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Black Magic: Fragility, Flux and the Rewilding of Art

To grow nature is to encourage more of it. That's not easy to do. More nature means less control. Less control requires a certain kind of faith ... do you see the natural world as needing modification and improvement...? Do you view humans as a small part of an unbelievably complicated and fragile system, or do you view us as commanders?

Barber (2014: 19)

Introduction: Ecology and Art

The recent "Rewilding" ecological movement has proposed radical new ways of conceiving of the care for the environment, challenging the "bottom up" and anthropocentric approaches favoured within much current environmental thinking. In rewilding experiments, rather than target the careful nurturing of fragile and endangered flora and fauna within an environment, or the large-scale breeding and reintroduction of species or replanting of forests, or focus on close supervision and regulation by trained park managers, "keystone species" such as wolves, bears or beavers are introduced into degraded environments. This has been shown to have a surprisingly far reaching impact on an ecology's overall "health," affecting all aspects from other predators, large and small fauna, and the development of microclimates and diversified flora, through to soil and water health (Monbiot 2014: 81, 84-86). Rewilding emphasises the potential of dynamic and complex ecologies with intensive capacities to collectively experiment with flux. This contradicts the perceived environmental necessity of ongoing outside intervention to predetermine acceptable outcomes (83), which places value on system stability (denying the very fragility that may in fact be a key to novelty). Here, rewilding is an ecological practice

squarely addressing the field—not through control but through an understanding of the capacity for self-organization that exists within complex systems in certain states.

In considering instances of rewilding and its radical effects on ecologies—interesting in themselves as they are—I want to here interrogate what might be learned from these experiments. Aside from the wonder at these displays of the force and power of “nature” inspire (with potentially romantic and sublime aura), can these events be thought in a broader sense, beyond the detail of wolves, beavers and literal environmentalism, and thus could this concept have potential for a “rewilding” of art? That is, if we are concerned with a kind of art that might be thought of as participatory in an expansive sense of the term—one that involves more than a simple conversation between a participant and an object, or between two or more already composed and stable participants—an art that we might even choose to call “ecological” in its encouragement of a complex set of relations forming and reforming immanently between, within and across various components of an event, can this type of “ecology” be rewilded? Can indeed, “ecological” art be more than just a metaphoric label, loosely applied as the term “relational” often is, to a broad range of practices that think beyond the object¹—can an art event in fact become a literal intensively organizing dynamic system?

How can we think or push participation outside of investments in control, identity and outcomes and into a more radical concern for the field *in its ongoing emergence*? By this I mean that to approach a “wilder” state, perhaps such art needs to think more about enabling the conditions for emergence of complexity—the prehensive capacities of ecologies to intensively evolve their own motivations or, as Erin Manning has termed them, their “minor gestures” (Manning 2016: 1). This, I would argue, might be linked to the concept of “immediation”: a concern for the primacy of the event, for “affective field[s]” that generate “an immediate in-bracing of multiple bodies in an event and in differential attunement” (Brunner, *Immediation* 1, 276). As with processes of rewilding, processes of immediation might be concerned less with linear cause and effect and more with the excess of any direct causality (that must always also be in play), an excess arising from “the complexity of those relations, from interference and resonance effects between the formative factors” that creates a “margin of play in an event” (Massumi, *Immediation* 1, 281). That is, as I will argue, it is not exactly the wolves or beavers themselves who instigate these dramatic shifts in the ecological

health, but the inventive, forward looking trans-subjective events that experiment with collective individuation-ing (wolf-and-deer-and-grass-ing, and so on) that continue to transduce forces flowing through the field, immanently create new relational complexities.

Here I attempt to extrapolate abstract principles from rewilding by considering such systems as examples of state systems, organized through intensive differentiation (DeLanda 2002: 14-16), in order to bring in research from the physical sciences on how in certain conditions such systems move towards novelty rather than entropy: studies on self-organizing criticality, far-from-equilibrium states and radical cybernetics concerned with expanded dimensional capacities. I then speculate on what might the role of an artist be when we attempt to think the potentials and tendencies of a relational artwork through enabling such dynamism of the field to be foregrounded? What might such an art look like and what intensive motivations would it attend to? What transindividual collaborations might evolve? Here this is thought through an examination of Cat Jones' *Somatic Drifts V1.0* a work that grafts human and plant life into new collective experiences: a strange hybrid of therapy, participatory art and black magic. For, as much as rules or conditions can be abstracted and quantified, both rewilding and Jones' artwork remain also magical: mysterious, alien and fragile, operating beyond the reach of the human participant, instead entertaining on an environmental scale, flowing through and around the human, with little concern for discrete boundaries. To paraphrase Gordon Pask, when we think on an environmental level, we must think not of systems composed of discrete things with inputs and outputs through which they communicate, but must recognise that the magic all happens on the plane of the field: as system level composition of potentials (Pask cited in Green 2001: 681).

Black Magic

Since ecstasy is a communication with what is sacred, remote from ourselves, it is a communication with others too. There is no such thing as private ecstasy.

Lingis (2011: 169)

What is black magic? Firstly, it is a *practice* rather than a thing, an adventure-into—rather than a method—an ecstasy of fields drawn into relation. Black magic is conjunctive, a practicing of intersubjectivity, an inter-specialization—a dislocation from a body that implicates “not one but several bodies and energies flowing in and out of one another across borders” (Taussig 2006: 141). It is flux, transition: an encounter with a wilderness that is the feeling of a “more to come” rather than an arrival.² It is a wilderness that comes from no longer being a thing, but the flow between things, their circulation, the force of their becoming-other. This is a wilderness that is as much found in one’s own black heart as in the world, in a speculative moving beyond oneself—a transindividualization in the midst of individuations³—self organizing, metastable, autonomous and anonymous: a collective immediation with the event, the wilderness of the field.

But as well as enacting this flow, black magic is also a game or play that is a fluidity between belief and scepticism, a trickery that gains its strange power through the display and revelation of deception, through making perceptible the “fault line” in and between such distinctions. That is, it enacts a continuous movement between treachery and its reveal that is the shaman’s technique: to involve confessions of fraud whilst inventing new trickery to confound and question this exposure, to hide and reveal simultaneously without resolution (Taussig 2006: 144). This is a fragile and paradoxical event whose magic is in the flow of ideas and other energies, in the *event itself* becoming “plastic and protean,” suspended in “becoming other” (140).

