

DRAFT paper presentation

## **Life in the city: a moss-eye view**

Jennifer Gabrys, Goldsmiths, University of London

Paper presented at Department of Architecture, University of Sheffield, UK

16 March 2011



[Figure 1.: Moss viewing]

### **From corporation to incorporation**

Urban nature, or more-than-human life in the city, is a topic that at once suggests cities are less the all-consuming human spaces they might at first appear to be, and that ‘nature’ in relation to urban sites and processes is something that shifts and materializes through changing political ecologies (Braun 2005; Keil 2003; Swyngedouw 2006;). Cities abound with a range of more-than-human forms of life,

and yet many of these forms of life—from rats to nettles to starlings—do not always register as matters of substance. Nonhumans in the city are not just anomalous or weedy inhabitants out of place, however, but are forms of life that emerge in distinct relation to cities (Hinchliffe and Whatmore 2006; Wolch 2002). Urban development and the political distributions of green space and grey space, as well as the extended resource networks that support cities, are intimately enfolded with the possibilities for more-than-human forms of life to inhabit and sustain urban space (Cronon 1991; Gandy 2002; Heynen et al. 2006).

This paper discusses an urban walking event, “Moss-eye view,” which stages an itinerant investigation into urban natures in London. The walking event, which I developed to take part during the This Is Not a Gateway (TINAG) festival October 2010, focuses on the prevalence of bryophytes, particularly mosses, in the Square Mile as a way to ask questions about more-than-human forms of life in the city. Mosses are a prevalent if typically overlooked form of life that can be found throughout the City. Yet mosses are not mobilized as resources or food or organisms to protect within biodiversity policies. In what ways do the distinct inhabitations of moss—as peripheral yet urban organisms—in the City of London shift the possible registers from which we experience urban space? How do these altered perspectives and positions generate distinct urban practices for engaging with cities through situated and material engagements, and not exclusively through discursive analysis (Haraway 1988; Harvey 1996; Hinchliffe and Whatmore 2006)? While many different forms of life lead an *urban* life, or are influenced in some way by the form, distribution, energy of cities, their membership in the “*polis*” may not be recognized as significant to urban democracy (Bingham 2006, page 493; Glendinning 2000, page

6). In what ways does the process of “making room” for more-than-human life in the city then provoke new conceptions of urban citizenship (ibid.)?

The TINAG 2010 urbanism event was held on the edge of the City of London at Hanbury Hall, and had as its theme the “corporation,” focusing especially on those spaces that might be seen as central to the financial crisis of 2008-onwards. Even more than the corporation, however, the ‘Moss-eye view’ walk explores issues of *incorporation* in the financial and historic centre of London. Incorporation is a concept that I am developing here to draw attention to the ongoing entanglements of ecologies, economies and politics that constitute urban life.<sup>1</sup> Karen Bakker has suggested that the “nature” that analyses of “neoliberal” economies are able to see is often informed by distinct categorizations of the more-than-human. In this respect, an analysis of the role of the corporation in the city is already an analysis of human and nonhuman modes of incorporation, since these are “co-constitutive” participants in urban life (Bakker 2010, page 717; Braun 2008, page 668). Incorporation may then describe processes for studying how ecologies and economies are “co-constituted,” and for indicating how certain types of “neoliberalization processes” are enfolded with certain “types of socionatures” (Bakker 2010, page 716). The co-constitution of ecologies and economies involves much more than recognizing their interdependence. Because the interlinking processes of ecologies and economies are so critical to the ways in which urban life is understood, new insights into cities necessarily emerge through an attention to urban economies and ecologies as they intersect (Bakker 2010, page 717).

Incorporation may be a way to bring nonhumans into discussions of urban life. But this discussion focuses on incorporation as a process of co-constitution, and does not address incorporation as a mode of complete assimilation, or the extent to which nonhuman nature may resist such assimilation (Braun 2008). Could incorporation be deployed as a term that indicates “openness” to a city that is more than human, and that transforms and regenerates through meetings between humans and nonhumans (Hinchliffe and Whatmore 2006, page 135)? How could incorporation describe a process that takes place through the changing and situated inhabitations of humans and nonhumans in urban spaces? How could these entanglements inform urban processes and urban forms of life, and even designate the possibilities for urban citizenship, through the rethinking of which urban participants may be recognized as contributors to urban life (Bingham 2006; Glendinning 2000)?

### **Site work**

In the apparently singular space of financial industries occupying the Square Mile that informs which exchanges are construed as generative or peripheral, the ‘Moss-eye view’ walking event explores more-than-human forms of life from the ground up, from the moss-eye view, in order to understand these politics of urban relations—how they are incorporated in the arrangement of urban life across material and interspecies boundaries, and how they inform the possibilities for new relations to unfold. The walk draws upon diverse but related disciplinary practices, including urbanism, ecology and citizen science. A bryologist, Emeritus Professor Jeff Duckett, contributed to the identification and discussion of bryophytes and other plant life observed en route (Duckett and Pressel 2009), and the participants on the walk

similarly contributed their observations and knowledge of both the organisms and places traversed, making this a collective and open-ended event.

This discussion is not meant to *explicate* an object or ‘artwork,’ since the walk was staged as practice-based research that sought to advance embodied and participative inquiries into urban life. As an urban event, the walk experiments with rethinking approaches to everyday urban life through observations and engagements with more-than-human forms of life. This is a way to practice urban ecology in order to undertake what Hinchliffe and Whatmore call the “reformulation of ecological attachments as inexpert experiments” (2006, pages 124-130). The engagement with bryophytes in the City of London is neither a critical exegesis nor art project; it is not a process of ‘following’ scientists in the field or an exercise in citizen science dedicated to expanding environmental surveys. Instead, the walk considers the ways in which alternative practices of urban political ecology might constitute and allow for distinct forms of site “work” (Woodward et al. 2010, page 273) that are not typically fore-grounded in the usual economies of the City of London. The walk explores in what ways mosses in the city might be studied as sentient, more-than-human exchangers of and participants in urban energies; and as in-between and peripheral organisms that connect up sites by working across material, affective, political, socio-natural and imaginative registers.

