

## Haunting seedy connections

Draft (Version 4.0)

(...) So  
no my love  
whatever we've run short of  
this hasty day  
its name cannot be  
time.

Ayi Kwei Armah, "Seed Time", 1988

Seeds are potent things. So potent in fact that much effort has been poured into debilitating their self-replicating capacities through legal frameworks, gene-use restriction technology, gene guards and other termination devices. One could describe these efforts as seeking to curtail the seeds' talent for return. On the other hand, seed banks like the Svalbard Global Seed Vault want to preserve this talent indefinitely, keeping it on the cusp without end. Svalbard, also called the "Doomsday Vault", stores seeds *ex situ* in a purpose built repository on the island of Spitsbergen in the very north of Norway.<sup>1</sup> This is ostensibly done for the preservation of genetic plant diversity in the face of its steady decline due to land use and climate change, or as its name suggests, sudden catastrophic annihilation.<sup>2</sup> The Doomsday Vault and similar facilities, as a recent report by the UN's Food and Agricultural Organization put it, "bridge the past and the future" by securing perpetual availability of genetic resources (Food and Agriculture Organization of the United Nations 2014, x). Similar prospects dictate the ongoing development of many museum collections, which are regarded as safeguarding the heritage of 'endangered' cultures and natures. Expressly designed to withstand even nuclear war, the Doomsday Vault has, one could say, come to terms with various ends of the world. It, in fact, banks on it.<sup>3</sup>

In this text I want to attend to the challenges posed by collections and archives such as the Doomsday Vault in relation to their "hauntings" (Gordon 2008), their "unfinished

---

<sup>1</sup> Despite its near-Arctic location not quite cold enough to ensure the permafrost conditions necessary for seed storage. Subzero temperatures are guaranteed by the extensive cooling system run on the power infrastructure left behind by the island's extractive industries.

<sup>2</sup> Set up and maintained by funds from the Rockefeller Foundation, Monsanto and the Bill and Melinda Gates Foundation. The first two were important actors in India's green revolution that is now, with the help of the Gates Foundation, extended to Africa.

<sup>3</sup> The returns promised by managing knowledge of the world's seed stocks, including old (heritage) cultivars, are considerable.

business” (quoted in Subramaniam 2014, 21) particularly as these relate to the “ruinations” that describe “the ongoing quality of processes of decimation, displacement, and reclamation” of imperial formations. (Stoler 2013b, 8) What or who lingers on in these collections despite their best efforts to vanquish and purify specimens and rhetorics? How can “haunting” be configured as a method to trouble the neat returns underwritten by collections? And how to reckon with and remain responsive to the capabilities of archival materials such as seeds whose global histories and polyvalent presents customarily vault across disciplinary practices. These questions address the tensions between the Doomsday Vault—and similar attempts at more or less total archives that avow an untroubled progression of time—and the fact that, as William Faulkner put it, “[t]he past is never dead. It’s not even past.” (Faulkner 2011[1951], 73) Yet, questions about the hauntings in archives and collections also direct analytical sensibilities to the situatedness and site-specific co-evolutions of archival practices and imperial formations. Looking for their hauntings makes apparent how archives and collections have emerged through specific material-semiotic arrangements whose “stubborn attachments” (Ahmed 2007, 133) refuse to be vanquished by new technologies or alternative political paradigms. And lastly, questions about such “ghostly matters” (Gordon 2008) are important to consider when engaging with the “complexity and historicity” of collections and their organisation (Bowker 2006, 121). Adding to Bowker’s concerns about relevance and functionality of archives and their production of “reconfigurable pasts” (Bowker 2006, 136), the stakes pertain also to their enactments of specific futures. While this might be particularly evident in the case of the Doomsday Vault, less sensational efforts to collect and preserve seeds, like the Mai Collection discussed in more detail below, are equally implicated in setting the terms for realities to come.

