

Entangling (non)human isolation and connectivity: island nature conservation on Ile aux Aigrettes, Mauritius

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Abstract: This article discusses the Mauritian offshore islet and nature reserve Ile aux Aigrettes as an example of how the tension between isolation and connectivity of small islands plays out in the context of nature conservation. Combining approaches from island studies, anthropology, and geography, and based on ethnographic fieldwork and interviews, the article enquires into how ‘pristine’ nature on Ile aux Aigrettes is produced. It shows how the selective mobility of humans, animals, and plants is part and parcel in producing a seemingly isolated island, e.g. in the case of visiting scientists, species translocation, and invasive species. This shows how the production of the isolated ‘pristine’ island is dependent on global connections and flows. Isolation and connectivity of islands, I argue here, depend on each other, and are significantly co-constituted by nonhuman mobilities. Nature conservation on Ile aux Aigrettes will be looked at as a reference towards an ideal past or a utopian future, protected as signifiers for a world in socio-ecological balance.

Keywords: boundaries, ecological destruction, island laboratories, Mauritius, nature conservation, nonhuman mobility, small islands

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Introduction

So what if I said, we are here today in a laboratory of the planet. [...] Think about this. If you extrapolate the human population density of Mauritius to the rest of the land surface of the planet you’ll get 100 billion. That is to say, we are at the extreme of the extreme. We are, in a way, a window to the future.

—Vincent Florens, TedEx Plaines Wilhelms, 26 April 2018

Against the backdrop of a history of ecological destruction under the rule of three colonial powers, conservation efforts in Mauritius have recently centred on the many small offshore islets. In attempting to isolate these islands from global flows and invasive species, much work is invested in ‘island restorations’, such as in the case of the Ile aux Aigrettes nature reserve. But what does it mean to restore an island landscape? Whereas one could suppose that islands are particularly well suited for controlled conservation in relative isolation (Baldacchino, 2007; Mountz & Briskman, 2012), islands also commonly feature as exemplary relational sites and meeting points in circuits of global flows (Pugh, 2013, 2018; Schnepel & Alpers, 2018; Stratford et al., 2011), and thus challenge ambitions for complete control. How does the particular island setting exert its influence on attempts at its restoration? And which role does the (im)mobility of humans, plants, and animals play in this context?

In recent years, debates about the consequences of anthropogenic ecological destruction during the so-called era of the ‘Anthropocene’ (Crutzen & Stoermer, 2000) have heated up

(Cohen et al., 2016; Haraway, 2015; Lennard & Parr, 2016; Pugh, 2018; Vaughan, 2016; Williams et al., 2015). Often, nature conservationists and politicians try to solve conflicts about biodiversity loss and habitat destruction by drawing boundaries between spaces labelled as ‘natural’ and ‘cultural’ (Buller, 2004; Carter & Palmer, 2016); this is equally true in the case of endangered species on small islands. Social scientists criticize this reproduction of the nature-culture dichotomy, which they largely abandoned in favour of approaches focusing on hybridity and entanglement (Cronon, 1996; Descola, 2013; Latour, 2011; Whatmore, 2002). In practice, however, separating wild, natural spaces from domesticated, cultural sites is still influential and widely manifest as the practical solution to complex dilemmas (Pooley et al., 2016), as this article will also illustrate.

This is also the case in the Western Indian Ocean, a region severely impacted by ecological destruction (Cheke & Hume, 2008; Florens, 2013; Walsh, 2007). Deeply embedded in transoceanic trading relations, people and goods with them animals and plants have travelled and circulated between the various coasts and islands, often with severe impacts on the native flora and fauna (Fuller et al., 2011). On Mauritius, many species have gone extinct since human settlement of the Mascarene Islands started in the late 16th century, the dodo being the most emblematic of these (Roberts & Solow, 2003). Besides habitat loss, ‘invasive species’ are considered as the main threat to island wildlife. With continuous industrialization and urbanization on Mauritius, accompanying population growth, and an increasing participation in global flows, threats to native wildlife have recently become even more severe, causing increased conservation efforts by non-governmental, governmental, and international organizations (Cheke & Hume, 2008).

Since the 1980s, nature conservationists on Mauritius have begun to focus conservation efforts on the many offshore islets, attempting to isolate them from globalized flows of plants and animals in order to protect native species (MWF, 2018a). One of the most prominent examples is Ile aux Aigrettes, a small offshore islet that has thus been set aside and restored (Cheke & Hume, 2008; Florens, 2013), receiving much international praise as an exemplary conservation success, and as a refuge for endemic species saved from the brink of extinction (Aspinall, 2016; Florens, 2013).

In this article, I discuss the Mauritian offshore islet and nature reserve Ile aux Aigrettes as an example for how the tension between isolation and connectivity of small islands plays out in the context of nature conservation. The attempt to protect Mauritian biodiversity, and to restore a ‘whole island’ to the image of a ‘natural’ past prior to human disturbance is explored, shedding light on the *selectivity* of isolation and connection. While the mobility of some, such as autonomous visitors and invasive species, is limited, the mobility of others, such as eco-tourists, scientists, and translocated species, is actively supported. This demonstrates how the production of the isolated ‘pristine’ island is dependent on global connections and flows. Conversely, the image of the pristine island contributes to global flows by activating international networks to support the island restoration. In this interaction, the sometimes-conflicting images of the *biodiverse* island and the *pristine* island are looked at as carriers of social values, as references towards an ideal past or a utopian future, protected as signifiers for a world in socio-ecological balance, giving rise to the *hyperobjective island* of the present.

The history of species circulation, extinction, and conservation on Mauritius

Historically, the Indian Ocean has been a focal point of circulations of people, goods, plants, and animals, as many of its islands are located along trade routes between Africa and Asia (Fuller et al., 2011). Human trading activities have shaped this region, including its fauna and flora (Fuller et al., 2011; Walsh, 2007), and it is still strongly embedded in relations of circulation (Schnepel & Alpers, 2018; Verne, 2012, 2017). Since the arrival of humans on the Mascarenes in the 16th century, a massive replacement of the native fauna and flora through

habitat destruction and introduced plants and animals has taken place (Cheke & Hume, 2008; Florens, 2013, p. 41). New animal and plant species have been introduced for their economic value, or reached the islands unintentionally alongside humans (Fuller et al., 2011).

Three colonial powers (the Dutch, the French, and the British) ruled Mauritius consecutively, until the island gained its independence in 1968. Each of these periods was characterized by different developments concerning both the destruction and the conservation of the island's wildlife, as Cheke and Hume (2008) have illustrated in detail in their book on the ecological history of the Mascarenes.