### **Walking in the city**

London is a city with a long and detailed history of walking practices, guides and narratives. Texts held in the City of London Guildhall Library inventory a diverse range of forms of mobility within the city. From wandering and rambling to loitering

and sauntering: these modes of walking are not synonymous but suggest distinct sensory and imaginary engagements with London. A device used by many writers, walking in London follows trajectories that are at turns ‘orbital’ or oriented toward the ‘hinterlands’ (Sinclair 2003 [1997]; Sinclair 2003 [2002]). In these narratives, walking is often a practice for accessing overlooked parts of the city, and for plumbing the depths of urban inhabitations that are well outside the official narratives of city life.

Embedded in this discussion of more-than-human forms of life in the city is the importance of walking as a method. From spatial theorists to environmentalists, natural historians and creative practitioners, walking has been a way to explore places and to generate multiple inhabitations in and observations of those places (Benjamin 1999; Careri 2001; Rendell 2006; Solnit 2000). Walking could be seen to ‘articulate,’ as de Certeau suggests, urban practices and the possibilities for alternative everyday spatial practices (1984 [1980], page 94). Walking as a highly textured urban practice, however, is not merely performed at a discursive level—it is also embodied and *incorporated* through social, material, political and collective encounters. Walking is a sensory method that connects up places and experiences, but also permits for wandering, digression and resonance (Ingold 2010).

While much walking research focuses on the perambulations of solitary walkers, often with the intention of exploring issues related to embodiment and self-landscape relations (Wylie 2005; Edensor 2000), other walking literature specifically emphasizes its role as a method steeped in “sociability” (Lee and Ingold 2006). In these accounts, walking is an event that articulates distinct forms of collective

experience—and how by walking together, collectives may be incorporated and practiced in relationship to places (Ingold and Vergunst 2008). Walking is at times seen as a way to mobilize research, where a perambulatory or performative method might reshape the questions and connections made within a research practice (Mol n.d.; Szerszynski et al. 2003). Mobile ethnographies are discussed as ways to have interviews with people *on the move*, in everyday situations that become animated through the course of ethnographic dialogue (Lee and Ingold 2006).

Walking is also a long-standing environmental method, where to be engaged with place is to walk through places (Muir 1916; Thoreau 2008 [1862]). On the topic of walking, Thoreau articulated that he was particularly interested in the root of the word ‘sauntering,’ since this term describes the art of walking as something undertaken by idle people in search of *la Saint Terre* (2008 [1862], 260). For Thoreau walking does not just facilitate the movement between places, but involves a transformation in the way we occupy places. These journeys are the basis through which it is possible to form relationships to environments and more-than-human forms of life, and through these relationships recast our understandings of human life.

Walking activates an embodied and yet also collective relationship to places, which allows for the introduction of distinct ways of sensing and thinking places that might be entrenched within distinct forms of occupation and everyday practice. In the City of London, an urban district ostensibly devoted to the running of finance, walking can be explored as a practice of connecting up urban political ecologies, and for observing and understanding environments from alternative perspectives. Walking is a way in which these more situated connections and practices are taken up in this event to

question our engagements with localized more-than-human forms of urban life. In what ways does this mobile and situated method draw attention to expanded urban communities? In what ways does a rather literal practice of “botanizing on the asphalt” (Benjamin 1999, page 372) reshape understandings of what constitutes “cosmopolitan bodies” (Clark 2000)?

### **More-than-human urban communities**

With the walk starting at Hanbury Hall, a well-known site of community gatherings and political activity, the walk participants consider the ways in which nonhumans are typically left out of accounts of the city. Our urban communities may include a diverse range of participants, but even these more multiple renderings of urban life often exclude more-than-humans from urban communities. Political urban ecologies are a decidedly human matter, and when ‘nature’ enters the scene, it is either as a commodity or unruly force such as a natural disaster impeding profit generation (Braun 2005). Yet cities are more than exclusively social or economic entities, and the need to engage with the city as a complex natural-cultural set of relations has become evident not just due to environmental change, but also through the ways in which urban ecologies inevitably interlink with political ecologies (Braun 2005; Swyngedouw 2006; Wolch et al. 1995). Some writers have argued that there is no ‘nature’ that is not in some way a ‘metropolitan nature’ (Braun 2005; Cronon 1991; Gandy 2002), since even the most distant hinterlands are incorporated into the economies and circulation of cities.

Urban nature is a conjugation of human and more-than-human life that exists in distinct relation to the politics and management of life.<sup>2</sup> While ‘nature’ may even

appear to be ‘returning’ to the city, following the relative improvement of air and water quality, not to mention increasing encroachment or urbanized development upon formerly non-urbanized lands, this return is not a simply matter of mosses and wrens and foxes now proliferating in the spaces between buildings. At the intersection of plans for sustainable cities, development schemes, nonhuman migrations, biodiversity policies, and environmental rhetoric, distinct forms of urban life emerge in direct relation to these urban practices. Nonhumans do not simply *return* to the city, but rather *become urban* as part of the assemblage of urban political ecologies in which they are situated.

While visions for sustainable cities often rely on a quite generalized notion of “nature” or natural conditions toward which cities might develop, this “internal” view of urban life typically depends upon a highly ideological and even organicist view of nature that often obscures the wider relationships and political connections that contribute to the possibilities of cities and urban life (Braun 2005, page 637; Hinchliffe et al. 2005). Could there be a ‘green city’ of technocratic imaginings, and another ‘green city’ of overlooked life forms? Cities may already be *green*, but not necessarily in a way that facilitates further urban development.

How do these other peripheral forms of life such as mosses inform urban processes? What other possible urban inhabitations do they suggest, as organisms that are both more-than-human as well as beyond the usual function or commodification of forms of ‘nature’ that are resources for urban development? Mosses cannot be construed as a raw material or ground to the figure of urban development, as they are more than “a static stock of ‘things’” forming a backdrop to human life (Braun 2005, pages 645-

646). By all accounts, the lively if unpredictable, dynamic and sentient qualities of more-than-human life suggest new forms of engagement that take account of the co-constitutive relations of urban life (Braun 2005; Haraway, 1997; Hinchliffe and Whatmore 2006; Wolch 2002). The wavering qualities of vegetation blur the boundaries of organism, community, and environment (Head and Atchison 2009, page 237; Hitchings and Jones 2004, page 5). These assemblages are not just more-than-human communities, but are also urban communities of humans and more-than-humans. Often composed of forms of life that may be “off the social science radar” (Bingham 2006, page 486), these diffuse more-than-human urban communities may then inform new forms of urban political practice.

