


Please cite the Published Version

Trafi-Prats, Laura  and Castro-Varela, Aurelio (2022) Visual participatory arts-based research in the city: outlining posthumanist approaches. In: Visual participatory arts based research in the city: ontology, aesthetics and ethics. Routledge Studies in Urbanism and the City . Routledge, London, pp. 1-20. ISBN 9780367462963 (hardback); 9781003027966 (ebook)

DOI: <https://doi.org/10.4324/9781003027966-1>

Publisher: Routledge

Version: Accepted Version

Downloaded from: <https://e-space.mmu.ac.uk/631242/>

Usage rights:  Creative Commons: Attribution-Noncommercial-No Derivative Works 4.0

Additional Information: This is an Accepted Manuscript of a book chapter published by Routledge in Visual participatory arts based research in the city: ontology, aesthetics and ethics on 7th April 2022, available online: <http://www.routledge.com/9780367462963> It is deposited under the terms of the Creative Commons Attribution-NonCommercial-NoDerivatives License (<http://creativecommons.org/licenses/by-nc-nd/4.0/>), which permits non-commercial re-use, distribution, and reproduction in any medium, provided the original work is properly cited, and is not altered, transformed, or built upon in any way.

Enquiries:

If you have questions about this document, contact openresearch@mmu.ac.uk. Please include the URL of the record in e-space. If you believe that your, or a third party's rights have been compromised through this document please see our Take Down policy (available from <https://www.mmu.ac.uk/library/using-the-library/policies-and-guidelines>)

Visual participatory arts-based research in the city:
Outlining posthumanist approaches

In: Laura Trafi-Prats and Aurelio Castro-Varela (2022). *Visual participatory arts based research in the city* (pp. 1-20). Routledge.

Visual participatory arts-based research in the city: Outlining posthumanist approaches

Laura Trafí-Prats and Aurelio Castro-Varela

Introduction

The book *Visual participatory arts-based research in the city* engages with practices of inquiry crafted at the intersection of art, theory, and the city with the aim to explore and experiment with the relational, sensorial, material potentials of different places and spaces in cities across the world. We propose a journey through nine studies that use concepts and questions emerging from new materialisms, new empiricisms and posthumanist frameworks to consider life in the city multiply and beyond anthropocentric frames. A central motivation of the book is to widen the imagination around urban life beyond neoliberal and colonial subjectivities and geographies. For this, we suggest a focus on the city as a territory of practice (Amin and Thrift 2017), which complements the motivation of thinking urban life multiply. As Deleuze and Guattari (1987) noted, territories are different from a plan or a map because they resist abstraction. Territories are grounded in the earth and express ongoing movement, composition and flow. Territories encompass and provoke felt and embodied relationalities.

Thus, we propose approaching the city as a *posthuman ecology* (Signal and Braidotti 2019), where things, systems and infrastructures have active powers to augment or decrease the capacities of bodies to move, connect, communicate, think. The city as a posthuman ecology could be thought as a complex organism that expresses, senses, regulates and controls. In a posthumanist framework, places, things, systems are more than tools and contexts for human action. They are actants that function in relation to other actants creating trajectories and movements in the territory (Bennet 2010). In this posthuman landscape, we see contemporary arts-based research as carrying the potential for inserting virtual openings in the complex architectures, spaces, infrastructures and computational systems that make urban life take on specific forms. Artistic experiments

could open the imagination for less passive ways of living with such architectures, spaces, infrastructures and computational systems and appropriate them to develop other ways of making *with* them. This can widen the participation in existing urban concerns such as housing, climate change, resource distribution, etc. (Corsín Jimenez 2014). It also can open a space for aesthetic play with things, places and technologies that allow experimenting with times and rhythms (de Freitas, Rousell and Jager 2019) as well as other exercises of re-spatialization that lead to the impossibility of being pinned down by the spatial, computational, managerial and mediatic designs of the neoliberal city.

