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INTERSTICES SPINOZA

Common notions and composite collaborations: Thinking with Spinoza to design urban infrastructures for human and wild cohabitants

“Animals are good to think with.”

—adapted from Claude Levi-Strauss, *Totemism*, 1964: 89

In a 2007 video from BBC World, narrated by David Attenborough,¹ we see a crow adapting to the complex choreography of the modern city, using the rhythms of the city to bring together a food source it could not previously eat with a technology that was invented for other purposes. Viewed 1.7 million times on Youtube at time of writing, shared on sites from the UK to North America, Japan, and Australia, the video invites us to rethink the relationship between nature and culture, blurring the boundary between the urban and the wild, as the crow first learns that it can drop a nut (too hard to break with its beak) into ongoing traffic, using passing cars to crack it open. As the traffic proves too dangerous to navigate in the retrieval of the nut, the crow eventually learns, through a process of unclear duration, to drop the nut from a perch above a crosswalk and wait for the green crossing light to access the nut in safety. This inspiring, if all too infrequent, example of an interweaving of human technology, the rhythms of the city, and the ingenuity of urban wildlife, might provide us with a different way of imagining the city and the relationship between the urban and the wild.

It is also, we might argue, a contemporary expression of Spinoza’s concepts of how the composite body is constituted through a common notion, a common notion that enables very different species—beings who are (to borrow from E2P13S) “of different natures”—to thrive in a collaborative context. Here the common notion exists in the functioning of the crosswalk—crows and cars are in common agreement about the usefulness of the crosswalk for their own different forms of thriving, and so constitute a composite, collaborative body.

Writing in the 1660s, Spinoza was explicit in his project of renaturing the human—“consider[ing] human actions and appetites just as if it were an investigation into lines, planes and bodies” (E3Pref) and with this, dismantling the Cartesian view that the universe was divided into two substances, a divine realm

and an earthly existence, and dethroning humanity from its presumed hierarchical rule over nature—its position as “a kingdom within a kingdom” (E3Pref). But he was less clear about collaborations with non-human others. In thinking the composite body through the common notion, however, we can begin to think about an ethics of collaborations beyond the human—and derive a Spinoza for our time, a Spinoza beyond Spinoza. The common notion, for Spinoza, was an expression of the collaborative possibilities between beings, each coming to an adequate and active understanding of the others’ capacities and operating in concert in a way that produced a sense of joy—an active rather than passive understanding. The task for Spinoza in arriving at a common notion was to know how to move from the passive experience of affect, the “sad passions” (which might even include love), to active joy. Affect, constituted passively, does not comprehend its cause adequately and ultimately limits the capacity to act. If an encounter is grasped passively—by happenstance and without reflection, we do not know how to reproduce a joyous encounter (or avoid a dangerous one). We are at the mercy of random encounters.

The common notion is a powerful concept for it undoes the idea of mind over matter—undoes the idea that emotions are something to be suppressed or overcome through reason. Active joy is itself a function of an adequate understanding of something, and this understanding enhances our capacity to act. The common notion emerges in the encounter with other beings, a practical kind of knowledge expressing a relationship between mind and body, a knowledge that necessarily involves the body. One must have an adequate knowledge of the nature of the body to understand this union adequately (E2P13S). It is through this knowledge that we become active: to become active is a state of becoming, not being; a social act, a co-production in our encounters with the world around us.

In the case of this assemblage of beings around a crosswalk, each of the participants in this choreography comes to an *active understanding* of the context. For the pedestrian, the crosswalk enables safe passage; for the driver of the car, the timing for free movement; for the crow, safe access to an otherwise inaccessible food source. But these are diverse beings with different ways of knowing—different manners of mind and body. The crosswalk assemblage is therefore also illustrative of a second concept that Spinoza offers us: the idea of the composite body. This is one of the few times that Spinoza (focused as intently as he was on the task of human freedom) explicitly addresses the relationship between beings who are of different natures.