For the last three years I have been working in the Natural History Museum Berlin (*Museum für Naturkunde*, MfN). Questions about ghostly matters and imperial ruinations are urgent in an institution filled with dead animals and the exploits of over 300 years of imperial extractive activities. As a conspicuous venue of science, education and nationalism it has shaped an enduring and far-reaching vision of scientific inquiry, of citizenship and of the nation-state, particularly through a dogged pursuit of its “acquisitive impulse” and attendant compulsions of ordering, arranging and dividing (Livingstone 2003, 29). While ethnographic and anthropological museum collections have been the focus for a sustained critique of their complicities with various imperial regimes and technologies of governing (most recently Bennett et al. 2017), their natural

history counterparts have remained fairly unfazed. Sheltered firmly on the side of Nature, they have by and large escaped the troubles that readily come with the categories of the ethnographic (e.g. “race”, “tribe”, “culture” and so on). Such troubles are being raised by activists, scholars and, increasingly, artists and so they have become a busy arena for interdisciplinary and collaborative engagements. Here, the concern for hauntings becomes doubly demanding if we consider interdisciplinary work as learning to question our at times pathological disciplinary conventions. At the same time though, a too disciplined commitment to the in-between runs the risk of losing sight entirely of the genealogies shaping our perceptions and thinking. Although some museums and disciplines might only be too happy excising their more embarrassing ghosts (e.g. human remains, craniometry), these ghosts are always already in the machine so to speak.

In 2014 I began collaborating with the visual artist Åsa Sonjasdotter on conceiving and producing an exhibition in the MfN based on troubles gathered during ethnographic and collaborative research. Our shared disconcertments were provoked by what we perceived, through our respective experiential and disciplinary sensibilities, as absences, obfuscations and neutralisations in museum displays and practices. Rather than formulate and present an orderly critique, however, we wanted to intervene more delicately and playfully, restoring some of the wild complexities (barely) contained in the museum through subverting orthodoxies of display and narrative. Entitled *Tote Wespen fliegen länger/Dead wasps fly further* (March-May 2015) our exhibition comprised of three artistic interventions presenting protagonists—a wasp, lunar dust and seeds—from the Museum’s collections and their “factual and imagined journeys” as we called it. Sonjasdotter’s artistic practice has for over ten years focused on the potato as object, archive and companion species, tracing its travels and political pasts and presents across centuries and continents.<sup>4</sup> So quite naturally our research first took us to the palaeobotanical collection where we searched for potato traces but came up empty. Instead we found the Mai Collection, an extant plant seed collection that is kept in rows of nondescript cupboards from GDR times, tucked away in the far corner of one of the collection rooms.<sup>5</sup>

---

<sup>4</sup> See <http://www.potatoperspective.org/>

<sup>5</sup> The MfN is situated in Invalidenstrasse 43 which was located only about 200 meters from the Berlin Wall in East Berlin. This location is reflected in the collections which disproportionately feature specimens collected from former Eastern Bloc countries as well as affiliates (e.g. Cuba).

In the midst of the Museum's palaeobotanical collection we find a curious body: a vast assortment of extant plant seeds, stored in glass vials, laid out in flat drawers and arranged by taxonomic order. These were put together by the palaeobotanist Prof. Dieter H. Mai (1934-2013) from the 1950s onwards though some parts had come to the Museum from the Prussian Geological Survey (1873-1939). The extant plant seeds serve as a reference collection to allow comparison with fossilised seeds whose identity and kinship structures can thus be ascertained. Side by side sit seeds from Togo, Brazil, Cuba, Indonesia, Japan, the UK or Sweden. They come from global seed exchanges maintained by the world's botanic gardens. Seeds, like dust and the wasp, are seasoned travellers, accustomed to many means of transport, from winds to turtles, rivers and birds. The seedlings of the sisal agave (*Agave sisalana*) have experienced a most intrepid sojourn, abducted from their Mexican homeland in Yucatán by German botanist Richard Hindorf (1863-1954) to Hamburg from where the surviving seedlings were sent to Tanzania in 1893, then the German colony of German East-Africa. There they became the root stock for a sisal industry that exported over 90,000 tons of sisal each year and forever transformed the landscape that the plantations had occupied. Like cotton, coffee, rubber or the potato, the agave and its movements contributed to the rise of the global agro-industrial complex.