In tune with these ideas, our book also recognizes and problematizes the city as a space where there are continued practices of erasure affecting the liveability of subaltern, Black and brown geographies (McKittrick 2012). The city as a colonial neoliberal space categorises as *inhabitable* the places of the poor, Black and brown, so these could be subject to all sorts of interventions exercised from a distance. These are interventions that manipulate but do not feel the city (Simone 2019). To feel the city, one needs to be in the plane of territorial practices, where sensing, mattering and becoming in relation are important aesthetic, ethical and political acts for enacting experiments with modes of collective life that resist such de-humanizing and abstracting gestures. We explore how contemporary art-based research can cultivate such radical forms of inhabitation, movement, composition and re-spatialization.

A story to take perspective

In this section, we retell the infamous story of artist Mierle Laderman Ukeles' residency at the Department of Sanitation in New York City (DSNY). We do it in the sense that it helps to foreground the idea that collective life in the city could be creatively reinvented through an art practice that opens up and grapples with questions such as, how space is made, maintained and sensed in the city? And, how spaces, materialities and bodies enter in relation when engaging in practices of maintenance? Prior to this residency, Ukeles had become known in the art world for developing the concept of Maintenance Art (1969). Maintenance Art linked practices of care, cleaning, maintenance and feminist politics with conceptual art, performance, documentation, site-specific interventions and collaborations with different institutions in the city, including the DSNY.

Touch Sanitation Performance (1979-1980) was one of Ukeles' initial projects at the DSNY. In the course of eleven months, she shook hands with 8.500 sanitation workers (popularly known as *sanmen*) and thanked them for their work. Maintenance Art turned away from the capitalist notion of *doing something* as connected to ideas of productivity and neoliberal performance and embraced a speculative notion of creativity, which assumed that there is *something doing* in the emergent and undecided socio-material processes of cleaning and managing detritus in the city (Manning, Massumi and Brunner 2019). This *something doing* suggests that being in the midst of activities such as conversing,

documenting, moving, mapping and performing tasks along sanitation workers can generate modes of sensation, attention, habituation and collective engagement (Manning and Massumi 2014). In turn, this can give form to new sensuous bodies and living styles alternative to the imaginaries and spatial behaviours regulated by the neoliberal and colonialist city.

One of Ukeles' projects that better shows these notions of being amid things consisted in a series of maps based on traveling the city in garbage trucks through designated collection routes and times. In creating these maps, Ukeles learned about sanmen's particular ways of feeling and envisioning the city while handling and moving around types of waste and pollutants encountered in these routes. She became attuned to and highly interested in sanmen's techniques, knowledge and sensorium, and began exporting, experimenting and reconnecting these to new artwork.

Ballet Mécanique for Six Mechanical Sweepers (New York City Art Parade 1983) is possibly one of the most significant examples of how Ukeles adopted and experimented with maintenance techniques. It consists of a choreography that she designed in collaboration with six of the best DSNY sweeper drivers that she met and observed at the DSNY. It mixed concepts of time, movement, ensemble, and grace taken from the realm of dance and performance art, with automotive sweeping techniques. The low-rated, invisible even annoying labour of sweeping the streets with a noisy vehicle, is rendered as something wondrous, made different, choreographed, and artful. This happens through the combination of modes, where choreography as an art concept combines with the dexterous sweeping techniques of the sanitation workers, dancing around iconic avenues and the background of Midtown Manhattan office buildings. In mixing and interpenetrating these different modes, artworks generate creative forces that redistribute the sensible and affective conditions of collective life in the city, showing that the continuous making of subjectivity is interconnected with the continuous making of the world (Ellsworth 2005). Concepts like Maintenance Art and Ukeles' residence at the DSNY also evoke that being in common is not like being the same but "an active belief or ethic that our common being is never given or found but always in the making" (Rajchman 2000, 13). The relational and hybrid nature of the city, any city, provokes that this immanent process of making cannot be reduced to human or social attributes. On the contrary, urban objects, infrastructures and technologies "are the prosthetics that enable subjects to think, act, and feel" (Amin and Thrift 2017, 17; also see, Jacobs 2012).

The DSNY residence and Ukeles' collaborations with sanmen is a good example of how art contributes to intensify experiences around the city's vital powers. It brings us to consider the city as a medium for art inquiry and speculative thinking (Rousell 2020). In what follows, we try to connect a theory of the city as a complex and agential assemblage (Amin and Thrift 2017) with understandings of arts-based research as a speculative process of life inquiry (Manning and Massumi 2014).