Rewilding

Instead of finding stability and harmony wherever we look,
we discover evolutionary processes leading to diversification
and increasing complexity.

Prigogine (1980: 2)

George Monbiot’s book *Feral: Rewilding the Land, Sea and Human Life* charts a series of instances in which the return of a top predator to an ecosystem enlivens and reinvigorates the environment far beyond linear causal chains, and he makes the argument that the loss of such “keystone” species (both extinct mega flora and existing species such as

bears, whales, wolves and so on) is at least as responsible as a general loss of diversity and habitat for the degradation and entropy of these once dynamic natural systems. The controlled reintroduction of beavers into certain rivers in Scotland and Wales,⁴ for example, changed and most importantly, diversified the surrounding area, creating variations in the river flow through the elaborate lodges they built, ditches and hollows in the banks, the felling of trees to create surplus wood and cleared areas, and through all this created habitat for a much wider variety of wildlife including fish, bats, ducks, voles, insects and soil microbes, as well as reducing flooding and soil loss through erosion (Monbiot 2014: 77-82). Similar reinvigoration was seen when wolves were reintroduced into Yellowstone National Park, where their arrival reduced the deer and antelope numbers that had led to erosion and modified the grazing animals' routes, allowing tree regrowth, the return of numerous species dependent on these forests, including bison, beavers (with accompanying diversity in river ecologies as above), bears and small mammals. This continued throughout the system down to soil health and nutrient distribution, with some areas now being intensely fertilized by the deer in their restricted safe havens, while other areas received less nitrogen, all allowing a greater diversity of fauna to flourish across the newly variegated terrain. As Monbiot argues, previous attempts to curtail the damage caused by deer through culling not only failed in this aim, but also provided none of the flow-on benefits the wolves provided (84-86).

The key to this success is not a move from bottom-up to top-down planning or organization, as the success of the wolves might imply. Top-down organization is highly problematic, it might again suggest anthropomorphism: that humans, as the top of the food-chain, are the necessary component, or worse, neo-Darwinism and a capitalistic "trickle down" economic model that sees the free market as the most dynamic and viable system.⁵ Rather, looked at as a system-level problem, one can see that the wolves add or motivate key factors in the "system" of the wilderness. Firstly, one could say that they add "dimensions" —new levels on which interactions can take place between the components, new *system level* capacities for interaction, beyond the individual capacities of any one component. Secondly, they help to activate a metastable system, where there is a greater tension or competition for resources and thus components of the ecosystem are subject to multiple complex forces in this competition that allow nonlinear shifts to occur: a far-from-equilibrium system. Rather than

attributing the new dynamism to any one species, this abstraction of the events might suggest these more promising and useful explanations that emphasize relationality, complexity and flexibility as the root cause of the newfound health or wilderness. Such system-level complexity is the third factor in consideration, the evolution of self-organizing capacities that are achieved at a point of system criticality.

Dimensions & Trophic Diversity

Unity is not uniformity, but is coherence and diversity
in collusion

Pask in Frazer (2001: 645)

As Monbiot points out, clearly the success of rewilding is based on its emphasis on process rather than outcome (thus it is not really about “conservation” at all), emphasizing the necessity of promoting dynamic and deeply interactive environments (2014: 83). Monbiot argues that such systems are activated by an increase in “trophic diversity” leading to “trophic cascades.” These, he states, occur when the animals at the top of the food chain—the top predators—change the numbers not just of their prey, but also of species with which they have no direct connection. Their impacts cascade down the food chain. (84)

The use of the term “cascades down” here perhaps demonstrates something of a misunderstanding of non-linear events and the special system-level capacities that might override local causalities. Greater trophic diversity, being an increase in diversity of potential energy-exchange relations, is however clearly a key factor (83).⁶ When, for example, a particular animal increases the number of food sources it can exploit, and in turn can be exploited as a resource by a larger number of other components of the environment (remembering that fauna are, eventually, food for flora as much as vice versa), the overall entanglement of components, and therefore the system’s flexibility and adaptability is increased as is its heterogeneity.⁷ This increase in ways in which an environmental component⁸ relates to the world around it might also be thought of in a larger sense as an increase in dimensions that, in Peter Cariani’s terms, enlarge its “life-world” (Cariani 2008: 3).⁹ Dimensions might be thought of as capacities for a component’s interaction and differentiation within a system, its

expressive possibilities, or, as Manuel Delanda states, “the number of relevant ways in which [a component] can *change* (these are known as [a component’s] *degrees of freedom*) (DeLanda 2005: 13). A component species with increased dimensional capacities has a greater number of potentials that it is attracted towards, the conflict between these “attractors” —future states—charges greater potential differentiation (that is, differentiation): more (and more diverse) processes in which the species can engage with the field. Thus thinking in dimensions is not, as Delanda points out, about the consideration of individual static properties of objects or components, but instead a way of thinking the potential complexity of a system in process (14).

At its simplest, whilst the sheep or deer, for Monbiot, potentially erode and drain their environment of energy by interacting in a relatively mono-dimensional manner (eating everything in their path indiscriminately), the beavers eat some wood, leave other species alone, create eddies, pools and banks in rivers that once flowed relatively uniformly. In turn this creates new opportunities and problems (dimensions or capacities) for all that they interact with, and cause diversification (a particular tree species can grow here but not there, a fish can breed in this part of the river but not that section, and so on): there is a cascade, but not necessarily of direct relation, rather of exponential system-wide complexity seen as both ongoing positive and negative differentiation, with the system held in states of process or immanent states of development. These potentials are forward driving, if sometimes contradictory on the level of individual actualization, held together on a virtual plane as the undifferentiated potential of the system—as a multiplicity. As a multiplicity, this potential is without essence, it has no “unified and timeless identity” (DeLanda 2005: 26). There is no essential “wolfness” to perform, there is what the wolf does, how it interacts—what it is in a process of becoming—and this is always subject to potential change, a genesis immanent to the genesis of its world and organized through the negotiations between the evolving dimensional capacities of the wolf and the emergent dimensional capacities of the field of which it is a part.