The Dutch took the first steps towards an over-exploitation of the island's flora and fauna during their rule of Mauritius. Dutch sailors were allegedly the first to set foot on Mauritius in the late 16th century, and they consequently used it as a trading post and stop-over for ships to restock their supplies (Oostindie, 2008, p. 202). The sailors exploited native plants and animals on their visits, released livestock such as pigs, goats, and chicken to multiply and provide supply for later visits, and brought with them the first invasive species such as rats, all of which caused damage to native species (Cheke & Hume, 2008, p. 76). Later, Dutch settlers also started cutting forests and exporting ebony in large quantities (Grove, 1996, p. 132). Smaller offshore islets, like Ile aux Aigrettes, provided refuges for species that had already disappeared from mainland Mauritius over the course of time (Cheke & Hume, 2008, pp. 76-81).

When the French took control over Mauritius in 1715, these developments were boosted through an intensified industrialization with sugarcane and coffee plantations based on slave work, and increased imports of exotic animals and plants (Grove, 1995, p. 173; Oostindie, 2008, p. 207). Early conservation focused mainly on stopping unregulated hunting and woodcutting, in order to ensure food security for the starving island population (Grove, 1995, p. 449). Ile aux Aigrettes supposedly received its name during this period, by virtue of being the last home of a species of egrets, which were by then already extinct on the mainland, a fate shared by many bird species (Cheke & Hume, 2008, p. 81, p. 92, p. 97).

The British rule of Mauritius, starting in 1810, saw a further increase in sugar plantations, slave trade, and later indentured labour (Pyndiah, 2016, p. 489). The island's population grew drastically during the 19th century, land use intensified, and invasive species proliferated. In 1872, legislation to protect mountain and riverine forests was put in place (Cheke & Hume, 2008, pp. 116-129, p. 136), and, in 1951, the first official nature reserves were established (Safford, 1997, p. 186). But only after becoming independent in 1968 did nature conservation become a real concern during the 1970s and 1980s, after ecological research and conservation projects in cooperation with UK and New Zealand-based scientists and organizations increased knowledge about the sensitive Mauritian fauna and flora (Cheke & Hume 2008, pp. 163-164, p. 227). During the 1980s and 1990s, several spectacular conservation successes occurred by saving a number of species, such as the Pink Pigeon and the Echo Parakeet, from the brink of extinction (Florens, 2013).

Ile aux Aigrettes' history is deeply embedded in Mauritius' colonial history. It was used as a military base by the British during the Second World War (Jackson, 2001, p. 72). Some buildings and remnants of cannons from this period remain on the islet today. Formally, Ile aux Aigrettes became a nature reserve in 1965, but much of its native vegetation was damaged by woodcutting and invasive species. Alien introduced species such as rats, shrews, and non-native reptiles were widespread and hindered the regeneration of the forest (Cheke & Hume, 2008, p. 245). Serious conservation efforts on Ile aux Aigrettes began in 1986 with attempts to build up the native plant communities under the auspices of the Mauritian Wildlife Foundation (MWF) (Cheke & Hume, 2008, p. 245). In 1991, rats were successfully eradicated, which led to a spectacular regeneration of native ebony trees (Cheke & Hume, 2008, p. 245). Since 1998, the island has been open for tourists to learn about the island's flora and fauna on guided tours (MWF, 2018b). Other offshore islands, such as Round Island

and Gunner's Quoin, are the focus of similar conservation activities, as native plants and animals also survived there (Florens, 2013, p. 43).

Islands and boundaries in mobile worlds

In the Anthropocene, the issues of ecological destruction and biodiversity loss are tied to major social anxieties and dystopian visions (Robbins & Moore, 2013). Facing these challenges leads to heated debates about the 'right' way to manage nature. This often means separating 'natural', wild spaces from 'cultural' or 'domesticated' spaces. Such boundaries serve to protect valuable wildlife from intrusions of the cultural, and vice versa, safeguarding cultured spaces and humans from intrusions of the 'wild' (Buller, 2004; Carter & Palmer, 2016; Collard, 2012; Hinchliffe, 2010; Hinchliffe et al., 2005; Whatmore & Thorne, 1998). Even though this dichotomy is criticized in scholarly literature (Cronon, 1996; Latour, 2011; Whatmore, 2002), it is still influential and widely manifest in practice. The central question underlying these management attempts is: whether, and how, should humans manage nature? What should we protect, where, and how?

The nature–culture dualism, and with it the conceptual separation of wild/natural and cultural/domesticated spaces, is difficult to uphold. It is questioned especially through the reconceptualization of places as sites of hybridity and entanglement, which illustrate the impossibility of the categorical separation between nature and culture (Descola, 2013; Whatmore, 2002). Examples of such sites are nature reserves, supposedly spaces where natural wilderness is protected in its most pristine and untouched form, where human management and population control, however, question their status as 'purely wild' (Braverman, 2014). On the other hand, supposedly 'wild' animals, such as foxes or wolves, regularly move into cities or rural 'domesticated' spaces, where they find suitable habitats and create conflict, illustrating that supposedly cultural spaces cannot be kept 'clean' of wild intruders (Buller, 2004; Carter & Palmer, 2016; Hinchliffe et al., 2005). Wild and domestic animals, which conservationists attempt to keep from hybridizing, have been shown to be genetically mixed in many instances (Buller, 2004; Ritvo, 2017). In attempts to manage nature and separate the wild and the cultured, material and immaterial boundaries play an important role (Hinchliffe et al., 2013). As fences and barriers (Hinchliffe et al., 2013), as perceived boundary zones between rural countryside and wild areas (Buller, 2004), or as taxonomic categories (Ritvo, 2017), these boundaries are never impermeable. As permeable boundaries or "contact points" (Hinchliffe et al., 2013, p. 535), they allow for selective mobility and contain within them the potential to break down.

Islands have an interesting position in this debate. Due to their distance from the mainland, islands are always already isolated, and insulated, in some way, with the water surrounding them forming a 'natural boundary' (Hay, 2006, p. 22). This natural isolation suggests that islands, especially small ones, can be easily controlled, which is manifest in the many islands that are used e.g. as detention centers and quarantine stations (Mountz & Briskman, 2012; Potter, 2007). Islands can also appear as especially suitable for trying out new nature conservation measures, lending themselves to experimentation in controlled isolation (Baldacchino, 2007). On the other hand, islands have been considered as key sites of relationality, embedded in manifold connections to other places, and to take an essential part in flows of people, goods, and ideas (Bjarnason, 2010; Hay, 2006; Pugh, 2018; Schnepel & Alpers, 2018). With the notion of 'archipelagos' (Pugh, 2013; Stratford et al., 2011), island scholars criticize the simplified oppositional relation of isolation between island and mainland. Instead, thinking of islands as archipelagos emphasizes the significance of ubiquitous island-island relations.