### **Mossy collaborations**

The entangled and urbanized forms of more-than-human life might then be seen as “collaborators” (Matsutake 2009) in making cities—and in informing research and practice on cities. The material, political and ecological processes that intersect and unfold in cities cannot be singularly located, and are not exclusive to human endeavors. From this site of urban community activity in East London, the walk participants set out to investigate the possibilities for encountering the more-than-human life of mosses in the city, and in the process for considering how to describe cities as incorporations of urban dwellers, materialities, politics, and ecologies.

Leaving Hanbury Hall, we traveled along the Eastern edge of the City of London, walking across Commercial Road along Lamb Street to the Elder Gardens public-private gated park space adjacent to Spitalfields Market. Upon entering the gateway of the gardens, it is possible to observe moss blanketing the ground, in among the

paving stones, the common wall moss known as *tortula muralis*. Tracing the lines of the pavement, moss draws attention to the openings within these built urban architectures, and the infra-urban forces that transform their assumed solidity. Moss is adjacent to and contiguous with a whole range of urban forms. It quietly if pervasively inhabits cities and lives with urban dwellers of all types. Such a “living city” or modes of “living together” might recast understandings of cities, as Hinchliffe and Whatmore note (2006, page 134), since by living together, new encounters and alternative political engagements come into view.

While identifying lines and clumps of moss in and among the pavement in Elder Gardens, we consider how this *living alongside* is the subject of attention within analyses that range from the interspecies to the companion species and the multispecies, where the intersections and relations rather than the hard boundaries of organisms are an area of considerable attention (Haraway 2008; Kirksey and Helmreich 2010; Matsutake 2009). In their discussion of the possibilities for “multispecies ethnography,” Kirksey and Helmreich suggest that creatures once seen as peripheral have become more central to ethnographic analyses: “Animals, plants, fungi, and microbes once confined in anthropological accounts to the realm of zoe or “bare life”—that which is killable—have started to appear alongside humans in the realm of bios, with legibly biographical and political lives” (2010, page 545; Agamben 1998). By living alongside, however, the more-than-human does not become synonymous with the human, but rather may even challenge the ways in which humans are understood as discrete entities in the first place. In this way, any multispecies ethnography gestures toward an interspecies view of life. Whether

shoring us up or pre-dating our short if furious planetary transformations, a whole host of organisms works in and through dynamic environments with us.

Mosses are a part of these multi-species communities, inhabiting the dark edges and crevices of so many urban spaces. An urban and multispecies ethnography of moss, however, does not immediately reveal the ways in which these organisms may be “co-constitutive.” What they seemingly lack in usefulness, they make up for in prevalence. Over 60 percent of the total flora in the UK consists of bryophytes, including liverworts, hornworts and mosses. There are 1,055 bryophytes in the British Isles, which includes 754 mosses (Porley and Hodgetts 2005, page ix). There are a high number of bryophytes in the British Isles due to the humid, oceanic climate. It is for this reason that the British Isles is often referred to as a green and mossy land (ibid., page 1). Even in the center of the City of London, a generous number of mosses can be found in and around gardens and squares.

On this urban edge of a newly redeveloped part of East London, we consider how mosses are at once transitional and ancient organisms, as well as pioneer species. Evidence from fossilized bryophytes suggests these may have been the first plants to make the transition from water to land approximately 350 million years ago, shifting from algae to bryophytes via fresh water pools, as mosses typically inhabited the fluctuating littoral margins of fresh water bodies (ibid., pages 40-41). While they are dependent upon moisture for reproduction, a reminder of their watery origins, they are also tolerant of dehydration and in some cases complete desiccation. Because they are able to withstand long periods without water, losing water rapidly and suspending photosynthesis when no water is present, they are highly adaptable. They may

suspend their metabolisms, for instance in the summer, and begin reproduction in autumn and winter when moisture is more abundant. Mosses spread by microscopic spores that may travel from mountains to sea—and while their spores have the capacity for far-reaching dispersal and establishment, with some “cosmopolitan” species such as *Bryum argenteum* spreading from London to Antarctica and farther still, most mosses are small and slow-growing (ibid., page 78).

At this moment when many species are under stress and reaching extinction, mosses are at a high point in their diversity. While their range is shifting, potentially due to climate change, in terms of overall diversity mosses are proliferating (ibid., pages 98-103). Part of reason for mosses’ flourishing is their ability to withstand extreme and inhospitable landscapes. Not only do many species of moss inhabit potentially unaccommodating urban environments, they are able to grow on the edges of geothermic pools, in icy Arctic landscapes, in sites with metal and salt contamination, and directly on rock surfaces from the maritime zone to the alpine zone. Mosses are “able to colonize some of the most inhospitable and extreme places in the world” (Porley and Hodgetts, page 31). As pioneers, bryophytes play an important role in substrate stabilization, trapping sediments and water and nutrient cycling. They form a “biotic crust,” which aids in the “establishment of vascular plant vegetation” (ibid.).

While moss is an abundant if almost signature organism of the UK, it is regularly overlooked as an insignificant if not nuisance species. The New Naturalist handbook on *Mosses and Liverworts* suggests, “The word ‘moss’ conjures up a particular picture in the public imagination, a vague feeling of damp, greenness and perhaps undesirability” (ibid., page 1). Despite its prevalence and even centrality to plant life

in the British Isles, moss is a peripheral organism considered to be of decidedly marginal use or concern. While there are very few instances where moss is seen to have any use, one striking exception is the Moss Men (*Hombres de Musgar*) parade in Béjar, Spain. In this other type of moss-walk, participants adorn themselves from head to foot with moss as part of a religious ritual celebrating the defeat of Muslims by Christians in the 12/13<sup>th</sup> century, when townspeople disguised in moss were able to take a fortress in Béjar, Salamanca by virtue of their unparalleled camouflage (Martíáñez-Abaigar and Nuânñez-Olivera 2001). This parade, which has been repeated since the late 1300s, is a performance of mosses' entanglement in politics, race, religion, and combat, meshed with a costume party and legend continually re-inscribed on moss-bearing bodies.