We in the twenty-first century are beginning to appreciate that even the human body itself is a composite individual composed of diverse natures, among other things comprised of 39 trillion bacterial cells and only 30 trillion human cells. We are a collaboration from our very beginnings. In nature, moreover, nothing exists but composites: we are not aggregated from simple bodies. There is “no pre-social state of nature from which previously isolated individuals could emerge” (Montag, 1998: xviii). Instead we are always already in a state of composition. Indeed, Spinoza suggests this in his correspondence with Oldenburg, in the discussion of the worm in the blood, arguing that our separation of things into parts and wholes is a matter of perspective, based on the extent to which we understand how things come to agree with one another (Ep. 32). The example of the crow at the crosswalk invites us to think of complex collaborations at the level of the composite body, a social body that dissolves any preconception about hard

distinctions between human and nature, nature and technology. And although Spinoza insists at many instances and in different ways that there is nothing more useful “to man [...] than man” (E4P18S), he does suggest that there is an advantage to humans in collaboration with beings of diverse natures: the greater your capacity to affect and be affected, the greater your power to act (E4P38).² This is evident in the ways we have come to understand more fully the evolution of our species: how, for instance, collaborations with beings of different natures (the coevolution of humans and dogs as hunting pairs, for example) combined different capacities to affect and be affected in ways advantageous to both.

In the crow-car-pedestrian-crosswalk, there is then a composite body wherein the crosswalk acts as a kind of prosthetic intermediary in the constitution of that body, conferring different kinds of advantages and different meanings to its varied participants. Here the crosswalk expresses a kind-of surplus code—an excess of meaning, with varied but nonetheless adequate understandings for the pedestrian and car whereby the crosswalk mediates or choreographs the flow of traffic in a way that both can move through the city effectively. For the crow, the crosswalk and the timing of the lights enable it to adapt a tool (the car) designed for one purpose to another, namely the crushing and safe retrieval of a nut that it could not crack open itself without the car and that it could not retrieve safely without the crosswalk. Seen this way, we understand the composite body truly as a composition of forces, made active through a choreography, expressing a multi-temporality and manifesting in a convergence—a node or coming together with no strictly defined border. In a Batesonian reading, the composite body is a pattern which connects (Bateson, 1979).

We might argue that—unlike the coevolutionary collaboration between dogs and humans—the mutual benefits in the crow-crosswalk are not immediately recognisable. This is not an obvious exchange; rather, as a species (I am speaking here of Western man), we are becoming increasingly aware of the previously unacknowledged benefits of non-human others, or “nature” in its popular conception, to the state of human health and even human existence. Here Spinoza’s framework anticipates contemporary arguments supporting biodiversity. For Spinoza, the greater capacity that a body has to be affected, the greater the possibility for forming alliances (or common notions) with a variety of bodies that are external to it (E2P14). Although Spinoza is speaking here strictly of the human body, we might think this in relation to a composite body, or in this case an ecosystem. A complex ecosystem involving complex interdependencies between bodies exhibits greater capacity than a simple one. The more complex the ecosystem in its patterns of exchange, the greater its capacity. While we cannot, strictly speaking, accord an ecosystem a “mind” in this understanding of interdependencies, we can think of complex communicative systems at a more general level—in a Batesonian sense, a communicative web, or a Peircean sense of a sign system (a world composed of nothing but signs, or composed through signification), or, in the thinking of Maturana and Varela, a communicative system (Bateson, 1979; Peirce, 1907, 1982; Maturana and Varela, 1980).

But why specifically should we care about reimagining urban natures? And why turn to Spinoza for an understanding of relations between humans and

non-human nature? Arguably Spinoza in his own time was more concerned about human freedom and equality. His insights on relations between humans and non-human nature are only fleeting. And as Genevieve Lloyd argued, “anyone who looks to the *Ethics* for a viable, coherent metaphysical system to ground a belief in the rights of the non-human will look in vain” (1980: 294).

In examining how Spinoza helps us to think through these aspects of our historical moment, we might note, firstly, that the notion of biodiversity might look somewhat different under a Spinozist lens. The idea of biodiversity as being significant for human health has now become part of mainstream opinion and settled science—whether we are thinking about its implications for food security, water quality, climate mitigation, or psychological wellbeing—and is endorsed by organisations like the United Nations (United Nations, 2019), the World Bank (Berthe et al., 2018) and the World Health Organization (World Health Organization, 2015), albeit somewhat narrowly conceived of through the idea of ecosystem services. Yet while we might be encouraged by this shift, we have to be careful that single-source instrumentalist valuations of aspects of the non-human world (e.g. trees produce oxygen and shade, green roofs reduce runoff) do not blind us to a much more complex picture of composite collaborations.

This more complex picture might consequently help us to rethink how to deal with habitat fragmentation. Habitat fragmentation is a leading cause of extinction: following the logic of the species area curve, the larger the area, the greater the species diversity; likewise, the smaller the fragment of habitat land, the more likely the species will suffer local extirpation and eventual extinction. And with urban areas projected to cover 60 per cent of the globe by 2060 (United Nations, 2017), urbanisation will continue to play a leading role in this. The expansion of cities will fragment wildlife habitats and interrupt migration routes—not only existing and long-established routes but also new migration routes necessitated by climate change.