Thus, islands are tied up in a discourse of ambivalence between isolation and connectivity, where it is helpful to reconceptualize islands as entities with "molten edges" (Morton, 2017, p. 71)—boundaries that are both real, but cannot be pinpointed or separated

from that which surrounds them. This discourse becomes more acute when the vastly distributed yet intangible ‘hyperobjects’ (Morton, 2013) that characterize the Anthropocene come to interact with these molten entities. Such human-made, “boundary-disrespecting” (Pugh, 2018), potentially destructive phenomena, like climate change or the global flows of species introductions, address both the isolating and relational aspects of molten edges and are typical for the Anthropocene. Reaching islands through flows of connectivity, these phenomena play out in particularly urgent ways on islands due to their relative isolation (Pugh, 2018). This ambivalence is additionally complicated in the context of nature conservation, when islands become sites that need protection, and when they are entangled in the separation of spaces through boundaries. Here, redemptive narratives of ‘solving’ the ecological crisis of Anthropocene by ‘restoring nature’ clash with claims that nature has ‘ended’ and been replaced through hyperobjects (Morton, 2007, 2013, p. 39), and that the forces of the Anthropocene are out of control (Chandler & Pugh, 2018, p. 2).

Methods and field sites

The data for this article was collected in August/September 2017, during a period of multi-sited ethnographic field research in the Mascarenes, embedded in a larger research project. This larger project focused on animal mobilities, and particularly the mobility of a genus of small geckos (*Phelsuma*) as a terrarium pet, a protected species, and an invasive species. I was following *Phelsuma* geckos (and the humans caring for them) over several sites in Germany, La Réunion, and Mauritius—resonating with Marcus’s (1995, pp. 109-110) take on multi-sited ethnography, when I came to visit Ile aux Aigrettes. Fascinated by the island restoration process taking place there, and the manifestations of (non)human mobility and isolation, I started to inquire more deeply about the island. I contacted nature conservationists and rangers, conducted interviews and informal conversations, and visited the islet with a tourist guide as well as with a ranger in the context of an ethnographic ‘go-along’ (Kusenbach, 2003). I conducted expert interviews with nature conservationists working at MWF, private institutions, and the University of Mauritius. These interviews each lasted between 60 and 90 minutes, and addressed questions and challenges of nature conservation on Mauritius, with a specific focus on invasive species and the island context, and problems that cannot be solved sustainably. Some of these experts were chosen and contacted prior to field research, others through ‘snowball sampling’ (Noy, 2008).

More specifically, I focused on three different aspects in order to explore the ambivalence of islands in the context of nature conservation: 1) With a focus on *conservation discourses*, I followed the question about why islands (especially small ones) are considered as ideal conservation sites. I approached this aspect in four semi-structured expert interviews with conservation biologists working or having worked on Ile aux Aigrettes, and informal conversations. 2) A focus on *conservation practice* on islands led me to inquire about how these discourses are applied, and what the practical challenges of the daily routine look like. I tackled this aspect on ethnographic ‘go-alongs’ on Ile aux Aigrettes, once with a tourist guide, and once accompanying a ranger for an entire day. I also inquired about the conservation practice in many informal conversations with rangers, conservationists, students, and volunteers. 3) I was interested in how these issues emerge most strongly through *specific animals*, and their *autonomous mobility*. Therefore, this multi-sited ethnography was also inspired by multispecies ethnography, which is characterized by its “attentiveness to nonhuman agency” (Ogden et al., 2013, p. 16), and an opening towards nonhuman experience and entanglement (van Dooren et al., 2016). Practically, this meant that I was paying specific attention as to how the biology and ethology of specific animals were central for shaping the conservation reality of Ile aux Aigrettes. Particularly as invasive species, the mobility and agency of animals force humans to work with them.

Managing nature on Ile aux Aigrettes, or, creating isolation through connectivity

Waiting for the little boat at Point Jerome, I can see Ile aux Aigrettes, a little island, only 25 hectares in size, all covered by forest, just about one kilometre off the shore. Shallow, turquoise, clear waters separate it from the shore, white sand on the ground, an accidental colourful fish tugging on a piece of coral. The reef is further away, we won't cross it. This would be a nice daily commute, I think, as the boat starts its engine, and the three of us hold tight and protect ourselves from the sudden cold wind on this otherwise sunny and hot day. (Excerpt from field notes 21.8.2017)

Ile aux Aigrettes is one of the prime examples of MWF's island restoration program. Today, the islet is home to a thick forest of Ebony and Pandanus trees, of ferns and orchids. It hosts Aldabra giant turtles, Telfair's skinks, Ornate day geckos, Guenther's day geckos, pink pigeons, and endemic songbirds. But there are also a few less welcome inhabitants: crows, shrews, Malagasy birds, and tenrecs. As invasive species, they damage the carefully recreated ecosystem on the island. 'Isolated' or 'insulated' as this islet may seem, all surrounded by water, the mobility of plants and animals towards, from, and on the island is ubiquitous. Circulations of all kinds are managed, supported, initiated, suppressed, and reversed. Some species have been brought purposefully to the island, in the context of well prepared 'species translocations'. Other animals move in on their own and make their way there in a less organized fashion and by unsupervised means of transport, e.g. as blind passengers on boats, or through the air.

Isolation and connectivity play out in different aspects of nature conservation and island restoration on Ile aux Aigrettes. In this section, I discuss empirical material from interviews and observations with respect to isolation and connectivity on Ile aux Aigrettes. *Isolation* is discussed from two perspectives: as the trope of the temporally isolated, original, and natural island; and in terms of the conservation work performed on Ile aux Aigrettes to create isolation, stop species mobility, and fight invasive species. Against this background, three different aspects of *connectivity* will be explored: the global flows of people, ideas, and technologies involved in the island restoration process; the mobility of species labelled as 'invasive' which are not wanted on Ile aux Aigrettes; and the purposeful translocation of species onto Ile aux Aigrettes.

Isolation and the active creation of boundaries: Ile aux Aigrettes as a 'pristine' island

"Visit Ile aux Aigrettes [...] and travel back in time to discover what Mauritius would have looked like over 400 years ago, before the arrival of man and his devastating impact on the environment" (MWF, 2018c), advertises MWF guided tours to the island, which is otherwise not accessible to the public, only to scientists holding a permit. Tour guide Mary (*name changed*), a woman in her late 40s with a striking British accent and a big, slow smile, expertly steps off the rocking boat onto the jetty. She goes along with this narrative throughout the guided eco-tour, emphasizing time and again that this is what the forest would have looked like before everything was destroyed, "because of man's callousness":

The dark forest swallows us. Ebony and Vacoas trees. The trees are not very high, as the forest has only been planted around thirty years ago. But it forms a thick canopy covering the whole island, and the light and the open skies, the white sand and turquoise waters are soon forgotten, when shades of green and brown, and thick entanglements of branches, roots, and lianas, and the confusing play of light and shadows take charge. (Excerpt from field notes 25.8.2017)

Islands have frequently been connected to a different, slower, isolated temporality (Bjarnason, 2010), perceived as ahistorical ‘paradises’ (Hay, 2006), and turned into museums or laboratories during processes of colonization (DeLoughrey, 2007, p. 2). This is reinforced when ‘pristine’ nature is produced on islands, which positions the islands in a different, pre-modern temporality, separated from human influence, masking their participation in global processes and flows (Hennessy & McCleary, 2011).

