Rewilding and Neoliberal Territorialities after the Anthropocene: Cybernetic Modelling of the Oriental Stork as Critique

This chapter explores the example of the reintroduction of the oriental stork *(Ciconia boyciana)*, sometimes called the oriental white stork since it resembles the white stork *(Ciconia ciconia)*. It went extinct in Japan in 1971, while the species survives in continental East Asia as an endangered species (class I) with conservation groups estimating that between 1,000 and 2,499 remain in the wild. Over the last three decades, the Hyogo Prefectural University has developed an institution known as Hyogo Park of the Oriental White Stork to plan activities in the name of the reintroduction of the oriental storks from Russia. It is a multi-partied joint effort involving cooperation of community residents and businesses, local farmers, as well as various local and national government entities, including those dealing with tourism and culture, not to mention the participation of species cultivated in the stork food chain.[1] It is this interdependency that forms the basis for analysis of territoriality and extinction in light of Deleuze and Guattari's posthuman cybernetics interdependencies, which I hope to show helps clarify misconceptions concerning extinction in existing conservation discourse and practice in Japan. In the course of this investigation, it is suggested that the concept of the Anthropocene is a misnomer, that some form of post-Anthropocene era should be introduced to account for the cybernetic interdependencies in the due course of the human generation of self-displacing posthuman decentring. It is suggested that conservation requires cold post-anthropocentric modelling to account for its responsibilities that exceed modelling based on the Anthropocene as an era of human ascendency.

Before the Fukushima Disaster, Japanese nuclear regulatory agencies and corporations ignored warnings and sustained their established method of relying on cover-ups of known dangers even as the Disaster unfolded. Though one would expect such behaviour to change given the rarity of known meltdowns in the world, it forms a

benchmark now for understanding the priority placed on profits (a hallmark of neoliberalism) over biological sustainability of life systems including humans. Subsequent indifference to human and nonhuman victims was evident, as if the disaster only reinforced a brash sense of blindness to material conditions and a retrenching of state authority and priority placed on corporate profits. In relation to conservationism in neoliberal Japan at this time, one must ask, to what extent have ecologically minded Japanese become ineffective or similarly misled in the current neoliberal context, which is partially responsible for placing power industry profits over the sustainability of life in Japan.[2] To answer this question, relevant to conservationism in Japan, demands that attention be drawn to historical state-driven enterprises as well as contemporary neoliberal withdrawals of state responsibility for endangered species (not to mention the growing precariousness of people's lives)[3] and extinction in the context of the oriental stork. People, livestock, wildlife and land are expendable, but capital invested in nuclear power infrastructure is not; this is the lesson of Fukushima. Similar issues have been addressed in critiques of Anglo-American conservation efforts, as when Lorimer (2015) situates the role of neoliberalism in privatizing and marketing charismatic flagship species within its consumer-oriented modelling of society and ecosystems as mere halfway measures (Lorimer 2015). Lorimer's suggestion of a matrix of ecological charisma in effect outlines human-nonhuman affects as forms of communication. He creates, echoing Deleuze and Guattari's uses of the Spinozan sense of affect as generalised force (not personal emotion), a capacity to affect and be affected—a Nietzschean differentiation of passive (or reactive) affect and active affective engagement that alters contextual conditions. In conservation, this distinction may be extended not simply to inter-human politics but human-nonhuman as well as nonhuman-nonhuman relationality among species.

If, as Nigel Thrift (2008) summarises, »in the world of Spinoza and Deleuze, affect is the capacity of interaction that is akin to a natural force of emergence« (Thrift 2008: 182), then affect may include not only human communication but any species or inter-species signalling. With respect to the storks, their affective relations—conscious or autonomic—require not human presence but indeed distance to reproduce and flourish. Conservation focusing on viewing the storks may build human interest in them but be perceived as threatening to storks and not help them at the level of establishing

conditions for affective emergence as a species in a sustainable ecosystem. Kathleen Stewart (2007), very helpfully in the context of conservation discourse, defines affects as »a kind of contact zone where the overdeterminations of circulations, events, conditions, technologies, and flows of power literally take place«. They are »at once abstract and concrete« and »more directly compelling than ideologies, as well as more fractious, multiplicitous, and unpredictable than symbolic meanings« (Stewart 2007: 3).

Deleuze and Guattari's territorial metaphors may be used to frame species narratives of extinction and recovery. In particular, they ask how capitalist forms of culture and exchange—given their schizophrenic array of material-abstract assemblages—may responsibly situate species decline and concomitant questions of reintroduction and recovery. In addition to de-/re-territorialization, Guattari's concepts of transversality and ecosophy will be critically assessed in light of parallels in stork conservation discourse. Then, one may see how Deleuze and Guattari's critical metaphors deconstruct and redefine the givens of neoliberal Japan and its compromising approaches to reintroducing locally extinct charismatic megafauna: systems of nationalism, tourism, pollution, transportation and urbanization that continue to undermine ecosystems in the first place. In the end, extant territorialities will be shown to highlight the ongoing counterpoint between pragmatics in acknowledging stork needs and conservation values that are sometime reliant on obfuscating abstractions such as a Japanese oneness with nature.

1 The Japanese Reintroduction Project: Oriental Stork as Automata of Hope

Prominent narratives offered by Toyooka City and Hyogo Prefecture documents conflate ancient times with an ideal to be recovered in time future, with few attempts to mediate time in-between: the time when oriental stork apparently just vanished. Yoshito Ohsako (2011) writes: »Japanese people lived in harmony with the storks in agriculture, forestry, tourism, entertainment, local knowledge and so on in the past. The storks were considered as a part of the scenery and customs for the people«. This text, submitted for publication through Hyogo Prefectural Government channels, plays on clichés of Japanese living in harmony with the storks in a timeless past that anachronis-

tically includes contemporary institutions (agriculture, forestry, tourism), confusing emotive ideological fantasy with contemporary conservation efforts.