### **Under the radar**

The hazy verdure and perpetual green that we see but do not see in peripheral urban space, may then be primarily composed of moss, which carpets cities as well as exurban landscapes, all the while exchanging energy, accumulating materials, and transforming ecologies. With the image of moss-wearing marchers in mind, we walk from this eastern edge of the City of London through Spitalfields Market, and past Petticoat Lane toward Cutlers Gardens at Devonshire Square. This edge of the city is a relatively non-mossy space, in part due to the low number of open spaces, whether public or private, and in part due to the managed and private quality of many of the few open spaces, which most often consist of fescues and ivy. At Cutlers Gardens we catch our first glance of a liverwort—a member of the bryophyte family—proliferating in the soil edge between the storm drain and the concrete pavement.

The practice for viewing bryophytes can at times be a somewhat mangled matter, as the bryologist wields his pocketknife and surgically removes a small sample of liverwort from the storm drain. With hand lenses of 10x and 20x magnification, we learn the process of holding the lens against our faces while bringing closer the specimen to be examined. From this fine-grained if nearly myopic angle of vision, the waxy water-loving organism becomes a life-sized lily pad under closer scrutiny, a speckled landscape of pores and folds-within-folds of leaf-like bases and cup-shaped receptacles. *Marchantia polymorpha* subsp. *ruderalis*, this common liverwort is often regarded as a weed, as it typically grows in disturbed sites and in gardens (Atherton et al., 2010). But in this moment of walking through the city at lunchtime, when the procurement of sandwiches and cigarettes and coffee generates a set of addled and frantic routines, the liverwort appears to be holding out for another *under-the-radar* sensorial and temporal register.

### **Migrational city**

In this moss-eye view, the imperfect overlapping of these multispecies sensory worlds comes into focus, so that life sensed from below also opens up different possibilities for thinking and experiencing life in the city. This moss-eye view investigation is informed in some ways by the architectural perspectives that are standard fare in drawing classes: the bird's-eye view from above, or the worm's-eye view from below, each figuratively offering a different view on space. While these perspectives may seem to simply suggest contrasting vantage points, in other writings the politics of viewing from above and below are seen to open up possibilities for alternative spatial practices. The often-discussed writings of de Certeau focus on these possibilities, where he counter-poses the aerial view of New York City from the World Trade

Center, and contrasts this with the articulated experience of walking in the city from below—the latter a space of political possibility (1984 [1980], pages 91-93). The “walkers” down below, de Certeau suggests, articulate practices that “escap[e] the imaginary totalizations produced by the eye” so that “a *migrational*, or metaphorical, city thus slips into the clear text of the planned and readable city” (ibid., 93).

While viewing from above and below are now well-discussed themes, another element of de Certeau’s *under the radar* analysis of urban life includes a consideration of the ways in which master plans and rational designs for cities collide with a proliferating range of fleeting urban practices that operate beyond detection. This discussion of the rational city against or within which alternative practices emerge continues to have a long-standing effect on urban studies, where cities seem to be totalizing and totalized entities through which localized counter-practices emerge (Hinchliffe and Whatmore 2006; Petcou and Petrescu 2007). In de Certeau’s account, individual spatial practices are articulated as the possible site of agency and appropriation of urban life (1984 [1980], pages 95-96). Yet engaging the city from above or below is not simply a matter of scale or point of orientation, but also implies practices of urban political ecologies that *connect up* distinct spatial possibilities. Hinchliffe and Whatmore ask, “How can civic attachments and associations adapt to the hectic comings and goings of living cities?” (2006, 129). The movements of urban dwellers—human and nonhuman—may be mutable, varying and digressive. The urban practices, forms of life and meetings that come together through these migrations are characterized not necessarily by “resistance” (Pinder 2005), but in many respects by associations that are the sites for new political ecologies.

## **Micro-city**

Since de Certeau's analysis of urban practices, there have been many more views of the urban, material or spatial consequences of engaging with environments *from below*. Infra-urban practices imply more than an altered perspective or scale, since from these sites there may emerge suggestions that new types of politics or ontologies are possible from these situations. These altered orientations are evident in the micro- or ground-level inhabitations of everything from the worms found in the writings of Gay Hawkins, and Jane Bennett, to the insect worlds of Hugh Raffles, to the fly-eye view of geographer Keith Woodward and others (Bennett 2010; Hawkins 2005; Raffles 2010; Woodward 2010). The fly-eye view, as Woodward and his co-authors suggest, can offer a way to consider what different political perspectives are offered up through this more detailed and intimate perspective. In distinction to "the perspective of the eagle," these authors suggest the fly-eye view gives rise to "specific political actions" that are made possible because they "transpire beneath the radar" of universal plans and ambitions (Woodward et al. 2010, page 272).

While these authors draw on Deleuze and Guattari's notion of "minoritarian politics" (1987 [1980]) to articulate, their emphasis is directed toward the ways in which attention to the politics of scale might generate new political possibilities—from below. Engaging this similar thread of minoritarian discussion, Hinchliffe and Whatmore suggest, however, that minor practices are more a matter of kind than scale (2006, page 134). From the micro- to the minor and the miniature, and from below or in the more specific and localized sites of engagement, a relatively consistent if at times diverging set of analyses suggest that these perspectives allow for distinct

spatial practices that go against the grain of major urban discourses.

What filters through this analysis, however, is that the view from below does not refer to individual (if generalized) acts of resistance necessarily, but to new political associations and practices that, as in this engagement with cities, are bound up with more-than-human forms of urban life. In this respect, it may be useful also to consider Benjamin's micrological practices for engaging with urban materiality (1999). His fine-grained approach that contrasts with the overarching systems view so pervasive within most philosophical—and urbanist—modes of thought and practice. The micro-perspective allows for an attention to specificity of exchanges and practices that do not just scale up, as a microcosm, to a larger set of concerns, but rather in its condensation and compression makes relationships (and political connections) more vivid, where they might otherwise be diffuse and disparate.

Viewing from below, with this particular set of organisms, we then turn to the ways in which new urban associations make possible alternative urban practices of viewing *together with* overlooked forms of life. The urban locatedness of these encounters describes a key aspect of their formation, since our way of glancing and studying mosses attends to the fine-grained vegetation that lines the joins and depressions within hard surfaces. We use lenses to bring our view of London down toward the magnified view of mosses and liverworts colonizing the primarily hard surfaces of the City. Viewing here is a composite practice, taking place across organisms, spaces and technologies. No longer a matter of viewing from high or low, instead viewing takes place from the moss-eye view in another respect, where in the process of viewing mosses, new practices of situated and “infolded” urban vision emerge (Gabrys

forthcoming; Haraway 2008).