We have to be able to think clearly about—and design for—those circumstances in which the composite body of an urban environment does *not* function well to benefit all parties. The crosswalk-adapted crow tells us, by way of Spinoza, that, in certain circumstances, urban nature can indeed comprise a mutually beneficial composite body in which animals have learnt how to match their “speeds and slownesses” alongside the speeds and slownesses of human beings (E2P13L1). But while crows are particularly adept as a synanthropic species—a species that benefits from living in close proximity to humans—not all animals are that adept. To put it another way, cities are a problem for most animals; humans have not designed them with animals in mind.

My current research is on the fate of wildlife in urban environments with particular attention to the design of urban infrastructures. The project area, the Greater Toronto Area (GTA), is an excellent urban laboratory for the above questions pertaining to the relations between human cities and non-human nature. The GTA—the fourth largest city in North America—is home to around 4.18 million people and is one of the fastest growing urban regions in Canada, projected to absorb 60 per cent of the nation’s population growth in the next twenty years (Ministry of Public Infrastructure Renewal, 2005). It also happens to contain rich wildlife habitats sustained by the Great Lakes and an extensive local ravine system. It is, significantly, at the centre of a complex node of existing local and

global wildlife migration routes, including an emerging climate-change-induced migration route: as global temperatures increase, wildlife is moving northward at an estimated rate of 7 kilometres per year—very roughly—and these routes are interrupted by existing or anticipated urban and suburban development in the GTA.

Like it or not, the GTA already functions, well or badly, as a composite body, or as Deleuze (1992: 17) might say, a badly analysed composite. It is perhaps not surprising that the Toronto Wildlife Centre, the largest wildlife outreach, rescue, and rehabilitation centre in North America, fields approximately 12,000 hotline calls a year from urban residents encountering wildlife in distress, and takes into care (into its capture and release programs) somewhere in the range of 5,000 wild animals per year, which include roughly 300 distinct species. These animals have been injured in road accidents, caught in frozen ponds or on freeways, or subjected to whatever endless means for abuse and affliction is possible in heavily urbanised environments.

From an animal welfare point of view, this is an undesirable situation. From a Spinozist point of view, however, the GTA is not necessarily a dysfunctional composite body. Rather it is a composite body that functions perfectly well—it is just that it functions in the service of specific aspects of human urban life at the expense of non-human wildlife. But, if we agree that human health and planetary biodiversity are intimately intertwined, then our objectives to design cities to support human health must also take into consideration our wild cohabitants. Cities are a complex choreography involving the timing and spacing of different beings—this is what Spinoza means by a composite body—but by design or by default, most modern cities constitute a particular kind of composite time-space too often at odds with the rhythms of non-human ecologies (May and Thrift, 2001). The precise timings and spacings within an urban composite will vary depending on the local particularities of geography and animal ethology. Thus, the task is to develop a design language with multiple grammars that allow the composite body to be expressed in mutually empowering ways, that is able to organise time and space in way that is mutually enhancing for sets of different beings, in ways that are attentive to maximisation of mutually reinforcing benefits. This process involves a selective process of composition to create emancipatory assemblages (Ruddick, 2012, 2017).

Here it would be helpful to think also in terms of prosthetics. A city is a system of empowerments and limitations (as an occupant in a city, you are empowered or constrained depending on who and where you are, and when). Accordingly, every element of a city can be understood as a prosthetic instrument of empowerment or of constraint. To design a modern city is thus also to design a grammar of prosthetic instruments.

Elizabeth Grosz pushes thought in this direction in one of the earlier accounts to think bodies and cities through a Deleuzian lens, arguing that there is a “two-way interface” between bodies and cities “in a series of disparate flows, energies, events, or entities [...] in temporary alignment”, comprising an assemblage of sorts (Grosz, 1992). To my mind while this reformulation pushes against classical-humanist notions of the city, it does not go quite far enough: the separation between the human and the urban is first defined and then combined—first things and then their interrelation. If, however, we think of the city as a

composite body from the outset, this distinction begins to collapse and the sequence inverts. Things (e.g. body and city) do not come together in a relationship in which they pre-exist, or rather, put more precisely, they *become differently* in relation—as any resident of a suburb who moves to a dense urban area understands immediately. Relationships constitute things, not in terms of their physicality *per se* but rather in the way these relations enhance or constrain capacity to act. Bodies (whether cells, humans, plants, freeways, cities, or regions), in this sense, are thought in terms of their capacities and the ways they “extend to the limits of their powers.” This is not to imply, of course, that a “body” dissolves on leaving a “city” (as Grosz defines them), but rather we are constituted differently in and through our relations—to each other, to physical affordances, to wind and weather, and to how we share sites and spaces with a vast array of cohabitants. This view follows more closely a Spinozist conception of the composite body (E2L7S).

