaces of promiscuous contact, after the museum. It is important to pull the question of audiencing away from the single and overwhelming case of the Museu Nacional, as I do not wish to define a new audience for the Brazilian museum. The practices I share are based on several performative encounters in different settings. The travel between various physical and digital terrains that suits the infrastructural conditions of the state of afterness. I use them to articulate speculative methodology of audiencing to access the potential of afterness as a space of unlearning that simultaneously proposes a place of relearning.

Collective Witnessing

What is left after the museum (and its model of collective memory and national subjectivities) is an unfilled territory that lacks and refuses coherent identity. The territory of the residues is one whose people are missing, to use Deleuze's term. In my introduction, I discuss the museum's "moment of publication,"¹⁹¹ that is, the moment when the public becomes constituted as a specific public, through the experience of art. In a field that studies museum practice and theory, the moment of publication is considered the moment where individuals or community become "the people" of art. In the new conditions of the National Museum's aftermath, the moment of publication become a moment of absence. How to understand the possibility of being constituted as a specific public through that absence? How does one become an audience of something that has ended, when what takes place is the lack of the taking-placeness? The process of becoming an audience and becoming through audiencing can be formed in the absence of an event and in urgency posited by this absence.¹⁹² It is a process activated by the loss of known limits of the museum as a system of meaning. It is a process that is no longer bound to the structure of the museum and the protocols of being a museum audience, but still exists in relation to these protocols and is made insecure by them.¹⁹³ The idea of becoming the audience of the residues entails turning the past to orient to the future.

¹⁹¹ Simon Sheikh, "Letter to Jane (Investigation of a Function)," *Curating and the Educational Turn*, eds. Paul O'Neill and Mick Wilson (London and Amsterdam: Open Editions and De Appel Arts Centre, 2010), 61–75.

¹⁹² The notion of community of exhibition that becoming through its absence is developed by Sarah Pierce in: Sarah Pierce, "It's Time Man. It Feels Imminent." (PhD Thesis, Curatorial/Knowledge, Department of Visual Culture, Goldsmiths College, University of London, 2013).

¹⁹³ Maurice Blanchot, writing about the events of May '68 in 1983. Quoted in Pierce, "It's Time Man."

How to become the people of a scene that is characterized by absence? Although the museum has disappeared, tuning into its afterness involves some degree of publicness. The process of becoming an audience to the museum's active residues demands replacing the "what-is" the institution with the mission of learning how to attune to its incompleteness. The state of incompleteness, after the institution, is fragile. It represents a crisis in the network of meaning and knowledge production. But its fragility represents a possible way to reenter the space of the museum and become its audience through mutual caring for the museum's afterlives.

Audience combines the activities of auditing—an inspection or examination of an event—and of perceiving, or reaching a higher awareness or conscious that is enabled by an event. Perhaps the possibility of becoming audience through the absence lies in the activity of collective active witnessing. In the final notes for his book *Singularities*, Andre Lepecki calls for the understanding of audience to be reshaped from passive spectators to an active witnesses. He understands witnessing as developing a responsibility of caring for an event's afterlives by giving testimony; that is, carrying the aftermath into a future by transmitting subjective experience. It is the notion of witnessing that I propose as a method to becoming an audience in the lack of the taking-placeness. I understand witnessing as a way of carrying the institution's afterlife from the past into the future. How is the active witness to be understood when facing the institution's spectral absence? Collective witnessing of the state of incompleteness calls for experimentation with the multiplicity of knowledge that remains unclaimed or unclaimable after the event of error. Becoming a witness cannot reform it or solve it. The uncertainty of what's left provides an opportunity to walk away from old authoritative assumptions and hierarchical positions toward engagement with the immaterial and material remains. Witnessing, with others, is developing the capacity to share, transmit, and narrate an event. The event becomes an abstraction but it lives through these interpretations and mutations. The idea of becoming audience through collective witnessing suggests that the audience isn't hinged on a specific object or subjectivity. Instead, the uncertainty of the residues allows accesses to other times, like the museum deep time, or colonial time, and speaking from the mouths of many: the living and the dead, the collectors and the collected. The moment of publication is no longer the moment of confronting the event, but the moment of transmitting testimonies of the event to others, with others. The audience act in relation to both historicity and futurity. Such an understanding of the audience entails that the museum become less available and central as a site, but live through the

witnessing of body, matter, and data infrastructure that become agents for transmuting, translating, and multiplying. Witnessing is always transversal. In Lepecki's understanding of witnessing, the event he refers to is a performance, and the witnesses are the members of the audience who are no longer passive spectators but carry the event forward. However, the very act of carrying an experiential event forward is never a private introspection or an event of the self. Instead, he points out, witnessing is the vehicle that transforms the occurrence into a greater social and political field. It "addresses the entire social field as a transitory ear—that later will become transitory mouth."¹⁹⁴ Witnessing is an act of response-ability. The idea of witnessing the museum's residues is based on academic work that puts forward the notion of witnessing as a framework for engagement not only with people but with matter, body, media, and data.

Witnessing matter proposes engagement with the material strata of the world. This can generate new insights and modes of working.¹⁹⁵ By welcoming the "testimonies of things," matter itself becomes a device to record evidence of colonial history. Also relevant here is the literature that emerged from performance and calls to knowing an event through a network of body-to-body transmission of affect and enactment. The live body here means both the "flesh and bones" as well as the "labor and use" as a source of evidence, both of which are active and impact across generations.¹⁹⁶ Finally, the field of media witnessing,¹⁹⁷ as well as witnessing nonhuman actors entails learning to witness emerging data-worlds.¹⁹⁸ The various strands of inquiries from recent years represent modes of engagement with an event not through the act, but by tuning into its surrounding milieu of matter, flesh, or digital as a method of renegotiating it in its afterlives. It requires a release from the grip of the grand narrative of the museum, toward an active processing of its leftovers and crafting, situated, and localized accounts of testimonies.¹⁹⁹

¹⁹⁴ André Lepecki, *Singularities: Dance in the Age of Performance* (London and New York: Routledge, 2016), 175.

¹⁹⁵ Susan Schuppli, *Material Witness: Media, Forensics, Evidence* (Cambridge, MA: MIT Press, 2020).

¹⁹⁶ Rebecca Schneider, "Slough Media," *Remain*, eds. Ioana B. Jucan, Jussi Parikka, and Rebecca Schneider (Lüneburg: Meson Press, 2019), 5.

¹⁹⁷ Paul Frosh and Amit Pinchevski, "Media Witnessing and the Ripeness of Time," *Cultural Studies* vol. 28, no. 4 (2014): 594–610.

¹⁹⁸ Patricia Reed, "On Witnessing Otherworlds – A Diagrammatic Talk" (Sugar Contemporary, April 3, 2020), <https://www.youtube.com/watch?v=WU5xUAVLD9A>.

¹⁹⁹ Lyotard's idea of "grand narrative" is the story that is considered common to all. He proposes a move to small narratives—les petit récits—as a way to break up or unravel the metanarrative's dominant stream. Jean-François Lyotard, *The Postmodern Condition: A Report on Knowledge* (Minneapolis: University of Minnesota Press, 1984), 156.

Thinking with the framework of matter and media as a witness, the idea of collective witnessing suggests relinquishing of human centrality and looking instead for new alliances between human and nonhuman witnesses. Collectivity in that sense proposes a shared form of situated and localized accounts of testimonies. Collective witnessing as suggested by Lepecki carries certain kind of historical-political performativity. Such situated accounts go against the meta-narrative of the museum as a producer of a narrative that holds things together, and are not invested in what the museum was. Instead, the multiple actors are producing stories that bind the gaps and presents. Witnessing is a place of experimenting *with* the event, where both the flesh and language are still a transmission. Witnessing forms “sedimented acts” that haunt material in constant collective interaction, in constellation, in transmutation. The audience then becomes itself, not at the moment of witnessing the event, but when the event becomes an experimental field of thoughts through sharing it with others. The residues can be understood both as a generative term for all the entities that do the witnessing *and* as a site of becoming through collective sharing.



Figure 23. –. Discover the National Museum of Brazil—Google Arts & Culture. Retrieved June 18, 2021, from: https://artsandculture.google.com/story/RAVxwQA_-ABfJw. Screenshot by the author.

Encounter 1: Collective Witnessing

In March and April 2020, I conducted a series of performative encounters that responded to the new working environment during the Covid-19 quarantines and how these formed new relations between skin and screen and between physical exchange and technological mediation. Looking at the case of Brazil’s National Museum, I spent months thinking about the possibility of moving

through non-physical space, especially in a museum, a space that is traditionally dedicated to the display of material culture. In March 2020, when museums around the world have closed their physical facilities and some offered virtual visits, the question of how to visit a digital museum was in the mind of many. Suddenly, numerous institutional collections became online collections and museum visits shifted from the soles of our feet to the tips of our fingers. The blocking of access as well as displaced locality are some of the conditions of the state of afterness that I have been looking at while researching the fire at the National Museum. The extreme change of spatial expectation became, all of the sudden, a global phenomenon. The possibility to move together with others, without physical bodies in a concrete space that is no longer a physical site, seemed all of the sudden so real. I was joined by thirty-five willing participants who were ready to take a tour of the digital ruins of the National Museum.

None of us had been to the museum in the past. We didn't have any feeling of the space as it was, nor a memory of a specific object or the atmosphere. We also lacked the political and historical proximity to either the institution or the event of the fire. Yet, we became the audience of the museum and its aftermath. We were the audience of the museum's haunted digital imitation, accepting that we can never grasp anything fully. From a theoretical perspective, our problem was, how to know something we don't know, something to which we didn't have direct access? The notion of the "absent audience," developed in the Advanced Practices research lab,²⁰⁰ led me to approach the museum not as a local but in terms that respond to the museum as something that continues to resonate and expand in time and space, involving all the people and agencies that intersect and interact with these possible resonances. To become the audience of the digital museum was an attempt to think of ourselves as part of an expanded community, which granted us the chance to engage with the knowledge that spreads from the event, even if as an action at a distance. How do we position ourselves in relation to what it means to know the institution? Since the idea of the audience is traditionally related to physical presence, how can we become an audience when the museum no longer exists, when our body is absent? And could such knowledge transmission have the power of transformation?

²⁰⁰ "Absent Audience" was a two-day virtual conference organized by the Advanced Practices Laboratory at Goldsmiths College, University of London, presenting a two-year-long collaborative research on the 1997 Johannesburg Biennial as a reflection on a case study from the middle. The final conference took place on June 10–11, 2021.

The first iteration of Leaking lands—An Unguided Tour took place as part of a festival called HeHarat Shulaim.²⁰¹ It was my first attempt using Google products as a performative and collaborative space—in this case, it was the Google Arts & Culture virtual tour of the National Museum. What I proposed to the participants was that we would visit a museum that we'd otherwise never visit and participate in an experiment. During an hour-long performative encounter, each of the participants sat in their own private space, navigating the same site: same URL, same landing page, welcomed by the same authoritative male voice that was recently added to the Google virtual tour of the National Museum. There was something about the constant demand to silence the autoplaying male voice, clearly not a Brazilian and possibly chosen from a voice catalogue, every time one of the participants moved into a new room, that made one even more aware of how the space, seemingly fluid, is fully indexed, each room saved in a separate folder. Google was attempting to imitate the recognizable figure of the museum docent, channeling the voice of the institution while presenting the museum narrative as one, coherent standpoint of assumed neutrality. Similar to the standardization of time, discussed in chapter 3, the single narrative offered by the male voice reiterates a position that never existed. This is the all-knowing voice of the institution that tells the virtual visitors what happened, when, and in what order. The narrator's voice echoed abstract fixities that produced violent categories that are presented as a canon. Our quest in this work was to move with multiplicity of voices, to move without a body, to grow a different, collective, bigger body that acts from a distance.

Over the course of an hour, participants were asked to wander around the museum's virtual space, each time guided by a different voice. I presented each voice to the participants as a different navigational key or attuning system. First, we moved around the virtual space while listening to the voice of Luana Batista, a young Brazilian woman who grew up in Brazil's rural semi-arid region, one of the poorest regions in the country. Luana describes in vivid detail her journey from her hometown to the National Museum, where she later became a student. Luana walks us through the anticipation, her arrival at the train station in Rio and how she didn't know how to exit the station, the bodily shock of the big city, the lush greenery of the museum's gardens, and the first time she walked into its space. In other moments, Luana's account crossed times, weather, cultures, and locales through small anecdotes:

²⁰¹ See He'arat Shulaim 13, <https://no-org.net/events.php.html>

Next to my advisor's room were some taxidermy and I thought that it is so funny because suddenly there were trees and something resembling a forest by the window, and the park, and the palace, and the taxidermy. It was a crazy mix of nature and culture, city and jungle (laughter). It was a different sensation than I've never felt before, and at the same time, I felt important just being there, at the same place with those animals. We shared the same space.²⁰²

Sitting in many different places, we moved with Luana. We were moved by Luana. Can we carry the aftermath into the future by transmitting subjective experience? We were constantly working to orient ourselves within a three-dimensional image of the museum that seemed intuitive until we discovered it is not. The Google tour is full of glitches, dead ends, and rooms that were not scanned. As we moved along, we realized navigation isn't only about getting to the next room. Entering the virtual museum with Luana was an invitation to be in northern Brazil while in its capital, to admire the grand national museum for one moment and miss the forest in another. Through her eyes, the space became the many things it is and was: a museum and a school, a palace and a public bathroom, an extension of a genocide and a space for safeguarding, a place full of contradictions. Luana wasn't leading us, she wasn't offering directions, making suggestions, or highlighting any of the objects. Her voice and experiential account offered a tone, a feel, an atmosphere. We were moving in response to her testimony. Without a body, our movements became an active form to carry and transmit Luana's experience. Our cursors dragged us around between rooms. Moving bodies without flesh, the cursors kept twisting and turning while our bodies were buffering between the actual and the virtual. They search and destroy in the pixelated spaces where people are gone, and the objects are robbed, and the language is broken, our cursors danced. Our movements—the multiple hands on trackpads trying to move through the dizzying space—were expanded fields of both action and transformations, directly and indirectly, sensing and analyzing the voice, words, and density of past events on a collective yet heterogeneous level.

Through Luana's testimony our bodies transitioned from one affect to another, toward movements, clicks, and actions in a nontangible space. Listening to Luana's voice, each one of us started to acclimatize to the task of moving between ancient times and administrative time, between glitches and freeze frames, history books and jungle animals, mineral time, dinosaurs time, time of the spirits, cursors and zoom-ins, bus stations and magical gardens, drought fields

²⁰² From Luana Batista's testimony, recorded in Rio de Janeiro, Brazil, March 26, 2020.

and royal palaces, blurred faces and camera reflections, and blocked entrances, like the many rooms that were left out of the virtual space.

In her essay on atmospheric attunements Kathleen Stewart writes:

An atmosphere is not an inert context but a force field in which people find themselves. It is not an effect of other forces but a lived affect - a capacity to affect and to be affected that pushes a present into a composition, an expressivity, the sense of potentiality and event. It is an attunement of the senses, of labors, and imaginaries to potential ways of living in or living through things.²⁰³

Stewart's provocations of affective attunement is a productive framework to consider the our movement in the virtual space guided by Luana's experience. Stewart thinks of affect less through a bodily response and more through relationality—intimate encounters that put the social, cultural, political, and other worlds together, encounters that instigate something “to throw itself together”²⁰⁴ and attune to.

Entering a multiple-dimension space through Luana's eyes was an invitation to move through space informed by the atmosphere emerging from the lived affect. This has the capacity to fuse a present into a composition and intensify a sense of potentiality. Luana's words offered a soft voice, perhaps unaccounted for relationships and exchanges, that don't get articulated in the formal histories. Her testimony allowed us to project ourselves into the past starting from our times, taking up the address of the institution, and bringing back its preoccupation and its urgencies to the present time. We were collectively witnessing the void of the museum afterness and the disorientation of its digital prosthetic. We were at once Luana's audience, the audience of what ended (the museum) and the auditors of the digital remains. We became audience by letting the experience of the past to resonate and expand in time and space, and by holding a shared moment for all people and agencies to interact with these possible resonances.