In this display and wall installation we present parts of the Museum's Mai Collection and follow the sisal agave plant from Mexico to Germany and Tanzania. It combines archival materials with contemporary ephemera, telling stories of collecting, smuggling and losing.<sup>6</sup>

Text from the information panel accompanying the seed display and installation

There are 288 drawers that make up the Mai Collection. There the seeds stand still, arrested in development, seemingly robbed of the capacity to germinate and grow and return and disperse and grow again. The collection is rarely used and, as part of a research collection, not meant for public display. Its unspectacular appearance appealed to us and we began probing the curator (the always forthcoming and open-minded Dr. Barbara Mohr), cupboards and catalogues assembling strands of stories about seeds and their circulations. Arondekar has beautifully written about the perils that might beset researchers when encountering the (colonial) archive "as a central site of endless promise" (Arondekar 2009, 6). She warns that not every time "a body is found (...) a subject can be recovered." (Arondekar 2009, 3) Developing her argument in relation to the queering of archives Arondekar's caveat remains instructive for querying the seed collection. It's not just about troubling authenticity and recovery although these stay important sites for contestation. While the difference many of us want to make is the recovering of presences that have been rendered absent in and through archives, such a difference might also work to confirm the archival ordering, taking at face value its

---

<sup>6</sup> Material from Botanischer Garten und Botanisches Museum Berlin-Dahlem (Botanic Gardens and Botanical Museum Berlin-Dahlem), Freie Universität Berlin (Free University Berlin); Ibero-American Institute Berlin; Image Collection of the German Colonial Society, Frankfurt University Library; Kew Gardens; Der Palmenmann™; Seed Area™; and eBay™.

patterning of presences and absences. Or, as Spivak put it, such nostalgic revisioning “would restore a sovereignty for the lost self of the colonies so that Europe could, once and for all, be put in the place of the other that it always was.” (Spivak 1985, 247)

As with many of the collections and specimens in the museum, the seeds do not lend themselves to tidy narratives. Patchy documentation, ambiguous labelling and upheavals large and small render reconstructions of their histories forever speculative. Where exactly specimens were taken from, under what conditions and in what specific state are questions that for many parts of the collection (fossil and extant) cannot be answered with any certainty. Nevertheless, faithful reconstructions of collection items’ institutional histories have become a prominent genre for acknowledging and re-mediating museums’ complicities in imperial formations. These so-called “object biographies”, which describe the life histories of specific artefacts including their acquisition, storage, display and so on, have found uptake especially in the context of ethnological collections (Kopytoff 2013; Gosden and Marshall 1999).<sup>7</sup> Informed by the material turn in the social sciences and humanities, object biographies appeal to museums as they celebrate the ‘power’ of objects to tell bigger stories and thus confirm the continued relevance of vast collections of stuff. We learn, for example, that a “large Egyptian boat model” was purchased by Pitt-Rivers “from the London-based antiquities dealers Rollin and Feuarent, some time before 1879” (Stevenson 2011) or that “5 Mexican pots”, also from the Pitt-Rivers Museum, have the “duty (...) to be cultural ambassadors” and “to stand up for Mexico” which is “a fabulous mix of ancient and modern, Christian and pagan” (Gray 2011).