These additional dimensions add new planes in which the components can potentially interact, and the ability of a system and/or numbers of its components to develop new dimensions gives it a level of ‘autonomy’ as Cariani terms it, as new intensively organized rules, actions and potentials can evolve (2008: 3). Dimensional change problematizes existing relations: they require a new flexibility—a new immanence to

relations—in order to survive, and the event that develops is this very exploration of the field’s new capacities to intertwine. Increases in dimensional capacities then might be the first step in creating a more complex system that is *immediating* (an ongoing event of exploration/ evolution of field or system capacities) rather than *mediated* (a renegotiation between components).

As in some of Gordon Pask’s experimental art/science cybernetic ecologies¹⁰, the dynamic wilderness post-beaver/wolf reintroduction is dynamic in a radical way because it does much more than encourage further individuations of a species’ capacities. At a system level it goes back to a step before this stage, and demonstrates a capacity to autonomously develop the potential and motivations out of which such special individuations (and differentiations) might arise—to develop new dimensions. As Cariani terms it this is a truly “creative” rather than “adaptive” emergence: less concerned with creating new combinations of interactions within available dimensions as the former is, and more with the “expansion of the possibility space” (2008: 9).¹¹ This, I would argue is at the basis of the intensive dynamism of rewilding, the opening up of new dimensional spaces that is a charging or priming of the ecology’s capacity to develop “minor gestures” (Manning 2016: 1-2 and passim) —a tuning of the field towards its future differentiation that is felt by the ecology itself—an immediatory process by which “fields of relation agitate and activate to emerge into collectivities” (Manning, *Immediation I*, 276).

Far from Equilibrium Systems

The laws of nature, which no longer deal with certitudes but possibilities, override the age-old dichotomy between being and becoming.

Prigogine and Stengers (1996: 155)

This exponential increase in intensive (actualized) differentiation and (potential) differentiation changes the nature of the system in a fundamental way that might be crucial to its newfound wilderness. The “rewilding” might be that the system as a whole as developed from a relative stable organization to an unstable system of organization—a far-from-equilibrium state. In the eroded sheep paddock where all

is subsumed by the voracious and uncritical appetite of the animal grazing without competition,¹² perhaps one could argue that this is an ecology in an entropic cycle. That is to say it tends towards a minimal energy state, while still being, of course, in many ways a complex ecology. While this tendency towards entropy might, as in classical physics, be seen as the “natural order” of all systems, Prigogine argues otherwise, stating that in far-from-equilibrium (FFE) systems behaviour can move instead towards a greater relationality and complexity (1980: 88-89), as components “acquire new properties” and become more active (Prigogine and Stengers 1996: 65).¹³ Whereas the sheep maintain similar relationships in a relatively stable (if entropic) system, the presence of wolves not only encourages difference to arise (new feeding habits, redrawing of safe habitat boundaries for herbivores, increases in bird species, variations in forest density and tree species, and so on), but here difference is also preserved—accentuated even—through ongoing capacities to further differentiate differences (the preservation of potentials) that are, DeLanda states, characteristic of FFE systems (2005: 73). These emergent differences are tensions that drive the circulation of energies. This might be closer to the drive towards novelty that Whitehead designates as the driving appetite of the universe, rather than the entropy of classical physics that struggles to explain the nonlinear nature of events such as rewilding.

As a FFE system, a rewilding ecology operates in an intermediate position ‘between a deterministic world and an arbitrary world of pure chance’ (Prigogine and Stengers 1996: 189), moving beyond linear causal chains events. Here events that occur are never the result of clear trajectories, but always one (or more) of the many potential options, and causal chains are complex and system wide, and always themselves in a process of development and differentiation, held in tension (that is, quasi-causal). The arrival of a particular bird species to the river where beavers have been returned, might, for example, be related to (though not entirely contingent on) the increase in wood debris on the riverbanks that provide habitat for insects that become a food source, and/or the reintroduction of opportune tree and shrub species in cleared spaces that provide shelter and nesting materials, and/or the beaver’s lodge that provides pools in the river in which further food sources (fish and insects) thrive. At the same time the bird’s droppings might fertilize the river, providing food for insects and small fish (allowing larger fish to thrive and an opportunity for otters to feed), eggs hatched might provide food for scavenging

mammals, the disturbance of the leaf mulch created by the search for food and building materials might create new conditions under the trees allowing fungi to grow and new insect species might arrive to colonize this growth, trees may thrive on the new microbiological activities around their roots, and so on. The evolution of aspects of the system is, or becomes, increasingly symbiotic (composed of parallel and interdependent individuations) —the birds need the insects as the insects need the birds. Potential in the system for new developments (habitat, food, symbiotic relations) continue to arise, bifurcate and disappear: energy continues to circulate. Individual species of bird, fish, tree and insect may thrive or decline as the conditions constantly evolve and change or diversify, affecting many other elements in the ecology, as a series of ‘fluctuations and local instabilities’ (64-65) that knit together over time in complex tangles of local and non-local connection. In an ecology operating in such a FFE state, small shifts resonate throughout the system (42-44) in unpredictable and productive ways, opening both new actualizations of relation and also always increasing the potential for further diversification and entanglement. Here the ‘system’ is in itself a series of *relations and potential relations* between components— not the components themselves—and as an assemblage of relations (actual and virtual) it develops its own emergent characteristics and properties (Bak 1997: 51): it is in flux, adaptive and remaining charged through the ongoing ‘potential energy due to [the components’] interaction’ (38-39).

Over time such a system might have many small or catastrophic shifts or losses as it continues to diversify and evolve potential, but as a whole can remain in this unstable and productive state. Without contradiction, such a FFE system is both fragile and robust. It is fragile on an individual level, in terms of the loss of the certain futures of clear linear trajectories of a stable system (where the sheep consume everything and the system—the intensity and potential of relations—degrades), and in the fact that the system as a whole never ensures the survival of any particular component, only the exchange of energies. It is robust on a level of collective individuation in the metastability that allows the system to accommodate ongoing differentiation, adjusting system-wide to accommodate new relational factors. Thus as the wolves clear the grassland of deer, trees, birds and small mammals begin to reinvent the area into new, varied and resonate systems of relation.

Self-Organizing Criticality

The critical state is the most efficient state that can actually be reached dynamically.