In his brief discussion of urban bird watching, “Where Species Meet,” developed in response to Haraway’s *When Species Meet* (2008), geographer Steve Hinchliffe indicates how the usual alignment of “the hidden lens-eye-body” shifts in the urban bird encounter, such that the relationship between birds and humans becomes a mobile and embodied flickering encounter, at times informed by the objectives to challenge development plans in areas where rare species may be spotted, at other times revealing other ways of mapping and navigating the city, from the bird’s-eye view. In order to unfold these encounters, it becomes vital to learn how to “mak[e] oneself available.” This *making available*, a term Hinchliffe elaborates upon through Haraway, is not just about encounters that happen “one-to-one,” in place—where species meet—but also encounters that occur across multiple spaces, in the anticipatory or detailed spaces of field guides to the amplified gaze offered up by viewing devices (Haraway 2008; Hinchliffe 2010).

Making oneself available is about a receptive politics of vision—of making space for encounters through an ethics of situatedness. Such a vantage point perhaps resonates with Maria Puig de la Bellacasa’s discussion of touch as a sensory capacity that collapses the distance of (visual) abstractions, and makes available new encounters of “connectedness” (2009, page 298). What might be seen as yet another way of viewing from below, touch opens up the possibility of forming alternative political associations and practices. As Puig de la Bellacasa writes:

Haptic speculation is not about imaginative expectation of events to come; it is a (survival) strategy of the present in ‘life below the radars’ of optic orders

that do not welcome, know, or even see the practices that exceed pre-existent representations and meanings. This sense of haptic engagement relates well to the (knowledge) politics of reclaiming the neglected: to speculative commitments that are about being in touch, relating with, and partaking in those worlds that are struggling to make their other visions not so much visible, but possible (ibid., page 311).

Seeing as a sensory practice connotes autonomy of the sensing subject; while touching often requires connection and receptivity—or incorporation. Here again, below the radar of one type of vision is another set of practices that seem to offer connection and possibility in place of abstraction and stasis. Seeing from below, and feeling from below, can be a way to connect up with other forms of life, and to generate alternative speculative practices.

### **Life in the city**

As we pass through Cutlers Gardens, I note that Devonshire Square is the site of various sustainability initiatives, including the placement of a stuffed polar bear in the main lobby as a way to remind office workers of the relationship of their environmental practices to the imminent if removed destruction of habitats and species. Here, the viewing of a relatively abstract if completely inert charismatic megafauna stands in for the environmental practices and life forms to which we ought to have a sense of accountability. And yet nearer at hand are any number of less charismatic organisms that already populate our cities. We live alongside a whole host of other forms of urban life, and we rely on more extended networks of urban life that support both the spatial objects of the City of London—and the Arctic. The polar bear might be seen here as a detached form of life, a symbol of environmental degradation

and abstract obligation. Would a renewed attention to the urban life around us provoke other types of ‘environmental’ relationships through our awareness of more-than-human urban dwellers?

### **Bio-diverse city**

Moving across Bishopsgate and Liverpool St. To St. Botolph without Bishopsgate, we spot a tree covered with mosses, a sign of an organism that has returned to the city with the abeyance of air pollution (Duckett and Pressel 2009). Up until the 1960s, more-than-human forms of urban life were relatively limited, and in the 1945 *London Natural History* guide, the author R.S.R. Fitter comments on the relative dearth of flora and fauna to be found in London: one might encounter the cockroach and the pigeon, the blackbird and the raven, the sparrow and assorted weeds, but these figures of urban wildlife were often the hardiest and most tolerant species, able to tough it out in extreme urban environments.

The City of London Biodiversity and Habitat Action plans focus now on preserving habitats and species that are unique either for their return to the city, or for their threatened status (2002). These include the black redstart, the peregrine falcon, and the house sparrow, for which the City government seeks to create improved habitat in the Square Mile.<sup>3</sup> Here is one approach to biodiversity, where significant organisms are identified and ideal habitats proposed for their ongoing urban habitations. Still other forms of urban inhabitation might be seen to take place through the emergence of distinctly urban “biological communities” that are distinct from “the staple of conservation biology” (Hinchliffe and Whatmore 2006, page 123). Cities become important sites for studying urban ecologies, where ecologies indicate not just

familiar, overlooked or rare species populating cities, but where urban ecologies are understood to have distinct processes and modes of inhabitation (Braun 2005; Lachmund 2007; Wolch 2002).

Within the context of green cities and biodiversity, less desirable species may be weeded out or extirpated. Moss is often a managed form of vegetation, and there are moss removal programs to rid spaces of this relatively abject organism, whether by mechanical or chemical means. When considering for which species viable habitat exists or is made, there is a question about the way in which life is managed in the city. What does it mean to green the city, to invite life into the city and manage it? How do these environmental agents occupy the city—across ecologies and edge habitats—regardless of or in relation to the plans laid for them? In many ways, moss is a wayward organism, which does not occupy an idealized form of managed life even within the bio-diverse city, but is another form of green life that we are in a sense provoked to take account of when we look at the city from this moss-eye view.

### **Sensing life**

Moving from the moss-draped tree to the entrance of the church hall at Bishopsgate, we study the 18<sup>th</sup>-century gravesite for Arthur James Clarke, which bears a depressed inscription carved into a porous granite slab. This horizontal marker has collected moisture in its depressions, making the perfect home for mosses. Here, *tortula muralis* has carefully followed the line of letters, transforming a gray memorial into a furry green alphabet of partial legibility. In this vegetable language, one is reminded of the role that mosses play as tracers of another sort, since they act as bio-indicators of environments. Sharing this quality with lichens, which are typically even more

sensitive to air pollution, mosses sense and store the effects of air and water pollution and acidification. They do not have a root structure but rather grow through hair-thin rhizoids, absorbing most of their nutrients from water and air gathered across their surface area. For this reason, they absorb a high number of chemicals, including carbon dioxide, which may be present in air or water. As mosses absorb minerals present in the substrate, they may be used to prospect for minerals, also known as bioprospecting or geobotanical prospecting (Porley and Hodgetts 2005, page 34).

Operating at the “land-air interface” and contributing to water and nutrient cycling, moss is an organism that senses and inscribes, responding rapidly to environmental changes (ibid.). Mosses are increasingly used in biological monitoring to study atmospheric deposition of heavy metals: maps are created with mosses to indicate occurrence of metals, and moss samples in herbariums can be studied for historic levels and concentrations of pollutants (Norris 2003, page 6). In some cities in Europe, mosses are suspended in cloth bags over freeway overpasses and later harvested in order to do mineral analysis of air pollution levels at these sites (ibid.).