²⁰³ Kathleen Stewart, “Atmospheric Attunements,” *Environment and Planning D: Society and Space* vol. 29, no. 3 (June 1, 2011): 452.

²⁰⁴ Stewart, “Atmospheric Attunements,” 452.



Leaking lands—An Unguided Tour

Figure 24. —. Discover the National Museum of Brazil—Google Arts & Culture. Retrieved April 4, 2020, from: https://artsandculture.google.com/story/RAVxwQA_-ABfJw. Screenshot by Lee He Shulov.

Encounter 2: Museum for No-Body

The second experiment in the digital replica of the Museu Nacional was informed by the familiar sensation that the place where we are and the place where we feel we are do not coincide. It was inspired by several artistic investigations and researchers who focused on speculative tourism, spatial reenactments, and using technologies to overlap urban geographies as a decolonial practice.²⁰⁵ More specifically, I was interested in the disorienting experiences of competing realities, between physical spaces and the ones committed to memory, and the possibility to turn the hybridity of locations and the multiplicity of mental, social, and political images of them into an actionable space. For this encounter, participants were asked to draw a map of a route they know by heart: a walk from their childhood or their current commute, for example. Each participant was asked to be attuned to their sensual memory and to annotate the path from what their bodies already know—the light and wind, the landscape, the changing sounds and temperatures, the affective terrain. After drafting these in their minds, each participants drew a map of their route, which we used as navigation models to lead a partner through the virtual museum space. Each pair spent time negotiating, interpreting, and finding relations by working with spatial and orientation guidelines from another place and time. The two bodies interacted so

²⁰⁵ This chapter examines how refugee tour guides in Berlin use memorials to mediate and represent trails of collective memory from other places and times, and place themselves within the ongoing history of movement and migration inherent to Berlin. See <http://youarenotthere.org/> and <https://mushon.com/blog/2017/06/11/introducing-speculative-tourism-walk-the-future-streets-of-jerusalem/>.

that one held the path while the other controlled the cursor and tried to echo the movement the first was describing in the virtual space, finding their rhythm navigating personal, social, and technological times. The meaning is transmitted little by little, as every movement becomes a calculation of the relationship between memory, embodied knowledge, and a technological time that often freezes. The navigation tool they used was Zoom and the space they moved through was a Google product in a museum founded by the colonial impulse to collect and amass objects inextricably linked to the colonial violence enacted on other bodies, spaces, and societies. The two partners operated on a corporate time, institutional time, the time of extraction, collection, and indexing. The practice of superimposing and reenacting one kind of psychogeographical knowledge onto another locale often surfaced meaningful juxtapositions but the peer navigation method was frequently troubled by the frustration of the spatial representation when users can't go back, can't turn toward an object, and often feel thrown out of a scene if they tried to zoom in on something.²⁰⁶ In the case of digital navigation, the strong sensation imprinted into our bodies of a familiar journey was constantly refused by the technology producing a frustrating and utterly disoriented experience of a space. Tools of knowing space that were familiar, embodied, suddenly became useless. More often than not, we were zoomed out or brought back to the room's starting point, arriving at dead ends where it was clear that although the physical space continues, there is no continuation of the digital space. And, of course, no real way to get outside of the institution. If a user wants to leave the museum and stroll into the city, they need a different URL.

It was a strong experience of disorientation, crafted by the need to move between incommensurable elements (Stewart). It shed light on the ways we compose spaces and how we inhabit them—the qualities, rhythms, forces, relations, and movements that exemplify how forces take form as worlds.²⁰⁷ It momentarily fractured the digital coherency but made room for

²⁰⁶ For example, if I walk down a corridor and see on my right-hand side a vase that I find interesting, my natural way of engaging with this object will be to slow down, turn toward it, and look at it directly. Even though if the visitor is standing at a specific place the object looks “real,” because the camera is depicting the object while moving forward, this minor movement that is so simple yet essential in the process of observing and engaging with a site or an object, is, in fact, impossible.

²⁰⁷ “I am suggesting that atmospheric attunements are a process of what Heidegger (1962) called worlding - an intimate, compositional process of dwelling in spaces that bears, gestures, gestates, worlds. Here, things matter not because of how they are represented but because they have qualities, rhythms, forces, relations, and movements. In the everyday work of attunement to worlding, spaces of all kinds become inhabited. Modes of existence accrue, circulate, sediment, unfold, and go flat. I am asking how questions of form, event, viscosity, and circulation open and problematize attention to the ways that forces take form as worlds or dissipate (or get stuck, fester, shelter

the everyday work of attunement: “spaces of all kinds become inhabited. Modes of existence accrue, circulate, sediment, unfold, and go flat.”²⁰⁸ During the event, our bodies were together in relation to the same thing happening, but we didn’t all act in the same direction. Unlike bodies moving together in a concrete, coherent space, ours were in different time zones and weathers, different bedrooms and screens. We moved through the incommensurable qualities of the space as our individual and collective sensorium re-habituated in its strange geometries that constantly demand to configure otherwise.

The audience then becomes itself, not at the moment it witnesses the event at the first time, but when it was passed on between participants, as testimony of the event as, speech and action, loosely coming together for a momentary expression and then coming apart again. Through our affective encounter in a museum we never visited before, we captured some of the potentials the museum still bears. We became its audience. One can ask, how can participants congregate around what is missing? But we came together only after the museum was gone. We didn’t have to follow the expectations of what being an audience means, and besides ourselves, there was nothing else around. We turned to ourselves, to our knowledge. But what were we witnessing? We were the audience of the institution’s transgenerational knowledge and its transgenerational trauma. We were the witnesses of its ever-complicated matrix of coloniality as it is encapsulated in the notion of a national museum. We were the audience of the exploitation of the land and its multiples cultures, while also noting the care of the museum’s community of researchers. We moved in a space that no longer has foreground and background, interior and exterior and no identifiable middle. We navigated between incommensurable states and contact zones. We became an audience that will never fulfill its promise, despite, or in spite of the limits of our exposure. We got there too late.

From Mediation to Navigation

Becoming an audience of something that has ended marks a shift from being a passive spectator of error to actively narrating the new relations between objects, bodies and data. The incompleteness demands a reconsideration of the terminology of mediation, a common museum

something...). How do rhythms and labors of living become encrusted and generative?” Stewart, “Atmospheric Attunements,” 445.

²⁰⁸ Stewart, “Atmospheric Attunements,” 445.

practice which is believed to assist in the process of shaping individual and collective subjectivity through art. In the following lines I explain why the practice of mediation doesn't fit the conditions of afterness. Instead, I present the methodology of transductive navigation as a portal for becoming an audience through processes of collective movement and learning. Mediation is a key term in museum practice, which describes the set of activities that connect the institution, its collection, and its audience. The act of mediation, whether using text, sound, or an expert person is happening in what Simon Sheikh calls the "moment of publication" and situated in between the work and the spectators, not only mediating the work, but also operating as an intermediary. The figure of the mediator becomes a representative of the institution—its discourse on art, its "order of things," and its manifestation of what it means to become a public of an institution and its education system. Mediation is often understood as the craft of connectivity, or the practice of the middle. It operates on a model of interaction between two, mediated by an intervening third. Brian Massumi proposes that mediation's being "in the middle" is understood in these terms, as pertaining to external relation.²⁰⁹ In the act of mediation, the message transmitted between two entities is assumed to be pre-constituted; in order to mediate a message, there must be two separate entities and the message itself must be first formed or formatted into a transmissible content to become transmissible. "In a word, mediation supposes pre-formation. The pre-formation extends to the parties in communication."²¹⁰ During the museum visit, the visitor often takes the passive role of receiving the already pre-formed message, often a delivery of content.

In the museum, such external relations exist not only between the displayed objects and the viewing subjects, but also between different items in the collection itself. In the collection, an entity produced and narrated by the institution, the elements are separated from one another. Massumi notes that the connection between objects in the collection isn't their internal natures but external to it. The connection between them is simply the fact that they have been put together and therefore, "the between of them has no particular consistency, no thickness proper to it, no nature of its own in which their natures are called upon to participate in a way that changes them."²¹¹ The collection is an disjunctive multiplicity produced by external relations that

²⁰⁹ Brian Massumi, "Immediation Unlimited," *Immediation II*, eds. Erin Manning, Anna Munster, and Bodil Marie Stavning Thomsen (Open Humanities Press, 2019), 501–43.

²¹⁰ Massumi, "Immediation Unlimited," 504.

²¹¹ Massumi, "Immediation Unlimited," 508.

comes into being via the act of mediation. Each item in the collection can be mediated to other objects or to other subjects.

The holy grail of the museum visit is the idea that the viewer will go through a process of change of perception, which is believed to be achieved through reception of information. The cognitive act is too often in favor of methods that are properly perceptual, or broadly experiential. Massumi claim that the paradigm of mediation has another major homeland: the theory of power. He explains: “Individuals come to their thinking in ideological conformity with what is already socially pre-thought. The mediation paradigm, applied to the theory of power, tends toward a vanguard politics. [...] These naturalized social relations are transmitted to the individual, in whom they are implanted as a priori beliefs. They come to the individual before the individual consciously comes to herself. Individuals’ self-expression is secondary and derivative, expressing the power relations already structuring society, whose form of domination reproduces itself by means of this inculcation.”²¹² Foucault’s account on institutions, knowledge, and power can be helpful when coming to understand the museum’s apparatus of mediation as an extension of state policy. Foucault’s “Diagrams of Power” and institutions contribute to the idea of power as force and the associated process of subject formation (subjectification) as devices of state sovereignty.²¹³ Mediation, in a state apparatus like a national museum, is established based on common characteristics that can be exercised.

The museum residues represent a space where objects in the museum lose their physical presents and slip out of the indexical order. In the space of afterness it is challenging to identify a “middle” between two objects, as there is no fixed relationship between collectible entities. When positioning is constantly in motion, there is a growing challenge to identify the “here” and the “elsewhere” without a clear distinction between an object and its subject. What happens when we are no longer able to identify a middle? And when positioning is constantly in motion? Mediation assumes that there are two identifiable entities and a space between them that can be mediated, but this can be replaced with terminology of navigation, which operates on intentionality with the contingency of unknown or accidental events—a method of knowledge production within the incomplete space, after the museum. The afterlives of the residues are an

²¹² Massumi, “Immediation Unlimited,” 505.

²¹³ Kevin Hetherington, “Foucault, the Museum and the Diagram,” *Sociological Review* vol. 59, no. 3 (2011): 457–475, 459.

uncomfortable space to inhabit, as it requires sharing the space of incompleteness without knowing what form it might take and sustain.

Navigation will thus be discussed as a methodology that allows for moving through in response to the social and technological milieu surrounding it. If mediation is dealing with pre-formed messages, navigation is transductive. To use the Gilbert Simondon's term, it is constantly "in-formation." By transduction, according to Simondon, "we mean a physical, biological, mental, or social operation, through which an activity propagates from point to point within a domain, while grounding this propagation in the structuration of the domain, which is operated from place to place: each region of the constituted structure serves as a principle of constitution for the next region."²¹⁴ Simondon focuses on the state before the rupture between the object to be known and the subject of knowledge. Indeed, in his view, "knowledge is not grounded on the side of the subject any more than it is on the side of the object."²¹⁵ In opposition to the practice of mediation that is producing a middle third between two entities that have their own nature, I argue that navigation is essentially transductive and collective. It demands entering into the relation that leads to a change in the nature of the entities involved to a level where the very definition of what a thing is, and the spectrum of what it can do, are at stake. Navigation is a methodology to navigate the contradictory narratives that fill the space. I do not understand navigation as the next stage of mediation but the logic that fits the state of afterness. Navigation is clearly not a location technology, not an actualization of set of aspiration to improve situation. Instead, navigation is a pathway that is not about the value mediation ascribes to influence.

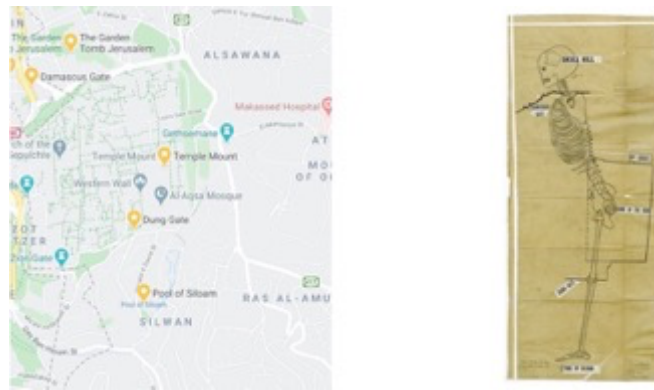
Collective navigation is how the residues can potentially develop an internal relation, to come out of themselves to come together. It is "shared outside of what they collectively come into, to become-through."²¹⁶ Navigation of the residual space goes beyond the bio-matter/digital binary toward trans-positional movement that is based on already lived experience and is revived to orient further experience. It expresses the processual sense as it proposes a new concept of space based upon multiplicities, manifolds, vectors, and potentialities. The possibility of becoming through audiencing is anchored in the process of disenchantment from the model of a

²¹⁴ Simondon, *L'individuation à la lumière*, 30, quoted in Muriel Combes, *Gilbert Simondon and the Philosophy of the Transindividual* (Cambridge, MA: MIT Press, 2013), 6.

²¹⁵ Combes, *Gilbert Simondon*, 7.

²¹⁶ Brian Massumi, "Strange Horizon: Buildings, Biograms, and the Body Topologic," *Architectural Design* vol. 69, no. 9/10 (1999): 12–19.

collection that needs to be mediated, instead engaging with the incomplete state, before the rupture between the object to be known and the subject of knowledge. The space after the museum must move away from the paradigm of mediating the institutional collection toward a transudative mode of becoming audience through collective navigation of the museum's residues. Being an audience, as I understand it here, is an invitation to tune into a processual movement in-formation that characterizes afterness.



Anthropomorphic map and Google map of Jerusalem, visual materials from Virtual Journeys group

Figure 25. —. Visual Journeys working group. Retrieved March 25, 2020, from: https://artsandculture.google.com/story/RAVxwQA_-ABfJw. Screenshot by the author.

Encounter 3: Where is Where?

I understand digital navigation as a methodology of being and studying together, not as a fixed digital solution meant to temporarily replaced physical navigation of the land. I understand navigation as a mode of afterness—a collective practice of audiencing that unlocks the potential of afterness. The practice was developed in response to a collapse of familiar spatial orders and the feeling that a familiar method of navigating a space has been temporarily terminated but the spatial orders and relations that conditioned its existence are still active in our bodies and minds. In this thesis, the notion of afterness is explained mainly through the state that comes after the museum as a result of the fire. Afterness is a state full of potential that emerges from a sudden change in the spatio-temporal conditions of a specific institution. The following encounter occurred during the early days of the pandemic. In it, the change in the ways the space was known or used was sudden and radical. The encounter shared here emphasizes how afterness works retroactively in relation to the production of exceptions and how institutional practices,

such as organized tours in this example, must be reconsidered. In this case, the conditions of contact change abruptly and a new methodology emerges in response. The invented collective navigation system that I discuss was developed in response to a crisis in a network of meaning and knowledge production, and as a result of lack of access.