Despite their intentions to provide a richer, more diverse set of histories that could perhaps work toward unsettling dominant evolutionary narratives, object biographies still succumb to what Harriet Bradley has identified as the archive’s “assurance of concreteness, objectivity, recovery and wholeness.” (Bradley 1999, 119) And so they often fail to productively sustain the disconcertment that has given rise to novel ways of engaging collections and archives in the first place. Trouble, as feminist methodologies show, is a matter of *crafting* and not *recovering*, of *inventing* and not *finding*. Arondekar suggests that “[t]he intellectual challenge here is to juxtapose productively the archive’s fiction-effects (the archive as a system of representation) alongside its truth-effects (the

---

<sup>7</sup> The Humboldt Lab in Berlin, a series of interventions in the *Ethnologisches Museum* and the *Museum für Asiatische Kunst, Staatliche Museen zu Berlin* (Ethnological Museum and the Museum for Asiatic Art, State Museums of Berlin), included object biographies. There is also an object biography project at the Pitts-River Museum, Oxford. See <http://web.prm.ox.ac.uk/rpr/index.php/objectbiographies/>.

archive as material with “real” consequence), as both agonistic and co-constitutive.” (Arondekar 2005, 12) Here, haunting can become an appropriate method in evoking necessarily uneasy stories of and with museum objects. In this sense, fictitious or inappropriate entities creeping into scientific and historical orderings can bring into relief the parameters, conventions and terms that are, always unthinkingly, wrapped up with museum collections and their display.

The sisal agave (*Agave sisalana*) is a member of the Agavoideae subfamily and known for its leaf fibre, which is valued as cordage and has been widely used in marine, agricultural, shipping and industrial settings. Sisal fibre can also be found in carpets, musical instruments, tea bags, paper pulp and alcohol. The plant’s thick and spiny leaves can reach a length of almost 2 metres and within 4 to 8 years after planting, a central flower stalk will appear. This can reach a height of 6 metres and bears yellow flowers emitting an unpleasant odour. The sisal agave is native to Central America, where it has been cultivated since Mayan times (1800 BCE-900 CE). Until the early 20<sup>th</sup> century it was at the centre of the henequen industry, based in the Yucatán region of Mexico, which sustained a monopoly on farming sisal in concert with North American rope manufacturers. In 1893 Dr. Richard Hindorf (1863-1954), a German agronomist working in German East Africa (Tanzania), smuggled 1,000 young plants (some speak of 2,000) in the belly of a stuffed crocodile or in the folds of a large coloured umbrella out of Yucatán. Only 62 (or 66 or 72) plants survived the journey that took them first to Hamburg and then to Tanga, a port town in Tanzania.

Plants are canny travellers that can use different means of transport: Some are gone with the wind, others prefer to be carried by rivers or turtles while yet others choose human help. With the support of Wardian cases, portable greenhouses designed by the English botanist Nathaniel Bagshaw Ward (1791-1868), masses of plants reached Europe and its colonies in the 19<sup>th</sup> century in organised plant raids. In their global travels plants also often bring unexpected companions with them such as fungi.

Text from the information panel accompanying the seed display and installation

Very few of the seeds in the Mai Collection are of cultivated plants. This is not surprising given that the collection serves to identify seed material from a time before humans, and cultivated plants are commonly “humanly socialised” (Åsa Sonjasdotter). One of the most precious and policed practice in natural history museums concerns divisions and boundaries.<sup>8</sup> There are the divisions between the kingdoms of life—animal, plant and mineral—as well as the many divisions within these kingdoms (phylum, class, order, family, genus, species). These also translate into the organisational structure of the MfN as collections are divided amongst curatorial staff according to phyla. Another major structural division in many museums concerns the separation between non-public research collection, ordered according to taxonomic rank, and public display collection

---

<sup>8</sup> It is not surprising that the notion of the “boundary object” (Star and Griesemer 1989) emerged from research in a natural history museum (Berkeley’s Museum of Vertebrate Zoology).

that are arranged in order to communicate specific stories (about, for example, evolution, biodiversity, dinosaurs or the solar system).