The fate of the Oriental stork would seem to hinge on two factors. First, the *scale* of wetland habitats necessary for successful breeding and repopulation of a species reduced to an estimated two to three thousand birds inclusive of all its known territories in East Asia. Second, various forms of cooperation with humans at all levels so as to not only refrain from killing the birds but to proactively engage in cultivating toxin-free wetlands that allow stork prey to form supportive ecosystems within which the bird (not to mention other species) may once again thrive. After all, a rice field grown with pesticides and fertilisers may look green but could be as helpful as a parking lot to the stork if biodiversity is inhibited. In Japan, governments sponsor programs to flood unused farmlands so as to create wetland ecosystems where storks can consume frogs and dragonflies; however, recent research shows that if repopulation is the aim and expanding wetland or rice fields into new territories for Oriental stork is the means, the scale must be larger and contiguous in order for successful reproduction to be expected.

The very modern ideology and language of the fiction of oneness of a Japanese people, tied to oneness with nature, suddenly grows correspondingly distant from an archipelago colonised by networks of trains and highways, urban sprawl, and chemical overuse destroying species in rural farming areas. Yet, as will be shown, some Japanese conservation professors and advocates cling to such ideologies, apparently not realizing their counterproductive reifications of wartime nationalist ideology (not ethnic or inherited exceptionality) that they have embraced.

Japanese (postcolonial) war machinic affective engagement with the world can be shown to constitute a conservative falling back on a simplistic ›nature-Japan‹ fusion, that is more accurately a mental subtracting of things western from the category of being Japan and being Japanese so as to produce a nature-Japan (my coinage) utopic fantasy. Deleuze and Guattari's conception of a »war machine« (Deleuze and Guattari 1987, Ch. 12) explores precisely such spatio-temporal distortions, the sort that occur when engaging a movement *toward* war, whether engaged or not, as in the pseudo-war of competition during the period of high-growth capital in 1960s-1980s Japan, and by analogy the neoliberalisation and austerity measures to follow. However

the nature-Japan discourse and practices may exhibit such war machinic affects and family resemblances. In terms of territoriality, the innovative means of sharing paddies with the stork suggests not simply a return to past practices but, quite to the contrary, an active posthuman conservation effort that modestly stands out against the European and North American nature reserves cultures, which are characterised by stark demarcations of areas absented of humans (Lorimer 2015: 163–64). Stork conservation efforts in Japan have avoided the »territorial trap« (Lorimer 2015:164) of conserving species and ecosystems by way of mutually exclusive human-nonhuman spaces. Still, within the context of extreme neoliberal protections of private (including corporate) interests, a more flexible »fluid topography for wildlife« (Lorimer 2015: 176) as a means of connecting stork populations with other species' needs remains limited. Though academics in conservation understand the necessity of »nonhuman mobilities« (Lorimer 2015: 177) and the need to cultivate many species, the overall planning methods stress limitation to the ›doable‹ within the existing demands of human cultures (farming, tourism, etc.) which inhibit and police the nonhuman despite the best of intentions. Part of the inherent limitation stems from being blinded by nationalist attachments for grounding conservation thought in irrational ›the west‹ versus Japan binaries.

Although conservation in part is about *moving* citizens into action, the actions that really matter are decisions made by farmers and government agencies to regulate practices that pollute or dry out wetlands and paddies or lead to the loss of tall trees or artificial poles required by oriental storks for nesting. *Conservation that focuses on big ideas risks drawing attention from the cybernetic entanglements that matter and that require some variety of posthuman compromise with the needs of other species*. One may at this point note how Claire Colebrook (2014), in a sweeping exploration of theory's relation to extinction, misreads posthumanism in this respect. Posthumanism may be understood as a discourse predicated on a revaluation of human hubris in human power or territorial relations with other species and their needs in various symbolic and material manifestations that recognise interdependencies.[4] It by no means »begins from an already integrated, dynamic and connected world« (Colebrook 2014: 20), but rather, following N. Katherine Hayles (1999), is a critical intervention itself always in a state of becoming. It is not a given. After all, it is ›post-‹ in the sense of ›no longer only‹ human, not simply in the sense

of being absolutely ›no longer‹ human. Colebrook seems to see posthumanism as abandoning all semblance of human agency, an extreme position not borne out in the literature either in posthumanism or conservationism, and certainly not in Deleuze and Guattari's philosophy of immanence that builds on territorial site-based compromises found in species interaction, not in self-effacement.[5] It is here, in their virtual-material coordinates (that in some ways replaces Cartesian coordinates of thought and being) that Japanese nature nationalism displays its wishful humanist entrenchment. Nature colonization only seems to be an inoffensive register for grounding nationalist projects, as it seems on the surface innocuous and to dovetail with the general ecological crisis precipitated by anthropogenic climate change.