In April 2020, during the first Covid-19 lockdown in the UK, I was invited to participate in a six-week project around the concept of virtual journeys. It was initiated by a group of artists, curators, and researchers from Israel-Palestine and organized by the Institute for Public Presence.²¹⁷ We were eleven fellows who met online for six weeks to follow a self-organized navigation. The forum continued previous programs organized by the same people that took place in a physical space and focused on liminal and marginalized borders.²¹⁸ The proposition to focus on digital journeys emerged as a response to the new conditions of physical and social distancing and was driven by a curiosity about what can be achieved through an invented navigation operation that is shared by a group via a digital platform. A tour, a trip, a walk, a wander, a journey, an excursion—I quickly noticed that even defining what we were doing together was complicated by the digital medium and the way it unfolds as numerous systems of replacements, as well as the geographic site we explored, which was mainly the territories of Israel-Palestine. For the sake of clarity, I will use the word “journey” as this is the term used in the original invitation. What I hope to do is discuss this manifold invented structure as a system of navigation. I will start from a description of the basic structure we followed.

We started in one place: Jerusalem. In the ever-so-complicated reality of the Middle East, to choose Jerusalem as a starting point was a compound gesture: it acknowledged the history of mapping the region, where Jerusalem often appears as the center of the world, or the single point of reference for orientation. More crucially, it highlighted the notion that any cursor moving on the digital map and every mouse-click within this dense territory is the product of political disputes, social intensities, and thick layers of tensions too deep to map. It immediately made

²¹⁷ See the webpage for the Institute for Public Presence at the Israeli Center for Digital Art: https://www.digitalartlab.org.il/skn/en/c6/e2754/Project/Institute_for_Public_Presence

²¹⁸ “Our point of departure was a project of gathering-journeying around borders, titled Liminal Spaces, which took place from 2006 to 2009 in conjunction with the Center for Digital Art. The project was a collaboration between Palestinian, Israeli, and international artists, curators and researchers, that took place in Israel, Palestine, and Germany, and explored the intermediate spaces of living, doing, and action which are increasingly divided and separated by walls, roadblocks, and ideologies.” Avital Barak, “Border Patrols – Journey Log / Avital Barak,” *Maarav /Border Patrols*, no. 28 (Spring 2020), <http://maarav.org.il/english/2020/05/18/border-patrols-journey-log-avital-barak/>.

present the impossible lightness of the digital map. Big and layered cities like Jerusalem are characterized by their enduringness and modes of doing-ness, a patchwork of what make things going all these years. In that way, cities with their multiple logic of operations are very different from the controlled environment of the museum. However it was the lack of access we experienced, where we couldn't walk together in the specific locale, which makes the case relevant to the category of afterness. The digital Jerusalem was stuck between no longer being a city to walk in together and the discomfort of "not yet" knowing how to be in it together without the physical dimension. It was unavailable, but we were still in debt to our past knowledge of the city that shaped our thoughts and activated our decisions. The organizers, Avital Barak, Michal Bar-Or, and Udi Edelman, each offered a personal short navigation in Jerusalem that was driven by their own research. Toward the end of the first session, two participants were randomly picked using an automatic generator to lead the next two journeys. These two had to decide where the group will head the following week. Each leader had an hour to lead us to their chosen destination (limited to fifty kilometers from the starting point). The following week, the same chance mechanism was applied to pick the people who will continue journey A and journey B. Each of the following sessions consisted of two hour-long journeys to two selected destinations. The two journey lines were led in parallel, occasionally intersecting geographically or otherwise. The small navigation system used a variety of digital mapping services²¹⁹ and intentionality made space for unknown or accidental events. The journeys enmeshed fields of interest and geographies and offered techniques of relations that bridged times, abstraction, and situated experience to reach a map of possible forms, shifting from a site to a shared experience.

At the beginning of the shared process, some of us, mainly the ones who were previously involved in a series of physical meetings, were concerned that the digital was an insufficient realm in which to explore these ideas. The frustrations with the medium were imminent, from the silences of mute microphones, failed attempts at screensharing, crashing platforms, and bad reception to the overall awareness that by using certain platforms we were subjecting ourselves to various forms of surveillance capitalism. The lack of real danger or risk involved in physical

²¹⁹ Besides Google map participants used iNakba, a trilingual mobile app (Arabic, Hebrew, and English) based on GPS navigation technology. It's an app that allows users to locate and learn about Palestinian localities destroyed during, and as a result of, the Nakba in 1948. Participants also used Amud Anan, a community project for creating an online and offline guided tour and geographic encyclopedia of Israel, mainly run and used by national Israeli groups, and Steps, which offers user-generated annotated maps.

and national border crossing was present too. Unlike the physical territory, it acted as a sort of safe space where territorial “risks” could be taken at almost no cost, unless one broke Google’s terms and conditions. It made it a sanitized space, but also one where it was possible to speculate and work in a poetic way. The idea of the classic journey, with its known point of departure, known destination, and assumed series of tasks or challenges, was very different from the way we wanted to think. Yet, it often acted as an operator or provocateur in the process. In its core, the invented navigation structure was an invitation to free ourselves from the need for historical “filling-in-ism,”²²⁰ or the need to provide an overview of a topic, and a call for rejection of chronology in a way that was described by one of the participants as sourcing materials “from Jesus to the future” without any interest in marking specific events, places, or themes as “important.” The knowledge formation we crafted as a group was always partial, where bodies moved through multiple location and times, like the geological time of limestone formation, the slow time of the checkpoint, the Zionist time of naming flowers, digital platform time, and brain fatigue time, collecting all knowledge into inferential models. It was a topological hyperspace of moving-through.

As one path started where the others end, the collective navigation quickly turned into a speculative practice, with many of us approaching fields of knowledge like amateurs, guided by visuals, memories, technical limitations, and online curiosity. A navigation route that delved into the tradition of Orientalist tourism in search of ceramic goods on the deserted road to the city of Jericho was continued by a trans-geographic pilgrimage back to Jerusalem, for example. Bodies were used to map a site and somatic mnemonic techniques were practiced to memorize maps, a common practice in the Israeli military that also has choreographic potential. One tour meditated on the corrupting power of PowerPoint and its leader’s personal history as a tour guide; another path circled the multifaceted landscape around Israel’s only international airport; a third used Google Maps to visit a museum in the Negev-Naqab region, a territory that wasn’t captured on the map. Mapmaking has been a cornerstone of the Zionist settler-colonial project as an instrument of claiming the colonized territory and narrating a sense of historical continuity.

²²⁰ Clare Butcher, “44 Tonnes,” *Field Notes 04: Publics, Histories, Value: The Changing Stakes of Exhibitions* (Hong Kong: Asia Art Archive, 2015), 13.

Many reported that from the moment they were assigned to lead a journey at the end of a previous session and until the moment they presented their own navigation to the group the following week, they delved into a “trip”: a non-methodological, often improvised path into a world of references, connotations, and intensities. Our slowly developed group system loosened its commitment to the lineage inscribed in a territory and most importantly disavowed a chosen method of moving through it. It offered a different kind of movement that is needed to keep things alive. We came together through fabulation that produces the event over and over again. One could say that we never wandered in the physical or geographical realities of a site, but only in its cultural and techno-political products. We came together through movement in-formation between physical, technological, and social operations. Surely, this freed participants from the need to define what this place is. “Where am I?” was replaced by “Where is where?” A collective ontological effort toward the politics of locality, where many storylines were constantly added, where times and places mixed and overlapped between different worldviews. The work welcomed non-academic and associative thinking, with most of us deliberately moving away from our research, or any other forms of established knowledge. Far from being an escape from the world, then, the practice of collective navigation took us to the territories’ symbolic centers, knotted together different pasts and presents, and allowed us to establish some leverage within the tangled contingencies and hidden conventions that lie there.²²¹ At times, this gave the geo-historically situated struggle we all know too well the sense that it may offer insight to alternative time and space.

How to come to a site that we know well without knowing it? The more we moved forward, the more the binary methods of comparing and contrasting the physical and digital spaces melted away and made room for a different kind of curiosity, the kind that is attuned to movement between layers and shared practices not yet known. The more time we shared on the journey, the more I turned my attention from what seems to be the destination or the methodology of getting there, and started to wonder how the shared journey kept living through our practices and activities once we left the online space we shared. Thus, navigation became a collection of multiple experiences and efforts that didn’t have an operative dimension in the actual navigation but provided a loose system of our mutual orientation. In it, the weekly

²²¹ Jon K. Shaw and Theo Reeves-Evison, eds., *Fiction as Method* (Berlin: Sternberg Press, 2017).

navigation structure operated more as a generator or stimulator of energy that produced a moment of communality.

As the process progressed, the relations between each navigation started somehow to “think” for themselves. As events and destinations started to operate as a multi-positional system, where mistaken and accidental knowledge rebelled against the authority of knowledge. In parallel to what we know as individuals there was what we know together. The “us” being there is what allowed things to move, the “us” being there is what allowed navigation “from elsewhere.” When one person’s endpoint is the next participant’s departure, the notion of planning was unsettled by the event. It demanded a constant recalculation as we shifted from location concern to a concern about position. We became “we” by moving away from “where are we?” to “where is where?”

Where was my body during that process? It wasn’t a sweaty body that climbed up a hill or a dreadfully exhausted body that walked in and out of a tour bus, but a body that was dragged behind my smiling face and typing fingers like an effete tail. A body that lived through its sore eyes, neck pain, pulsating temples, and brain fatigue but also preserved the lived experience of once being on that hill, curving one palm to protect the eyes from the blinding sun. Such a split sense of the body and its location highlighted how the choreo-nexus of movement with/out body in the digital space can become a formulation that forced us to think with non-localizable system of multiple embodiments. Unlike a bodily movement in a digital space is driven by the notion of abstraction,²²² our movement in the digital space fails to be fully translated into abstraction. It was made possible by bodily sessions that slugged behind the possibilities of the cursors, where only partial embodiment is available. Thinking through the partiality of the of body and digital surface, the collective movement also became a thread that navigates along the experiential, sensorial, and spatial knowledges toward a conceptual model of knowledge production that operates from a state of intellectual partiality. How can we think of navigation with/out a body? It demands a non-chronological field of qualities that are both fluid and abstract. It goes beyond

²²² “...as a way to distinguish the concrete experiences of the physical body from the abstract reality of mental experiences, without erasing their important relation.” The digital in this case is defined as both the nonhuman entities that follow a discrete logic in binary abstractions, but also as a mode of thought that presents a translation of movement into abstracted relations. Aaron Knochel, “Stamatia Portanova (2013) Moving without a Body: Digital Philosophy and Choreographic Thoughts,” *Deleuze Studies* vol. 11, no. 4 (November 2017): 608–616.

the body/digital binary toward trans-positional movement that is based on already lived experience as well as revived to orient further experience.²²³

What was it that took place in the virtual journeys group beyond the specific destinations that were picked and the anecdotes that were shared? What was produced? Such mutual work brings into common space all sort of identities, subjectivities, technologies, and temporalities that connected not only through what is shared but also through what is not shared and is not easy to capture, to get a hold of. What formed is not bracketed by an event or secured within a shared project, but operated through what remains in one's imagination, linked to inquiries and projects from past and future years, creating a kind of connective tissue that keeps diffracting.

Transductive Navigation

Considering navigation as a transposition practice that could be an alternative for mediation requires rethinking a practice that does not reproduce the methodology of modern thought. Like collecting, navigating is a paradigm of gaining access to properties and potencies in the world as we know it. In order to navigate the unknowns of afterness it's necessary to borrow and adapt methodological tools from unexpected places. In the final move of this chapter, I turn away from linear navigation as tool of discovery, and instead turn to the Indigenous navigation system of wave piloting to propose a method of local, circular navigation, which is appropriate for the residual space. Similar to the collective navigation in Jerusalem that linked up local, ancient methods of knowing the place with recent digital tools, I will use a fourth encounter as an example that looks to the endangered practice of wave piloting as source of methodological inspiration. Wave piloting is a practice of expansively being in the present. It proposes navigation that is not based on a map but on reading and interpreting relations. Through the fourth encounter I show how it can become an inspiration for collective research. In and of itself wave piloting is not an example of afterness but few of its element are key for the development of the transductive navigation, a method of "moving with" the residual space.

How to navigate the residual space? The dislocation of collectable objects and the promiscuous circulation of museum residues, where everything touches everything else, represent the emergence of new kinds of topologies, order, and limits. The residual state proposes a space that goes beyond the physical/digital binary that interlocks patterns and

²²³ Portanova, *Moving Without a Body*, 186–187.

dynamics and as a result reframes geographical coordinates in multiple ways of dimensions, intensities, speeds, and repercussions. Crucially, the residues, although not many, are wired and circulated in large-scale systems, both technically and politically, and that requires a shift in the scales of reference. As the system's scale moves beyond human imagination, the context or the operational knowledge used in the Western world to move through or to move forward is slowly becoming obsolete. In a power system that looks to advance territories to rule, navigation is the practice of "toward which." In it, the horizon and the frontier become a two-step system, where the horizon can be easily transformed into a frontier.²²⁴ The horizon and the frontier highlight the need to think about navigation—finding a way—as a colonial practice, where the residual state underlines uncertainty and vulnerability that characterize current modes of existence. A close study of wave piloting presents a relational model for making accumulated local knowledge intelligible and reproducible across similar contexts. The model of the local and circular Indigenous navigation system is speculative yet pragmatic, precarious but operational, and based on mutuality rather than individuality. I use the model of wave piloting as an example that is useful in a quest to develop a model of, to use Ferreira da Silva's term, offering knowing without modern categories. Together with the last practice-based encounter, it represents a decolonial approach for navigation, not as a system of "toward which" but as a practice of "moving with" that is based on accumulated experiential knowledge that brings forward the notion of transduction to the method of becoming audience.

Navigating between lands is a precarious operation. For thousands of years, the method of wave piloting practiced across the Marshall Islands, a collective practice that is now largely lost, fascinated many. Using no maps or instruments, the Marshallese move between islands using stick charts to mark the relation of the boat to land, current, and wind. The charts, made of sticks and shells bound together, calculate waves and wind patterns for orientation, in relation to the swell's diffraction on the meeting point with the atolls. The charts, a set of geometrical shapes, do not represent a specific geography of the islands, but depict possible relations between patterns and event.²²⁵ They "map possible geometries between the confluences of patterns that

²²⁴ "Let us hitch a ride with Elon Musk to Mars my friends, to Mars. There we can once again disavow the toxic destruction of existence far away on a long-forgotten earth. And here we catch a glimpse of how the horizon can be easily transformed into a frontier." In: Elizabeth A Povinelli, "Horizons and Frontiers, Late Liberal Territoriality, and Toxic Habitats," *E-Flux Journal* #90 (April 2018).

²²⁵ "The Marshall Islands stick charts are generally of two types. They are sizable objects, generally about 60 to 120 cm by 60 to 120 cm. Many are maps showing a few or many atolls in relationship to each other and to significant

one could encounter over the course of navigation at any point in the open sea, rather than merely geometries that are known or accounted for.”²²⁶ In lieu of indexing data, the charts model possibilities. I bring wave piloting navigation into this discussion in order to present a way of knowing that is devalued by the European model of spaces and times that use navigational logic as a technique for discovery, extraction, and expansion. Wave piloting is not afterness but very much during-ness. The residues, an entanglement of lineages with no clear points of origin, demand a methodology that is not clearly based on hegemonic knowledge. Rethinking navigation as a method of “moving with” means encountering a navigational method that is unauthorized by Western thinking and is foreign to its epistemologies.