The temporally isolated, original, natural island

Presented to visitors as a pristine patch of original nature, much work is necessary to maintain, or approximate, this state on Ile aux Aigrettes. The past, as it once was, cannot be completely recreated, also because some species have gone extinct, and knowledge is limited. Historical accounts, archaeological and biological research about species distribution and relations form the basis for an image of what ecologists consider an ideal, ‘pristine’ past (Jones, 2008, p. 244). When we follow the narrative of the pristine island back to those people who manage the island restoration process on Ile aux Aigrettes, to MWF’s ecologists working behind their desks in the organization’s headquarters in Vacoas, it soon becomes clear that this effort—despite the term ‘restoration’ assuming otherwise—is not about recreating a particular moment of the past. MWF’s ecologists know that time cannot be turned back. Charles (*name changed*), working at MWF as a leading conservation biologist, sits behind his computer where he writes hundreds of emails daily, when he talks to me about the island restoration program. Patiently, he tells me:

It is building, rebuilding, basically, rebuilding the vertebrate communities, the invertebrate communities and the plant communities [...]. So there is more structure, there is more support and it is more resistant to invasion. [...] [W]hat is natural, we don’t know! These systems have been so damaged and torn apart, so we don’t have a clear picture of what these systems were like before humans settled in Mauritius some 400 years ago. We got little snippets of information. We found a historical account of one species on an island that then tells us, because we know about this species, everything else that would be needed on that system to be supported. But yeah, what we are trying to do, is not restore places back to the way they were. That is an impossible task. What we are trying to do is [...] build up that resilience as natural as it can be [...]. And it is about supporting species to survive a longer term. (Interview C. 23.8.2017)

Charles denies that they attempt to recreate a *particular* past on Ile aux Aigrettes. Resilience, naturalness, and survival are the key terms in his explanation. As natural as it can be, in his words, it does not relate to a specific past, but is still implicitly opposed to human interference. The ‘re’-building of animal and plant communities also testifies to this past, and describes nonhumans connected with each other, but in some kind of isolation to humans, and thus implicitly relates to a *generalized* kind of unspecific past before the man-made, ecological destruction. This powerful image serves as a guiding principle. Resilience and survival, then, are directed towards the future. Guided by the past, conservationists protect or fight species on Ile aux Aigrettes in order to build up resilient communities of animals and plants, to create a natural island for the future. This ‘naturalness’, however, also describes species communities on Ile aux Aigrettes that can only be produced through human management.

The limited island perimeter offers ideal conditions for controlled insecurities, and for maximizing knowledge. Charles gestures energetically, enthusiasm sparkling in his eyes. “This is a lovely thing with island restoration. It’s that you are working in a relatively closed system and so the action that you take to remove an invasive species or to bring in a native species or an ecological analogue, you can see that impact quite quickly” (Interview C. 23.8.2017).

Small islands suggest the possibility of near-to-complete control, lending themselves to social and scientific experiments, as island scholar Baldacchino (2007, p. 166) writes: “Something about the insular beckons alluringly. It inspires a greater malleability to grand designs,” possibly what Charles calls a ‘relatively closed system’ that shows effects of your work. But how isolated is Ile aux Aigrettes really? And how well can it be controlled?

The intensive care invested in Ile aux Aigrettes is impossible to uphold for larger stretches of forest. And its ‘relative’ isolation does yield results. According to MWF’s ecologists, the island forest was restored ‘by 98%’ from a degraded to a native forest, which today is the last remnant of intact coastal vegetation (Interview C., 23.8.17; Jones 2008, p. 227). Thus, almost the complete forest has been cut and subsequently replanted, a simultaneously destructive and incredibly intensive effort. Populations of endangered species have been brought back from the brink of extinction, and become established on Ile aux Aigrettes, receiving international attention (Florens, 2013). The groundbreaking ecological restoration processes which take place on Ile aux Aigrettes resonate with Baldacchino’s (2007) view that islands, due to their ambivalent and paradoxical properties, are also sites of novelty. He writes: “It should therefore come as no surprise to us that islands, both real and earthy as much as concocted, or even those occupying the fuzzy space in between, stand out as sites of novelty, of coy experimentation, of deliberate or coincidental pathbreaking events” (Baldacchino, 2007, p. 166).

Creating isolation by fighting invasive species

However, the work necessary to create the isolated island state that is assumed as inherent, and communicated to tourists and visitors, is immense. Invasive species management is one of the highest priorities on Ile aux Aigrettes, and is the major way to create the ‘isolated island’. The issue of invasive species has been much debated in recent decades. On the one hand, alien introduced species are deemed one of the major causes for biodiversity loss, and are thus actively fought as ‘invasive’ (Leung et al., 2002; Pimentel et al., 2005; Simberloff, 2003). On the other hand, some ecologists point out the positive functions of introduced species as niche-fillers in damaged, ‘emergent’ ecosystems (Hobbs et al., 2009). Social scientists have argued that while invasive species are socially “productive” (Everts & Benediktsson, 2015, p. 134), the concepts are faulty, and the native-invasive dichotomy cannot be upheld, as it is impossible to pin down exactly in space and time when and where something is native or invasive (Warren, 2007). Additionally, the language surrounding invasive species is criticized as racist, as masking economic and political interests, and as fraught with normative ideas about nature and culture (Ogden, 2015; Robbins & Moore, 2013; Subramaniam, 2001; Wanderer, 2015; Warren, 2007).

On Mauritius, much of MWF’s efforts to prevent species mobility goes into political and educational work. Through the subcommittee of the National Invasive Alien Species Committee, MWF conservationists attempt to prevent imports of potentially invasive exotic species. Education activities in the bay area around Ile aux Aigrettes attempt to sensitize skippers that their boats can inadvertently provide transport for invasive species to the precious offshore islets. On Ile aux Aigrettes, fauna and flora are under constant close observation. The bigger reptiles are chipped, the birds ringed, and trees labelled as egg-laying sites. What is possible to count is counted, measured, and numbered. Invasive species like rats, shrews, crows, and even stray dogs are fought constantly. Specific solutions have to be found for every new trespasser. Dogs and tenrecs are captured and returned to the mainland. The eggs of the invasive Malagasy pigeons are destroyed. Grime-covered tiles and wax-balls mixed with insects and peanut butter are used to catch potential early signs of rats. Invasive weeds are cut. There are, however, exceptions when a species is ‘useful’ in some way, to other valued species, like Indonesian Banyan trees, which, as tour guide Mary explains, contribute habitat and fruits for birds and reptiles. Isolation, in the context of invasive species, is not a pre-

existing given on Ile aux Aigrettes, but a constant work-in-progress and a state that is never actually reached, but can only ever be approximated.