The Investigative Committee on the Reintroduction of Oriental White Storks (2014) reports key successes attributed to local activities, including the increase of the wetlands along the Maruyama River from 82 hectares in 2004 to 127 hectares in 2014, approaching 1930 levels when the stork population was 100 (Investigative Committee 2014: 4, 12). They also document the adoption of organic farming as ›Stork Friendly Farming‹ (Investigative Committee 2014: 4) and various affiliated products such as the stork-branded rice labels associated with lower levels of pesticides or organic grains. But, the report also reifies abstractions derivative of Japanese nationalist sentiment, including the clichés that Japanese love nature (Asquith, and Kalland 1997: Ch. 1) and have a conventional longing for their rural hometown (even when most Japanese live and are raised in urban environments). These abstractions are presented repeatedly in the report by the Investigative Committee, a group composed primarily of university professors, who emphasise »an analysis focusing on ›sympathy‹ as the axis of the evaluation« (Investigative Committee 2014: 6). For instance, one text box titled ›Points of sympathy for seeking a better life‹ contains three numbered points: »Love of living creatures = Biophilia (Love of nature symbolized by Oriental white storks«, »Love of the hometown = Topophilia (love of a place »Toyooka«)«, and »Desire for a stable life« (Investigative Committee 2014: 6). These slogans are wishful thinking, perhaps not pertinent to the actual conditions in Toyooka, characterised by farmers abandoning their fields and residents relocating to urban areas. On the other hand, the report also emphasises more practical aims, such as raising the »level of recogni-

tion of the development of local communities living in co-existence with Oriental white storks« (Investigative Committee 2014: 11).

In a graphic rendering of Hyogo Toyooka Model by the same group of scholars assessing conservation efforts (fig. 1), despite the detail and complexity, one can see a process and relationality that promotes binary labelling in lieu of more intricate cybernetic engagement with posthuman force-struggles at play in situ. As this is primarily a local effort in Hyogo City and Prefecture, putting aside national government indifference today—contrasting with the roles of war-mobilization and national economic development in the decimation of stork populations—what appears in this graphic representation *seems* to be along the lines of Guattari's ecosophic (ecological philosophical) modelling of cooperative and mind-changing relationality that may proactively deconstruct capitalists' assumptions that ecosystems should serve profit-extraction processes and, to the contrary, transform human practices into more other-oriented and dynamically engaged ones. However, the capitulation to a neoliberalisation of ecotourist fixation on stork imagery (note the repeated use of the stork as »symbol« in a »process of awareness« and »a future image« and »visualization«) and affective production may endanger the well-being of storks if this symbolic chain of spectacular and fantastical imagery were ever to fail, to lose human attention. The use of the oriental stork to attract tourism and sell ›Flying Stork‹ brand rice suggests a reduction of the stork to a spectacle that in effect would contribute to passive reception of a purely emotive affectivity: a static image used in public relations campaigns and travel brochures as well as enforcing a ridiculous ecological engagement under the cartoon image of oriental stork. Then, storks again might suffer the same fate of extermination in the name of famine, war or economic competition (requiring, for instance, the use of pesticides that would destroy the stork food chain).

2 Temporality and Territoriality

Though the literature on the demise of the Oriental stork population plays down the role of militarism and war sacrifice in the decimation of the stork as an existential threat to wartime Japanese—as the bird has the habit of trampling rice plants—emphasis in terms of both activities and conceptualization of the reintroduction project is on

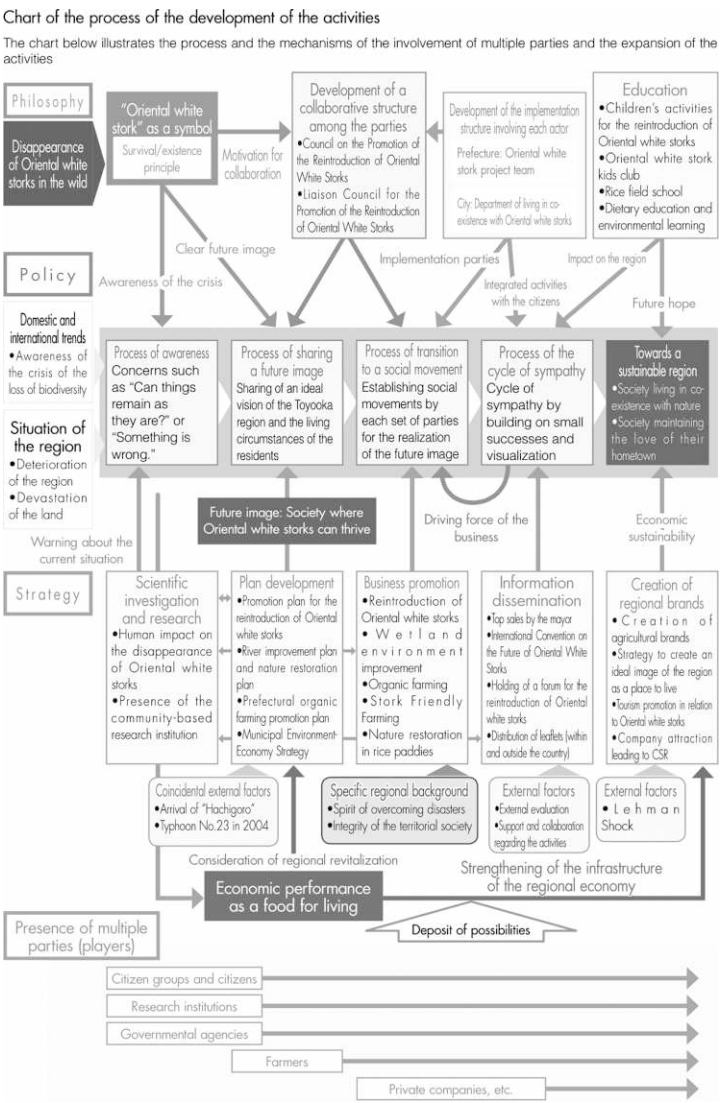

Figure 1. Excerpt (upper half) from *Assessment of the extension of activities for the reintroduction of Oriental white storks [summary]: The ›Hyogo Toyooka Model‹, which promotes local communities living in co-existence with Oriental white storks.* (Investigative Committee on the Reintroduction of Oriental White Storks 2014: 23).

altering human practices to make possible a transformation of the ecosystem as a whole. Oddly, it seems that the only untouched given of nature is the ecosystem of neoliberal capital itself. All else involving the storks is structured and planned as compromises. Thus one might better situate the reintroduction project as a manifestation of the reterritorialisation of the Capitalocene (Moore 2016).[6] Since the Anthropocene frames an age of human dominance, indeed the Capitalocene more precisely frames this less as an essential given manifest in the rise of humanity than as a particularly dangerous system within humanity's ever-expanding exploitation and occupation of the raw materials and biosphere of planet Earth.