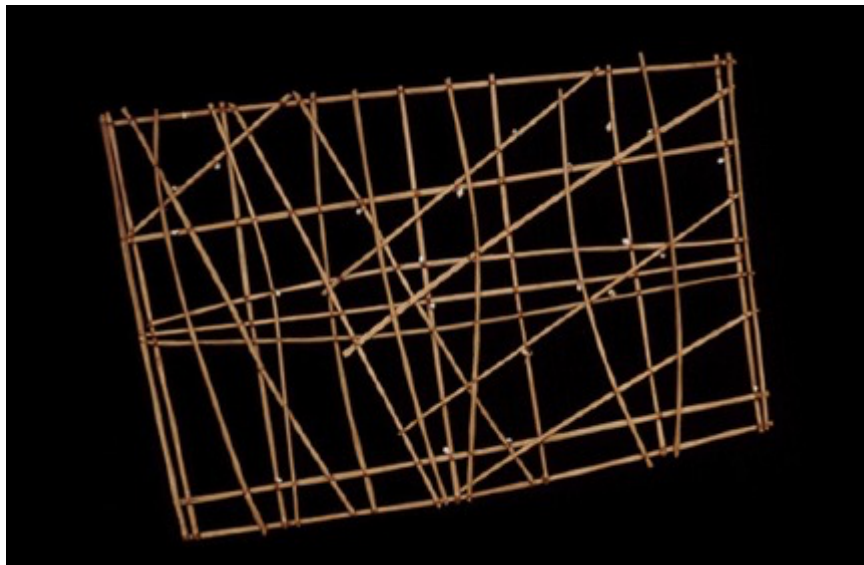


Figure 26. —. Nineteenth-Century Navigation Chart (before 1892), cane, wood, shell, 67.5 x 99 x 3 cm, Marshall Islands, Micronesia. Collection of the of the British Museum, London.

features in the environment. These are named meddo and rebbelith; the former having few atolls and the latter representing a larger area. The second type, named mattang, are quite different and are not what we classify as maps at all. They are, however, even more abstract as they model the dynamic geometry that underpins the wave piloting system of the Marshall Island navigators. [...] Used as training devices, they show the interplay of oceanographic phenomena and land masses. That is, they are static idealized representations of shapes and motions in the sea and at the land/sea interface. They introduce the prospective Marshall Island navigator to the features of the environment and that will be included on the maps. Just as with any map, one must first understand what of the original space will be preserved as significant in the analogous space. And, of course, as one learns what is significant, one is learning why it is significant or what role it plays in the system.” Marcia Ascher, “Models and Maps from the Marshall Islands: A Case in Ethnomathematics,” *Historia Mathematica* vol. 22, issue 4 (November 1995): 364.
²²⁶ Nick Houde, “For Any, for All, for Each,” *Glass Bead Journal* (December 2019), <https://www.glass-bead.org/research-platform/for-any-for-all-for-each/?lang=enview>.

In 1995, anthropologist and mathematician Marcia Ascher looked at the system of abstractions that makes the charts unique in one of the few mathematical accounts of the navigational practice. If maps use diagrams and aim for representation of a certain reality, the Marshallese charts operate on a profoundly different form of reasoning. They are formulated in terms of mathematical models, not representation. The stick charts are based on simplification of complex patterns and how they essentially represent relation, not geography.²²⁷ The accumulated experiential knowledge has been conceptualized into a general system that is believed to apply to oceans and land masses anywhere and everywhere.²²⁸ The navigator interprets the charts “within the context, purpose and social milieu of the knowledge accumulation” and “successful interpretation is reliant on their ability to translate sensory accounts into informational techniques within the framework of the model as opposed to essentially determining specific locational markers.”²²⁹ Unlike standardized Western navigation systems, the Indigenous system is based on heuristic methods that enable their adherents to actively realize accumulated knowledge. There are few characteristics to note that can be extrapolated for contemporary thinking of collective navigation:

1. Intangible model: In the history of Western cartography, a distinction is made between maps and charts. While maps are concerned with the world as a whole, charts refer to the depiction used by mariners which contained varied types of information based on their experience and specific to their purposes. Unlike representative maps, charts such as these operate as mathematical models. Before sailing on their journey, the navigators need to know the general wind direction, current waves, and the position of the boat, all of which are charted in a relational positioning system. The land, sea, and wind are recast into points, lines, curves, and angles, and the interplay of the open ocean phenomena are recast into how the geometric aspects change and interact with one another. The Mattang, one of three common models of stick charts, exemplifies the application of dynamic geometry that is based on generalized and idealized geometry of swell interactions. The generalizations of conditions is at the heart of its operability

²²⁷ The shift away from representation made an operational and transferable system, where they “Strip the system to what is considered essential [...] phrased in terms of the geometric characteristics of the ocean phenomenon—the substance of the land and sea and wind are recast into points, lines, curves, and angles, and the interplay of the phenomena are recast into how these geometric aspects change and interact.” Ascher, “Models and Maps from the Marshall Islands,” 361.

²²⁸ Ascher, “Models and Maps from the Marshall Islands,” 361..

²²⁹ Houde, “For Any, for All, for Each.”

and the intelligibility of the model is based on the ability not only to produce or use the knowledge but also to reproduce it.²³⁰ As the charts provide only conditional information about the seascape, each chart, each general geometric possible, is equivalent so long as it adequately frames a consistent branching of possibles, thus accounting for the variety and number of charts that exist. Because the model is not focused on data but on understanding relation and conditions, it is modeled after a possible space and possible navigation route in multiple and variable scenarios. Hence, the activity of navigation is simultaneously a conceptual and material activity. By putting the knowledge into practice, it activates the divide between the terms.

2. Knowledge transmission: One of the most surprising elements of the Marshallese navigation system is that the stick charts are not needed while at sea. The operational knowledge encapsulated in the model is, by the time of departure, known to the navigator. It was embodied and memorized beforehand, as training is focused on the method rather than the details. The *Mattang* doesn't contain semi-realistic renderings but rather lines and curves that are models of interpretation. Learning to use the model focuses on a technique based on reading the relations marked by the model, in specific conditions. Each of the many existing charts work in a similar way to isolate and idealize the swells, emphasizing directionality with respect to wind and land positions. Instead of a standard map, navigators who learn the art of sea navigation know that there is more than one way to capture it.

3. Speaking in the mouths of the many: “Wave-piloting is the art of reading—by feel and by sight—these and other patterns.”²³¹ The navigator could find the nearest solid ground based on how far off it lies, long before it is visible, as the “where” is always both subjective and geographic. The mental processes that make navigation possible are also the ones that allow us to tell a story: to produce, choose, and connect the origin and endpoint of a journey. The Indigenous navigation system is conjuring geometrical abstractions from personal and ancestral affective intensities. It is based on a constant reorientation of the subjective, social, and environmental conditions that makes its practice of navigation a form of collective storytelling, or floating fabulations.

²³⁰ “Extending accumulated knowledge, it makes components explicit, while also making the manner of explicit making operational for other use. Ampliative deduction, therefore, does not merely unpack causation and inference: it includes the methodology of its inference within the context of its deduction.” Houde, “For Any, for All, for Each.”

²³¹ Kim Tingley, “The Secrets of the Wave Pilot,” the *New York Times Magazine* (March 17, 2016), <https://www.nytimes.com/2016/03/20/magazine/the-secrets-of-the-wave-pilots.html>.

4. Multiple temporalities: The ancient maritime practice operates as a system of multiplying times: the time of now, ancient time, and the time of the not yet. It is recessively transitional. It operates in personal, social, and ecological times. It is measured in human time and more-than-human registers. It's the time of the poor, the time forgotten by power. Its temporal dimension unfolds from one point to the next, in close vicinity to one another, but not in a full continuum.²³² The movement through the spatial and philosophical coordinates of the navigational condition is a vectored movement: no matter how close, there always lies another definable point. It recedes, continuously, into the between, recessively transitional. It is transmitted little by little and always in succession, as it calculates the relation between the swell and the atoll, as it is bound in sticks and shells, and as it feels at the specific moment. It operates between its multiple potentialities toward a particular emergence of an event. The ancient art of wave piloting the sea is knowledge in-formation.

What can be learned from wave piloting about the movement in the residual space of afterness? Massumi's description of shifting condition of the horizon in a digital, Euclidean space can fit the spatiality of residual state: "the space has no foreground-surround, like a trick center twisting into an all-encompassing periphery. They are uncontainable either in the present moment or in Euclidean space, which they instead encompass: strange horizon."²³³ The estrangement of the notion of the horizon captures the sense of disorientation, or dizziness, caused by extreme dimensionality. Coming to think of the residual space, the challenge is letting go of the ability to encompass the space yet keeping its unfamiliarity as part of the space's qualities. Wave piloting is a local system, but it sails through the deep time of geological formation, wind time, ocean time, and story time. It isn't necessarily slow; it just doesn't move forward linearly. It moves in a system based on reading one's bearing as it is situated in the locale. However, it is geographically and culturally limited to a specific location. It puts in motion a transgenerational modality of coexistence, yet it is fragile and diminishing.²³⁴ Its model

²³² Paulo de Assis, "Gilbert Simondon's 'Transduction' as Radical Immanence in Performance," *Performance Philosophy* vol. 3, no. 3 (2017).

²³³ Brian Massumi, "Strange Horizon: Buildings, Biograms, and the Body Topologic," *Architectural Design* vol. 69, no. 9/10 (1999): 12–19, 19.

²³⁴ Similar to Deleuze and Guattari's concept of the smooth space, this model of circular movement doesn't respond to the binary categories of us and them, longitude and latitude, interior and exterior—categories that enable a world of frontiers and horizons. It considers matter and myth in equal measures.

of navigation fits the method of movement in the space of the residues as it demotes the horizon into a practical and intelligible proportion: a scale for routing the world. A temporal situatedness.

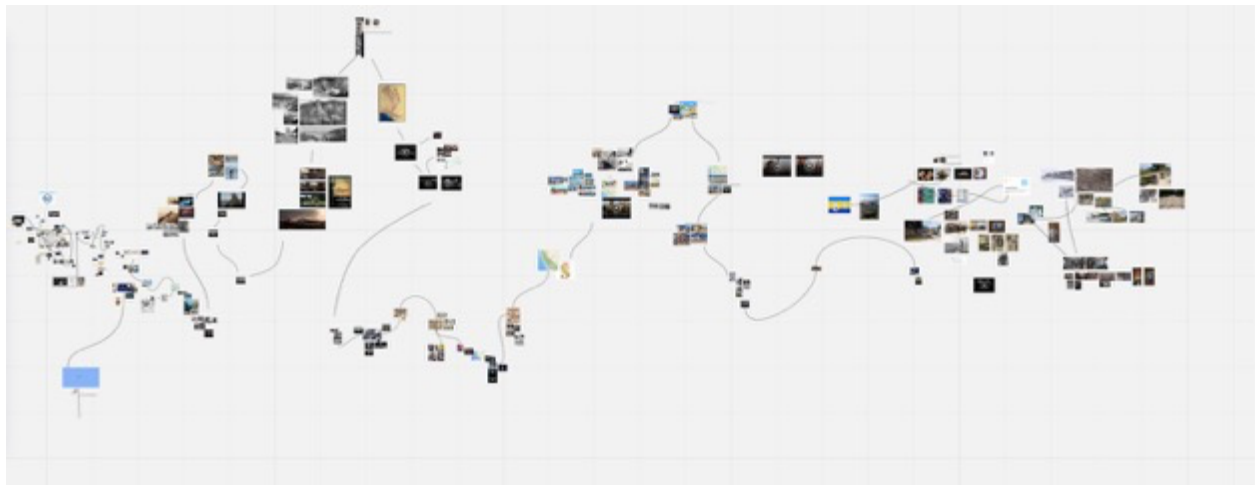
With the quality of the relational navigation model I come back to the residues, an ecology of leftovers that do not response to a certain index or directional knowledge of north, south, east, and west, instead representing interlocking geographical coordinates and multiple ways of dimensions and intensities. The residual space represents amalgamations of living and non-living, where there is an equal focus on the human subject and its material and technological environment. The Indigenous navigation technique can become a model for a processual movement that isn't a "toward which" system that moves forward in order to extend its power, but a system of circular movement. Navigation of the residues forms relation between hypothesis and indeterminacy. It is a movement that is dimensional rather than directional. It stems from the indeterminacies at each level of the interaction and proposes mediation between metaphysics and cultures that do not conform to the universal standardization of knowledge. It proposes ways to produce a shift from the logic that reproduces the interiority of a system to forms of "transductive learning," in the words of Luciana Parisi and Ezekiel Dixon-Román.²³⁵ Transductive navigation affords "cultures the possibility of transforming their relations to the metaphysical conditions of the human, entailing not simply the abolition of Western metaphysics but the abolition of all systems of knowledge based on the mirroring effect of the universal and the particular."²³⁶ Crucially, it allows to re-elaborate the limits of knowledge from the standpoint of what cannot be measured. Transductive navigation represents movement between human and nonhuman actors in their non-oppositional states of differences, where elements are forming relation through "the mediation of constant units of measurement and/or a limiting violent force," as Da Silva writes.²³⁷ Transductive navigation approaches space not a solid unit that can be known through colonial expansion but expresses a new concept of space based upon multiplicities.

²³⁵ Parisi and Dixon-Román propose that "trans-ductive learning go against standard method of recursive learning and call for speculative computation that allow interaction between data sets, contexts, and algorithmic rules." Luciana Parisi and Ezekiel Dixon-Román, "Recursive Colonialism & Cosmocomputation," *Social Text Online*, 2020.

²³⁶ Parisi and Dixon-Román, "Recursive Colonialism & Cosmocomputation."

²³⁷ Denise Ferreira da Silva, "On Difference Without Separability," in *32nd Bienal de São Paulo – Incerteza Viva. Catalogue.*, eds. Jochen Volz and Júlia Rebouças (São Paulo: Fundação Bienal de São Paulo, 2016), 59.

Unlike wave piloting, navigation as a method of becoming audience isn't based on physical movement between destinations. It develops in response to the lack of the middle, third space that is needed for the practice of mediation and offers, instead a transpositional method that is based on interpretation within the context, purpose and social milieu of the knowledge accumulation. Like the stick-chart model, the transductive navigational model is based on a lean structure, or an abstract model that becomes operational when situated in relation to a certain condition or inquiry. It is driven by affective attentiveness, not access to land. It relies on experience, not a defined object or destination, which is crucial for the unfixed space of the residues. Local navigation methods tend not to be linear, they are oblique; they aren't based on the model of an individual explorer conquering unknown lands. Instead, they reflect ecologies of knowledge spoken by many. They are made to be practiced by many. In lieu of indexed data, they respond to relations and possibilities. It can be a personal connection or local affiliations. They don't attempt to expand properties but intensify distances; they aren't capital-driven expeditions but instead movement in expanding the meaning of local knowledge; they can be practiced anywhere and everywhere yet are not a global system as they can't be scaled up.



Portolan Journeys collective working board

Figure 27. -. Portolan Journeys Miro board. Retrieved April 25, 2022 from: https://miro.com/app/board/o9J_kgASJFA=?utm_source=notification&utm_medium=email&utm_campaign=daily-updates&utm_content=go-to-board. Screenshot by the author.

Encounter 4: Portolan Journeys

The last encounter brings forth another project organized by the Israeli Center for Digital Art's Institute for Public Presence. During the winter of 2020–21, a group of fourteen came together

for a second iteration of the collective navigation practice. It was a mixed group of programmers, performance and visual artists, an oceanographer, a poet, curators, and cultural researchers, who collaborated on several digital platforms. The second encounter was specifically focused on the notion of water-based navigation as a model for navigating the digital terrain. The series drew its methodology from the first virtual journey project and Indigenous navigational practices as described above. Once again, the method developed in response to the changing in conditions of access both due to the pandemic and in this case, located in the Mediterranean, also in response to the limited access due to the political restriction. It was also part of Atlas of Mediterranean Liquidity,²³⁸ a digital platform for maps based on artistic and research-oriented representation of different perspectives relating to water in the Mediterranean. The atlas's rationale claimed that the regional water, which is often at the center of conflicts, demands a flexible, liquid platform for a multiplicity of voices. To use the word of Tiziana Terranova's who writes about the "Middle Sea" as a technological arena, the social and technological knowledge that emerges from the tri-continental sea, demands decolonialization.²³⁹

Taking the concept of liquidity²⁴⁰ as one entry point and the notion of the port as the second, the journey put into question how movement through bodies of water can be used to collectively witness the current regional geopolitical and technological conditions. Liquidity, an immersive experience of being-in-the-world brought together the biophysical, financial, and circular digital networks. The port, as marker for the Mediterranean Basin's circular seashore geography, became a connector between the region's ancient trade routes and colonial history²⁴¹

²³⁸ The atlas addresses and invites art centers from the Mediterranean Basin to develop multidisciplinary maps on local and regional issues related to the climate crisis, culture, folklore, economics, geography, and politics in order to deepen knowledge and attention and focus on burning questions about water.