When Åsa and I began thinking about our interventions, we early on committed ourselves to troubling the Museum's divisions between present and past, nature and culture, cultivated and wild type, fact and fiction. Sharing feminist, postcolonial and environmental concerns, our intention was to return things and troubles to presence even if they have never before been (quite) present. In researching the seed collection, the extensive network of seed exchanges that involved botanic gardens and, more generally, the role of botany in the German Empire (1871-1918), the sisal agave plant appeared again and again in different written and photographic accounts especially about German colonial rule in Tanzania.<sup>9</sup> It thus seemed to us a perfect protagonist for telling uneasy stories about the implications of plants in the imperial project, the role and shape of science and the continued devastations of ecologies. Since the Mai Collection did not include any sisal agave seeds we 'planted' them: The sisal seeds on show in one of the installation's vitrines were purchased specifically for the exhibition from a seed trader in Hong Kong. A life sisal plant, shipped from a nursery near Cologne, sat alongside the seeds atop a plinth. It caused much concern as potting soil can carry unwelcomed guests (pests). Introducing sisal seeds makes it possible to haunt and implicate the collection to tell a story specifically about German colonial botany but also more generally about the colonial and imperial circulations that linger on.

Subramaniam talks of "interdisciplinary hauntings" (2014, 1) when describing how her combined disciplinary backgrounds—biology and women's studies—allowed her to perceive and recognise the ghosts of eugenics that continue to pervade evolutionary biology and the history of variation, of women in science and of flower colour. Her hauntings were hence, in the spirit of Arondekar, an achievement of bringing together these histories' truth-effects and fiction-effects. The "interdisciplinary" was also borne out of encountering her subject matters as both, object *and* archive, subject *and* resource. Such double vision can also be understood in terms of recognition hauntings "[pull] us affectively into the structure of feeling of a reality we come to experience as a

---

<sup>9</sup> The Museum's centre piece, the *Brachiosaurus brancai* (the world's largest mounted dinosaur) was taken from what was then German East Africa (now Tanzania) in the course of the so-called Tendaguru Expedition (1909-1911) that excavated and shipped to Berlin over 200 tons of dinosaur bones. The expedition took place after the Herero and Namaqua genocide committed by German troops between 1904 and 1907 that had cleared vast swathes of land for such extractive programmes. Many of these histories are being reconstructed in the research project "Dinosaurs in Berlin! The Brachiosaurus Brancai as an Icon of Politics, Science, and Popular Culture", led by Ina Heumann (MfN).

recognition.” (Gordon 2008, 63) Hughes and Lury have written how returns and returning can be understood as a “coming back to persistent troublings; they are turnings over.” (Hughes and Lury 2013, 787) Adding to their polysemic register of returning, which includes putting things on their head and giving back, haunting recognition would thus mean giving shape to a “seething presence” (Gordon 2008, 8). In placing the sisal seeds alongside the Mai Collection they become an apt figure to turn things over (with). On one hand, they provide a beginning for the story, a provision close to their nature as seeds. On the other, they serve as vehicles for shuttling across times and spaces, soldering connections that the divisions of natural history, the order of the museum, are at pains to keep from growing.

After its introduction to German East Africa, the 62 (or 66 or 72) sisal plants smuggled from Mexico were planted in the Tanga region and became the foundation for large-scale sisal production in East Africa, which at its height accounted for 47 per cent of world production. The transformation of land into labour-intensive, agro-industrial plantations in German East Africa and other colonies was supported by a network of botanic experimental stations, such as the *Biologisch-Landwirtschaftliche Versuchsanstalt* (biological-agricultural experiment station) in Amani, coordinated through the *Botanische Zentralstelle für die Deutschen Kolonien* (Botanic Central Office for the German Colonies). The *Zentralstelle* was based at the Botanic Gardens in Berlin and was also tasked with popularizing the colonial project. The stations carried out extensive farming experiments to test the suitability of agricultural crops in the local climates and soils. These crops were obtained from the *Zentralstelle* which collected and distributed seeds and seedlings of crops such as coffee, cocoa, rubber, sisal, rubber, potatoes, pepper, cotton, tobacco and tea from Java, Brazil, India, Egypt and British Ceylon among others. The experimental planting was also facilitated by a lively international exchange of field reports and stories by farmers and planters.