As Christian Schwägerl writes (2014: xi), »Sustainability ideas come prepackaged with a set of imperatives. The Anthropocene idea works differently, but in a complementary way. It exposes us all and asks for responsibility«. In other words, naming an era of human domination need not consolidate a sense of capitulation to the inertia of a failed status quo; it could and should incite a renewed sense of determination and engagement in vigilant activities aimed at creative change. In other words, while planners and assessors of the plan highlight the laudable »Presence of multiple parties (players)« within the »Hyogo Toyooka Model« (see fig. 1), such abstract flow charts can be dismissed as bureaucratic simplification, reducing unknown sites of interaction and becoming to a capitalist model of investment and returns propelled and threatened by various contingencies. Core needs of the storks are not foregrounded as absolutes, while human institutions are.

3 Rewilding

Rewilding is not the same as sustainability. The former may imply a teleological movement and a return to an idealised period of an ecosystem in a given territory, say when the stork numbers were at a known peak. Sustainability maintains a more sensitive (and ecosophical) focus on the malleability of territories and actors themselves in dynamic relations within constantly changing situations. We may, as humans, a species capable of reflection and adaptation, situate the storks both in the Anthropocene and, in Guattari's sense, as part of the »artificiality« of the assemblages we always already inhabit. In Guattari's notes to *The Anti-Oedipus Papers*, he moves away from

both a Lacanian absolute of the guiding »petit objet a« (Guattari 2006: 152), a remnant of the traumatic real, and the capitalist reification of value in symbolic language—which he associates with »totalization [of signifying practices] cut off from all praxis« (Guattari 2006: 87). It should be pointed out, however, that Guattari sees »molar bodies« as subject to group practices while »molar alliances« of groups (under signs and rules) may suppress freer »molecular filiation«. In the realm of conservation, note how molar alliances and molecular filiation are challenged by the local Hyogo government website (and presumable locally-distributed) pamphlets that emphasise the importance of emotional shifts that correspond with behaviour shifts, both of which would assist in the survival of the oriental stork. Thus, the conservation efforts lose focus on the application of research findings and therein lose focus on the *needs* of the oriental stork. Instead, in effect, focus on the *feeling* of doing something good for others as other is underscored. This is not to say filiation is nil, but just that it is overshadowed by »molar« group practices in concert with the form that oppresses the oriental stork: capitalist and other human demands for territory and, more specifically, consumerist subject models of identity, rather than posthuman (inter-dependent) individuation[7] that would sustain a constant renegotiation of the human-stork territorial needs.

Guattari's *The Three Ecologies* expands his earlier emphasis on transversality in psychiatric counselling, removing the doctor as authority figure and letting social interaction develop spontaneously to ecosophy as an ›ethico-aesthetic‹ approach bringing into relation »social ecology, mental ecology and environmental ecology« (Guattari: 2000: 41). He locates in environmental problems »a certain incomprehension and fatalistic passivity […] among both individuals and governments«, accepting »negative developments […] without question«. Representative of his critique of capital flows, he asserts the need for praxis in these three ecologies—a position that is helpful in situating Japanese conservationists, who range from nationalist ›nature-Japan‹ advocates to pragmatists.

But, in addressing problems of ideology in Japan, one may further turn to Guattari (2015: 106) who focuses on the need for changing how people think:

> ecological consciousness ought not to be satisfied with worrying about environmental factors, such as atmospheric pollution, the predictable conse-

quences of global warming, and the extinction of animals; it also ought to bear upon ecological devastation in the social and mental domains. Without transforming mentalities and collective habits, there will only be ›remedial‹ measures taken concerning the material environment.

Thus Guattari is helpful in understanding the problem of creating conservation models that are both pragmatic in their effectiveness and capable of altering human mentalities, in effect altering practices and conceptual individuations so as to create sustainable ecosystems.

4 Cybernetics, Rewilding Fantasies, and the Territoriality of Performative Ontologies

Although *cybernetics* typically refers to computational systems as applied in explorations of human-machine affinities and barriers between organic and artificial life or intelligence, in this work it is used to refer more generally to the dynamism of cross-species communicative interaction or the need to see beyond the nominalization of cybernetic organisms into essentialised objects or subjects. This follows approaches first explored in second-order cybernetics, which focuses on communication modelling, not merely machine interfaces. Such cybernetics, as Andrew Pickering (2010: 380) points out, engages the framing of ontologies in terms of conjunctions of complex »systems—human, nonhuman, or both—that staged their own performative dances of agency« so that »one can read cybernetics as ontological theatre«. Then, if we understand the ecosystem of the oriental stork in Japan as always partially unknowable »exceedingly complex systems« in which humans may only engage in interactive »performative dances of agency and findings-out« (Pickering 2010: 380), cybernetics becomes a helpful field of attention for situating the de- and re-territorializations among species in specific contexts.[8]

Cybernetics helps clarify the territorializing relations between humans engaged in (or opposed to) conservation policies and the storks, as well as numerous other species and material conditions that factor into their shared systems. Whereas *rewilding* suggests an infinite nature, the communicative relationality of species in a cybernetic model maintains the possibility of the knowability of a local event, while sustaining as much complexity as is necessary. Humans and oriental storks form mutual dependencies: humans use storks to draw tourists and sell ›stork-friendly‹ (mostly organic) rice, while

storks require that humans stop using pesticides in the paddies and keep them flooded as long as possible year around in order to subsist if not thrive. We know that the territorial criteria for its continued survival are very specific: The oriental stork is a »wetland-obligate species« that »nests on tall trees and artificial structures such as electricity pylons and feeds on fish and small animals in open, usually fresh water wetlands, and occasionally coastal tidal flats« (Liu et al. 2008: 292). These systemic requirements reflect divergent virtual codes immanently manifest separately in humans and stork. Abstract capital is produced so that human economic systems remain balanced from the perspective of existing human values while the stork's genetically coded needs are also met.