²³⁹ Terranova shows how the technological moment of the sea is past and how it shares the destiny of the Global South: "there is no technology there, only that which has been imported from the North or the West, that which the latter decides is more suitable in the overall scheme of its global division of labor, and which at any rate can only be declined as a minor or subaltern version of the hegemonic one." Tiziana Terranova and Ian Chambers, "Technology, Postcoloniality, and the Mediterranean," *e-flux journal* no. 123 (December 2021), <https://www.e-flux.com/journal/123/436918/technology-postcoloniality-and-the-mediterranean/>.

²⁴⁰ Zygmunt Bauman uses the notion of liquidity or liquid times to describe the free flow of capital and the erosion of government at all levels.

²⁴¹ Iain Chambers and Marta Cariello argue that from the late nineteenth century to the present, the Mediterranean can be considered a "colonial lake," given that its current iconography privileges its northern shore, which is widely identified with the Mediterranean tout court. This conception foregrounds that since 1900, and until quite recently, the Mediterranean was directly ruled from London, Paris, and Rome. To consider what escapes this coloniality, and to insist on the incalculable slipping through the nets of a still hegemonic positivism—secured by a faith in the European human and social sciences—is to encounter that we, Occidentals, do not know what we thought we knew. Iain Chambers and Marta Cariello, *La Questione Mediterranea* (Mondadori, 2019).

to its current internet infrastructure and how it redefines access and power. As we took these ideas further, the attempt to navigate the online terrain together became a meditation on the porous relationship we have with technology, liquidizing the interface between physical and digital realms. The collective navigation welcomed speculative approaches to thinking, practicing from a state of immersion in differentiated worlds toward future possibilities. It was a model of attuning together to specific locale as a way of working with limiting situation in order to rehearse a possible model of moving within those limitations. Similarly to the first iteration, every week a new route was led by a small group that used as its point of departure the last “port” the previous group docked in. The method of collectively navigating the partially known and inaccessible territories was developed in relation to the sudden change in condition. It is shared here as a mode of afterness, as a proposition for a method of audiencing the state of afterness, a state we do not yet know how to know.

Interestingly, the possibility of moving through water produced a much larger variety of navigation and meta navigation systems that began in the Sea of Galilee (our entry point) and its industry of religious tourism. It then moved via the ancient Mediterranean trade routes and considered the digital realm as the only way to reenact these trades; we traveled through the Mariana Trench and floating homes off Phuket; we joined some notorious female pirates. To paraphrase Bauman, images, questions, and pieces of information traveled together like fluids. They “spilled,” “ran out,” “splashed,” “poured over,” “leaked,” “flooded,” “sprayed,” “dripped,” “seeped,” and “oozed.” The port, as a marker for the Mediterranean geography and a reminder of the colonial history of the region, became an important concept. Images and locations dissolved, while some soaked their way through. During the seven weeks we worked together we shared our notes and culminated our augmented research in something that operated like an archipelago map with possible navigational routes between ideas, terms, and concepts.

As the project progressed, we started to question the possibility that we could move differently with water, as we noticed how limited we were by our human perspective. In other words, the human body and the human eye were the only way we knew how to know. Sedimentations of Western navigation of the sea were navigating our boats, standing between us and other, invented, practices of moving together. We moved on water but never became bodies of water. Our movement was never molecular nor galactic, it was still informed by the limitation of our bodies. We were knowing bodies of water, from the land. The bio-logical and the techno-

logical weren't as smooth and circular as wanted them to be. We felt the grip of the ordered world. But somehow, through the mutual inability to switch perspective became a vulnerable place. All of it was passing across us as individuals and group. The "us" being there is what allows things to move, to form meaning by moving through. We were navigating the failing of our ability to collectivize through water, kept the navigational project moving on, not as a resolved space but as a practice that allowed us to witness the failure as a message, not to us but to something within us.

Conclusion: Becoming Audience

The challenge that the state of afterness poses is twofold: on the one hand, it questions the very notion of a pure European knowledge structure; on the other hand, it has the potential to articulate a mode of thought and a model of engagement that navigates the unknowns that emerge from a collapse of previously established spatial or mesological protocols. In this chapter I focused on the latter. Museum practices of spectatorship and mediation maintain the objective of subjectivation through a mediated experience of the collection. Becoming audience of the residual state puts the participants in an immediate relation of openness to an unknown future and creates space for the emergence of a form of witnessing the institution's afterness, and thereby transforming its potentials. The collection's residues open up a space where the production of collective engagement provokes alternative knowledge. Becoming an audience of the residual state entails turning away from how one knows how to be an audience in a cultural institution as defined by its absence. Instead, it means engaging with the uncertain conditions of institutions' afterlives without repeating the methods of ordering the world into collections.

In the heart of the chapter are two propositions. The first is centered around a shift from spectatorship, which is more passive, to a mode of collective witnessing, which carries the residues of afterness into a future by transmitting subjective experience and activating the potentials of afterness. The idea of becoming audience through collective witnessing suggests that the audience isn't hinged on a specific object or model of subjectivity but engages in a mutual process of transmitting and narrating an event that one has lived. The state of afterness, now abstraction, lives through its interpretations and mutates as it travels through being collectively witnessed and engaged with. The second proposition calls for moving away from the museum practice of mediation, which clearly defines and differentiates its subjects and objects,

toward a method of navigation, which is transductive, a collective activity of situatedness. Navigation developed in response to conditions of afterness, in which there is no longer a recognizable center and no addressed periphery. Navigation thus discussed is a methodology that shifts from authority to mutuality and develops in response to the milieu surrounding it. It encourages traffic between worlds, spheres, and ecologies that allow for unordering existing methods of worlding without any need for these new worlds to be “discovered.” The chapter is structured around four practice-based collective encounters. The residues represent a release from the grip of certainty, a new reservoir of possible relations. Drawing inspiration from Marshallese stick charts, each of the encounters offers a relational model of interpretation based on accumulated experiences, rather than mapping and indexing. Together they approach knowledge transmission through speculation and exemplify collective methodologies of engagement with an networks of people and extensive networked environment.

One is often invited to be an audience of a final expression, say a performance or exhibition. My approach for audiencing is closer in its essence for the notion of rehearsal. Becoming audience of the state of incompleteness of the residues provides an opportunity to experiment with the situation of afterness, the one of the museum residues, in order to train for possible futures of decentered alliances. It is an invitation to try out possible relations of matter, body, and data in a strange horizon. It is a process of giving recognition for a world not yet known by developing techniques of getting ready for it and by forming speculative dialectic systems of shared experiential knowledge. The attentive practice of collective witnessing and navigation can be understood as a mode of doing research. As such, the development of a methodology of navigation and collective witnessing rehearses the moment of seizing the fleeting, uncoded potential of afterness. It is a research practice that turns away from asking what happened, which is a notion of European knowledge structure. It always fizzles out the main event toward ecologies of knowledge spoken by many. In this case, afterness is pluralized through multiple voices and collaborators. In lieu of indexing data, such research is an invitation to think through shared consciousness between elements that have been with us for a very long time and by forming a relation of openness to an incomplete future.

Chapter 5: Leaking Lands

Afterness is a framework that emerges from the need to conceptually capture a materially dispersed and ideologically fragmented state of affairs. Afterness is a slippery category, often too abstract to easily recognize or too opaque to engage with. How can we access a space that offers a variety material consistencies and locales without order? I argue that afterness is a state or a set of conditions, but it needs a practice, or a method, in order to activate it. In this final chapter I ask how the potential of afterness can be actualized as a space to unlearn colonial orders.

Throughout it, I share examples and analyze my own performance and video works to propose that the potential of afterness to be actualized in space and time is through collective research-based performative encounters. These encounters offer a concrete, even if momentarily, examples of transforming institutionality through transmission of the afterlives of the museum into the now.

The activation of the state of afterness through performance encounters depends on the nature of the residues. The residues' active and ephemeral qualities call for action-based experimental forms of enactments and composing. In chapter 2, I showed how the residues are not only the matter that survived after the object but the conditions and affordances of that object that is already present at the moment of its constitution as a museum artifact, and have been dragged into the residual realm of afterness. In chapters 3 and 4, I proposed a research method that takes terms and tools from performance in order to stage temporal engagements in museums, the urban sphere, and online. In this final chapter, I come back to the digital remains of the Museu Nacional. I suggest that the residues are simultaneously the condition that informs performance as a chosen practice *and* the practice site. As a research methodology, I rely on the active characters of the residues and the use possibilities that opened up after the removal of the object. The performative encounters inhabit the remaining conditions left after the collection while using and interpreting the qualities or properties that originally defined the objects' possible uses. The encounters make use of the affordances that were dragged with the residues but also reuse them. As a method, the residues are not only what is left after an event but also the conditions that make the performance possible. They are both the performance's catalysts, and, as a specific site of afterness, where the performance takes place. Residues are, to borrow Irit Rogoff's term, "un-disciplined." As a practice they no longer work "in relation to recognizable

knowledge structures but instead produce ruptures and affects within the map of knowledge.”²⁴² Together, the encounters and video work discussed in this chapter present potential unfixed relations between entities and make use of the surviving affordances of the collection to provide a model that is based on material and affective active network, rather than index. The event of the fire is here not only conceived through the loss and the cultural death but rather as a way of entering the space of the museum through engaging in a form of collective, imagined embodiment in the virtual remains of the lost museum.

This chapter focuses on *Leaking Lands*, a three-channel video installation that I developed over the course of three years.²⁴³ *Leaking Lands* is video installation that acts like a “digital séance” in three parts, where I use the digital remains of Brazil’s Museo Nacional as sites of intervention. The work considers the digital collection as the multi-sited meta-collection that is enacted through conversations and collaborations with many stakeholders, from former employees to data activists and dance makers. *Leaking Lands* is an invitation to rehearse how to be witnesses of the digital remains and their affective sediments. This chapter opens with a description of the installation, focusing on each of its three screens. It continues with a critical discussion of three chapters: Error, Storage, and Leaks. Then, I examine several theoretical concepts that emerged from the video: the spectral state of the objects, the use of pleasure as a form of healing, and the piece as an exercise in collective witnessing. I conclude by discussing my artistic practice as a mode of afterness that un-disciplines not only the museum but also the research itself.

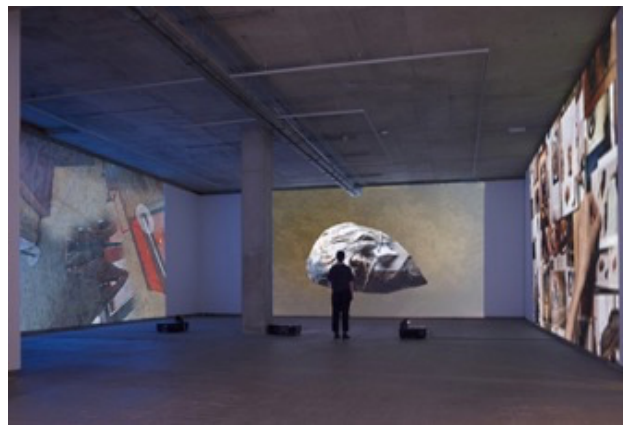


Figure 28. —. Cnaani, Ofri, space rendering for the video installation *Leaking Lands*, December 2021. Collection of the artist.

²⁴² Irit Rogoff, “The Disenchanted Contending with Practice Based Research,” *Studies in the Arts - Neue Perspektiven Auf Forschung Über, in Und Durch Kunst Und Design*, eds. Thomas Gartmann and Michaela Schäuble (Bielefeld: transcript Verlag, 2021), 51.

²⁴³ For previewing: <https://vimeo.com/700148674> Password: Leaking_Lands2022. For viewing purposes, all three channels are presented on one screen.

Leaking Lands is organized in three projections playing simultaneously. On one screen, I use the Google virtual tour of the Museu Nacional to wander around the spectral museum, guided by conversations with several of the institution's caretakers—researchers, former students, maintenance staff, and educators—who looked after its collection and publics. Through their personal lenses, re-lived via digital space, the museum is mediated less as a site for art and ethnography and instead as a memory palace pierced with lacunae. It emphasizes the capacity for organizing individual and collective memory not through a capitalist temporality that fragments and monetizes any experience, but instead by highlighting personal narratives and bringing forward the specific, peculiar, and esoteric. This screen emphasizes the capacity to share, pass on, and unfold the lives that were once lived inside a national institution that was falling apart, and now become an abstraction that produces rhythm and lives through its production as digital mutations.

The second screen uses as an entry point the user-generated hybrid collection of images from the Museu Nacional, built by users who uploaded photos to the Wikimedia Commons. The disordered images are individual accounts of those who visited the museum and shared their own impressions. In my studio, the visitors' digital photos became materials again. I printed them at a one-hour photo printing service spot, like travelers used to do after their pre-digital journeys in order to share their experiences with friends and family and then archive in albums. The now-printed, uploaded photos are sometimes poor copies and are often anecdotal or deprived of any context or information. In the video that stemmed from a lecture performance of the same title, I arrange the photographic sources, stitch them together, or reinvent the images. Sometimes I collage different things together, other times make cuts or tears in the photo paper to hide or reveal its materiality, or else reorganize the space of the page by folding or relocating parts of the image. Through the physical gestures, the personal collection of photographs seen on the second screen keeps mutating and growing, where materials and images intermingle and refuse the canonic catalogue, refuse to be tagged or rest in the photo album's sleeves.

Finally, the third screen brings to life my collaboration with dance-maker luciana achugar. achugar speaks of a "pleasure practice," a healing practice that releases the body, a storage space of transgenerational trauma, through pleasure. In conversation with achugar, I subject a group of 3D models of objects from the collection to a methodology of movement. Following a similar speculative methodology, objects can no longer be "known" by a specific set

of indexing or “put to work” for a specific ideology. The virtual space allows me to explore movement without a body and to engage with the collection on this new nexus of body and no-body.

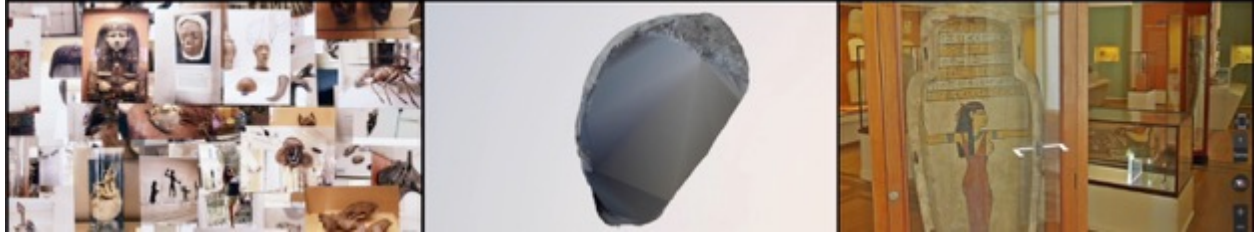


Figure 29. –. Cnaani, Ofri, *Leaking Lands*, three-channel video installation with sound, 2022. Collection of the artist.