Bak (1997: 198)

FFE systems such as the dynamic rewilded ecologies are more than simply complex—as all systems when studied closely enough have many scales, relationships and causal chains. Complexity, Per Bak argues, is in itself not a cause of intensive self-organization, but merely an observable 'local manifestation of a globally critical process' (1997: 112) (again the necessity of thinking field effects, system level capacities and expressions). Rather, such system's dynamism and vigour are due, according to Bak's arguments, to the FFE system reaching a 'poised state': a point of, as he terms it, 'self-organizing criticality' (SOC), where the required range of events and dimensions of relationality are potentialised (48, 45-46). Here while the proportions of ranges of events may be statistically analyzable and 'predictable', the timing of any individual event is non-linear and not predictable (12-14)¹⁴ and thus at any one point in time all potential future events are still open to actualization and the richness or thickness of the virtual is preserved.

Once a system has reached a state of SOC this might be recognized not because the range of potential events actualize in a predictably linear order of events over time leading to greater complexity (the arrival of wolves leading to small local shifts in flora and fauna numbers, then larger local changes, then forest-wide shifts, and so on), but instead because a state is reached whereby all sizes of shifts and developments are potentialised. In this newly critical state a small shift may lead to very large changes echoing quasi-causally through the system (a few trees removed by beavers leading to associated birds, insects and fish thriving as outlined above, these birds bringing in seeds of berries, leading to bears reappearing and associated shifts caused by their hunting of fish and mammals and the fertilization of soil through droppings and carcasses left, and so on), and also larger changes in individual species may not directly or immediately have any noticeable effect, though like any event it opens new potentials (as a bird species is chased out of the riverbank habitat through competition for resources the overall ecology remains relatively unchanged, but their replacement species has slightly different feeding habits opening at least possibilities

for shifts in fish and insect numbers and types, and further potential differentiations in the system as new characteristics might be developed in one particular location)¹⁵. Each event may cause local, system wide or little change but it is always an act of differentiation and associated differentiation, and this is a new system-level virtual dynamism that operates on an additional and autonomous dimension, a metastability based on system-wide contingency (Bak 1997: 59).

In this contingency, cause and effect are enfolded, immediating and in flux. Each event enriches—rather than ‘adds to’ in the sense of classical physics (DeLanda 2005: 172-173)—the system dynamics not by necessarily causing an immediate or recognizable reaction or chain of events, but because it adds new potentials across the system. It is perhaps on this level of the virtual that SOC systems are most dynamic, saturating a system with potential, each actualized differentiation adding further to the multiplicity, the virtual plane on which the system is immanently and intensively organized. It is here that the global dynamics or capacities emerge from the potentialising effects of components’ interactions. Once a rewilded ecology reaches SOC, you can no more explain its behaviour by examining the capacities of the wolves than you can by understanding the worms or rivers (though all these capacities oscillate or resonate with the system), or by summing all the capacities of all components into an algorithm, if such a thing was possible. Rather, system organization evolves an independence from component properties (Bak 1997: 50-51, DeLanda 2005: 171) that is immediatory: a potentialisation of all relational dynamics that allows for ongoing exploration or freedom of expression of evolving wolf-ness, worm-ness, beaver-river-fish-ness drawn from this saturated potential¹⁶, while at the same time understanding that each of these explorations is also folded back into the ongoing potential of the system.

SOC is of course not exactly a state that is ‘achieved’, but rather an always-emergent state, a robust criticality where not only are components’ properties emergent, but the ‘rules’ or relational capacities themselves are also emergent (Bak 1997: 110) (its system level capacities immediated by emergent component expressions and *visa versa*¹⁷). Thus SOC is very likely not achieved as soon as wolves and beavers are introduced (though undoubtedly they do immediately cause changes to the ecology), but eventuates once (or if) the flows of energy and relational entanglement reach a limit—a critical tipping point into a new global dynamic.

How do the wolves or beavers tip ecologies into this state? SOC does not necessarily or simply arrive simply through pushing more energy into a system—add more sheep to a degraded paddock and it will simply degrade further. What critical states require, according to Bak, is a surplus of energies that continue to circulate through the system, and in doing so cause an intensive problematisation of energy (50-52). Perhaps here Simondon's concept of transduction provides a clearer explanation of what might be occurring in rewilding. Transduction is a process by which disparate entities and forces are integrated into a system of relation through the ongoing negotiations and transformations of energy flows and individuations (Simondon 1992: 315) and in doing so the system evolves the 'dimensions according to which [its] problematic[s] can be defined' (313). The incoming energies that Bak proposes are required to reach a self-organising critical state, and which are provided by the introduction of the wolves or beavers, create tensions or incompatibilities within a previously relatively stable system that require new negotiations and developments. There is a circulation and transformation of the force of the wolf's movements, its eating habits, territorializations and the affectual power its howl to the moon has on other animals, as shifts and developments to accommodate such forces occur throughout the flora, fauna and geology. That is, these new disjunctive forces problematize the existing system, moving it into 'criticality'—partial and provisional resolutions that are ongoing, keeping the system in productive or creative tension as components move outside themselves (their previously defined capacities and relational expressions) to continued and collective becomings, generating new relational systems between previously disparate elements (311, 315)¹⁸.

If this ongoing transduction of energy added to the system is key, then it is this the force of these transductions that immanently organizes relations (a concretization in Simondon's terms, where components' individuations become interdependent) and its ongoing input and flow (in terms of the reintroduction of species, the growth of diversity, and the input of force from one species or micro-environment into another) that keeps the system in a critical or problematic state (Bak 1997: 50). But transduction also emphasizes that in a FFE system it is the ongoing flow and problematisation of force that organizes, instigating individuations of flora and fauna in response, not a fixed set components that forces respond to: it is the field that is the

self-organizing criticality, not a specific set of animals (never the wolf or beaver, despite their role in shifting the system to this state).

Transductions, as Brunner says, 'cut across the disparity of the physical, biological, mental and social' at an affective plane (Brunner 2012: 6). Thus while energies and their transductions can be thought most obviously as the redistribution of biomass—through the continued conversions between energy and biomass—it might occur also with energies on other planes: movements and territorializations (the pulse of the refrain of a species, the magnetism of a nesting pair, the tensions of invasion); speeds and flows (water running, pooling and stagnating, lines of ants, flight paths); surfaces (colours, textures and densities that reflect the sun's rays, earth crust splitting as seeds germinate and fungi bloom); and sensations and perceptions (sounds that vibrate ears and diffract off surfaces, smells exciting nostrils, touch that triggers imagination)¹⁹. All of it is the energy of flux: of diversification, splitting, novelty arising, of an excess in the field that must be dealt with, circulated, distributed (that is also perhaps the development of an excess of capacities within the system to deal with these flows) —a flux that organizes and generates dimensional capacities whilst remaining far-from equilibrium.