In the pursuit of imperialist politics by means of plants many actors coincided: botanic gardens, plant scientists, gardeners, entomologists, financial institutions like the Deutsche Bank (1870-), railway companies, farm machinery, cattle, migrant work forces, plantation owners. The sisal agave was a particularly imperious coloniser, radically restructuring local ecologies. For this, the lands which had been designated German East Africa became a vast laboratory for experimenting with introduced plant species, agricultural techniques, investment practices and labour economies.

Text from the information panel accompanying the seed display and installation

For Gordon haunting is “the language and the experiential modality” (2011, 2) by which to understand the ongoing ruinations of racial capitalism on bodies, social bonds and the sense we have and make of ourselves and the worlds around us. “Haunting”, she writes, “raises spectres, and it alters (...) the way we normally separate and sequence the past, the present and the future.” (ibid.) In other words, it’s an episode where the containment of what’s past (trouble, injuries, violence) no longer holds.

Gordon’s ghosts are specific. They have a certain appearance, a definitive haunting ground. Oftentimes their power (to manifest, to harm) is tied to specific places although in those places they attest to the permeability of divisions and walls. Planting sisal seeds in the collection was an act of mischief by which to conjure up spectres of injurious pasts. They were recognisable enough so as not to seem entirely out of place. Plant seeds are, in the end, part of the collection. Yet, true to their nature, they helped us cultivate a shadowy place, an otherwise barren corridor connecting *Masterpieces of Taxidermy* with *System Earth*, both are part of the Museum’s permanent display. Following the planned path, museum visitors would move from the showcases detailing the preserving, stuffing and mounting of animal bodies to a dimly lit hallway, an artefact of the ongoing renovation works that require large sections of the building to disappear behind temporary drywalls.

On the right side of the corridor four illuminated table display cases contain sketchy stories (the ones running through this text) that string along an assortment of objects we had collated: drawers from the Mai Collection, the sisal seeds, a nappy (used to smuggle seedlings), a Kenyan banknote depicting sisal plantations, some of the few traces left of the Botanic Central Office of the German Colonies (*Botanische Zentralstelle der deutschen Kolonien*).<sup>10</sup> On the drywall to the left, huge bright yellow curtains signified three (non-existent) windows, their measures mirroring the ones in the adjacent exhibition halls.<sup>11</sup> Inside (outside) those windows we hung a selection of framed photographs depicting a sisal plant in Yucatán, portraits of Wardian cases (transportable greenhouses) and a monoculture sisal plantation, possibly from Tanzania. The arrangement was carefully crafted, indeed, the question of *how* to display was equally significant to the question of *what* to display. This “how” also points to the continuation of method by other means, its lurking presence in forms of presentation that often function as “marker for appropriate conduct” (Last, this volume XX). Complying with formal constraints of academic publishing or museum displays thus

---

<sup>10</sup> References to this office and, more generally, colonial entanglements of German botanical institutions are scant although Katja Kaiser has been doing important work to make these histories present again (Kaiser 2015). The office, founded in 1891, together with the herbarium and library of the Botanic Gardens and Museum were destroyed in World War II and its experimental stations disbanded or taken over by Allied forces. The experimental station in Amani for example was “revived” by the British and continued agricultural and other experiments (Conte 2002). What documents survived in relation to the office’s work in Berlin are a number of periodicals produced and distributed for the benefit of German settlers and farmers in the colonies as well as four boxes containing the estate of a German colonial botanist who had worked at the experiment station in Amani.

<sup>11</sup> The Museum was designed to work with natural light rather than electric lights, hence huge windows line the walls.

becomes a ready indicator for proper method. Likewise, messing with form can immediately disqualify otherwise methodical rigour and in academic scholarship, unlike in art, is the privilege of seniority.