Accompanying the three screens is a score emanating from eight speakers. The audio combines the sounds of the physical body: breathing and growling, humming and swallowing; sounds of matters: water dripping and fire burning, powdery dust and stretched skin; and sounds from digital sources like keyboard clicks and machine “noises.” The vocals weave together testimonies and navigation instructions shared by the museum’s employees, along with the sounds of women singing in extinct languages. The Museu Nacional contained recordings of conversations, ceremonies, and songs in dead languages that were not duplicated in any other collection: Interviews etched on century-old wax cylinders; Indigenous music captured on a phonograph in 1912; film, reel-to-reel, and cassette tapes recorded by field anthropologists since the 1960s. In the video I used surviving recordings from German-Brazilian ethnologist Curt Nimuendajú’s Indigenous cultures archive to comment on the declining spoken diversity that is greatly affected by the monolingual technosphere and the lack of digitization of the disappearing one. The sonic landscape offers more abstract commentary on the material aspect of the residues and of the techno-capitalist standardization that invalidates the lingual margins by way of a centralized code of use. The three chapters of the video, Error, Storage, and Leaks, carry different meaning and agency in the world of museums and archives and the sphere of ubiquitous computation and big data repertoires and therefore activate a set of problems on the crossroad between these models of knowledge governance.



Figure 30. —. Cnaani, Ofri, *Leaking Lands*, three-channel video installation with sound, 2022. Collection of the artist.

Error

When I asked Professor Luiz Fernando Dias Duarte to join me for a “walk” in the virtual space of the former museum, he admitted that even though two years have passed, he never visited the virtual tour. It felt too cruel, he explained. Then he added: “but I’ll do it for you. So, let’s go.”²⁴⁴ The display, he tells me as we glide through the bright rooms, was in a “shabby, shabby condition.” The colossal damage where Duarte lost forty years of research, thousands of books and academic papers, and many private items and artworks was framed as an event caused by set of errors: first, a short circuit in one of the museum’s wings, followed by a lack of water supply in the fire extinguishing system. On that Saturday afternoon in September 2018, Duarte was at home. He turned on the television and watched how his “entire career was burnt.” He knew there was no sense in going to the museum. As a seasoned researcher he couldn’t do much onsite. He knew that the series of misfortunate events was not innocent and he was watching the livestream of the most painful reality show. The events occurred in the context of long-standing austerity that ended up manifesting in a set of errors. “We had no money for maintenance, no money for exhibition,” Duarte admits. The hardline austerity policies in the years before the disaster had seen a reversal in social programs and plunged the Brazilian economy into deeper crisis, damaging public services, especially the country’s already fragile health, education, and culture systems.²⁴⁵ In the spring of 2020, when I digitally met with museum employees, the government, which was elected shortly after the fire, was pushing for economic reforms centered around accelerated privatization, while brandishing a culture war against racial, cultural, and gender diversity. In previous chapters I showed how the multiple entangled environmental, financial,

²⁴⁴ This and all other quotations from the video work are all Ofri Cnaani, *Leaking Lands*, video installation (color, sound), 2022.

²⁴⁵ Simon Romero, “Brazil’s Leaders Tout Austerity (Just Not for Them),” *New York Times* (March 3, 2017), <https://www.nytimes.com/2017/03/03/world/americas/brazils-leaders-tout-austerity-just-not-for-them.html>.

and cultural catastrophes enacted by administrative errors were already ridden with systematic neglect. The error must be politicized. The fire wasn't caused by an unfortunate administrative error in the system, but by a major crisis of austerity that is framed as just an error. Not an error in the system but a systematic error.

There is also a danger of overstating the critical potential of errors. The perceptions that highlight the potential of the errors, or similar concepts like glitches, to expose systematic assumption and give voice to minor voices uncomfortably echo a neoliberal drive to operationalize and render productive all form of errors and to see the error as something that will always feed back into the system. Luciana Parisi and Ezekiel Dixon-Román show how recursive computation is designed to include both contingency and chance within itself because the temporality of cybernetic machines precisely admits that errors, incidents, and failure are part of the causal process of systems learning.²⁴⁶ As data sets grow from local archive and collection to live, dynamic data on a planetary scale of processing, we must not feel too comfortable with the potential of errors.

Keeping in mind that the brutal reality of the fire is also framed as an error, I believe that the notion of the error also allows some affordances. For example, in the last years before its tragic end, the National Museum saw very little interest from the government. The museum system wasn't completely shuttered but it was definitely stuttering. But the poor conditions at the museum were precisely what opens up new ways of making sense of the institution to become “the museum of the people”—a home to sex workers, a hub for free internet, and a host for political Indigenous activity. This is the kind of error that operates within a singular institutional framework rather than by adding something external. The institutional device was erring against its official purpose. The fact that people saw the museum as their own is also an error in the original national apparatus of a museum as a means of disciplinarian power. Once the museum became a place that belongs to the people it shed its authority and became a defunct or broken governing tool. In this loop of error and affordances, the systematic failure of the museum became an affordance for people but an error for the government.

The error's agency is defined by the governmental setting it is active in. Errors can be seen as a threat in the nation-state rationale or as a necessity for machine-learning training

²⁴⁶ Luciana Parisi and Ezekiel Dixon-Román, “Recursive Colonialism & Cosmocomputation,” *Social Text* (November 24, 2020), https://socialtextjournal.org/periscope_article/recursive-colonialism-and-cosmo-computation/.

models. But errors become inoperative by the state of incompleteness. The state of incompleteness is a post-error space that is full of potential. The unstable potential of the error lies in the idea that it cannot be performed nor reenacted. It can only be captured in its aftermath. In the video work, the engagement with the error is through the physical, infrastructural, and affective traces it leaves. The practice of contending with the museum's aftermath is guided by the intensity that is carried after the moment of disequilibrium. In the artistic process I asked if the video itself can act like an error inside the spectral space that is left after the museum. After several failed attempt to hack the Google product and stage performative moments inside the sterile digital tour, I learned that the virtual space is not as dynamic as it seems but rather a hermetic space. It was made by stitching several folded panoramas that mimic the museum but block any possibility of intervening or augmenting any content. Like the museum itself, there is a way one should behave inside its digital replica. Failing to misbehave in the digital space by using codes, I turned to misusing it with minor performative gestures. For example, I tried running through the virtual tour as fast as I could, like someone escaping a fire; I insisted on glitching into the undocumented galleries that the Google team decided to omit from the tour; I looked for traces of the camera captured on reflective surfaces; I used the tour to map all fire safety equipment in the museum; and tried hard to leave the galleries to breathe some fresh air only to be pushed back into the space by the program. The small gestures were erring the seamless design. Finally, I started to occupy the tour by bringing back people into the computational space. By inviting museum caretakers to walk and talk, the space slowly turned into a meeting place. Their memories and personal knowledge leaked into the corporate product that became a host for something else. By rejecting the preestablished codes and proposing a mode of relation with others, the ambiguous specter became a potentially creative space.

Storage

I wanted to look at the museum's aftermath through three storage systems that aggregate different corpora, matter, and data. The first storage system is the museum. The nineteenth-century model of the encyclopedic museum aims to store and tell the story of the world through physical objects. In museum storage objects are contained and regulated in measurable units. More often than not, objects are bound to their shelf lives, never allowed out, aren't made for circulation. In recent years, huge art storage spaces have been created around the world in what

could essentially be called a luxury no man's land tax haven. An embalmed relic of a derivative market, these storage units are places where "artworks are shuffled around from one storage room to another once they get traded."²⁴⁷ This new phenomenon shows how the storing infrastructure of cultural objects needs to be politicized as it captures the financial, spatial, and technological complexity of storage. The collecting drive of the European royalty and the American Gilded Age lives on through a new generation relying on offshore banking and art trade via shell companies, but it highlights how storage is always far from the public eye. Whether in museums' underground storage spaces, in contemporary private collection outside of the territorial water of a given state, or in ephemeral corporate storage services on the computation clouds, storage space is an apparatus that makes the heavy burden of various kinds of content vanish into thin air or disappear from the public eye.

The second storage system is digital: it is Google Arts & Culture services, which offer free cloud storage for museums' digital collections in exchange for managing and monetizing their digital visual content while repackaging rights and obligations. The accumulation, storage, and management of information in big data repositories is unprecedented and these highly networked storage spaces manage constantly growing data streams. In Google's storage solid things melt into air and clouds become a new form of material infrastructure that is a little less fluffy.²⁴⁸ The third storage space is the human body. Inspired by Achugar's practice, I approach the body as a storage unit for pain, a mnemonic device for trans-generational knowledge of colonialism. The growing anxiety and chronic pains are records and evidence, the muscles and fascia are the dissemination sites of violence. In the video, the first storage space is an archive of matter, the second of data, and third is a place for storing trauma that passes through the soft tissues. Storage systems are physical sites of creation, transformation, and mediation of the past.

Storage is a concept that brings together the container and the contained. Its definition encompasses both the host structure and the item stored in there. Whether it is a colonial palace that is now a museum, a server farm dematerialized into the image of a cloud, or a nervous system that is passed on from one's ancestors, it is a meeting place between the containing

²⁴⁷ Hito Steyerl, "Duty-Free Art," *e-flux journal* no. 63 (March 2015), <https://www.e-flux.com/journal/63/60894/duty-free-art/>.

²⁴⁸ "The cloud is not weightless: it is a heavy industry. Add in the metals and plastics, the hydro dams, the thousands of miles of cables, the satellites and their rocket launches, and the millions of tons of electronic gadgets we use to access our movies – and the cloud looks a little less fluffy." Sean Cubitt, "How to Weigh a Cloud," *The Conversation* (October 27, 2013), <https://theconversation.com/how-to-weigh-a-cloud-19581>.

infrastructure and the preserved units. Storage can no longer be read in a binary way between matter and form, container and the contained, human and nonhuman, or object and digital, but as a complex assemblage. It is a place of complex mnemonic relations that bring together an entanglement of data, matter, places, and times. As Giuliana Bruno argues, discussing storage as a gray zone: “It is not a question of materials themselves or a matter of ‘thingness’ per se but rather concerns the substance of material relations and connections and how they are configured on the surface of different media.”²⁴⁹ *Leaking Lands* takes Bruno’s reading to offer a complex storage system that moves across the three storage systems described above: the museum, the corporate cloud storage space, and the moving body are all containers of trauma and can become sites to rethink the relationship between the container and the contained.

In the case of the National Museum in Brazil, a storage space that records an act of colonial violence became itself the burnt debris of another violence. This time it is late-capitalist neglect that disposed the culture of its own objects. Without a proper knowledge transfer into the digital, the burnt museum became an unsecured and promiscuous storage space. The three forms of storage—national building, digital platforms, and human body—are not coherent or secured. Their materiality carries the possibility to imagine another kind of storage, perhaps a leaking storage. It is storage without a security system that monitors and controls incoming and outgoing traffic. Storage that is not safe because its materiality is a victim of similarly violent behaviors. The residues are a network of leaking forms of storage. Can the leaking storage be imagined as a practice? When I was working on the video, I imagined it becoming another site to store files, images, and connections. During the artistic practice of collecting, editing, and intersecting digital objects, the video became a possible storage space for the residues. The video becomes a layered, heterotopic site that is nonhegemonic and is simultaneously physical and mental. It is a parallel space that can possibly “other” the storage spaces by mirroring and disturbing them—and, as a result, it can possibly transform them. In this leaking storage there is no unified form of container and contained but a web of elements that escape traditional forms of tracking or measurement, calling instead for mutually intelligible discourses across differences in material, energy, and inheritance.

²⁴⁹ Giuliana Bruno, “Storage Space,” *e-flux Architecture* (November 2016), <https://www.e-flux.com/architecture/superhumanity/68650/storage-space/>.

Leaks

Storage spaces—whether they are museum storage or portable containers, remote servers or corporate cloud services—shape narratives by defining what is being saved or omitted and how these things should be secured. The potential of a leak is already contained by this notion of storage. Wherever there is a close physical and ideological system, a potential leak lurks. A leak, like an error, is always already part of the storing or archiving process as a potential. The potential of the error is to produce momentary breaks, and the leak's potential lies in the flow that can go through those breaks. In the case of the Brazilian museum, the problem was that what leaked out of the museum storage wasn't too much but too little. According to Matthew Fuller and Andrew Goffey, leaks teach us not so much what the story is but rather how stories become known. The leak can take different forms, but its essence is not its material nature or its content:

The leak can be understood as a speech act with an unwilling speaker, but it can also remain simply as a gray anticipation, a document waiting nowhere for the eyes of no one, held in abeyance by a forensic disinterest. Such a leak is like every other document, an anonymous squirt into the ocean, but one that dreams of becoming the center of a whirlpool. The leak, then, is an attempt to capture and mobilize the dynamics of unintended consequences, to enter in the domain of the accident, the double agent, confusion, and to render it fruitful.²⁵⁰

The key characteristic of the leak is its potentiality. Looking mainly at data leaks, Fuller and Goffey shift the focus from the content of the document or the infrastructural qualities of the storage and point readers' attention in the direction of the virtual. The virtual, in the political sense, focuses not on the past but on the event to come, and how that event has the potential to act as affective attunement that touches the different participants involved in different ways. The writers approach the notion of the leak as an unstable potential that can only be captured in its aftermath. It is an intervention that goes beyond representation. The leak is an a-signifier whose actualization happens through the traces it leaves. Its potential lies in its latent tendencies. Because leaks are an a-signified virtuality, they should be read not read only through the domain of the error but operate in the domain of affect. Approaching the notion of the leak as an event of the virtual does not rely only on, for example, improving storage safety. Instead, it proposes a continual and unstoppable elaboration of new data that has not yet been leaked.

²⁵⁰ Matthew Fuller and Andrew Goffey, *Evil Media* (Cambridge, MA: MIT Press, 2012), 103.

Leaks foreground the dynamics of unintended consequences. In its unstable state, the leak represents a potential alter-politics. The leak produces ruptures in the knowledge structure, but at the same time it lacks the interpretative tools as to what to make of it. Such an event of the virtual is provoked by encounters between the memories and experiences of the stakeholders in the National Museum I involve in *Leaking Lands* as archives, and the performance encounter but crucially makes space for thinking in affective terms. In Fuller and Goffey's description, what leaks out is mainly data but a different quality leaks out through the performative encounter providing a setting of non-institutional thinking-feeling that was stored within the institutional apparatus without spilling out and then becomes the energy of reconnecting between elements. The encounters set out to experiment with fictitious times and space. The consequences of afterness are actualized through encountering the impossible spaces like the glitchy virtual tour or the inner space of the digital objects. By forming a staged, invented setting for a conversation, personal histories and lost partialities start to connect and affective qualities spill out. My movement and that of my guests are an enactment of the many levels of dispossession of this particular situation. Our movement, in this invented scenario, offers a mutual ground for sharing the deprived possessions: the lonely melancholia of the professor is passing through me and starts vibrating in the deformed virtual museum, which he can't return to; the uncontrollable rage of the Indigenous researcher is throbbing through the moment I failed to capture his ancestors' objects. We don't share language; our words are not stable. We are trapped in the virtual space and its conditions with a growing acknowledgment of our inability to move together. The belief that we have the capacity to exit these conditions is fading away. We are stuck within the conditions of afterness. The conditions of afterness are not as closed as the museum or the data center, but as we move along, we realize that there is no exit sign in this space. The performative encounters and the invented situations puncture holes in these conditions. Our momentary connections are not regulated, at least not successfully, by a state, a religion, an empire, a piece of land. Through them, things start to leak. A feeling starts to emerge. It is a feeling that cannot be fixed to a territory, state, nation, or history. It is the thinking-feeling that emerges through contact and with others. The possibility of enacting a leak is the practice in the space of afterness. What leaks out is the affect of the given incompleteness of the space after the museum.

Spectral Objects

The leaks represent a potential alter-politics. The afterness marks the end of a system that once contained knowledge, but whose old methods of knowledge production have become defunct. Leaks become a technique of relating world events and objects with live bodies, and a way to look for epistemologies that conjure actions from different times and spatial realities into a new fictional universe.