It is in the writings of Deleuze and Guattari that the impact of the cybernetics-inspired de-centering of subjects and exteriorization of knowledge and processing of autopoietic worlds become especially useful, for they situate machinic relationality between species. Their work—especially that in the period from *A Thousand Plateaus* through Guattari's work on ecosophy—provides numerous in-roads for rethinking human relations with other species such as the oriental stork. Although much of the work relies on discussion of liberating human desires, so that Guattari's psychiatric background in some ways seems to inhibit the realization of a rigorous inter-species model of communication and understanding, indeed even transversality—entrenched as it is in the anti-psychiatry movement model of mutually de-hierarchised sharing (talking and listening)—might be applied to develop a better understanding of human-stork relationality in the case of Japan.

In *A Thousand Plateaus*, Deleuze and Guattari explore various relations between understanding human-nonhuman territoriality. In addition to their more well-known preoccupation with biosemiotic symbiotic relationships between the orchid and wasp or fly and spider, outlined in terms of genetic codes and observable behaviour, they situate assemblages of a less harmonious sort. This other work proves helpful in understanding the precarious position in which endangered species are placed due to human behaviour. Such »combinations are neither genetic nor structural; they are interkingdoms, unnatural participations. That is the only way Nature operates—against itself. This is a far cry from filiative production or hereditary reproduction« (Deleuze and Guattari 1987: 242). Their work on territoriality helps highlight materialist accounts of force and territorial interaction of

species in the blind spots of neoliberal societies. They write: »A territory borrows from all the milieus; it bites into them, seizes them bodily (although it remains vulnerable to intrusions). It is built from aspects or portions of milieus. […] It is by essence marked by ›indexes‹, which may be components taken from any of the milieus: materials, organic products, skin or membrane states, energy sources, action-perception condensates« (Deleuze and Guattari1987: 314). They define territoriality not simply as where physical occupations of places and spaces are present, but as a multifarious arena in which claims to territoriality are presented in relation to other places and qualities that define them.

By suggesting that cybernetics may itself serve as a critical platform for analysing the state of conservation efforts, I mean to build on N. Katherine Hayles's (1999) discussion of incorporating practices that stand apart from discursive practices in the production of knowledge. When the storks were resettled from Russia into the Hyogo reserve park and surrounding citizens cooperated by changing their farming practices, reorganizing irrigation to maintain water in paddies for longer period and allow for species of fish and frog to flourish for the benefit of stork, through new human practices and new norms became incorporated knowledge. The irrelevance of the nature nationalism in these re-inscriptions of discursive knowledge—as these new practices elude »conscious view« and redefine »the boundaries within which consciousness takes place«—may be understood as »new technologies that affect how people use their bodies and experience space and time« (Hayles 1999: 205). In this sense, foregrounding Deleuze and Guattari's cybernetic roots[9] allows for an even more critical grasp of territoriality in Japanese conservation efforts, and allows us to see how Japanese nationalism, although marshalled to promote big projects that have even been incorporated in international United Nations programs—such as the Satoyama Initiative[10]—would distract from the systemic (autopoietic) needs of nonhuman target species to which attention is being paid. As Hayles (1999: 137) writes, »Each living system thus constructs its environment through the ›domain of interactions‹ made possible by its autopoietic organization«. By focusing less on overzealous grand narratives of ›oneness‹ with nature—far too general to be of any practical use—cybernetic functionality (assessed in relation to sustainability issues) and beneficial practices to incorporate make a difference due to pragmatics, not ideology. And this forms a critical difference that I argue may be an

asset to conservation itself. Just how such a shift would be implemented is beyond the scope of this paper.

5 The Deterritorialising Clatter of the Oriental Stork

One aspect that Deleuze and Guattari mention does not fit the neat songbird territorializing explored in *A Thousand Plateaus;* however, it does shed light on the interrelation of charismatic species and human cultural *changes* in Japan. Rather than rest on one's laurels under the monolithic idea that all Japanese live naturally with nature (if only the west had not contaminated Japanese beauty),[11] one can see the ancient poetry canonizing one bird while omitting another as setting up an aesthetic hierarchy that contributed to the extinction of stork. While one can blame the west, it was Japanese participation in imperialism that deserves the actual credit for decimating stork populations; during its expansionist period, storks were sacrificed in order to guard rice production or due to the felling of vital tall trees to support the war effort. Moreover, western conservation movements were originally joined by Japan and not the reverse. The idea that the stork is worth saving itself owes a debt to a reversal of the non-aestheticising history of the oriental stork. For lack of a better word, its ›birdcall‹ is unbecoming, in comparison to a staple of Japanese poetry and art: the Japanese bush warbler *(Cettia diphone;* 鶯 *uguisu)*, whose call smoothly and dramatically builds in volume (and with varied pitch, not shown) so as to endear itself to poets in imperial anthologies dating back at least to the early tenth century. The clattering of an oriental stork is a monotonous sound historically not lending itself to the realm of aesthetic allure and production; it has been largely ignored. Compare the modulation of their calls in figures 2 and 3.