Urban environmental health can then be registered through moss, indicating how mosses may be best understood as relational organisms. Not only do they store the effects of environments, and provide historic and contemporary readings of sites, they also grow in relation to particular habitats and conditions that are most favorable—and this is often the best way in which to identify which bryophytes may be growing in particular locations. Some mosses grow on trees, on soil, on calcareous surfaces such as walls. So beyond the sensing of present conditions, moss exists in clear relation to habitats and spaces. Yet it also has a relation to time, since it is an

accumulator, collector and exchanger of minerals and pollutants in sites. Moss incorporates the material effects of urban ecologies, across time and space.

### *Anticipatory organisms*

As we walk down Old Broad Street, to Threadneedle Street, crossing Princes Street past the Bank of England, it is possible to consider this other, future-oriented and potentially allegorical dimension of moss, an organism that collects and sediments past events but also anticipates future decay and sedimentation. In this respect, moss appears to be an anticipatory organism, ready to coat and carpet the debris of human industry. In fact, an image of the Bank of England in ruins seems to have been a formative part of its architectural construction, when the former Bank of England designed by John Soane was developed with accompanying drawings by Joseph Gandy that make the Bank of England resemble Pompeii, a ruined site in the centre of the city. The imagining of cities is bound up with the imagining of their ruination. And operative organisms such as moss stimulate and provoke these kinds of imaginings of the city. Moss has a relationship to ruins, covering them and indicating slow time in places that have become still and overgrown, inscribing the accumulation of time in place.

This is a different type of green city, a moss city, a city of remnants and remainders, a city of wild-life and unmanaged green. Such a green city is often depicted as emblematic of catastrophe, as Richard Jefferies indicates in *After England, or Wild London*, where the opening image of his tale of London ruin describes an aggressive colonization by flora of what was once London. In “Part I: The Relapse into Barbarism, Chapter One: The Great Forest,” where some unnamed catastrophe has

halted civilization, the rampant growth of vegetation is a sure indicator of these end times:

It became green everywhere in the first spring, after London ended, so that all the country looked alike. (1905)

Here, the City had come to a standstill under the forceful spread of vegetation, which seems to signal at once toward anticipatory futures and congealed pasts, where plants as life forms can be seen as intertwining in the exhausted spaces of human enterprise.

### *Life, uninvited*

Passing the relatively newly located Bank of China, which is now adjacent to the Bank of England, we return to a consideration of the corporation and forms of lively incorporation in the city. Corporations are not just discrete entities, organizations, sites, buildings, brands, products or services, but are also a set of interdependent spatial relations that may become explicitly evident or available for study in these concentrated urban districts. Of course the economic power relations of the City are congealed into urban form, they have their materiality, but the solid edifices of corporations also have their relational fissures, gaps and connective sinews that are intertwined with these architectures. In contrast to those allegorical friezes that adorn the pediments of grand City buildings, whether gargoyles or lions or ladies of Justice, this project nominates an unofficial allegorical figure that can be found throughout those less prominent but by no means less extensive cracks, gaps and margins that run through the City. Moss carves its way, in an uninvited fashion, into the City's stone, brick and concrete, suggesting that it too is a lively and provocative organism that embodies tales of the City.

Making our way through the central court of Guildhall, we find green algae as well as *tortula muralis* running along base of the St Lawrence Jewry. Past the lily pond with its abundant numbers of dragonflies, we pass the Goldsmiths Hall Gardens, a depressed garden below street level, which was created by bombing in 1941. Staff from Goldsmiths Hall made a garden in the ruins of the bombsite, planting flowers and shrubs from their own gardens at home. The garden flourished, which prompted the city to hold a garden competition for the best garden on a blitz site (City of London n.d.). The site is now a relatively managed if properly landscaped assembly of benches and sculptures and vines, with moss tracing the contoured edges of walls and walkways.

We have gained special access to yet another prior bombsite, the Plaisterers' Hall garden on Noble Street, where the bombing has revealed the remains of a Roman Wall segment, which is replete with mossy specimens. Here are *Fissidens bryoides*, *Grimmia pulvinata*, *Bryum argenteum*, *Bryum capillare*, and many others besides, an undisturbed haven for mosses to collect and spread on the Roman to Victorian ruins of London. From this site, we pass through the Barbers physic garden, a site of which John Gerard was master in 1607, and consider his various uses for moss proposed in his *Herbal* of 1597, as he was particularly attuned to the tendency of moss to grow on bones and at charnel houses. At the back edge of the Barbican, also part of a bombsite, we continue walking along the London Wall to Moor Lane, finding instances of managed decay and unmanaged neglect as derelict buildings seem to be the structures most welcoming of moss. From Moor Lane we arrive at our final destination, Bunhill Cemetery, a site that is bound up with these notions of incorporation, of moss and bones and anticipated decay.

## **Urban incorporations**

Our final stop leads us to Bunhill or bone-hill, a former dissenters' burial ground, which is 4-acres in size, is the site of approximately 123,000 interments, many are the remains of plague sufferers, but some include dissenters or nonconformists from Daniel Defoe to William Blake and Paul Bunyan, another proverbial walker of Pilgrim's Progress fame (2003 [1678]). The last burial ended in 1853, and now each gravestone is a compressed ecosystem of moss and porous stone, gathering moisture and settling into the earth.

The distinctive relationship between moss and waste sites, and moss and ruin, is evident here in high relief, suggesting that mosses are plants responsive to death and recolonization. Returning to Woodward and his co-author's discussion of the "work" that holds sites together, we begin to see how cities assemble through the labor of nonhumans, along with human bodies, their practices and performances, their labor and the economies and discourses in which they engage, as well as their imaginaries for political possibilities. Site work is a form of incorporation, where more-than-humans labor along with humans in their multiple economies and ecologies. In order to take note of the site work conducted by more-than-humans, as they exchange energies in similar and dissimilar ways, it may be necessary to operate from an alternative view—whether that of the fly, the worm, or moss—in order to gain a more nuanced and specified understanding of the work and exchanges that hold sites together (Woodward et al. 2010, page 273).