Sacrifice

The destruction that sacrifice is intended to bring about is not annihilation. The thing—only the thing—is what sacrifice means to destroy in the victim. Sacrifice destroys an object's real ties of subordination; it draws the victim out of the world of utility and restores it to that of unintelligible caprice [...] it passes from the world of things which are closed to man and are nothing to him, which he knows from the outside—to the world that is immanent to it, intimate.

Bataille (1997: 210)

In no way are the wolves and beavers merely catalysts calling an already primed environment into action. Rather, they are intertwined and nascent within every particle and potential of the new field: beaver-treeing, water-beavering, wolf-deering, grass-wolfing, microbe-beavering and so on. Just as the animistic gods always are, the wolves

and beavers are embedded in the heart of the extended potential—eruptions of the other-(future)worldliness of every component—a parallel series of collective individuations that move the ecology forward. To where? Perhaps to a new intensity—new degrees of differentiation—lived across new planes. It is not a question of triggers, nor of dominance, but of sacrifice: sacrifice of individual rights for collective re-beginnings. Wolf and beaver do not mediate the environment, they enter into movement²⁰, embedded as the spirit of the ongoing field-wide immediation.

What is sacrifice? Fragility and flux. As the Shaman sacrifices her own truth to the conjunction of spirit and physical world (sacrificed to the flux between dimensions), how does the wolf sacrifice wolf-ness – as this wolf-ness takes on new conjunctive meanings— (first to become a pack animal rather than lone wolf, then to become wolf-and-pack-and-deer, wolf-and-pack-and-forest), how does the beaver sacrifice itself to the excesses of its lodge—an expenditure beyond any utility—then to become beaver-and-lodge-and-river, beaver-and-lodge-and-fish, beaver-and-lodge-and-soil microbiology. Wolf becomes spirit (potential, future-being) of the plain/forest, beaver becomes spirit of the river/flow, a heterogeneity in which the shaman/wolf/beaver does not dominate its subjects, but is rather lost, brought to the surface as points of contact between things (Taussig 2006: 153) as it is also secreted into the very field, connected on a charged collective plane of potential—becoming its very essence, its spirit, taking on a new fragility of being. It loses its place in the order of things, its fear of dying as a thing in that order, a sacrifice in which it is never isolated but negates the individual in favour of a contagion, a dangerous ‘intimacy’ with all (Bataille 1997: 214-215).

The motivation of the Shaman—which is not a perspective owned by her, but an environmental appetite that passes through her—is a collective conditioning, the addition of new planes of potential, newly layered dimensions of relationality. In both black magic and sacrifice this journey, this ‘*more*’ is the important bit (more than the novel conjunction, instead the very act of transition), the intertwining, complexify-ing, unbalancing that is a system held in a fragile state of intensive, generative emergence and gathering.

Somatic Drifts V1.0

“Fluidity” to me suggests mimesis as a sort of streaming metamorphicity rather than a replication as with a photograph [...] this is magic of contagion and not of likeness.

Taussig (2006: 140)

In Cat Jones' work *Somatic Drifts V1.0*, participants are taken through a curious journey both into and beyond their body boundaries²¹. Using a range of sensations and the processes of perception the participant's gestalt is put aside, at least temporarily, in favour of a new intimacy: new relations with the artist, the plants, their own body, with a field of potential, and ultimately with a larger expression of a collective individuation. In brief, after the artist gives a careful explanation of the pragmatic physical process to be undertaken²², the participant is asked wear a pair of headphones (through which they hear both the artist's voice and tonal drones) as they lie on a black platform. Above the participant is a screen on which a life-size and (sometimes) real time projection of their body looks down on them. Throughout the process this projection is manipulated—often split down a central line of the body—so that sensations experienced in the body do not always correlate with what is seen above. This is combined with the artist making a circuit around the body (first in one direction, then the other), gently stroking body extremities, in a touching that moves between synchronicity and a-synchronicity with the touch shown in the projections.

At first the right and left sides of the body in the projection are swapped, and the participant is asked to move around and experience the discontinuity between what is seen and what is felt in moving and in being stroked, then one side of the body replaced with an image of that side of the body filmed earlier in the process to create a new discontinuity. As their body adjusts to each new projected metamorphosis, a new challenge is initiated: half the body is replaced with a different body of the same sex, then a whole other body, back to their own body and then to a body of another gender. At each stage the artist performs a circuit of gentle touching, mostly synchronised with the projection in which her hands are seen touching the other bodies. Next, while a participant's eyes are closed, a beach spinifex grass

(*Spinifex sericeus*) is placed in their hands and they are asked to smell a scent of wet earth. As a participant opens their eyes Jones touches one side of their head, while in the projection this side of their head is replaced by the image of the spinifex. Then the actual plant is removed. The video shows their reflection as half plant, half human, then fully plant, as the artist again moves around the body making contact (again the artist's hands are shown in the video touching both body and plant). Finally the projection returns to a live feed of their body and they are able to return to some sense of solidity.

During these later stages participants lose spatial orientation—they feel strongly that the spinifex in their hand is in fact on their head—and they feel themselves suspended perhaps in a state of transition as their sense of their own body fluctuates and shifts to something well beyond the human: not exactly a becoming-plant, but more an intense body-plant individuation. Yet this is not done through persuasion or through hypnosis. If the process is in itself based on mirror therapy for phantom limb pain, it has here been taken into another realm, one that puzzles the clear world of the cognitive scientist²³. And, unlike a Lacanian mirror stage this is a mirroring, that reflects a greater potential for the body, its saturation with the field rather than its containment and separation.

Perhaps one could say the artist plays a shamanic role here, tricking the participant through sleight of hand whilst also revealing this treachery (forewarning and explaining), and whilst also adding always-new layers of trickery and forgery of otherness, confusing any revelations of technique. This might be a game that all enter into: a literal field of play. It does not require blind faith or belief, just as it is not hypnosis. Its power does not lie there, but perhaps willingness and shared enjoyment in such continual fabulation²⁴: tricks, deceptions and semblances that create a 'continuous movement' across many planes of becoming (Taussig 2006: 128).