In reports from the Amani Institute we find references to pathogens and diseases affecting the usually so robust sisal agave. Small gouache paintings depict the damage done to its leaves and spikes by various kinds of rot and pests. After World War I the German colonies were distributed to the Allied powers and German East Africa became a British Mandate (Tanganyika Territory). In the 1917, the hacienda system in Yucatán, a continuation of the slave plantation, had been outlawed. The *Zentralstelle* was dissolved in 1920 and briefly resurrected by the National Socialists in 1941 only to be destroyed in air raids in 1944 that also eradicated most of its archive. The experiment station in Amani was taken over by the Royal Botanic Gardens, Kew in London. From the 1960s onward, the sisal production in Tanzania began its slow death, in no small part due to the rise of synthetic substitutes such as polypropylene. There the monocropping of sisal has left swathes of degraded land, having robbed the soil of nutrients and thus fertility.

The seeds in the Mai Collection too lie in dim stagnation with little possibility to ever germinate and propagate, receiving only cursory attention from researchers and museum visitors. A register of different figurations of loss then—defeat, destruction, removal, extinctions, banishment, forgetting—that also points to the devastation of relations, interdependencies and collectives.

Text from the information panel accompanying the seed display and installation

Despite or rather because of the museum's accumulations, it is a place filled with absences. The dead bodies that fill its halls and shelves continuously evoke what Butler has called "constitutive outsides", the "excluded sites" that make those present matter while containing those that don't away from sight (Butler 1993, xvii). Such outsides also haunt the neat narrative of discoveries, earth history and evolution that presents "ideas of a knowledge at once *positive* and *comprehensive*." (Richards 1993, 6, emphasis in the original) Ruinations can be understood as the material reverberations of enforced presences, lingering absences and persistent Otherness. They are differently sensible across domains and sites and this requires, compels even, a collective effort in address and redress. For Stoler, one of the tasks of postcolonial practice is attending to the "distinctions between what holds and what lies dormant, between residue and recomposition, between what is a holdover and what is reinvested, between a weak and a tenacious trace." (Stoler 2013a, 12) And this is also a question of form insofar as it is through form, which pertains to the how of telling/writing, that we can manage (or not) things as present *and* as not-present (Verran 2016). Thus, Arondekar's challenge of juxtaposing the archive's fiction-effects and truth-effects, of turning the archival object

into a “recalcitrant event” that refuses simple access (Arondekar 2005, 22), is not only an intellectual one. It is also always a problem of form and genre.

This is why a project like the Doomsday Vault that posits the seed-as-archive not only fails practically but more worryingly perpetuates a logic of ruination. Storing all the world’s seeds won’t do if there no longer is any place to grow them, or if the microbial communities in the soil have been harmed, or if planting and plant-tending practices have been erased and their people destroyed (or if Svalbard falls prey to the mounting geopolitical tensions in the Arctic Circle or to industrial accidents of the extractive industries stationed there). Another way of putting this is that the seed is and isn’t a whole, is and isn’t a part. The fallacy of its banking lies in always settling on one and thus forever excluding the others. This is also true for the efforts that are currently being mobilised around seeds in the course of planning Africa’s “green revolution”<sup>12</sup>, in the name of (food) security and in expanding the integration of biotechnologies, such as Bayer’s recent acquisition of Monsanto, which are part of the unravelling aftermaths of colonial botany, its institutions and ecologies.

Natural history museums have to forgo the cheap chills of taxidermy and take seriously their ghosts. Haunting as Gordon notes produces “something-to-be-done” as it is “a contest over the future, over what’s to come next or later.” (2011, 3) Hauntings thus evoke truly frightening questions for museum collections imbricated in imperial and colonial practices and orders. This is because the “something-to-be-done” might indeed entail restitutions, returns, dispersion or in any case a radical re-imagination of purpose, away from endless accumulation and infinite preservation.