Isolation on Ile aux Aigrettes is present as the trope of the pristine island, temporally and spatially removed; and as the performance of a conservation policy and measurements aimed at stopping mobility of humans and nonhumans towards the islet. But the two are intertwined. The trope of the pre-modern island motivates MWF's conservationists' work and is present in their experience, supporting the imperative to work towards isolation. The presentation of Ile aux Aigrettes for tourists clearly guides visitors on a journey to the distant past, contributing to the image of a temporally isolated, pristine, pre-modern island supposedly separated from global processes (cf. DeLoughrey, 2007; Hennessy & McCleary, 2011). However, conservationists' work on Ile aux Aigrettes is not quite seen as human interference, but rather as doing justice to inherent island qualities. Nature, on Ile aux Aigrettes, is actively produced, it is malleable, worked with like the "grand designs" that Baldacchino (2007, p. 166) spoke of. As such, the island restoration is also directed towards the future. Simultaneously, the processes to create isolation on Ile aux Aigrettes are also specific for the very present, the ecological crisis of the Anthropocene, a "time of hyperobjects" (Morton, 2013, p. 37). Many of the invasive species dealt with here are global phenomena, 'hyperobjects', that are, as species, vastly distributed: ship rats in particular have been counted among the 100 worst invasive species worldwide (Lowe et al., 2000, p. 7). Creating isolation from undesired species mobilities is thus also an engagement with hyperobjects in the present, while recreating the islet after a generalized past before ecological destruction performs a vision of a specific future after ecological destruction, making Ile aux Aigrettes a multitemporal endeavour.

Connectivity: many routes lead to Ile aux Aigrettes

Isolation on Ile aux Aigrettes is selective. While some humans and nonhumans are kept as far away as possible, the mobility of others is actively encouraged or necessarily accepted. This mobility concerns humans—mainly scientists—and with them scientific knowledge and ideas; and nonhumans, both as unwelcome travelers or 'invasive species', and as purposefully 'translocated species'.

Human mobility

The mobility of people, ideas, and technologies is essential for producing and maintaining Ile aux Aigrette in its current restored state. Ecologist Luc (*name changed*), who was among those who participated in restoring Ile aux Aigrettes' forest from scratch in the 1980s, had studied before in France, worked with MWF for some time, and then continued to work on La Réunion. John (*name changed*) worked with MWF as a conservationist, did his PhD in the UK, and then worked on La Réunion, the Comoros, and Madagascar. Sarah is an intern at MWF from a New Zealand zoo, who came to Mauritius to learn more about bird rearing. Andy is a student from the UK, who participates in Durrell's graduate conservation course on Mauritius to learn about innovative conservation techniques. "The work that is happening in Mauritius is having a global influence," MWF ecologist Wilhelm told me (Interview W. 21.8.2017). Other projects worldwide employ techniques spearheaded on Mauritian islets. People who worked for MWF hold leading positions in nature conservation projects worldwide. Ideas and methods used in one place inspire projects in other places, on other islands. New Zealand, MWF employees tell me, is an example to learn from, with their strict biosecurity measures in order to manage invasive species. Hawai'i is dealing with similar problems, I am told. MWF is sending delegations to the Caribbean, to inspire projects. Mixed field teams with conservationists from various Western Indian Ocean islands conduct island expeditions together, creating and sharing knowledge about the hyperobjects that have come

to replace ‘Nature’ (Morton, 2013, p. 39), and with which island ecologists have to interact: soil, microbiomes, wind, marine currents. As such, Mauritius, and Ile aux Aigrettes are prime examples of ‘archipelagos’, embedded in groups of islands for whom performed island-island relations are more formative than traditional island-continent dichotomies (Stratford et al., 2011).

Conservation on Ile aux Aigrettes is tightly embedded in international networks. Together with La Réunion, the Seychelles, the Comoros, and Madagascar, with people working or having worked there, with animals, and plants to be researched, projects and methods to be initiated and tested, they cannot be thought in isolation. In connection with places like the UK, Hawai’i, and New Zealand, these archipelagos span large distances, islands moving together with people and ideas circulating between them.

Nonhuman mobility

Walking through different forests and trying to attune myself to the agency of nonhumans, their shaping power seemed to me more and more like an unstoppable life force. The more I learned, the more the invasive species stood out. The lush forests in Mauritius mainland mountains started to appear aggressive after NPCRS rangers taught me about the invasive Acacia and Guava trees that dominate the forest. The inquisitive stare of the invasive common mynah, a medium-sized, black bird, became more difficult to bear. This bird will go places, I thought to myself, and no one will stop it. (Excerpt from field notes, 28.8.2017)

Nonhuman mobility contributes essentially to shaping Ile aux Aigrettes. Animals and plants move as they live, calling into question notions of nativity and belonging. “Any attempt to define ‘alien’ and ‘native’ involves the drawing of lines,” says, rightly, Warren (2007, p. 433), in his critical discussion of different perspectives on invasive species. The separation between native and alien, he claims, is “flawed, contingent on the construction of fixed lines through fluid, hybrid spaces” (Warren, 2007, p. 439). In these fluid, hybrid spaces, everything moves: “Wherever there is life there is movement,” Ingold (2011, p. 72) states. The water surrounding Ile aux Aigrettes does not constitute an impermeable boundary for these plants and animals. Moving on driftwood, with boats, or through the air, various species, often already globally distributed, make their way to Ile aux Aigrettes and become ‘invasive’, hyperobjects interacting with the islands’ “molten” (Morton, 2017), blurred, boundaries.

Conservationists build up animal and plant communities on the island in order to be resilient towards external threats, such as invasive species, with some of the invasives becoming an unavoidable part of nature on Ile aux Aigrettes. The Asian musk shrews (*Suncus murinus*) are impossible to control. Their boundary crossings are grudgingly accepted. Telfair’s skinks (*Leiolopisma telfairii*), reptiles native to Mauritius, have been purposefully translocated to Ile aux Aigrettes in order to keep the shrew population in check through predation (Interview C. 23.8.2017, W. 21.8.2017). But if the island, and its animal and plant communities, are built in relation to potential or actual invasive species, can the island then be considered as isolated from invasive species? Rather, I would argue, specific invasive species and the constant nonhuman mobilities have then become an integral part of the islet. The separation of native and invasive, the central theme of the debate on invasive species (Warren, 2007), is further complicated when ‘the native’ is constituted and produced around and in constant relation to these hyperobjective invasive species, as is the trope of the ‘isolated island’ that is constituted while taking constant mobility into account.