How is it that Jones is able to achieve this poised or critical state in the bodies of participants that allows such movement—creativity and play—and sensitivity and attention to the rich potential of the field in which these bodies become immersed? Here, after making a few more general observations about the artist's technique, I want to return to the physics that I have argued underpins rewilding: dimensional flexibility and invention, far-from-equilibrium states and their capacities to dynamically organise flows of energies.

The technique explicitly plays with both such conceptual and physical shifts between stable and unstable states, so that the participant shifts between forming a picture of their body (both a sensory and conceptual image of what is and is not a part of the body) —that is less a representation of the participant’s body, more of a parallel individuation, entwined and complicating—and again and again experiencing the disturbance of these boundaries. This the artist describes in terms of states of ‘congruence’ (when the perception and conceptual image of one’s body correspond), and ‘incongruence’ (a gap between self-image and perceptual evidence), that through experimentation she has found to be an essential part of the process, as the body seems to quickly adapt and accept each new dismorphic image and restabilise itself²⁵.

Jones introduces a complex succession of sensorial and perceptual factors into the event that create new relational resonances of both connection and new eruptions of difference within the system. Not only does this operate in the series of connections and disconnections between the participant’s sensation of their body and the image they view of their body mixed with other bodies and plants, but there is, for example, the act of the artist laying hands (and plants) on their body that creates congruence and incongruence. The pattern of touching creates a direct affectual connection between surfaces that at once defines as it breaks body boundaries, that connects the image of hands moving on a foreign body to the feeling of the hands on the actual body, that then contradicts this connected movement with touching that is asynchronous to the projected gestures. How is it exactly that this touch of the artist’s hand on another’s body can be felt so keenly on the skin of the participant, experienced both emotionally and as an affectual force? To view this merely as perceptual confusion or misplaced projection seems to me to sell it short. Is it not that *Somatic Drifts* engages a system or circulation of mutual feeling or prehension binding and extending components (just as the water, trees, plants, fish feel with the activities of the beaver)? This affectual force reaches—resonates—across planes, activating minds, bodies, senses, feelings. Such resonances across differences are perhaps the echoes of the minor gestures that activate this fielding of experience, existing only in the immediacy of the event, belonging not to any one body but the forward moving generation of difference of the system(s) of the event and its components into being something-else or more than themselves.

As it brings bodies to their surface through touch, the process of *Somatic Drifts* also shifts the manner in which it splits and connects to other entities the parts of the participant's body, at times connecting one side of the body back on to itself or to a series of other bodies (of increasing degrees of difference), or splitting half or all of the head from the body, or a hand. In this the *process itself* that is undergone is subject to the same shifting and re-combinatory status as the bodies are: as one cannot settle into a secure sense of oneself (or oneself as some strange new hybrid) in this art event and one cannot settle into a concept of how the techniques will unfold, so that here technique moves closer to a technics that is itself imminent and open. There is perhaps here also some relationship to Feldenkrais techniques, in the splitting of the body down the centre, the unbalancing and then reconnecting of the two halves (a mereotopological system addressing parts rather than wholes that consume and erase the differences between parts): the careful attention and close focus on individual parts and the larger sense of connectedness, the re-combinations of sensation, perception and mental processes, and the demonstrable power of the imagination in reconfiguring neural and nerve pathways. Here the rewilding that Jones' work performs on the bodies of participants does not address the mind as an ecology with inputs and outputs to and from the nervous system, as cognitive science might. And, just as it does not address the mind as a whole but as a series of mutable, overlapping and developing parts, so the body is not addressed as ecology interfacing with the environment, but a series of parts that are co-emerging with the ecology: one's head-with-plant immergences, one's left side-another's right side immergence, eyes-skin surfacing and so on. These energies are generated and felt from the perspective of the field, not to be seen or understood from outside the event, preceding and producing these new bodies rather than emerging from them as a collective becoming of components (artist's hand-shoulder-image-gesture, movement-smell-tone-touch and so on, each a complex emergence that does not act out a rewilding of a particular body but searches to immediate a new and tenuous relationship of forces). In this it addresses the field as the only ecology that counts, as the habitual becomings of relatively closed and stable system systems are opened and made fragile again.

Through these and other technics, perhaps Jones' work succeeds in opening a gap between the immediacy and excess of sensation (touch, smell, movement and proprioception and vision), and perception. That

is, the transition between the event of sensation and its comprehension and placement within a logic is stretched and enriched. The gap between the felt qualities of the contradictory sensory experience (feeling a hand on one's shoulder while seeing the same hand on some else's shoulder, feeling a clockwise movement of touching while seeing it performed counter-clockwise, the sensation of one's head contradicting the vision of the fantastic plant-head that then resonates also with the sensation of one's plant-hand), and the acceptance of this new logic that allows the participant's body to begin to feel stable again is delayed, so that, as Manning says of immediation, it draws 'attention to how the stakes of experience occur in the immediate interstice of its coming to be' (Immediation I, 276), and immerses the participant in this feeling. In *Somatic Drifts* there is a particular care and attention to these technics of moving between relatively stable and FFE states, that so that this transitioning is preserved and felt, achieved less through a slow shift between the two states (though certainly the degree of otherness of each new image, perception and sensation grows) than an episodic series of sudden plunges back into creative transition²⁶.

This gap between sensation and perception is accentuated by the sheer quantity of sensory experience that creates an excess of energies in the event, beyond the limits of (human) perception. That is, when pushed beyond limits of perception that can be contained within a gestalt a new system of relation concretizes that problematizes the limits of a single body, and is instead held between the components as a system of both actual relations of sensations and a shared potential to circulate these sensations. This might be a redefinition of the dimensions of the event, as it takes on this new, if temporary, system-level 'gestalt' that is decidedly transindividual. In this the excess sensation re-composes and re-potentialises the field, as attention and care move across many planes that become transpersonal— affective, neurological, sensorial (touch, smell, sound), intellectual, muscular, social (their skin against the skin of the artist, their eyes on the body of another & the artist's eyes on their body). Rather than removing extraneous input and energies as in a scientific experiment that seeks to establish clear causal links, this flooding of the body with sensations that in their excess quantity, incongruence and differing qualities cannot ever be completely contained within the logic of perceptions is employed by Jones as a 'psychic tension', a relational overload and incompatibility that is rich with potential individuation (Simondon 2007: 4, 3). Perhaps this sensory overload that pushes the event FFE can be thought of as the excess

energy that the system circulates and transduces (gesture to touch to vision to concept and so on), in order to achieve its dynamic or critical phase where new immanent connections can occur and a new flexibility moves component parts beyond individual trajectories. Thus, if it encourages a fragility of self, this is not merely the cost of the increased affectual flow but perhaps the very gesture that provides the condition for the flow.