In *The Three Ecologies* Guattari provides a sketch for how to disentangle human subjectivity from its central role as mediator of worlds while retaining a role for human responsibility by way of communicational entanglement across discourses, what he calls ›semiotic regimes‹ of the economic, the juridical, and the techno-scientific varieties (Guattari 2000: 48). Guattari argues that the binary worker-corporation relationship itself is captive to a fictive division parallel to the division of human and non-human, master and servant, while actually »the economic-ecological vectors of circula-

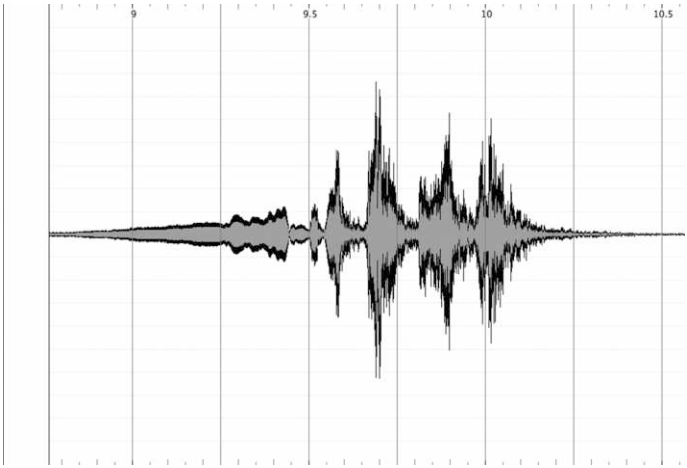

Figure 2. Call of the Japanese bush warbler.

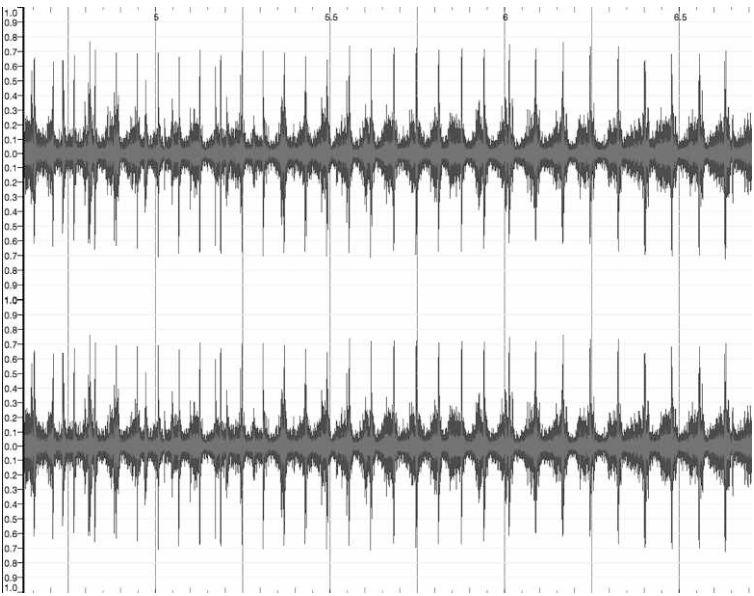

Figure 3. Clattering of the oriental stork.

tion, distribution, communication, supervision, and so on, are strictly situated on the same plane, from the point of view of the creation of surplus value, as labour that is directly incorporated into the production of material goods« (Guattari 2000: 49). Taking this model into the current eco-materialist turn toward acknowledging the alterity of non-human presences rather than a containing anthropocentric subjectivity, Guattari provides a rough model for disentangling the human economies and cultures not only from the *cul-de-sac* of human subject-production but from the needs of the nonhuman, which may then be distinguished and foregrounded. Thus endangered species and their precarious situations—often due to compromised territorial claims—may be mapped to the production of these blind spots in human awareness concomitant with human cultural and economic production.

6 Fallacies Concerning Japan and ›Nature‹

A favourite writer of the blame-the-west school is Watsuji Tetsurō, famous for his monograph *On Climate* (風土) that essentialises cultures as products of climates. In the Kyoto School (of philosophy) others engage in western treatments of Buddhist issues and develop hybrid discourses firmly within the frame of western philosophy but with the intention of overcoming it on ›Japanese‹ or more generally ›Asian‹ terms.[12] It is more the *intention* of leaving the west and ›returning to Japan‹ than the *embodiment* of such an aim. Similarly, there is a tendency, as Richard Reitan (2017) argues, for extremely conservative ecologists in Japanese to identify a problem »primarily in idealist rather than materialist terms, as a problem of ideas and beliefs rather than material conditions«.[13] The second overarching fallacy of this ecocriticism was perhaps influenced by various Kyoto School philosophers, who in turn were influenced by Hegel, Bergson, and various phenomenologists: the idea that human intentional constructs can perform superior forms of ›unity with nature‹ than contemporary discourse in posthumanism, which takes a more materialist approach to the inter-dependencies of species (including the human) in a more objective and yet engaged way.

Professors and directors of various museums and conservation as well as religious organizations contributing to the Biodiversity Network Japan's (pre-Fukushima) collection of essays, unconsciously

(one would hope) include nationalist works reifying wartime clichés. For instance, Kunio Iwatsuki (2008: 10), Director, Museum of Nature and Human Activities, Hyogo and Professor emeritus, University of Tokyo, resorts to conflating economic and biological materialism, writing:

> Our extreme materialism often leads us to evaluate every material in its monetary value. In this way, it is rather difficult that all people understand the meaning of sustainability of our only Earth. We should be respectful to the donor of the materials to support our lives and thank nature as in traditional Japanese culture. On the basis of this idea, boys and girls can understand the worship of nature and will eagerly contribute to sustain the Earth.