Yet these views from below are not articulated here as generalized zones of resistance, but rather as sites for considering the new associations and practices for

urban political ecologies that might become possible through more-than-human relations. In this walk, and from this alternative perspective, mosses become evident as exchangers of urban energies, materialities, temporalities and imaginaries. We might then ask what other exchanges emerge from the “moss-eye view,” which are distinct from the uni-dimensional economies of the city. In Thrift’s discussion of turbulent passions in non-representational theory, he draws on Sloterdijk’s discussion of air-conditioning and air-conditioning projects to suggest that finding new “breathing spaces” may be a key way in which to open up political possibilities (2008, 235). He asks, “Is it possible to change the socio-spatial terms of trade by providing new environments in which novel doctrines of living can thrive, environments which will provide the breathing space with which democracy can be re-invented...?” (ibid.).

Rather than see this breathing space as a matter of clearing away some things to make way for others, it may be that by placing the emphasis on novel forms of living that a micrological yet pervasive opening such as moss within the managed space of the Square Mile may help us to think about living and politics differently—through *incorporations*. These incorporations and this site work is ongoing, since as Braun suggests “There is an intimate geography of urban bodies and the exchange of properties between bodies—humans and animals alike—that has not yet been written” (2005, 647). “Moss-eye view” then attempts to make a contribution to these as-of-yet largely unwritten urban exchanges, and in the process seeks to make possible other forms of site work committed to exploring urban incorporations and urban life—under the radar.

## **Acknowledgements**

Thanks are due to Professor Jeff Duckett for his expert contribution in identifying and discussing bryophytes on this walking event; and to members of the British Bryological Society for contributing to my ‘inexpert’ ability to identify bryophytes at Hampstead Heath. Within the City of London, help in accessing garden spaces was provided by the City Gardens Section and Plaisterers Hall. Thanks are due to the garden attendants at Bunhill Fields, and the archivists at Guildhall Library for providing material in support of this walk. This event would not have been possible without the generous support and contributions of TINAG organizers and walking participants. An earlier version of this paper was presented at the ‘Life Itself’ seminar in Visual Cultures, Goldsmiths, University of London. Thanks are due to the conference organizers, Alice Andrews and Lynn Turner, and conference participants for providing a forum in which to test these ideas. Kathryn Yusoff contributed camera, sound and idea support to the field-trials of walking and talking that led to the ‘Moss-eye view event.’ Seed-funding for this event was provided in part from the Department of Design Cultivation Research Funds, for “Citizen science: new models of participation,” 2009-2010.

## References

- Agamben G, 1998 *Homo Sacer: Sovereign Power and Bare Life* translated by D Heller-Roazen (Stanford University Press, Stanford); first published in 1995
- Atherton I, Bosanquet S, Lawley M, 2010 *Mosses and Liverworts of Britain and Ireland: A Field Guide* (British Bryological Society, London)
- Bakker K, 2010, "The limits of 'neoliberal natures': debating green neoliberalism" *Progress in Human Geography* **34**(6) 715–735
- Benjamin W, 1999 *The Arcades Project* translated by H Eiland, K McLaughlin (Belknap Press of Harvard University Press, Cambridge, MA)
- Bennett J, 2010 *Vibrant Matter: A Political Ecology of Things* (Duke University Press, Durham)
- Bingham N, 2006, "Bees, butterflies, and bacteria: biotechnology and the politics of nonhuman friendship" *Environment and Planning A* **38**(3) 483-498
- Braun B, 2008, "Environmental issues: inventive life" *Progress in Human Geography* **32**(5) 667–679
- Braun B, 2005, "Environmental issues: writing a more-than-human urban geography" *Progress in Human Geography* **29**(5) 635-650
- Bunyan J, 2003 *The Pilgrim's Progress* (Oxford University Press, Oxford); first published in 1678
- Careri F, 2001 *Walkscapes: Walking as an Aesthetic Practice* (Gustavo Gili, Barcelona)
- Certeau M de, 1984, "Walking in the city", in *The Practice of Everyday Life*, translated by S Rendall (University of California Press, Berkeley, CA), pp 91-110; first published in 1980

- City of London, n.d., "Visit the city," available at <http://www.visitthecity.co.uk/index.php/attractions/view/213/>
- City of London, 2002, "Biodiversity action plan," available at [www.cityoflondon.gov.uk/bap](http://www.cityoflondon.gov.uk/bap)
- Clark N, 2000, "Botanizing on the asphalt? The complex life of urban bodies" *Body & Society* **6**(3-4) 12–33
- Crary J, Kwinter S (Eds), 1992 *Incorporations: Zone 6* (MIT Press, Cambridge, MA)
- Cronon W, 1991, *Nature's Metropolis: Chicago and the Great West* (WW Norton, New York)
- Deleuze G, Guattari F, 1987, *Thousand Plateaus: Capitalism and Schizophrenia* translated by B Massumi (University of Minnesota Press, Minneapolis, MN); first published in 1980
- Duckett J G, Pressel S, 2009, "London's changing bryophyte flora" *Field Bryology* **98** 30-46
- Edensor T, 2000, "Walking in the British countryside: reflexivity, embodied practices and ways to escape" *Body & Society* **6**(3-4) 81-106
- Fitter R S R, 1945 *London's Natural History* (Collins, New Naturalist, London)
- Gabrys J, forthcoming, "Moss cam: situating sense", in *Emerging Landscapes* Eds Eugenie Shinkle et al. (Ashgate, Aldersgate)
- Gandy M, 2002 *Concrete and Clay: Reworking Nature in New York City* (MIT Press, London and Cambridge, MA)
- Glendinning S, 2000, "From animal life to city life" *Angelaki* **5** 19-30
- Haraway D, 1988, "Situated knowledges: the science question in feminism and the privilege of partial perspective" *Feminist Studies* **14** 575-599