#### *References*

- Ahmed, Sara. 2007. “Multiculturalism and the Promise of Happiness.” *New Formations* 63 (3): 121–37.
- Arondekar, Anjali. 2005. “Without a Trace: Sexuality and the Colonial Archive.” *Journal of the History of Sexuality* 14 (1): 10–27. doi:10.1353/sex.2006.0001.
- . 2009. *For the Record: On Sexuality and the Colonial Archive in India*. Durham: Duke University Press.
- Bennett, Tony, Fiona Cameron, Nelia Dias, Ben Dibley, Rodney Harrison, Ira Jacknis, and Conal McCarthy. 2017. *Collecting, Ordering, Governing: Anthropology, Museums, and Liberal Government*. Durham: Duke University Press.
- Bowker, G. C. 2006. *Memory Practices in the Sciences*. Cambridge, MA: MIT Press.
- Bradley, H. 1999. “The Seductions of the Archive: Voices Lost and Found.” *History of the Human Sciences* 12 (2): 107–22. doi:10.1177/09526959922120270.
- Butler, Judith. 1993. *Bodies That Matter: On the Discursive Limits Of “sex.”* New York: Routledge.

---

<sup>12</sup> See the recent African Green Revolution Forum, 5-9 September 2016 in Nairobi.

- Faulkner, William. 2011. *Requiem for a Nun*. Vintage internat. ed. New York, NY: Vintage Books.
- Food and Agriculture Organization of the United Nations. 2014. "Genebank Standards for Plant Genetic Resources for Food and Agriculture." i3704e. Revised Edition. Rome: FAO. <http://www.fao.org/docrep/019/i3704e/i3704e.pdf>.
- Gordon, Avery. 2008. *Ghostly Matters: Haunting and the Sociological Imagination*. New University of Minnesota Press ed. Minneapolis: University of Minnesota Press.
- Gosden, Chris, and Yvonne Marshall. 1999. "The Cultural Biography of Objects." *World Archaeology* 31 (2): 169–78. doi:10.1080/00438243.1999.9980439.
- Hughes, Christina, and Celia Lury. 2013. "Re-Turning Feminist Methodologies: From a Social to an Ecological Epistemology." *Gender and Education* 25 (6): 786–99. doi:10.1080/09540253.2013.829910.
- Kaiser, Katja. 2015. "Exploration and Exploitation: German Colonial Botany at the Botanic Garden and Botanical Museum Berlin." In *Sites of Imperial Memory: Commemorating Colonial Rule in the Nineteenth and Twentieth Centuries*, edited by Dominik Geppert and Frank Lorenz Müller. Studies in Imperialism. Manchester: Manchester University Press.
- Kopytoff, Igor. 2013. "Cultural Biography of Things : Commoditization as Process." In *The Social Life of Things: Commodities in Cultural Perspective*, edited by Arjun Appadurai, 11. print, 64–91. Cambridge: Cambridge University Press.
- Livingstone, David N. 2003. *Putting Science in Its Place: Geographies of Scientific Knowledge*. Chicago: University of Chicago Press.
- Richards, Thomas. 1993. *The Imperial Archive: Knowledge and the Fantasy of Empire*. London: Verso.
- Spivak, Gayatri Chakravorty. 1985. "The Rani of Sirmur: An Essay in Reading the Archives." *History and Theory* 24 (3): 247–72.
- Star, Susan Leigh, and James R. Griesemer. 1989. "Institutional Ecology, 'Translations' and Boundary Objects: Amateurs and Professionals in Berkeley's Museum of Vertebrate Zoology, 1907-39." *Social Studies of Science* 19 (3): 387–420. doi:10.1177/030631289019003001.
- Stoler, Ann Laura, ed. 2013a. *Imperial Debris: On Ruins and Ruination*. Duke University Press.
- , ed. 2013b. "'The Rot Remains': From Ruins to Ruination." In *Imperial Debris: On Ruins and Ruination*, 1–37. Duke University Press.
- Subramaniam, Banu. 2014. *Ghost Stories for Darwin: The Science of Variation and the Politics of Diversity*. Urbana, IL: University of Illinois Press.