The active ‘design’ of Ile aux Aigrettes is most strongly reflected in the species translocations. These ambitious projects come closest to Baldacchino’s (2007) experiments and grand designs, when species deemed necessary to fulfill certain missing functions are moved onto the island. Thus, most notably the Aldabra giant turtles were brought onto Ile

aux Aigrettes for their grazing and seed dispersal behavior. Once, giant turtles roamed Mauritius, but they are now extinct. The Aldabra giant turtles are originally from the Seychelles, so not even in the most liberal viewpoint in the native-invasive debate would they be considered native to Ile aux Aigrettes. Yet, they have established themselves on the island, much to the delight of the Mauritian and international conservation community, grazing, making paths, and supporting the germination of native plants with their excrements. Global networks of people and technologies have to be activated in order for such a project to succeed. Mauritian ecologist Ria (*name changed*), for whom the survival of native species is very close to heart, elaborates:

Lots and lots of studies [*are*] going there: disease screening, genetic studies [...]. We are not just like, so, it can be like playing God, so, but no, we are actually doing a lot of research and we also know from first hand records that, you know, the Telfair's skink was there. (Interview R. 28.8.2017)

The work that includes multiple people, scientifically produced knowledge, research, the particularities of the landscape, and the demands and needs of plants and animals has for her more to do with intense efforts and continuous vulnerabilities than with Baldacchino's (2007) malleability and grand designs. Translocating specific species in order to fulfill functions and complement a community, alongside or opposite those nonhumans that travel on their own accounts as 'invasive', creates nonhuman communities on Ile aux Aigrettes born out of the participation of the island in global flows and processes, of entangling globally distributed hyperobjects with fuzzy, molten, island boundaries (Morton, 2013, 2017). International science, globalization, technological progress, and flows of capital and people between organizations allow for twenty-or-so giant turtles, native to the Seychelles, to be moved to Ile aux Aigrettes.

Intertwined temporalities and selective mobilities on Ile aux Aigrettes: what should we protect?

As mobilities are created and prevented, today's Ile aux Aigrettes emerges from this interplay of isolation and connectivity as an entity with "molten edges" (Morton, 2017, p. 71). The perception of the island as isolated in space and time guides the restoration process, and is continuously reproduced—explicitly towards visitors, and implicitly as underlying guidelines in the restoration process. Isolation is a work-in-progress, and is created through much effort in maintaining material and immaterial boundaries. Political and educational work seeks to prevent hyperobjective alien species (Morton, 2013) from setting foot on the island. Hands-on work in the field—monitoring the island, capturing, killing, weeding—has removed unwanted trespassers from the island perimeter. Connectivity and mobility are inherent in and essential to this process. Movements of people between universities and organizations worldwide, of knowledge, ideas, and technologies over the internet, between institutions, continents, and islands, is a prerequisite to produce the restored Ile aux Aigrettes. The movements of plants and animals are a main constituent of the island, both as invasive species and as species translocations. As a site of ongoing nature conservation, Ile aux Aigrettes shows that connectivity and isolation on islands have to be thought together, depend on each other, and that the (im)mobilities of animals and plants significantly contribute to shaping island realities.

The intertwining of vastly different temporalities on islands has been called a characteristic feature of the Anthropocene (Pugh, 2018). Resonating with this view, humans and nonhumans 'make' the island together on Ile aux Aigrettes, interweaving slow-paced processes like forest growth and turtle reproductive cycles with fast-paced processes of

knowledge circulation and human travel. Island relationality in the Anthropocene, Chandler and Pugh (2018, p. 4) claim, has however not been taken far enough. Thus, going a step further, maybe the processes that keep remaking Ile aux Aigrettes not only intertwine human and nonhuman temporalities, but are also intense entanglements between humans, nonhumans, and intangible but vastly distributed hyperobjects (Morton, 2013), such as global warming, invasive species, soil microbiomes, and digital technologies. These hyperobjects interact with the viscous, molten boundaries of small islands (Morton, 2017) in intense ways.

Going back to the initial questions that define the debates about the Anthropocene, I want to reflect on the question: what do humans protect when they protect Ile aux Aigrettes?

In the material presented above, two aspects stand out, two different kinds of islands that conservation measures address, intertwining different tropes and values: the *biodiverse island* and the *pristine island*. The *biodiverse island* includes the island biogeography and biodiversity: endemic species, ecological functions, species communities and ecosystems. Biodiversity protection is an international policy goal, fostered, e.g. by the international Convention on Biological Diversity, and island biodiversity is recognized to be of particular global significance (Whittaker, 1998, p. 33). For protecting Ile aux Aigrettes, biodiversity takes priority over nativity. Thus, Seychellan Aldabra turtles are transferred to the islet, and alien Banyan trees can stay, because they stand in productive relations to other species, and contribute to the island's biodiversity. The image of the island as malleable and easy to control reinforces the performance of biodiversity conservation as complete, all-inclusive, as an ambitious act of intensive care that attempts to create something completely new—an island that can show the world what the future could look like.

The second island is the *pristine island*. This powerful image conceives of islands as somehow different 'other' spaces, outside of time and modernity, as nostalgia, a kind of paradise lost, a more natural and authentic place (DeLoughrey, 2007; Hay, 2006). Built on the assumption of oppositional spaces separated by boundaries, this aspect resonates with the discourse of wilderness and the nature-culture dichotomy (Cronon, 1996; Descola, 2013). In the case of an island nature reserve such as Ile aux Aigrettes, these discourses reinforce each other (Hennessy & McCleary, 2011). The trope of the natural, ahistorical island amplifies the narrative of pristine, original nature—into an inherent characteristic of the island which simply has to be rediscovered, restored, brought to light. Ile aux Aigrettes' endemic, rare fauna and flora activates discourses and tropes of authentic, natural, and wild spaces, different from modern and urban, cultured spaces like most of mainland Mauritius today.

But, maybe, if we focus on the present, a third island will emerge, through the work invested in protecting Ile aux Aigrettes: the *hyperobjective island*. This island is inherently located in this specific moment, the present ecological crisis of the Anthropocene. Despite the utopian visions tied to Ile aux Aigrettes, it is difficult to call the endeavour of protecting Ile aux Aigrettes a hopeful, potential solution for the Anthropocene, as Chandler and Pugh (2018, pp. 3-4) criticise redemptive ecological narratives. Rather, I would argue, than restoring 'nature' on Ile aux Aigrettes, the process of making and remaking the island is a way of negotiating with the boundary-disrespecting hyperobjects of the Anthropocene (Morton, 2013; Pugh, 2018). Intervening in the dynamics of connectivity, mobility, and isolation, through engaging with invasive species, gene pools, and digital technologies, activates these enormous global and intangible entanglements in a paradox way: by engaging with and acknowledging these uncontrollable and "too rich, too intense" (Chandler & Pugh, 2018, p. 5) relationalities, on a seemingly bounded place: a small island.