Modern cities, as currently constituted, tend to comprise prosthetic instruments that constrain some species of wildlife and support others in ways that are wholly unintended. We must think the semiosis of the city—the surplus code it expresses—from the point of view of a vast array of species, in terms of the different ways they read the landscape (Ruddick, 2017). Synanthropic species such as geese, rats, raccoons, or crows thrive in our cities not because we have designed spaces for them, or with them in mind, but because urban landscapes and affordances quite by chance mimic environments to which they are most suited, that enhance their capacities to act. Songbirds, on the other hand, face extirpation and even extinction, death by skyscraper, as they die yearly in the millions in their migration between northern and southern hemispheres. On genetically embedded flyways that pass through major cities, they collide with the phalanx of glass office towers and reflected landscapes that they are unable to read as obstacles.

In order to design a city that can encourage the thriving of a diverse urban wildlife (and not just human occupants), we must consciously think in terms of designing a series of prosthetics of empowerment that enables us to overcome the existing aspects of the modern city that intentionally or unintentionally have attempted to reinforce a human-nature divide. It is these prosthetics that have been one focus of my research, some emerging by design, some by accident, or rather unintended, each offering a different kind of grammar of the composite body.

By accident? Of course, the concept of accident is incompatible with Spinoza’s thinking—there is always an efficient cause that produces an effect. In Spinoza, accidents are an illusion; an event appears to be an accident only because we are not fully cognisant of all contributing causes, and because we misguidedly compare this poorly understood event to an ideal that does not exist and find it to be lacking. But we might nonetheless be justified in speaking of *accidental urban composites* in the sense that quite often we have not designed the city with the view to enhancing urban natures, but rather have come to recognise only in hindsight the benefits for wildlife inherent in certain urban formations. The crosswalk has so far been my primary example of this: an element of the city that, by unplanned “accident”, has benefited crows as well as human beings and which we recognise as such only after the fact. (We human designers of cities have tended to come to an understanding of how we share common notions with such non-human beings only *after* the initial encounter with them.) Two

examples in the Greater Toronto area may serve to further illustrate what I mean: the city's famous ravine system and the Leslie Street Spit, both of which may be understood as composite formations that "accidentally" benefited local wildlife.

Each city has its own contextual landscape that implicates non-human others in distinctly different ways. Toronto may be unique among major world cities in being built on a vast system of ravines (which has led to the depiction, in the popular imaginary, of Toronto as a city within a park). This ravine system was preserved quite as an afterthought. During two centuries of city-building, back when Toronto was spending large on infrastructure, the city filled in many minor branches of Toronto's ravines and channelled storm sewers through them. However, the urge to build over the ravines was quelled after an unprecedented hurricane, Hurricane Hazel, flooded Toronto in 1954 and caused eighty-one deaths. A regional conservation authority was created to manage the city's floodplains; legislation was drawn up to prohibit building on or along ravines because of their potentially unstable nature. This legislation led to the preservation of



Fig. 1 The Don Valley, one of Toronto's ravines, with Prince Edward Viaduct and the Don Valley Parkway [image from Flickr (<https://www.flickr.com/photos/38693531@N08/4672897942>), taken by Jess, 2010, Creative Commons licence (CC BY-SA 2.0), no changes made, used here for non-commercial purposes].



Fig. 2 Little Rouge Creek, one of the ravines in the Greater Toronto area, in Rouge National Urban Park [image from Wikimedia Commons (https://commons.wikimedia.org/wiki/File:Rouge_NUP_Little_Rouge_Creek5.jpg), taken by Mykola Swarnyk, 2014, Creative Commons licence (CC BY-SA 4.0), no changes made, used here for non-commercial purposes].

the ravine system, the last remnants of a great forested area covering the region (Figures 1 and 2).³ The ravines remain one of the few residual spaces that act as migration corridors for wildlife and are home to coyotes, deer, great horned owls, opossums, foxes, porcupines, minks, and beavers. Here the prosthetic is expressed predominantly, though not exclusively, through *conjunction* (to use a word from Deleuze and Guattari⁴): what we conventionally think of as the urban and the wild overlay one another, but in a relationship that must be constantly mediated—a conjunction within the composite body.