For a new materialist post-humanist arts-based research

Our book is not the first source that addresses arts-based research from a new materialist post-humanist approach and with emphasis on place and space. We have been inspired by previous work that has connected with process-based philosophies including Whitehead (1978), Deleuze and Guattari (1987, 1994), Massumi (2002, 2011), Manning (2016, 2020), and Manning and Massumi (2014). This work puts posthuman ecological aesthetics (sensation, feeling, affect, relationality and the minor) at the centre of enquiry. Early on and informed by Massumi's (2002) work on sensation, Ellsworth's (2005) formulated a conceptualisation of pedagogical inquiry focused on environmental aesthetics. She defined it as "the sensation of coming into relation with the outside world and to the other selves who inhabit and create that world with us" (117). Ellsworth questioned how pedagogical knowledge is tight "to cultural theory's grid of knowledge already known" (120), affirming that such approach is invalid when thinking in a learning self that is in motion. "The learning self when it is in the making no longer coincides with whatever previously constructed knowledge about the learner we might hold" (121). For the development of her theory, Ellsworth substantially drew on the occurrent arts, architecture and media, all forms of art that develop in the terrain of the city. She sustained that such art forms help to think in terms of bodies that are not fixed but who practice emplacement, inhabitation, construction, and thereby make sense in movement and in relation to other bodies. Even more, Ellsworth noted how spatial and architectural arts offer possibilities to explore and experiment with "raw possibilities of movement and sensation that makes possible different corporealities to be expressed" (124).

Along with Ellsworth's (2005) and Kruse and Ellsworth's (2011) work, *Visual participatory arts-based research in the city* connects and extends a body of arts-based research developed through the last decade in the fields of curriculum, pedagogy and social practice that attends to the sensuous, material, more-than-human dimensions of thought. It sees arts-based research as a process of collective experimentation, concerned with how encounters between philosophical concepts, art practices and everyday explorations can generate unanticipated and non-hegemonic relationalities. Additionally, this research has shown an interest in spatial and environmental practices connected to living inquiry (e.g. Irwin and de Cosson 2004), walking (e.g. Lee, Morimoto, Mosavarzadeh and Irwin 2019; Springgay 2011; Springgay and Truman 2017, 2019) and mapping (e.g. Knight 2016; Powell 2010; Rousell 2020) that, while not always engaging directly with the city, are relevant in developing research in urban posthuman ecologies.

We are also interested in how this body of research differentiates from the focus of conventional arts-based research on art experiences defined as something exclusively human; humanly created, humanly experienced and about human phenomena (Barone and Eisner 2012). Conventional arts-based research considers that there are aspects of reality

that are hidden, and that arts-based research can unearth or make them more accessible (Leavy 2018). However, new materialists and posthumanist arts-based researchers have affirmed that such an approach runs the risk of oversimplifying the empirical potentiality of the arts. Rosiek (2018) sees arts-based research as not only centred in revealing how some discourses frame lifeworlds, but in how the “historical weight and momentum” (636) of existing discourses is not just resolved through processes of deeper understanding. The world is discursive-material, and agency is not only human but things in the world are agents in the creation of realities (Barad 2007; Bennet, 2010). Arts-based research can engage with historical weight “the practice of art [as] the cultivation of receptivity to a phenomenon or experience, which brings with it a condition of vulnerability to being changed by it” (Rosiek 2018, 640).

For Mazzei (2020), cultivating such receptivity and openness to be changed involves thinking research beyond a logic of deconstruction and recalibration grounded by humanism and dependent of a phenomenological logic in which experience is always of a human subject and refers always to the past. Thereby, experience can be charted and organized linearly, building the consciousness of the knowing subject. Differing from this phenomenological logic, posthumanist arts-based research focuses on a more-than-human notion of experience, not as something in the past, not as something that it is, but as something that needs to be created by entering in relations with different entities that are more than human. Mazzei (2020) develops such line of argumentation with a focus on the speculative philosophy of Alfred North Whitehead. Whitehead’s notion of experience is not centred on the knowing but in sensing by entering and forming relations that allow sensing to happen. Such relational view of sensing could be connected to the *receptivity* that Rosiek (2018) mentioned above.