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References

- Aspinall, R. (2016). Can Mauritius prevent its vulnerable wildlife going the way of the dodo? *The Guardian*, 25 October. <https://www.theguardian.com/science/blog/2016/oct/25/can-mauritius-prevent-its-vulnerable-wildlife-going-the-way-of-the-dodo>
- Baldacchino, G. (2007). Islands as novelty sites. *Geographical Review*, 97(2), 165-174. <https://doi.org/10.1111/j.1931-0846.2007.tb00396.x>
- Bjarnason, D. (2010). Island connections: Icelandic spatiality in the wake of worldly linkages. *Island Studies Journal*, 5(2), 217-236.
- Braverman, I. (2014). Conservation without nature: the trouble with in situ versus ex situ conservation. *Geoforum*, 51, 47-57. <https://doi.org/10.1016/j.geoforum.2013.09.018>
- Buller, H. (2004). Where the wild things are: the evolving iconography of rural fauna. *Journal of Rural Studies*, 20(2), 131-141. <https://doi.org/10.1016/j.jrurstud.2003.08.009>
- Carter, J., & Palmer, J. (2016). Dilemmas of transgression: ethical responses in a more-than-human world. *Cultural Geographies*, 1-17.
- Chandler, D., & Pugh, J. (2018). Islands of relationality and resilience: the shifting stakes of the Anthropocene. *Area*, 1-8.
- Cheke, A., & Hume, J. (2008). *Lost land of the dodo: an ecological history of Mauritius, Réunion & Rodrigues*. New Haven & London: Yale University Press.
- Cohen, T., Colebrook, C., & Miller, J. H. (2016). *Twilight of the Anthropocene idols*. London: Open Humanities Press. https://doi.org/10.26530/OAPEN_588463
- Collard, R.-C. (2012). Cougar-human entanglements and the biopolitical un/making of safe space. *Environment and Planning D: Society and Space*, 30(1), 23-42. <https://doi.org/10.1068/d19110>
- Cronon, W. (1996). The trouble with wilderness: or, getting back to the wrong nature. *Environmental History*, 1(1), 7-28. <https://doi.org/10.2307/3985059>
- Crutzen, P.J., & Stoermer, E.F. (2000). The Anthropocene. *Global Change Newsletter*, 41, 17-18.
- DeLoughrey, E. (2007). *Routes and roots: navigating Caribbean and Pacific island literatures*. Honolulu: University of Hawai'i Press.
- Descola, P. (2013). *Beyond nature and culture*. Chicago & London: University of Chicago Press.
- Everts, J., & Benediktsson, K. (2015). Pangaea's return: towards an ontology of invasive life. *Geografiska Annaler: Series B, Human Geography*, 97(2), 131-138. <https://doi.org/10.1111/geob.12069>
- Florens, V. (2013). Conservation in Mauritius and Rodrigues: challenges and achievements from two ecologically devastated oceanic islands. *Conservation Biology: Voices from the Tropics*, (January), 40-50. <https://doi.org/10.1002/9781118679838.ch6>
- Florens, V. (2018). Mauritius: laboratory of hope. TEDx Talks. *Youtube Video*, (0:48). <https://www.youtube.com/watch?v=jBJ25M9wk0>
- Fuller, D.Q., Boivin, N., Hoogervorst, T., & Allaby, R. G. (2011). Across the Indian Ocean: the prehistoric movement of plants and animals. *Antiquity*, 85(328), 544-558. <https://doi.org/10.1017/S0003598X00067934>
- Grove, R.H. (1995). *Green imperialism: colonial expansion, tropical island Edens and the origins of environmentalism, 1600-1860*. Cambridge: Cambridge University Press.
- Haraway, D. (2015). Anthropocene, Capitalocene, Plantationocene, Chthulucene: making kin. *Environmental Humanities*, 6, 159-165. <https://doi.org/10.1215/22011919-3615934>

- Hay, P. (2006). A phenomenology of islands. *Island Studies Journal*, 1(1), 19–42.
- Hennessy, E., & McCleary, A.L. (2011). Nature's Eden? The production and effects of 'pristine' nature in the Galápagos Islands. *Island Studies Journal*, 6(2), 131–156.
- Hinchliffe, S. (2010). Where species meet. *Environment and Planning D: Society and Space*, 28(1), 34–35. <https://doi.org/10.1068/d2706wsb>
- Hinchliffe, S., Allen, J., Lavau, S., Bingham, N., & Carter, S. (2013). Biosecurity and the topologies of infected life: from borderlines to borderlands. *Transactions of the Institute of British Geographers*, 38(4), 531–543. <https://doi.org/10.1111/j.1475-5661.2012.00538.x>
- Hinchliffe, S., Kearnes, M.B., Degen, M., & Whatmore, S. (2005). Urban wild things: a cosmopolitical experiment. *Environment and Planning D: Society and Space*, 23(5), 643–658. <https://doi.org/10.1068/d351t>
- Hobbs, R. J., Higgs, E., & Harris, J.A. (2009). Novel ecosystems: implications for conservation and restoration. *Trends in Ecology and Evolution*, 24(11), 599–605. <https://doi.org/10.1016/j.tree.2009.05.012>
- Ingold, T. (2011). *Being alive: essays on movement, knowledge and description*. London & New York: Routledge. <https://doi.org/10.4324/9780203818336>
- Jackson, A. (2001). *War and empire in Mauritius and the Indian Ocean*. New York: Palgrave. <https://doi.org/10.1057/9781403919540>
- Jones, C.G. (2008). Practical conservation on Mauritius and Rodrigues: steps towards the restoration of devastated ecosystems. In A. Cheke & J. Hume (Eds.), *Lost land of the dodo: an ecological history of Mauritius, Réunion & Rodrigues* (pp. 226–259). New Haven & London: Yale University Press.
- Kusenbach, M. (2003). Street phenomenology: the go-along as ethnographic research tool. *Ethnography*, 4(3), 455–485. <https://doi.org/10.1177/146613810343007>
- Latour, B. (2011). From multiculturalism to multinaturalism: what rules of method for the new socio-scientific experiments? *Nature and Culture*, 6, 1–17. <https://doi.org/10.3167/nc.2011.060101>
- Lennard, N., & Parr, A. (2016). Our crime against the planet, and ourselves. *The New York Times*, 18 May. <https://www.nytimes.com/2016/05/18/opinion/our-crime-against-the-planet-and-ourselves.html>
- Leung, B., Lodge, D.M., Finnoff, D., Shogren, J. F., Lewis, M.A., & Lamberti, G. (2002). An ounce of prevention or a pound of cure: bioeconomic risk analysis of invasive species. *Proceedings: Biological Sciences/The Royal Society*, 269(1508), 2407–2413. <https://doi.org/10.1098/rspb.2002.2179>
- Lowe, S., Browne, M., Boudjelas, S., & de Poorter, M. (2000). *100 of the world's worst invasive alien species. a selection from the Global Invasive Species Database*. Auckland: Invasive Special Specialist Group.
- Marcus, G.E. (1995). Ethnography in/of the World System: the emergence of multi-sited ethnography. *Annual Review of Anthropology*, 24, 95–117. <https://doi.org/10.1146/annurev.an.24.100195.000523>
- Morton, T. (2017). Molten entities. *New Geographies*, 8, 70–73.
- Morton, T. (2013). Poisoned ground: art and philosophy in the time of hyperobjects. *Symploke*, 21(1–2), 37–50.
- Morton, T. (2007). *Ecology without nature: rethinking environmental aesthetics*. Cambridge: Harvard University Press.
- Mountz, A. (2011). The enforcement archipelago: detention, haunting, and asylum on islands. *Political Geography*, 30(3), 118–128. <https://doi.org/10.1016/j.polgeo.2011.01.005>
- Mountz, A., & Briskman, L. (2012). Introducing island detentions: the placement of asylum seekers and migrants on islands. *Shima*, 6(2), 21–26.