The general fallacy may in part be attributed to confusing being primitive—a state in which *all* peoples are indigenous peoples and live off the land one way or another with minimal governmental structure—and being Japanese of a modern national state based on inculcated strict public order. Surely a modern person cannot claim to be acting on a Shinto or animistic instinct, since what is needed is not (or not only) a religious affect but a rational one capable of rethinking inter-species' needs and ecosystemic possibilities of complex and multiple systems.

As for the division of spiritual and material, one can point out, as Julia Adeney Thomas shows (2001: 181), that such putative spiritual and nature-bound Japanese culture »is quite plainly not a traditional notion. It differs markedly from the universalism of most Tokugawa and Meiji conceptions in claiming that there is a form of nature unique to Japan«. Thomas (2001: 181) shows how wartime apologists, both »scholars and bureaucrats […] created this image [and] sought to root it in antiquity by scavenging the past for examples of Japanese devotion to nature« so as to »craft a convincing aura of continuity«, a »vision of a Japan dominated by age-old *Gemeinschaft (kyōdōtai)* intimacies« and »immemorial harmony with nature«. This critique puts into question whether legacies of wartime ideology can or should be martialled in conservation efforts. Can such a situating of an anachronistically retrofitted tradition, with respect to human-nature harmony, address the deeply individualistic ideology of neoliberalism prevalent in Japan today? How can bland appeals to abstractions such as spirit and general animistic practices do more than preserve the ruling neoliberal order? In light of Fukushima, one cannot simply ignore the business-as-usual lack of dissent. Material concerns would

seem to matter more, not less, and nature merely become another territory to colonise. Discourses on Japanese race (a direct result of wartime propaganda) are even reflected in stork-reintroduction studies by way of its implicit emphasis on species lineage purity.[14]

To his great credit, Hidemichi Ootagaki (2008), Director of the Oriental White Stork and Human Coexistence Department, Toyooka City, in the same Biodiversity Network Japan pamphlet, by contrast refrains from entering into the fantasy of disentangling Japan from the west in nationalist restorations of pre-westernised Japanese views of nature, which are themselves anachronistic constructs. Nevertheless, his argument focuses on integration of stork needs with human economic needs, thus acceding to the neoliberal model and offering no critical resistance to its systemic antagonisms towards non-profitable nonhuman species needs. In other words, there is no vision inclusive of non-charismatic species conservation projects.

7 Conclusion: After the Anthropocene

The human encoding of a self-recognised species-specific transformation of the planet earth as the ›Anthropocene‹ has the misfortune of underscoring our differentiation from other species as if it were a given state of being preeminent rather than a precarious process of multidimensional entanglement. In fact, it might be more helpful to call it the ›post-Anthropocene‹ since at the very point of approaching such human mastery of the planet—through digital, archival, computational, chemical, nano, and genetic technologies that allow the rethinking and modification of matter itself—humans not only demonstrate control over other species but become subject to being controlled by our creations and transformations. The monstrosities released form our new ›nature‹, or cybernetic entanglements and dependencies for food, air, sustainability of ecosystems, and so on. That is, ecosystems are (except in controlled laboratory conditions) always subject to unforeseen inter-species as well as bio-chemical events. Multi-directional communication must define any serious manifestation of the Anthropocene; it behoves humans to watch, listen, measure, and learn, not merely to construct tolerable habits for a putative ›rewilding‹.

Such post-Anthropocene interdependency would undermine individuated relations between organisms, whether basing relationality

on categorical definitions of functions or material controls (vectors of force). Thus, if any postnatural rewilding is to take place after the loss of the fiction of pristine nature, it must include us, but not only us. Rewilding in the post-Anthropocene might mean the dynamic application of all our technological prowess poised in an overhuman cultivation of sustainable ecological systems. Surely, we—at 7.5 billion—could not simply all retreat now to an indiscriminate wild to live in trees in some ›deep ecological‹ entrenchment. Clark (2015: 61) locates in *fire* a technological development »lighting a space against the dark« that suggests both a turning point, and point of no return, in its refusal to give up technological conveniences. It is at this juncture that one may consider how human actions have first led to the local extinction and then to the reintroduction of the oriental stork in Japan. At the cusp of the post-Anthropocene, with its *uncontrolled* dialectical entanglement among species, posthumans would subject themselves to the species they choose to conserve, operate following their *jouissance* so as to save some species and ignore the threatened status of others. Are not technologically sophisticated Japanese, by no means unified, already making their decisions, that the preservation of capital is of supreme importance, and species may be allocated according to economic feasibility? If so, it would partially explain the continued hunting of whales as well as the slaughter of porpoises and dolphins (McCurry, 2014) by some Japanese fisher persons who see them as competitors if not always as lucrative prey.