In what follows we offer a series of three possible conceptual clusters that advance more than human approaches to arts-based research in the city.

Conceptual cluster #1: Speculative inquiry

In contrast with conventional arts-based research reliance on a human and pre-established subject who accesses profound realities through the aesthetic and sensuous, Whitehead advances a philosophy of the organism driven by an ontological principle according to which subjectivity is not individual but embedded in the entire universe. This means that subjects or entities are not exclusively human, but include any organism, a dog, a rock, a plant, a camera, a street, pollution, an automotive sweeper, and so on. The existence of these entities is defined not as discreet but as relational. This means that the subject is not set in advance. For these entities to exist they need to be sensuous (to ingress) and be sensed (prehended) by other entities (Shaviro 2012). Therefore, any entity only is because of its relation to others.

Therefore, the focus of speculative inquiry is not on things or beings but on events that bring different entities together in a dynamic process of becoming in which something new is introduced in the world by a nexus of incidents that adhere to one another. Whitehead calls these *occasions*. For Whitehead each occasion carries a unit of becoming and when the occasion perishes this unit of becoming subsists as *datum*, a raw sensuous/affective material that can be taken into subsequent occasions to in-form further becomings. For Whitehead, creativity resides in these occasions, but these occasions are punctual moments where entities come together and take on a new form that adds something new to the universe, what Whitehead calls *concrecence*.

This entails two important things. First, that becoming it is not ensured, but “punctual and atomistic, and always needs to be repeated or renewed” (Shaviro 2012, 18). Second, objects are not important for what they are, but for being events that accumulate occasions. Events are not things that happen to objects, and objects are not impassive but they are “actively *happening*” (18) even when they appear motionless. Objects like the work *Ballet Mécanique* mentioned earlier are the nexus of actual occasions, a multiplicity of becomings that exist in composition with one another over time, and that likely began through the multiple collaborations and encounters between Ukeles, sanmen, the city, sweepers, detritus and the public. However, as Shaviro (2012: 20) argues, the process of addition of occasions is not continuous: “Nothing comes into being once and for all; and nothing sustains itself in being, as if by inertia or its own inner force”. This means that there is not a consequential connection between two occasions like shaking the hands of DSNY workers or mapping garbage trucks routes that lead to the output *Ballet Mécanique*. Existence is relational. Things only come to existence through practices of setting different things in relation, forming different possible joints and connections. Some of these connections harden or acquire concrecence, and we can identify then a new creation. In *Ballet Mécanique*, Ukeles experimentally composed the sweepers with concepts and techniques extracted from choreography and performance, which allowed to see, sense, experience these vehicles as an urban ballet, thus adding a different visibility in the city landscape and a different valorisation of their potential for making space matter.

Thus, and as Stengers (2008) has noted, for Whitehead what means to be and make sense of the world is not a question of subtracting something (processes of capture and interpretation typical of conventional arts-based research) but a matter of adding. This adding involves the construction of ways of paying attention and learning to care for what it matters in experience. This is important for arts-based research because it means “that any new creative construction testifies explicitly ... to a commitment ... that everything we experience must matter” (99). It requires that as artists, researchers, and participants are responsive and response-able to the unique, peculiar, odd aspects that make an experience matter, not to a generalization that “explains away” (99). Therefore, the uniqueness of

experience should not be reduced or interpreted with aspects of another experience. It always adds to the world's multiplicity.

In *Process and Reality*, Whitehead (1978) foregrounds the value of concepts for being used in inventive ways to lure new feelings and induce new ways for experience to matter. Concepts are situated at the center of Whitehead's creationist world and entangled with the experiential nature of thinking. In this way concepts are re-designed again and again to lure new feelings, and to make experience unfold and become eventful in ways that extend the imagination and make certain questions matter (Stengers 2008). Also drawing on Whitehead, Manning and Massumi (2014) have argued that it is through the interpenetration of philosophical concepts and art techniques, what they describe with the term *research creation*, that art and philosophy can have a generative relation with each other as a way of keeping the creation of concepts connected to what is emergent and to "a practice of the event". Thus, art-based research that is engaged in speculative inquiry practice seeks to activate art and philosophy in mutually generative ways to grapple with the invention of new territories of practice and respond to emergent matters of concern in cities, communities, groups.