- Haraway D, 1997 *Modest\_Witness@Second\_Millennium. FemaleMan©\_Meets\_Onco-Mouse™* (Routledge, New York)
- Haraway D, 2008 *When Species Meet* (University of Minnesota, Minneapolis, MN)
- Harvey D, 1996 *Justice, Nature and the Geography of Difference* (Blackwell, Oxford)
- Hawkins G, 2005 *The Ethics of Waste: How We Relate to Rubbish* (Rowman and Littlefield, Lanham, MD)
- Head L, Atchison J, 2009, "Cultural ecology: emerging human-plant geographies" *Progress in Human Geography* **33**(2), 236-245
- Heynen N, Kaika M, and Swyngedouw E (Eds), 2006 *In the Nature of Cities – Urban Political Ecology and the Politics of Urban Metabolism* (Routledge, London)
- Hinchliffe S, 2010, "Where species meet" *Environment and Planning D: Society and Space* **28**(1) 34-35
- Hinchliffe S, Whatmore S, 2006, "Living cities: towards a politics of conviviality" *Science as Culture*, **15**(2) 123–138
- Hitchings R, Jones V, 2004, "Living with plants and the exploration of botanical encounter within human geographic research practice" *Ethics, Place and Environment*, **7**(1–2), 3–18,
- Ingold T, 2010, "Footprints through the weather-world: walking, breathing, knowing" *Journal of the Royal Anthropological Institute* **16**(1) S121-S139
- Ingold T, Vergunst J Lee, 2008, "Introduction", in *Ways of Walking: ethnography and practice on foot* Eds J Lee Vergunst, T Ingold (Ashgate, Aldershot), p 1-19
- Jefferies R, *After London or Wild England* (Duckworth & Co, London)
- Keil R, 2003, "Progress report: Urban political ecology" *Urban Geography* **24**(8) 723-738

- Kirksey E, Helmreich S, 2010, "Multispecies ethnography" *Cultural Anthropology* **25**(4) 545-576
- Lachmund J, 2007, "Ecology in a walled city: researching urban wildlife in post-war Berlin" *Endeavour* **31**(2) 78-82
- Lee J, Ingold T, 2006, "Fieldwork on foot: perceiving, routing, socializing", in *Locating the Field. Space, Place and Context in Anthropology* Eds S Coleman, P Collins (Berg, Oxford), pp 67-86
- Martiñez-Abaigar J, Nuñez-Olivera E, 2001, "The legend and procession of the Moss Men from Béjar (Salamanca, Spain)" *Journal of Bryology* **23** 261-266
- Matsutake Worlds Research Group, 2009, "A new form of collaboration in cultural anthropology: Matsutake worlds" *American Ethnologist* **36**(2) 380-403
- Mol A, n.d., "The walking seminar," blog available at <http://walkingseminar.blogspot.com/>
- Muir J, 1916 *A Thousand Mile Walk to the Gulf* (Houghton Mifflin Company, Boston and New York)
- Nancy J-L, 2007, *The Creation of the World or Globalization* translated by F Raffoul, D Pettigrew (State University of New York, Albany); first published in 2002
- Norris D, 2003, "A conversation about mosses, liverworts, and hornworts" *Fremontia* **31**(3), 5-11
- Petcou C, Petrescu D, 2007, "Acting space: transversal notes, on-the-ground observations and concrete questions for us all," available at <http://www.urbantactics.org/publications/publications.html>
- Pinder D, 2005, "Arts of urban exploration" *Cultural Geographies* **12**(4) 383-411
- Porley R, Hodgetts N, 2005 *Mosses and Liverworts* (Collins, New Naturalist, London)

- Puig de la Bellcasa M, 2009, "Touching technologies, touching visions. The reclaiming of sensorial experience and the politics of speculative thinking" *Subjectivity* **28**(1) 297–315
- Raffles H, 2010 *Insectopedia* (Pantheon Books, New York)
- Rendell J, 2006, "Walking", in *Art and Architecture: A Place Between* I B Tauris, London), pp 181-190
- Sinclair I, 2003 *London Orbital: A Walk around the M25* (Penguin, London); first published in 2002
- Sinclair I, 2003 *Lights Out for the Territory* (Penguin, London); first published in 1997
- Solnit R, 2000 *Wanderlust: A History of Walking* (Penguin, London)
- Swyngedouw E, 2006, "Circulations and metabolisms: (hybrid) natures and (cyborg) cities" *Science as Culture* **15** 105-121
- Szerszynski B, Heim W, Waterton C A, 2003, "Introduction to nature performed", in *Nature Performed: Environment, Culture and Performance* Eds B Szerszynski, W Heim, C A Waterton (Blackwell, Oxford), pp 1-14
- This Is Not A Gateway (TINAG), 2010, Festival program, available at <http://thisisnotagateway.squarespace.com/2010-programme/>
- Thoreau H D, 2008, "Walking", in *Walden, Civil Disobedience and Other Writings* Ed William Rossi (W W Norton & Co, London and New York), 260-287; first published in 1862
- Thrift N, 2008 *Non-representational Theory: Space, Politics, Affect* (Routledge, London)
- Thrift N, 2004, "Intensities of feeling: towards a spatial politics of affect" *Geografiska Annaler B* **86**(1) 57-78

- Whatmore S, Hinchliffe S, 2003, "Living cities: making space for urban nature"  
*Soundings* **22** 137–150
- Wolch J, 2002, "Anima urbis" *Progress in Human Geography* **26**(x) 721-42
- Wolch J, West K, Gaines T E, 1995, "Transspecies urban theory" *Environment and Planning D: Society and Space* **13**(6) 735–60
- Woodward K, Jones III J P, Marston S A, 2010, "Of eagles and flies: orientations toward the site" *Area* **42**(3) 271–280
- Wylie J, 2005, "A single day's walking: narrating self and landscape on the south west coast path" *Transactions of the Institute of British Geographers* **30**(2) 234-247

## Notes

---

<sup>1</sup> While *incorporations* is a term developed particularly in relation to the economies and ecologies of cities in this paper, and is a response to the theme of *corporation* for TINAG 2010, *incorporations* is also a term that has previously been discussed in relation to "life itself." In the edited collection *Incorporations*, Crary and Kwinter note, "every thing and every individual emerges, evolves and passes away by incorporating and being incorporated into, other emerging, evolving or disintegrating structures that surround and suffuse it" (1992, page 15). In their analysis, incorporation is a critical term for thinking about the relations that constitute life—something that is the subject of this paper, particularly in relation to urban life.

<sup>2</sup> J-L Nancy suggests the constitution of life as a (sovereign) category may necessarily give way to these other relations and forces, since life becomes "life determining politics," or else, "the sphere of politics coextensive with the sphere of life" (2007, page 93).

---

<sup>3</sup> There are 20.1 hectares of open space in the City, but most of this space is hard surface. The 300,000 workers that occupy the Square Mile during the week intensively use the open spaces that do exist in the form of city gardens, squares, and old churchyards.