The Leslie Street Spit, essentially a man-made peninsula, was first constructed in 1959, intended as a breakwater for shipping traffic and to act as an extension of Toronto Harbour (Figure 3). When container trucking caused the role of the port to collapse, the Spit continued to grow due to the dumping of detritus from demolished buildings and from the excavations of subways, underground parking



Fig. 3 Tommy Thompson Park, Leslie Street Spit, Toronto [image from Flickr ([shorturl.at/ajrRV](https://www.flickr.com/photos/roozbeh/13544444444/)), taken by Roozbeh Rokni, 2018, Creative Commons licence (CC BY-NC-ND 2.0), no changes made, used here for non-commercial purposes].

lots, and sub-ground levels of buildings. It is now largely a semi-wild parkland, Tommy Thompson Park, which over time has been colonised by local flora and fauna. A large portion of it is presently classified as an Environmentally Sensitive Area (ESA) and it is recognised as an Important Bird Area—a classification, as per an internationally agreed set of criteria, that means it is globally important for the conservation of bird populations, with over 300 species of birds using the Spit. This is again a case of an “accident”, since naturalisation was never planned. But instead of a process of conjunction or overlaying of human occupancy on top of urban natures, as in the case of the ravine system, here we can think of the relation between the urban and the wild, in the Spit’s initial phases at least, as operating in a process of *disjunction* or bifurcation that serves multiple uses. It is more the case here that the urban form bifurcates into areas for human occupancy on the one hand and areas for wildlife on the other. As the city grows up, the spit grows out.

At the same time, the naturalisation process is now actively managed by the Toronto Region Conservation Authority—thus the Spit is also in a conjunctive relationship with human processes. This takes the form of a complex spatial and temporal choreography. Dumping grounds for urban detritus are allocated along the eastern edge of the spit. Wildlife areas are inland from that edge and along its western side, including grasslands, marshes, and forested areas. Trucks move daily from Monday to Friday, 9 a.m. to 5 p.m., transporting and depositing waste from urban construction (concrete, rubble, granite, etc.) that builds out the spit. On evenings and weekends, the spit is open to the public, with certain prohibitions (e.g. no dogs, in order to protect wildlife), meaning people can hike and bike through its landscape.

It is possible to think of other examples of the human-non-human composite acting in the urban realm at a more fine-grained level, for instance, the opportunistic colonisation of human structures by wildlife: peregrine falcons, say, taking up residence on hotel balconies, or swifts roosting by the hundreds in chimneys. The practical point here is to always first look for opportunities in urban design and planning for the mutual enhancement of both human and (selected) non-human life—especially where these might not be immediately and obviously apparent—and to amplify their potentials. Or to put another way: Spinoza’s concepts of the common notion and the composite body are useful as diagnostic tools for design and planning.

To think—and design and plan—the urban as a composite body that supports its non-human cohabitants raises additional challenges, specifically around how we bound the spatiality and temporality of the object. Firstly, how are we to think—and delimit—its temporality, its rhythms? It is not just that we can see how the composite body expresses the convergence or syncopation of different timings (as in the coming-together of crow, crosswalk, and car) but that these temporalities themselves express the continuation or introduction of different kinds of durations. Urban nature as a composite body might involve, in part, wind and weather patterns that have persisted over thousands of years. Or it might involve evolutionary processes among species that express a continuation of life from inception, that express a species in continual becoming—a repetition-differentiation that persists not just in the thousand tiny acts that bring life from life but also (to further the idea of city as a composite body) in the larger connective tissues of the city. Here, in a manner similar to Spinoza’s epistle about the worm in the blood (Ep. 32), we must become attentive to the myriad processes that compose and connect the city, that comprise its whole. This city as a vast weave of processes, whose imbrication in and significance to the whole we often are aware of only when they are absent or shift in intensity (for instance in a blackout or power outage). These are the processes that effectuate this composite, whether we are thinking of how rhythms of migration or hibernation are calibrated with the presence or absence of food on arrival or awakening, or how prosthetic technologies such as a crosswalk can serve as “common notions” that enable specific but mutual forms of thriving. Designing or planning the city with wildlife in mind is to make material these temporal problems.