- MWF (2018a). About MWF. *Mauritian Wildlife Foundation Website*. <http://www.mauritian-wildlife.org/application/index.php?tpid=2&tcid=60>
- MWF (2018b). Ile aux Aigrettes. *Mauritian Wildlife Foundation Website*. <http://www.mauritian-wildlife.org/application/index.php?tpid=30&tcid=83>
- MWF (2018c). Visit Ile aux Aigrettes. *Mauritian Wildlife Foundation Website*. <http://www.mauritian-wildlife.org/application/index.php?tpid=1&tcid=3>
- Noy, C. (2008). Sampling knowledge: the hermeneutics of snowball sampling in qualitative research. *International Journal of Social Research Methodology*, 11(4), 327-344. <https://doi.org/10.1080/13645570701401305>
- Ogden, L.A. (2015). Diaspora. <http://www.multispecies-salon.org/diaspora/>
- Oostindie, G. (2008). *Dutch colonialism, migration and cultural heritage: Past and present*. Leiden: KITLV Press. <https://doi.org/10.1163/9789004253889>
- Pimentel, D., Zuniga, R., & Morrison, D. (2005). Update on the environmental and economic costs associated with alien-invasive species in the United States. *Ecological Economics*, 52(3), 273-288. <https://doi.org/10.1016/j.ecolecon.2004.10.002>
- Pooley, S., Barua, M., Beinart, W., Dickman, A.J., Holmes, G., Lorimer, J., Loveridge, A.J., Macdonald, D.W., Marvin, G., Redpath, S., Sillero-Zubiri, C., Zimmermann, A., & Milner-Gulland, E.J. (2016). An interdisciplinary review of current and future approaches to improving human-predator relations. *Conservation Biology*, 1-11.
- Potter, S. (2007). The quarantine protection of Sub-Antarctic Australia: two islands, two regimes. *Island Studies Journal*, 2(2), 177-192.
- Pugh, J. (2018). Relationality and island studies in the Anthropocene. *Island Studies Journal*, 13(2). <https://doi.org/10.24043/isj.48>
- Pugh, J. (2013). Island movements: thinking with the archipelago. *Island Studies Journal*, 8(1), 9-24.
- Pyndiah, G. (2016). Decolonizing Creole on the Mauritius islands: creative practices in Mauritian Creole. *Island Studies Journal*, 11(2), 485-504.
- Ritvo, H. (2017). The domestic stain, or maintaining standards. *RCC Perspectives Transformations in Environment and Society*, 1, 19-24.
- Robbins, P., & Moore, S.A. (2013). Ecological anxiety disorder: diagnosing the politics of the Anthropocene. *Cultural Geographies*, 20(1), 3-19. <https://doi.org/10.1177/1474474012469887>
- Safford, R.J. (1997). A survey of the occurrence of native vegetation in remnants on Mauritius in 1993. *Biological Conservation*, 80, 181-188. [https://doi.org/10.1016/S0006-3207\(96\)00048-1](https://doi.org/10.1016/S0006-3207(96)00048-1)
- Schnepel, B., & Alpers, E.A. (2018). *Connectivity in motion: island hubs in the Indian Ocean world*. London: Palgrave Macmillan. <https://doi.org/10.1007/978-3-319-59725-6>
- Simberloff, D. (2003). Confronting introduced species: a form of xenophobia? *Biological Invasions*, 5(3), 179-192. <https://doi.org/10.1023/A:1026164419010>
- Stratford, E., Baldacchino, G., McMahon, E., Farbotko, C., & Harwood, A. (2011). Envisioning the archipelago. *Island Studies Journal*, 6(2), 113-130.
- Subramaniam, B. (2001). The aliens have landed! Reflections on the rhetoric of biological invasions. *Meridians: Feminism, Race, Transnationalism*, 2(1), 26-40.
- van Dooren, T., Kirksey, E., & Münster, U. (2016). Multispecies studies: cultivating arts of attentiveness. *Environmental Humanities*, 8(1), 1-23. <https://doi.org/10.1215/22011919-3527695>
- Vaughan, A. (2016). Humans have destroyed a tenth of Earth's wilderness in 25 years - study. *The Guardian*, 08 September. <https://www.theguardian.com/environment/2016/sep/08/humans-have-destroyed-a-tenth-of-earths-wilderness-in-25-years-study>

- Verne, J. (2012). *Living translocality: space, culture and economy in contemporary Swahili trade*. Stuttgart: Franz Steiner.
- Walsh, M.T. (2007). Island subsistence: hunting, trapping and the translocation of wildlife in the Western Indian Ocean. *Azania: Archaeological Research in Africa*, 42(1), 83-113. <https://doi.org/10.1080/00672700709480452>
- Wanderer, E.M. (2015). Biologies of betrayal: Judas goats and sacrificial mice on the margins of Mexico. *BioSocieties*, 10(1), 1-23. <https://doi.org/10.1057/biosoc.2014.13>
- Warren, C.R. (2007). Perspectives on the 'alien' versus 'native' species debate: a critique of concepts, language and practice. *Progress in Human Geography*, 31(4), 427-446. <https://doi.org/10.1177/0309132507079499>
- Whatmore, S. (2002). *Hybrid geographies: natures cultures spaces*. London: Sage.
- Whatmore, S., & Thorne, L. (1998). Wild(er)ness: reconfiguring the geographies of wildlife. *Transactions of the Institute of British Geographers*, 23(4), 435-454. <https://doi.org/10.1111/j.0020-2754.1998.00435.x>
- Whittaker, R.J. (1998). *Island biogeography: ecology, evolution, and conservation*. Oxford: Oxford University Press.
- Williams, M., Zalasiewicz, J., Haff, P.K., Schwägerl, C., Barnosky, A.D., & Ellis, E.C. (2015). The Anthropocene biosphere. *The Anthropocene Review*, 2(3), 196-219. <https://doi.org/10.1177/2053019615591020>