Halfway through the video, José Fernandes Mendonça, an Indigenous researcher from the Ticuna tribe tells me: “There is a Ticuna thing, I don’t know how to say it, of not making completely visible what is sacred. One of the first things the leader of my people (cacique), who passed away, used to say: we need to keep our history, we need to preserve what is ours. [We can share with them] some of the medical plants to cure or treat, but we can’t go into details. We have to be careful.” He says this during our mutual “walk” in Google’s virtual tour of the National Museum. It’s late at night, April 2020, and we are speaking over Skype. Mendonça is stuck in Manaus, the biggest city in the heart of the Amazon rainforest. He fled Rio de Janeiro, where he works at the museum while completing his PhD research, but didn’t manage to get to his home tribe. These are the early days of the Covid-19 pandemic and the death rates among Indigenous communities are reaching a state of a crisis. Over the following weeks, I commemorate a few of his relatives who died alone after they were kept in isolation, away from their community. I carried José’s written eulogy into the local nature, based on his instructions. On that Skype conversation, it is a three-way dialogue between the two of us and Fernanda, who translates and tries to mediate the many linguistic and cultural gaps between us. Our conversation isn’t flowing: it is lagging due to the slow process of translation. Also, the formerly novel, now-Microsoft-owned Skype is buffering, and the Google virtual product keeps glitching, diffracting José’s embodied and emotional memories into a disorienting experience of the museum. He is frustrated. When I ask about his favorite object in the museum, he takes me to a room full of Indigenous ceramics to tell me about the multiple strategies Indigenous people employ in order to continue owning their knowledge while giving away the objects. He speaks of the big containers of matter and wisdom. The matter can be given away, the wisdom shouldn’t leak. The empty clay vessels were filled with whispered knowledge that failed the three-way translation back then and now. The sacred is untranslatable. The white man stayed with shaped matter, a storage device. Anthropologist João Pacheco de Oliveira tells me the Ticuna cacique,

the spiritual leader, tells him that keeping objects in the museum was always crucial for the Ticuna, as this is the way to “sweeten the white man’s heart.” But the heart of the healing is elsewhere. After the fire, looted objects were out of the hands that kept them, and glitched out of their screens, but the wisdom was still whispered from tongues to ears through oral protocols. The “empty” survived after the object. This is not a secure system protected by firewalls but an unspoken tactic developed for generations. You can own our objects as we can always make more, says the cacique, but you can’t own our spirit. In the “empty” lie the ancestral formulas and prescriptions that survived after the object. They are residues, and they can heal.

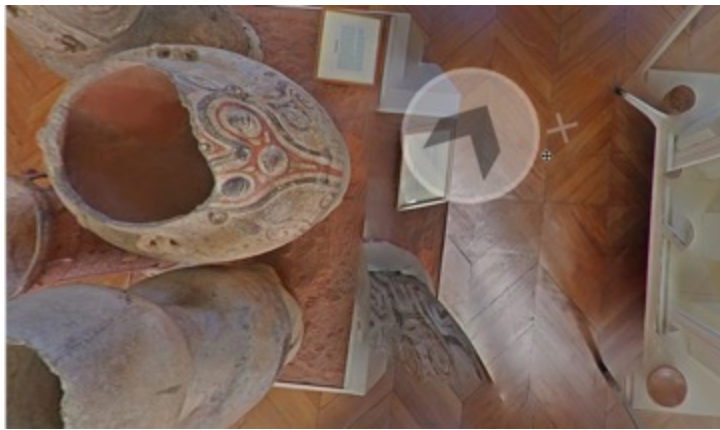


Figure 31. –. Cnaani, Ofri, *Leaking Lands*, three-channel video installation with sound, 2022. Collection of the artist.

The museum is not a fixed space. Robson da Silveira Mendes, a second generation of museum janitors, tells me about the museum’s infamous ghost. He used to come with his mom to clean the museum when she couldn’t arrange childcare. He never left. Da Silveira Mendes assures me everyone knew about the ghost. He even saw her once. She was wearing all white. As popular culture teaches, ghosts haunt because they need something from the living (revenge, justice, reparation, assistance) and, conversely, the living conjure ghosts because they want them to provide access to the past or to other worlds.²⁵¹ The museum was a place of living with specters, much more than it was a site for their exorcism. More than once, I hear about Viktor Stravisky, who was a museum mediator, a pioneer in sex education, and a scholar. Once, while visiting the museum with a group of students, he shared the finest details of the meticulous

²⁵¹ Esther Peeren, “Specters,” *Symptoms of the Planetary Condition: A Critical Vocabulary*, eds. Mercedes Bunz, Birgit Mara Kaiser, and Kathrin Thiele (Lüneburg, Germany: Meson Press, 2017), 167.

process of Egyptian mummification until he, himself, got into a state of trans. He was, I've been told, a very peculiar person and he was mostly interested in the Egyptian galleries, where respecting the living and the mummified in equal measures is in evidence. More than any other story, I hear about a marvelous Ticuna mask that could link different moments in time. Like other sacred Indigenous objects, it was looted and publicly displayed at the museum. Indigenous visitors who saw the mask experienced a spiritual sensation or even transcendence into a state of awe and fear. The mask, many agreed, was a living entity. Native museum personnel were often asked to bring back people who were affected by the mask and got into an alter-state. The fact that a sacred object, meant to be seen only by the few, is now displayed in the open, is often described as vulgar and ignorant. When listening, recording, and editing, I imagine the video work once again as a digital séance. The multi-layered editing is an attempt to think through the continuity of life and to approach objects and subjects, material and digital, as a continuum.

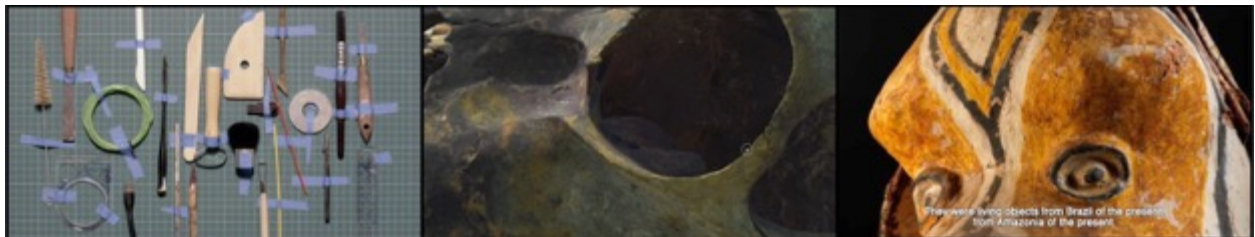


Figure 32. –. Cnaani, Ofri, *Leaking Lands*, three-channel video installation with sound, 2022. Collection of the artist.

The stories I shared reveal object in unstable states between the physical, spiritual, digital, and spectral. This is also the case of the first 3D object I worked with. On the central screen is a digital object that seems unfinished. One-third of it is a perfect modeling of a classical women's bust, the second part seems like raw stone, and the last section is a smooth gradient digital surface. The odd machine-made object perfectly captures the instability of the residues. Once I started crawling in it, guided by achugar, I exposed the inner spaces of objects that are speculative, partial, and mysterious. Moving from ceramic pots to the white ghost and from the mask to the three-dimensional model, the objects suggest blurred lines between solid and ghostly, between the spectral and the tangible. Even when the objects are gone, the regime of the object persists and their spectral inheritance presses itself upon us. Yet critical force may reside in how we give shape to living with this legacy.



Figure 33. —. Cnaani, Ofri, *Leaking Lands*, three-channel video installation with sound, 2022. Collection of the artist.

Eyes Within Skin: Pleasure and Healing

Writing about popular movements toppling racist monuments in public spaces in the summer of 2020, Paul B. Preciado called: “Let the museums remain empty and the pedestals bare. Let nothing be installed upon them. It is necessary to leave room for utopia regardless of whether it ever arrives. It is necessary to make room for living bodies. Less metal and more voice, less stone and more flesh.”²⁵² Working in reverse, with an immaterial museum as a starting point, the middle screen in *Leaking Lands* reintroduces voice and flesh as a way of engaging with the phantoms after the removal of metal and stones. The screen features a collaboration with achugar that was developed that same summer. achugar’s “pleasure practice” became one of the tools I thought of to engage with the collection’s digital remains. achugar asks: Can you allow your eyes to breathe? She approaches embodied witnessing as a kind of presence that allows the possibility of seeing with one’s eyes without constantly asking what it is that you are seeing. In this way, pleasure becomes a technique of engaging with the world. It is no longer a dystopian or abject category, but a way of rehearsing utopia, to use achugar’s words. achugar’s way of championing the libidinal economy of pleasure can work in response to Rogoff calling for disenchantment of the authoritative voice of academic research. The disenchantment or even disappointment of knowing a world through a cerebral process that thrives on homogenous, preexisting, and exclusive categories. The body-bound perspective works toward a cultural-theoretical technique that lets go of the verbal and repositions the experience of the objects, at the risk of being enchanted again. It encourages a process-driven concept of engagement with collected objects, rather than highlighting their external characteristics. Pleasure practice can be read as a continuation of recognizing pleasure as a method of claiming the objects’ materiality, agency, and ethics. It echoes feminist aesthetics that would place pleasure at the center of performance making and theory to imagine alternate discourses, to interrogate sexuality as constitutive of its

²⁵² Paul B. Preciado, “When Statues Fall,” *Artforum* vol. 59, no. 3 (December 2020).

power, and to mark the tense boundaries of identity politics.²⁵³ achugar focuses on the skin, an organ that distributes stimuli and protects the inside from the outside. The skin is the figure of some of the most urgent political and ethical problems of our time but also the nature of our relation to the world. By turning the skin into an observing device, the eyes can no longer look at the skin. The method of knowing by “looking at” is replaced by “moving with.” The skin as a seeing organ proposes a “membranous” recognition that involves transmission and exchange. With achugar, I consider body-based agencies through their materiality and corporality.

When achugar invited the viewers of the video to the space for the first time, she used some familiar markers from the world of guided tours to initiate a different kind of observation. She says: “Let’s take a moment to feel through your eyes, where they want to go. Let go of any knowing of what it is that you are seeing. Let’s take this opportunity to explore the space without concerning ourselves what things are, what their name is, what we know about them...let’s explore through the space. Let’s turn a corner and look up.” In chapter 3, I described pleasure practice as an alternative to the contactless condition and as a method of engagement with the promiscuous contact of the residues. In this chapter, I want to focus on the practice’s capacity for healing that is achieved through re-engaging with knowledge without concerning ourselves what things are, what their name is, or what we know about them. achugar says that the practice aims to “unsocialize” us from a normative behavior in order to get closer to a post-civilized utopian state. By privileging sensorial knowledge over the verbal and movement over vision, I understand the practice as a way of putting the past into meaningful, transformative relation with the present and rethinking historical consciousness in embodied terms. The state of pleasure not only channels new means of understanding the past, but also allows us to go against what Elizabeth Freeman has coined chrononormativity,²⁵⁴ the use of time to organize individual human bodies toward maximum productivity, which is central to colonial thought and the history of slavery. Pleasure, on the other hand, is elusive and slippery. It is immeasurable and can’t be owned. The release of the body from a state of measured productivity into the primal state of pleasure is a form of touching a utopian state where bodies are healed from the multi-generational trauma of being used and abused. One can’t own pleasure but be in pleasure. It is

²⁵³ Elizabeth Bell, “Toward a Pleasure-Centered Economy: Wondering a Feminist Aesthetics of Performance,” *Text and Performance Quarterly* vol. 15, no. 2 (April 1, 1995): 99–121,

²⁵⁴ Elizabeth Freeman, *Time Binds: Queer Temporalities, Queer Histories* (Durham, NC: Duke University Press, 2010).

not mediated but immediate. Pleasure releases a viral energy that can't be held for long. With pleasure the world is known subjectively and momentarily. With achugar, I subjectify the object of display to a methodology of movement, to a practice of pleasure. In that sense, the film is approached like an act of recovery. Guided by achugar's voice, I travel on the surface of the 3D-scanned objects and rub their digital skins. I use body-agency to tune myself to digital matter. I move my cursor to zoom into the objects until they lose their external shapes. Since the objects are only scanned from outside, the internal spaces of the objects are the product of machine "imagination." Like the body, the digital museum objects lose their form and can no longer be known as one entity. They melt into a new, speculative space, losing their ideological agency and becoming a site of distributed stimulation that offers a sense of body-machine intelligence. This is an exorcism of the colonial ghosts that hovered over each of the collected objects. It is necessary to leave room for utopia regardless of whether it ever arrives.

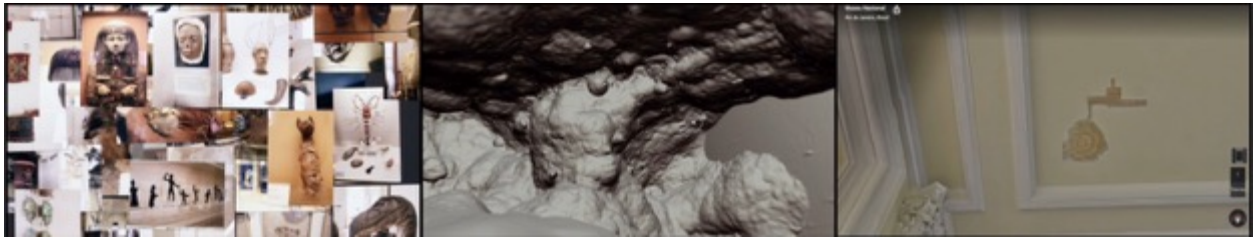


Figure 34. -. Cnaani, Ofri, *Leaking Lands*, three-channel video installation with sound, 2022. Collection of the artist.

Collective Witnessing

"I had Luzia facing my eyes, you know," says Luana, whose testimony I shared in chapter 4. Imagine the twenty-something Luana and the 12,000-years-old fossilized Luzia looking one another in the eye. In her words, Luana constructs a mode of sensibility that emerges from her deep feeling of a space shared with other animals, plants, and fossils. It is a sense of mutuality, modes of relation with other living and non-living beings that the video takes as a mode of production. In *Leaking Lands* I avoided a central perspective and favored instead a multiplicity of voices that keep sharing and narrating the event. The work attunes to the spectral space of the museum that no longer hosts objects and audiences, instead becoming a space of many fragmented voices, memories, notes, and interpretations. In lieu of expert witnesses who can tell viewers what they saw, I chose to weave together many voices that can share what they already know. Moving away from an evidence-based narrative, I consider ancestral archives by drawing

attention to centuries of information stored in the spiritual and material realms. Throughout the video and the written work, the event of the end of the museum is told again and again through subjects and objects, through matter and data. Within this mode of the performative enactment of all relations, the prefigurative politics of anticipatory forms is the last remaining space of fissure and interruption. This is the space where systems improvise beyond their own means to invent new territories of time, behavior, and relation(s). Here, the habitual performative continuum between enactment and re-enactment becomes defunct and a critically discursive space emerges where movement and temporality relate through indirection—in essence, carrying the weight of bearing witness is insisting on the prefigurative performative potential of all relational practice.



Figure 35. —. Cnaani, Ofri, *Leaking Lands*, three-channel video installation with sound, 2022. Collection of the artist.

Practice as a Mode of Afterness

Leaking Lands is a complex video production that took a long time to make. I started working on it three months after the fire in the Brazilian museum. It was a slow and careful process that seemed to operate on geological time rather than art-production time. In past works over the previous decade, I staged several performances that involved conversations with various museum stakeholders. I worked with maintenance staff, educators, museum volunteers, and other caretakers of the institution. In dialogue with the work of artists who collaborate with communities, motivated by the social change art can catalyze, my performances were intrigued by the ability to invent settings and stage conversations that are both enabled and preempted by the institutional conditions. The one-on-one interactions formed systems that improvise beyond their own means to invent new territories of time, behavior, and relations.