Secondly, how do we—or must we?—draw spatial boundaries around the composite body? Where does it begin and end? Western ways of thinking are often seduced by the false certainty of geopolitical boundaries, but when we begin to think urban natures as a composite body in the Spinozist sense, such boundaries begin to dissolve. In Spinoza’s thought, the composite body extends itself not to a predefined boundary but to the limits of its *powers* (Ruddick, 2008, 2016). Extension may be congruent with materiality, but this is a materiality that is constantly expressing itself in an infinite variation of modes, that is, in an infinite variation of bodies in becoming, in transformation, *going to the limits of their powers*. In a Deleuzian reading, for instance, one does not think of a forest as “bounded” by its edge, but rather as a forest that gradually peters out, going to the limit of its powers. As Deleuze notes:

The edge of the forest is a limit. [Is] that the forest [...] defined by its outline? It’s a limit of what? Is it a limit to the form of the forest? [No] It’s a limit to the action of the forest [...] the forest that had so much power arrives at the

limit of its power, it can no longer lie over the terrain, it thins out [...]. The forest is not defined by a form: it is defined by a power: power to make the trees continue up to the moment at which it can no longer do so. The only question that I have to ask of the forest is: what is your power? That is to say, how far will you go? (Deleuze, 1981, my translation).

This may be why, interestingly, Spinoza speaks a great deal of bodies and extension in the *Ethics*, but uses the term “space” rather sparingly. Space, for Spinoza, is a secondary function of *potentia* and *potestas*—the expression of the composition of forces. What then is the limit of the composite body? If we begin to think of our city, for instance, as partly composed through the migration patterns of birds whose vast routes span northern and southern hemispheres, then where are the beginnings and ends of our ethical responsibilities? And of our political alliances? Thinking of the city as a composite body causes us to question the juridico-political limits of our ethical responsibilities: how we respond in specific urban localities has implications for life far beyond our boundaries.

To think the city as a composite body in Spinoza’s terms is to become open to an awareness of the city as a composition of forces—a choreography of bodies that are constantly interweaving and overflowing imagined boundaries, struggles that are fought as much over time as space, the accommodation of the temporalities and spatialities of other life processes, other rhythms and cycles that would, without a recalibration, sync uneasily with the pacing and spacing of human requirements. It is to become aware of the city as a chronology fought over and fixed in concrete (such as the construction of freeways) and as a choreography enacted through legislation (the timing of dimming of city lights in spring to reduce collisions of migrating birds with tall buildings). It is to become aware of the deleterious effects that certain taken-for-granted features of urban life have on both humans and non-human cohabitants (noise and light pollution figure centrally here), and to design and plan accordingly. It is an invitation to think about collaborations beyond juridico-political boundaries and to begin to connect with creaturely processes very different from our own, yet sharing common notions whose potentials can be amplified by design. (If the “fatal confusion” of the west [McKibben, 2003] in thinking about time is to think of nature as stasis and humans as progress, then, in reimagining and redesigning the urban through the concept of the composite body, we are simply addressing the prosaic, pragmatic problem of coordination.)

Finally, to become open to the multiple durations of the composite body is, nowadays, to confront the challenge of extinction—what happens when (what we now understand as) parts of the composite die off? It is to confront the challenge of extinction along what Thom van Dooren calls its dull edge—the “slow unraveling of intimately entangled ways of life that begins long before the death of the last individual and continues to ripple forward long afterward, drawing in living beings in a range of different ways” (2014: 12). This challenge needs to be confronted through the design and planning of the prosthetics of an alternatively conceived city—an alternatively conceived composite body—that would enable the coordinated thriving of beings of different natures. Not just a challenge, but also an opportunity.

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ENDNOTES

1 www.youtube.com/watch?v=BGPgknpq3e0.

2 “That which so disposes the human body that it can be affected in more ways, or which renders it capable of affecting external bodies in more ways, is advantageous to man, and proportionately more advantageous as the body is thereby rendered more capable of being affected in more ways and of affecting other bodies in more ways.” (E4P38)

3 Also see Mary Grunstra's map of the Toronto ravine system, which may be viewed at https://www.thestar.com/content/dam/thestar/life/homes/opinion/2018/09/28/consider-the-future-of-green-spaces-as-you-consider-your-vote/_2_green_map.jpg, or in Davies, et al. (2018).

4 The idea of “conjunction” in one well-known passage from Deleuze and Guattari's *A Thousand Plateaus*: “The tree imposes the verb ‘to be,’ but the fabric of the rhizome is the conjunction, ‘and... and...and...’ This conjunction carries enough force to shake and uproot the verb ‘to be.’” (1987: 25).