Beyond simply exploring the capacities of the body, this process might be thought to allow new cross-form plasticity: new dimensions on which capacities might be expressed to develop. Jones' work moves beyond simply prompting the body of the participant into a FFE state of individual confusion or sensory overload, and emphasizes the body's co-individuation with other components within the field of the event. The participant's body not only pulls towards self-other hybrids that might resolve as a discrete body, if a strangely modified one, but pulls towards a new collective 'vital complex' in which the affectual force of becoming circulates through all aspects of the event's potential (Simondon 2007: 3). The ecology that is activated here is not just a body-mind ecology, nor just a combination of bodies, but of the held spaces between—resonances—the tensions within a problematized but open system in a state of individuation. These resonances might motivate, as minor gestures, the event's new dimensions—its new and forming relational planes²⁷—or, if they already existed perhaps they are intensified, their expressive capacities expanded and brought to the fore. Thus the process emphasizes the affectual circulation of energies in the field and brings to attention the potential of ongoing individuation beyond stable individualities, it also now overlays with collective individuations: with the operations of a field of energies that organises and expresses itself (Simondon 2007: 4).

In these technics intensive difference is generated and preserved—a key factor in creating a FFE state—as parallel impressions of congruence and incongruence exist together to create a paradox: keeping the event at a critical, intermediate state somewhere between stasis and a chaotic loss of connection and collapse of self. Or rather, if from a process-based philosophy view of the world this is always the nature of events/ecologies, then it is that here such a state is perhaps heightened and brought to attention. This continued problematisation or incongruence might perhaps be thought of as a critical state, with its accompanying characteristics of heightened creativity (an ability to make novel connections) and the related capacity to organise on a system level in

ways beyond and outside the boundaries and capacities of individual components that preserves this creativity as the participant's body continues to individuate, moving further and further away from its original conceived form.

To me this work cannot be explained in terms of conversations between plants, humans and images, rather it needs to see the transindividual nature of the forces at play and their primary role in the potential individuation of plant, human, image, thought and hybrids of all these components, and therefore needs to be thought in ecological terms, as a dynamic field of relations and its immanent capacity to connect a series of disparate components into a meshwork of flows. It seems to me that even as scientists are studying Jones' work to unlock its 'secrets', cognitive or other scientific explanations are never going to be able to satisfactorily explain the event unless they are prepared to abandon classical physics and embrace the radicalism of thermodynamics (or even further, the radical empiricism that would acknowledge thought as an actual event in the world (James 1996a: 18)). Nor can this necessarily be thought purely from one position—that of the participant. Just as the rewilding of the wolves is not a conversation between wolf and deer, but an ecological movement that is an event immanent with the individuation of all components—the grass, worms, berries, wind, river flows, rainfall—*Somatic Drifts* might be thought of as a 'fielding' in which new motivations can be found at this system level and it is these minor gestures that pull the components forwards towards new collective individuations, and it is in this creation of such minor gestures that the system achieves a 'wilder' state. Perhaps then this work has to be considered to at least some extent in terms of the movements, feelings and affective speeds that all components (artist, participant, plants, sound vibrations, projected images) enter in to. And so perhaps we should also not forget to ask what the plant feels—does it feel its own transitions to plant-humaness? And what does the artist feel—a becoming plant, a becoming participant? All here are caught up in the immediation of the event.

Rewilding and Immediation

Perception is not of a human nature as such, but part of a "worlding": the unfolding of relational events.

Brunner (2012: 4)

Rewilding is not conservation but something more radical and essentially creative. Reintroduction of wolves or beavers unsettles a system in ways that may be catastrophic for individual flora and fauna (deer population, a particular tree species that the beavers clear), but that also utilizes increased component fragility to organise new system-level vitality as the system of flows of affectual energies undergoes individuation. It is precisely this fragility that brings *Somatic Drifts* back from the sideshow and takes it beyond the understanding of the cognitive scientist and to a darker place. It is a fragility born out of the suspension in felt states of transitioning, in the immediacy of collective individuations, layered, competing, excitations of difference: not a new plant-human hybrid identity, but a collective moving into the flux, resonating with pasts and transducing towards new futures. Rewilding then might be exactly this suspension in the fragile act of transitioning, the experience of this process as it opens up to multiple possibilities, a world of problematisation and partial solutions. *Somatic Drifts* might be seen as a technics of both rewilding and immediation not because it suspends bodies in the FFE state in which they achieve a personal fluidity or dynamism, but because of its insistence that the participant reaches beyond their own body in a continuing act of co-composition with the field. Such rewilding is fuzzy, vague in that it is saturated with potential, always evolving on the virtual plane in parallel to the actualised novelty—a wolf or participant individuation that is now comprehensible not on its own but can only be understood as part of a collective immediation of the system.

If one might say that there has been a turn in recent years in towards thinking participation and relation in art on an ecological level, perhaps it is possible to say that artworks such as *Somatic Drifts* rewind a step from this. That is to say, such artworks might be concerned not primarily with developing potentials that allow a dynamic and complex meshwork of relations to actualise or be expressed, but with creating the conditions for the field of the event to evolve its own potentials: its own new dimensional planes or capacities beyond the control, interest or desires of the artist. Rewilding is less about conservation than returning an ecology to a state where it can immedie, and it is not simply a priming of an existing potential within a field, but a different milieu of relation that erupts from a field in a critical state—where there is an ongoing ‘conditioning [of] the event’s emergence’ (Massumi, *Immediation I*, 281).

Here perhaps what is important is not so much that the participants (or beavers or wolves) gain a greater range of expressive capacities within a system, though this may be true, but that the system as an ongoing event increases its expressive capacities and dimensions. Such a system might exhibit self-organising and far-from-equilibrium properties that allow it to enfold its web of relations such that the rules or structure governing these relations remains immanent to the (re)expressions of those relational forces: whole and parts not adding up to each other but caught in a system of immanent self-production. It is this that I want to name both a rewilding and immediatory process that Cat Jones' work engages with exploring 'the potential of the preindividual field [that] is relational and can only be expressed relationally, through and with others' (Massumi, *Immediation I*, 284).