Donna Haraway (2016), who is a reader of Stengers and Whitehead, offers some examples of how speculative inquiry can engage in re-making collective life in the city. Haraway writes about SF engagements with the matters of the world. SF stands among other things for Speculative Fabulation, a practice of forming creative and experimental collaborations between diverse constituents in our cities: scientists, artists, citizens, animals, plants, air, technology. Haraway sees art as central in the creation of interdisciplinary and speculative spaces that foster such collaborations in ways that are not competitive or exploitative but that focus on *rendering-capable*.

For Haraway (2016) research is conceived as speculative experiments that foster a multispecies justice of life and death in the context of the many concerns posed by the Anthropocene. (Anthropocene is a term that Haraway herself despises for its emphasis on the anthropos, proposing others like Capitalocene and Chtulucene). One of the unexpected collaborations that she discusses in depth was devised by digital artists, in collaboration with engineers, pigeon fanciers, and pigeons in Southern California. This unusual team worked together sharing knowledge and skills to invent ways of measuring and mapping air pollution in new and helpful ways. The artists and engineers designed a tiny backpack that combined a small GPS, pollution and temperature sensors, cell phone tower capability communication and a SIM card to be carried by the pigeons. Raised and cared by the fanciers, the pigeons were trained in carrying and flying with the backpack. Through this training, the pigeons flying styles offered feedback to the engineers on the ideal size and weight of the backpack for them to be able to fly at high altitude and acceptable speed so to monitor air in movement. The cell phone capability allowed to inform the public in real time, streaming about pollution levels, and mapping pollution through multiple points. This

in turn remade the public's imagination about pollution by showing how it moved across the territory. Haraway has argued how all the players in such project rendered each other capable and became-with each other through a speculative practice organized through multispecies collaboration that valued attunement, worlding and response-ability towards modes of living and dying. The project shows the idea of using the city as a medium for sensing, experimenting and enhancing collective life, and it demonstrates the importance of paying attention to how things come to working together in ways that matter life and experience differently.

Conceptual cluster #2: Researching with/in force fields and atmospheres

Arts-based research as speculative inquiry engages with what Amin and Thrift (2002, 2017) and Thrift (2008) characterize as the *non-representational aspects* of the city. They refer to urban elements that resist to be explained in terms of human (e.g. intentionality) or social (e.g. language, codes) attributes, and that instead highlight the assembled nature of the city. These are forms of collective urban life that cannot be thought in terms of parts but only can be engaged as arrangements that envelop many things. It is these materials and more than human arrangements that allow for personal and social styles of urban life to take place. Thus, Amin and Thrift (2017, 17), propose to think not in human agency but in *urban agency*, and describe it as a:

force field of relational interactions, [where] hybrid inputs are aligned and made to work through various coupling and amplification devices (e.g. infrastructures, bureaucracies, calculative logics) and a ... general ecology of interactions (e.g. tolerance capacity, population dynamics, flow turbulence).

The notions of force field and urban agency connect with non-representational and non-anthropocentric views of art developed by the philosophy of Deleuze (2003) and Deleuze and Guattari (1987, 1994). Art as a relation of forces separates from art as representation. For example, in *Francis Bacon: The Logic of Sensation*, Deleuze (2003) speaks of painting as a material embodied process “capable of detecting forces that become more and more intense and affects that emit these configurations” (Sauvagnarges 2018, 39). In such non-representational framework, art is a way of becoming with sensation and of responsibly resonating and mingling with such material forces, allowing the human body to recompose with them, or to exist in specific arrangements that can be more capacitating.