These performative interventions I made in the past informed my video work on the Brazilian museum. I tried to understand what my limited perspective, not being from Brazil or connected to the Museu Nacional in any other way, prevented me from doing. By not following a

specific research path or discipline, it became crucial for me to invent a working method. I wished to hold on to the afterlife of the museum by giving space to the multiple forms of knowledge that can result from the event. Informed by collective research at the Advanced Practices program, I abandon any illusion of the possibility of grasping the entire historical reality from beginning to end. When working in the studio, my aim is to think about the event of the fire and its consequences not through legacy but from somewhere else, which is unresolved and irresolute. How do you claim a radical moment if you were not part of it and have no direct involvement in it? My approach is to make this dilemma public: I avoid filling the historical gaps or fulfilling the desire to discuss the local event; instead, I've tried to take the case elsewhere. For instance, rather than reconfiguring what the museum is or what happened in the fire, the practice engages propositionally with what could be. I often think of the lack of the object or the entire museum as one that orients a practice that moves around and about the abrupt change. It is a place to look for the seeds of that seemingly abrupt change and how they have been planted and cultivated for some time and to think speculatively of their possible futures. In that sense, to frame something as "a mode of afterness," although it originates in relation to the past, is a future-oriented framework. I argue that the practice of afterness could be a mode of what Patricia Reed and Robin Mackay outlined as "making ready." The idea is a play on words, on modernist idea of the readymade that suggests a conceptual move based on presentation or recontextualization of existing things. The notion of readymade signifies a radical position in knowledge production by shifting the focus from what the status of the object is, to the capacity of the object to create meaning, make a problem, or spark a question. The concept of making ready is a hypothetical position, a way to prepare for living conditions that are more potential but not really practiced.²⁵⁵ It is a pre-enactment, not a reenactment. Making ready, as an approach to practice, is a mode of afterness, because it uses excising tools, in my case performance, to unlearn organizational structures and reactivate surviving elements into a continuous network that is based on abundance, not scarcity, and responds to emerging living conditions by giving agency to nonhuman actors. It is a useful way to think of the conditions that remain after objects, while acknowledging that the objects left loose ends behind. The framework of making ready

²⁵⁵ Yulia Gromova, "Towards Post-Anthropocentric Cosmologies, Interview with Patricia Reed," *Strelka Mag*, (January 4, 2019). See also Patricia Reed, "Making Ready for a Big World," *MAKING & BREAKING* no. 01 (2019), <https://makingandbreaking.org/article/patricia-reed-making-ready-for-a-big-world/>.

suggests that the practice becomes a site to test if the remaining conditions of the past may have another future. The performance becomes prefigurative; it does not deal with the revision or replication of historic events, but sets out to experiment with fictitious or spectral times and spaces for a potential futurity. It responds directly to Rogoff’s idea that unhinging knowledge demands recognition that “there is no clarity about its address” as its receivers and interpretative tools are not yet available.²⁵⁶ Artistic practice becomes a method of knowledge production that both observes the event and produces a speculative experience of the event.

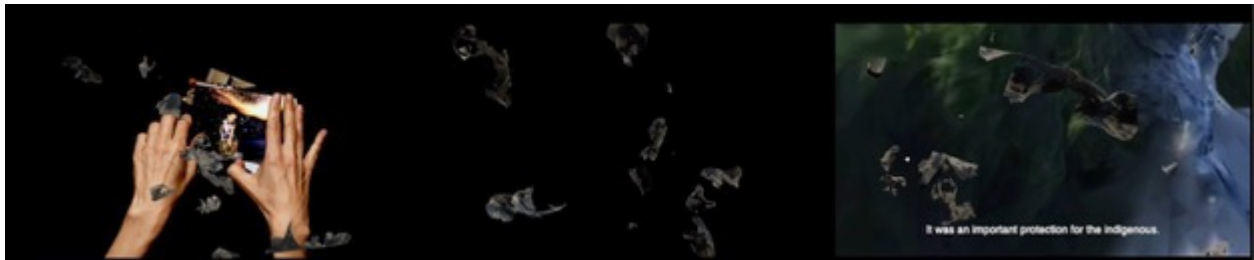


Figure 36. –. Cnaani, Ofri, *Leaking Lands*, three-channel video installation with sound, 2022. Collection of the artist.

Conclusion

Throughout the chapter, I shared my video practice to propose that the potential of afterness to be actualized in space-time is through performative encounters, which offer a concrete, even if momentarily, access to the state of afterness through transmission and translation of the museum’s afterlives as a shared urgency. I showed how the speculative qualities of the video *Leaking Lands* can become prefigurative, a form of using the remains of the past encounters with the museum to make ready for possible, yet uncertain, futures of cultural institutions and to expand our thinking of healing through nonhuman physical and digital objects. It was a conscious effort to work backward, from movement to concept and acknowledging that a concept will always carry a certain residue of an activity. In retrospect, the mission of writing one’s own practice is a work of fracturing. When engulfing performance with language, tiny cracks and gaps are constantly produced from disseminating one mode of being into another. Performance is a simultaneous activity. It is occurring, operating, or done at the same time. Its same-time-ness is what it is. Writing, on the other hand, is by nature sequential. Words and

²⁵⁶ Irit Rogoff, “The Disenchanted Contending with Practice Based Research,” *Studies in the Arts - Neue Perspektiven Auf Forschung Über, in Und Durch Kunst Und Design*, eds. Thomas Gartmann and Michaela Schäuble (Bielefeld: transcript Verlag, 2021), 51.

sentences follow one another or follow others. It is successive. Writing performance comes from where things can't hold together, from the edges of contact. Writing one's own practice becomes a productive series of errors, momentary storages, and leaking lands.

Concluding Remarks

This thesis has proposed multiple performance methods for engaging with shift in conditions in the cultural and political arena through the perspective of the end of museum. The fire at Brazil's Museu Nacional brought to its end the museum complex as we knew it. This practice-based research marks the state that opens up *after* the museum ceased to exist, as a state in which the museum apparatus loses its grip on the museum's remains; and yet, its residues remain fully active. Approaching afterness with performance highlights the state after the institution as an active field of relations. My performance practice develops precise methods for accessing and attuning these residues as active forms and works with their potential to transform ideas of institutionality, in a moment when "the museum" fades as a condition of organization. Such a moment points to the possibility of viewing the museum's residues as part of a very different order of knowledge-making from that of the museum, one that presents a cultural modality that is formed on alliances between body, matter, and data.

In the first and second chapters, I used the story of the fire in the Brazilian museum to lay the theoretical foundations for the term afterness and to observe the event's specific residues as a site of afterness. My approach to afterness exceeds historicity. It defines afterness through multiple dimensions (temporal, spatial, material, technological, and affective) and marks the residues that habituate the afterness as a potential site for unlearning coloniality. I showed how the residues values is not one of "thing-ness" but their capacity to *do* things. The residues are an active protocol of relations. The active qualities of the residues imply act-based methods as the preferred way to engage with the state of afterness, which always needs to be situated in the collective now.

In the third and fourth chapters I focused on the shifts in museum protocols. I have shown how the conditions of contactlessness, often associated with contemporary technologies, are rooted in museum displays that routinely separate the objects, which are perceived as rare and delicate, from the people, who are perceived as unruly. In parallel to the management of access and touch, the creation of a sequential timeline works to disrupt the objects' origins. The post-museum state is addressed through the continuous contact of the museum residues. Connecting between recent technologies of the contactless and auto-synchronization to the ones that have been practiced in museums activates a gap in decolonial literature because it connects the research on museum coloniality and the recent critiques of the colonial nature of information

technologies. Moving from spatial conventions to audience-related protocols, I showed how museum narratives are mediated to the audience through an expert voice. The historical role of the mediator was to explain the collection and reassure the model of collection as a way to “see” and explain the world. The state of afterness, on the other hand, creates space for the emergence of a form of collective witnessing of the institution’s afterlife, and thereby transforming its potentials. In both chapters I shared a series of attentive, performative encounters that reconsider institutional tools and practices. Through the encounters the state of afterness is pluralized through multiple voices and collaborators. The different performances-based methodologies recognize the potential of afterness to be a site of unlearning the museum as a device of colonial thoughts.

The final chapter annotated my video installation *Leaking Lands* to propose the potential of afterness to be actualized in space-time is through methods which offer concrete access to the state of afterness through transmission and translation of the museum’s afterlives as a shared urgency. I showed how the speculative qualities of the video can become prefigurative, a form of using the remains of the past encounters with the museum to make ready for possible futures of cultural institutions.

Altogether the five chapters frame the state of afterness as a solid challenge to the drive to universal knowledge and its claim to human centrality. The changes of conditions from the collecting institution to the museum residues unfold along the chapters of this dissertation: If the grand project of the Western museum relies on indexed collections, then the residues are unordered and can’t be fully indexed; if the museum’s public display maintains contactless zones between objects and bodies, then the residual state is inseparable, a place where everything is touching everything else; where the institution’s synchronized temporality allows it to become a storyteller of a metanarrative, the residues don’t operate simply as old or new but propose a complex mnemonic relation that acts as interim between times. And, finally, if the museum produces its public through acts of mediation where the spectator is a receiver and the expert is taking an active role, the residual space calls for a shift from mediation to the practice of navigation, a transductive methodology of learning that underlies the uncertainty of the residual space as a shared mode of existence.

Afterness, as a framework, can inhabit the museum but is not limited to the museum world. It applies more broadly to questions of governmentality, especially in a turn to algorithmic management that often sustains the operation of the rationale of separation instead of situatedness and approaches knowledge solely through instrumentality.²⁵⁷ The main contribution to knowledge that this dissertation puts forth is that the notion of afterness proposes potential ways for big institutional collections, archives, and datasets to exist away from a reasoning based on linearity and possession. Afterness is the active form of imperfecting this line of thought. With the notion of afterness, we can approach the non-rational as the incalculable and welcome mutually intelligible discourses across differences in material, vibrancy, and genealogy. It is a framework to inquire what sort of ethical opening can be envisioned with the dissolution of the grip of understanding toward matter-body-data alliances, an epistemological inquiry that is based on, to use Denise Ferreira da Silva's words, the releasing of The World to the imagination.

The residues that inhabit the state of afterness underline uncertainty and vulnerability and can become an account of epistemologies that transform the standardization of knowledge as it is currently carried out by museums and archives, as well as by digital media. The residues, because they are hard to capture or utilize by institutions, and because they do not reproduce the linear temporality and spatial separation of modern thought, can become a thinking tool for unlearning coloniality. From their fragmented, inseparable state, the residues can't reproduce separability and its aids, namely determinacy and sequentiality,²⁵⁸ which make them, although local, a productive site to think through nonhierarchical relations between human and nonhuman entities in an institutional setting.

But in order for the residues to become an active network of refusal, they need a practice to activate them. Along this thesis I propose a research method that takes terms and tools from performance in order to produce encounters and stage temporal engagements with the state of afterness; these are "modes of afterness." I use performance to invent moments: For example, I carried multiple conversations about the museum and the recent fire trauma, while moving together in the impossible space of its digital replica; I stitched together an invented collection made of photos taken by anonymous visitors; I created speculative objects by morphing 3D

²⁵⁷ Jason Edward Lewis, "From Impoverished Intelligence to Abundant Intelligences," *Medium* (May 28, 2021), <https://jasonedwardlewis.medium.com/from-impoverished-intelligence-to-abundant-intelligences-90559f718e7f>.

²⁵⁸ Denise Ferreira da Silva, "On Difference Without Separability," *32nd Bienal de São Paulo – Incerteza Viva Catalogue*, ed. Jochen Volz and Júlia Rebouças (São Paulo: Fundação Bienal de São Paulo, 2016).

models of a rock, horse skull, and a ceramic face into old-new hybrid remains that can only live in the imaginary; and I subjected digital objects to the practice of pleasure. The performance-based method goes against the desire to bring back the damaged collection through digging in the ashes or crafting a digital model. Additionally, the encounters I generated or participated in did not look into counter-histories through unrepresented objects in the collection. Instead, they rehearsed re-inhabitation of an unclaimed space through performative gestures. In this way, the performative interventions make use of the affordances that were dragged *with* the residues but also re-use them, differently. Altogether, the encounters present potential relations between entities that are not fixed and do not represent a specific past but make use of the surviving affordances of the collection that is gone forever. This way of re-interpreting the spatial and temporal condition of afterness and engaging with the object's affordances presents a different kind of relation to the event that is not only conceived through the loss and the social death but enter the space of the museum through the embodied and the imaginary.

Relying on performance methods to activate it through engagement with the residues, the framework of afterness helps identify space for practicing a new political imagination for the cultural scene. The modes of afterness presented in this thesis can be understood as different ways to rehearse disengagement from the binary thinking that separates the living from objects and the linear thinking that posits past, present, and future as trajectories that cannot be rethought. Working with performance can advance the act of imagination that is needed here, one that will allow us to recall that the political realm could be different, not only one that consists of the collectors and the collected, grantors and claimants of rights, but a shared world.

A persistent challenge in the study of residues is their lack of stability as an analytical object. The unstable nature of the residues marks them as active agents that propose inseparability but also makes them a slippery object of study at best. The temporal dimension of the digital remains poses concerns about the possibility of the residues to remain agents of change before being consumed completely by new means serving old power structures. The shift from the old museum structure to the new one of the digital collection experienced and shared on the platform represents a desire for improvement, but the state of afterness actively fractures the possibility for a frictionless knowledge transfer. It presents an approach to positioning knowledge production that both observes and produces a fragmented and partial state of intellectual partiality.

Afterness as a state of knowledge positioning calls for further exploration and research. Such research can expand processes of unlearning hegemonic infrastructure beyond old institutions, such as museums and archives, and consider similar power structures also in the intangible infrastructure of ubiquitous computation and machine learning. In other words, such future research will look for different notions of history and temporality that enable us to learn from mistakes rather than codify them. It will invest in the possibility of machine unlearning²⁵⁹ and will make a case for and against the notion of colonial infrastructure by continuing to work on the relation between locality, collective witnessing, (non)scalability, and the notion of old and recent technologies that is based on abundance rather than scarcity.²⁶⁰ I see a need for theoretical works that recognize potential agencies for different techno-cultural forms that go against the idea of progress and is rich in unindexable particularities.

My approach to performance practice as the preferred research method for afterness calls for a furthered expansion within the field of critical thoughts and specifically the critique of technology. Within the framework of the Advance Practices program at Goldsmiths, the community of researchers and practitioners recognize the urgency of working from invented methodologies rather than inherited ones. Using fleeting practices like performance in order to question social, political, legal, and technological realities can reshape knowledge production toward the inventive and the speculative. It is becoming increasingly important to insist on the possibility of multi-positional knowledge production, especially when considering the future of institutions or when engaging with the politics of advanced computation that is often blind to vital aspects of human existence such as trust, vulnerability, care, and community.

Thinking and writing from the position of afterness is a practice that holds a space for knowledge based on a network of continuity between data systems, matter formation, and biological life forms. Writing this thesis became a mode of afterness, a form of engaging with the now by thinking of the future of knowledge production and its institutions through the

²⁵⁹ Machine Unlearning is a working group led by Wendy Chun & Kate Crawford. The researchers argue that most machine learning-based technologies rely on a progressivist notion of history with deep ties to eugenics, imperialism and racism. The working group engage with the understanding that unlearning means not engaging with those relegated to the “past” as “primary sources” and what other concepts, models, and ways of being in the world are possible to think of potential companions. <https://digitaldemocracies.org/events/working-groups/>

²⁶⁰ The idea of technologies of abundance has been developed in recent years via the work of The Indigenous Protocol and Artificial Intelligence (A.I.) Working Group. <https://www.indigenous-ai.net/>. See also Edward Lewis, “From Impoverished Intelligence to Abundant Intelligences.”

possibilities that open up in its past form and remain open to the possibility that the past may yet have another future.

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