As Toscano (2009: 396) compellingly argues, Gilbert Simondon provided Deleuze and Guattari with a means of presenting class antagonisms as distinct decoded flows (of money-capital and labour) that form an irresolute social body. As Guchet (2012: 83) clarifies, part of Simondon's response to cybernetics entailed a redefinition of individuation as such a *process* involving human, nonhumans, and machines. His approach exhibits a »refusal to cut off the human from life in general« and begins with processes of partial individuations of species so that »the individuation of the living being and the constitution of its milieu are contemporary and complementary«. Inter-species relations exist (like labour) apart from capital flows and the fiction of unity with nature. Based on racialised myths, this bifurcation inhibits clear, active de-/re-territorialisations of human-nature relations. The Japan-nature fiction continues to subjugate lands under the guise of nationalist impulses, yet with increasing responsiveness to at least one species, the oriental stork. This human-stork interaction

asserts an entangled individuation (in Simondon's sense) that may seem to some to support Japan-nature while to others represent what is in effect a posthuman achievement, a new bar for inter-species cooperation within a process of becoming visible in light of the tilt toward biocentrism in Deleuze and Guattari's (1987) approaches to territoriality. What united Japan, the constructed territorialisation of the Japanese archipelago as linked with a unified Japanese race, was also linked to a postwar demilitarised offspring of nationalism in the form of a nature-Japan, which offers the added touch of modelling an implied innocence rather than the countenance of a just-mobilised nation.[15]

Moreover, with the rise of the individualist neoliberal model, citizens in Japan are pitted against corporate interests and more perniciously corporate *models* of how force-relations are mediated and resolved. Local governments themselves must exploit revenue opportunities, so that the stork-reintroduction program becomes a tourist attraction. Civic figures involved in the stork reintroduction project publicly worry over maintaining the local edge in stork-reintroduction leadership in Japan, not to be outshone by another wealthier or savvier prefecture or city in Japan also interested in marketing stork tourism and brands.[16] This attitude reveals how humans are already coveting control over areas not primarily in the interest of the rewilding of storks but rather in initiatives that are founded in competitive inter-human territorialisations of wetlands and paddies.

The connection between the ideological supporting discourses in Japanese state-formation and engagement with international capital flows—rarely dwelled upon in ecocriticism—is habitually self-censored from most documents and continues to blind inter-species understanding on the part of humans. What thus needs to be highlighted is that an effective alliance between nationalist nature-Japan advocates and the neoliberal hegemony suggests that, barring a monetary profit margin, it is difficult to see how pragmatic changes resulting from conservation efforts could take place *en masse*.

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Notes

[1] The list offered in the assessment project includes: The Agency for Cultural Affairs; Ministry of Land, Infrastructure, Transport and Tourism; Ministry of Agriculture, Forestry and Fisheries, Ministry of the Environment, Hyogo Prefecture and Toyooka City.
[2] The missteps in building and managing the Fukushima nuclear reactors, including, in brief, building reactors on an underground stream; not heeding warnings predicting exactly what happened five years before the disaster; not evacuating affected areas immediately as public relations trumped living beings in the area, all are well-documented and common knowledge.
[3] See Brink (2014).
[4] To be clear, posthumanism is not related in my ken of use with transhumanism, which focuses on improvements to the human by way of genetic and prosthetic upgrades. However, aspects of the posthuman in the sense of no longer humanistic or focused on human cultures may occasionally overlaps with issues raised (if only by way of a deconstruction of related assumptions).
[5] Colebrook (2014: 20) writes that »all the posthuman celebrations that there is no such thing as ›man‹ and that we are really always already at one with one web of life,

we might ask how it is possible for humans to have this panicked (or joyous) apprehension of self-loss«.

[6] Moore (2016: 6) writes: »the Capitalocene signifies capitalism as a way of organizing nature—as a multispecies, situated, capitalist world-ecology« and »and the era of capitalism as a world-ecology of power, capital, and nature«.

[7] See Simondon (1992: 300) on »the process of individuation rather than the process of individuation by means of the [preconstituted] individual«.

[8] Although John Marks (2006) argues that cybernetic models are too limiting for engaging materiality in the senses Deleuze and Guattari explore, he focuses on human interaction in complex systems that nevertheless share human expectations, whereas inter-species territoriality may indeed benefit from cybernetic metaphors and models of mutually unknowable complexity.

[9] One of most compelling engagements with the cybernetics in Deleuze and Guattari is found in Toscano (2009).

[10] The Satoyama Initiative, or the International Partnership for the Satoyama Initiative (IPSI), is an ecological model based on the promotion of productive human and nonhuman species cohabitation and uses of land. In Japan, it invokes an image of mountain hamlets with rice fields, whereas in other countries it simply suggests rethinking human-environment configuration along less exploitative and more co-productive models.

[11] If may be helpful to point out that since the Meiji period (1867–1912) official and unofficial formulations for the coexistence of west and Japan included slogans such as ›Japanese spirit, western technology‹ *(Wakon-yōsai)* that still leave their mark on commonsense in Japan. Prominent offshoots to appear in cycles later include ›returning to Japan‹ *(Nihon e no kaiki)*, which martialled broad modernist attempts to recover some form of residual Japanese culture and ethics lost during modernization, precisely at the time approaching and during the Pacific War. To complicate matters, the pattern for such nationalist formulations began in the seventeenth century, when Japanese turned to ancient Japanese texts to rediscover a lost Japanese culture before the putative deleterious influence of *Chinese* writing and culture.

[12] See J. McRae (2014).

[13] For an argument exposing fascist elements in ecological thinking today in Japan, see Reitan (2017).

[14] See Murata, Satou, Matsushima, Satake and Yamamoto (2004: 554).

[15] Note the wording in an abstract of a paper cited above: »The development of the Japanese Archipelago was followed by the concept of harmonious co-existence between nature and mankind. However, this traditional concept has now nearly been forgotten even by the Japanese themselves. To establish a sustainable use of resources, such a concept should be understood more widely and its underlying idea should be remembered globally« (Iwatsuki 2008: 4).

[16] The Investigative Committee on the Reintroduction of Oriental White Storks (2014: 27) writes: »With the expansion of activities across the country, there could be concern that the originality and leadership of the activities in the Toyooka region may become overlooked. As a region with a history in relation to Oriental white storks, the parties in relation to the Toyooka region must continue to carry out activities towards higher goals and make efforts to remain the leading communities involved, suggesting a human pride that would place civic preeminence over the welfare of the storks.