Notes

1. Some of which may be quite limited in their understanding of relation: Relational Aesthetics, for example, with its very fixed and limited concept of relation as a human-centered social construct, or much interactive art with relational conversations limited to those between preconceived and clearly demarcated participants and technical objects.
2. "We are expectant of a more to come, and before the more has come, the transition, nevertheless, is directed towards it." (James 1996a: 78).
3. The "transindividual is neither interior nor exterior to a body, but the continually folding and unfolding limit between inside and outside" (MacKenzie, 2002: 137).
4. It perhaps needs to be noted that these experiments concentrate on the reintroduction of species into environments in which they quite recently were indigenous, having been forced out by farming and loss of habitat. Clearly the introduction of non-native predators—such as cats into the Australian bush—can have quite catastrophic effects on flora and fauna.
5. See Per Bak for just such a disappointingly naïve conclusion championing neo-capitalism and the automated stock market with its non-linear causal chains and associated peaks and crashes (1997: 183-192). While far-from-equilibrium systems are of interest here they have their limits as ideal systems for all situations, being truly an-ethical (bluntly concerned only with the health of the system as a whole and without regard for the survival of any particular species or individual). In thinking any such system in which we might wish to live/experience, it remains necessary to also consider the ethics of care and attention across these other levels: this perhaps

is a compromise that Cat Jones' work, as discussed later in this chapter, attempts to address.

6. "Trophic" however only refers to the eating habits of species, and clearly the relational connections go much deeper than this, including, for example, aspects of habitat (micro-climates, competition for nesting materials, refrains and so on).
7. This emphasizes the ad-hoc nature of evolution: where survival is not based on "fitness," but on the ability to adapt and make do in changing conditions. For example, see Varela 1992: 185-207.
8. I use the term "component" here rather than concentrate, as Monbiot does, on particular marquee or key examples of flora or fauna to emphasize that the greater flexibility and complexity applies to all aspects of the environment, whether microbes, water, leaf-mulch or wolf.
9. Although Cariani does not use the term, this might be thought of as its capacity to feel in a Whiteheadian sense of the term.
10. See for example, the self-organized development of new sensory capacities (an "ear") in one of Pask's chemical computers (Cariani 1993).
11. See also Luis Mateus Rocha on the capacity of self-organizing systems to develop new dimensions, (2001: 822); and John Collier on systems with emergent dynamics as a third level of autonomy beyond autopoiesis (2008: 14-16).
12. Monbiot is particularly critical of the desolation caused by sheep farming, this of course is at least as much to do with the problems with sheep farming methods—monoculture approaches with blatant disregard to the long-term health of ecosystems—as it is to do with the omnivorous appetites of the sheep themselves. For an alternative approach see, for example, Permaculture design methods for sheep grazing, which emphasize a greater level of diversity of feed sources and a more complex integration of the function of components of the system (Mollison 1999: 442-446).
13. Indeed, equilibrium systems might be almost "mythical," convenient abstractions of the complexity of real interactions (Green 2001: 674). See also Bak 1997: 1-31 and Serres 2001: *passim*.
14. Bak uses many examples of SOC found in the natural world to explain this, including the example of earthquakes, where the proportion of minute, small, medium and catastrophic sized quakes that will occur can be charted logarithmically as probability using power laws (a quality expressed as a power of another property), but it can also be shown that there is no direct linear relationship over time between sizes of quakes (small quakes do not directly lead to larger and then catastrophic events) (24-7, 85-6).
15. A SOC can accommodate sudden dramatic shifts in relational dynamics, long periods of what looks like relative stability and what appears to be relatively linear flows of causal chains. And while these events may look local and linear when examined individually, there are always aspects that are

- globally organized. It may be that the evolution of SOC (rewilded) ecologies could be as effectively triggered by the introduction of a new insect, shrub or the reinvigoration of water flows in a river system as by the large predators championed by Monbiot, and that these self-organizing dynamics have simply not yet reached a critical state, or have reached SOC but have yet to trigger major, observable effects. See, for example, Charles Darwin's writing on the significant role of worms in archaeology and non-human scales of action (1881: 176-229; 305-313).
16. 'One does not act freely, one acts freedom out' (Massumi, *Immediation I*, 284).
 17. It is a mereotopological system—composed of parts that are not fully contained within a 'whole' that sums up or defines/restricts these parts' futures, a FFE system that is not defined by any final stable state but rather is caught in ongoing immediation, intertwined events that co-compose without losing their singularity. See Portanova 2013: 79-80.
 18. See also Adrian MacKenzie on transduction as a partial resolution to internal differences (2002: 50).
 19. It might be important to remember here firstly that while SOC 'organizes' energy in a system, it does not organize it towards any particular end, rather towards an immanent state of maximum relationality and openness to exchange energies, and secondly that SOC can be used to 'explain' some qualities of complex relationality, other qualities of the system remain free—in other words it is functional across some but not necessarily all of the dimensions in which a system is active.
 20. 'To go into nature is to leave stabilized and sedentary existence and enter into movement.' (Lingis 2011: 79).
 21. See "Somatic Drifts V1.0", for the artist's documentation of this project. Cat Jones, <<http://catjones.net/2014/05/27/somatic-drifts-v1-0/>>
 22. This explanation is used to try to circumvent the possibility of hypnosis or suggestibility leading to the shifts.
 23. In mirror therapy for phantom limb pain the patient's healthy arm or leg is mirrored to replace the damaged or missing limb, and in many cases with this visualization they are then able to 'reset' or control the painful nerve impulses that seem to be emitted by the missing limb. Cat Jones' work is now being studied by pain researchers in Australia to try and determine how she achieves such body transformations well beyond the general techniques and understanding of cognitive science.
 24. The pleasure in magic, Taussig writes, is both in the denial of trickery and also the bringing to attention or sharing of the knowledge of such trickery and the collective enjoyment of trickery (2006: 150-151).
 25. This ability to accommodate such disturbances and reconfigure might indicate that bodies themselves are already at a point of self-organizing criticality, with capacities to incorporate new differences without dissolution.

26. This might be thought of as a 'punctuated equilibrium', which, as Bak argues, is characteristic of what happens in nature, with relatively stable periods punctuated by shifts into FFE states when vast creative and system-level ecological shifts can occur (Bak 1997: 29).
27. Relation is 'an aspect of internal resonance of a system of individuation' (Simondon 1992: 306).