A good place where to see how Deleuze and Guattari (1987) bring the question of art as a composition of forces with ecological effects is *A Thousand Plateaus*. There they describe landscapes as made of different invisible and inhospitable forces and write about animals utilizing elements in their bodies and in the terrain to create territories through compositions of plumage, urine, song and movement. A territory is not just individually

made but it emerges out of the composition of several milieus that are territorialized, acquiring “a temporal constancy and a spatial range that make it a territorial, or rather territorializing, mark: a signature” (Deleuze and Guattari 1987, 315). Art emerges as the result of entering in relation with ongoing movements of external and material forces and existing in rhythmic variation with them. Art creates a circle or frame, thereby allows that expressive qualities are “no longer anchored in their “natural’ place but put into the play of sensations that depart from mere survival to celebrate its means and excesses” (Grosz 2008, 13). The body becomes a membrane where sensations may be felt and resonate, but sensations are of the world, not of the body. Sensations refer to powers that cannot be lived or perceived directly but that are felt in the body indirectly, in the nervous system, as vibrations or rhythms.

This aesthetic and ecological logic of chaos and variation connects with a thinking of the city as constant flow and heterogeneity. As Boumeester and Radman (2016) note, the city is unpredictable and cannot be captured. In any urban space whatsoever, nothing and nobody ever takes the same path twice, and paths are always open and molecularly affected by different drives such as food, shelter, warmth, sex, duties, and by desires for interactions, stimulations, aesthetics that can make bodies to move in specific directions and also be attracted to change trajectory, detour, slow down and get in random encounters. Paths are neither fully foreseeable nor are they just made of physical movement but of a transversality between the psychical (the body as a sensing membrane), the social (the categories and discourses that organize the city as a specific terrain) and the environmental (the earth’s material-atmospheric movements). This means that it is impossible to think the city just with fixed forms or pre-existing molar individualities. The urban experience is always the result of a composition of physical and virtual aspects along with several temporal and spatial vectors, which require a thinking concerned with complex dynamics of mutual constitution and emergence. Considering the relation of the physical with the virtual is essential for building non-mimetic cartographies that account for intensity, movement and becoming. “It is not about bringing all sorts of things under a single concept of the city, but about relating each city to the variables that determine its mutation, its becoming” (Boumeester and Radman 2016, 60).

Stewart (2011) has referred to *atmospheric attunements*, to describe how we precisely break through the idea of capturing fixed forms and engage in non-mimetic but sensuous practices of mapping that permit to think in physical-virtual ecologic conditions, as Boumeester and Radman (2016) propose. In tune with Deleuze and Guattari (1987), Stewart describes atmospheres as made by *force fields*. She writes, “atmospheric attunements are an intimate, compositional process of dwelling in spaces that bears, gestures, gestates, worlds. Here things matter not because of how they fit in hard politics and social categories but because they have immanent qualities, rhythms, forces, relations and movements” (445). Stewart suggests that perhaps by concentrating in dwelling in, embodying and

sensing worlds we can pencil down what is going on. We can notice specificities, minor movements, variables of how one state mutates into another, how becoming takes place in certain urban localities.

Thus, a focus on heterogeneity, force fields and atmospheric attunements renders practices of arts-based research in the city not as an exercise in knowing but in being through experimentation and speculation. In such framework, art is not a window into worlds that are complex and become accessible through thoughtful and sensitive artistic representations, as conventional arts-based research purports. Art is about becoming in the middle of ongoing variation, and where sensation opens spaces to experiment with affects and percepts coming from the outside (sounds, rhythms, planes, volumes, folds, voids) that push sensing beyond human capacities.

In contrast with the world made of birds, ticks, and hermit crabs described in Deleuze and Guattari's (1987) ecological aesthetics, urban sociality is more and more mediated by information systems, data and sensor technology inserted in the built environment which actively shapes ubiquitous sensation (de Freitas, Rousell and Jager 2020). Not being passive to these more than human sensuous systems and building capacity to sense atmospheric variation is an important aesthetic, political and methodological gesture for arts-based research to take in the formulation of concerns about spatial and environmental conditions. As McCormack (2018) notes, atmospheres are sensed by and through devices and infrastructures (more on this later) that can create, sense, measure and modify these atmospheres and the environments they shape. In this context, art as an experimentation with sensation can connect with ontological concerns about the agency of things, infrastructures and technologies in shaping both enduring and momentary existential conditions or propagating certain affects.

Artist Tomás Saraceno, who works interdisciplinary across science of air, art and engineering, shows how art projects can engage in a speculative aesthetics that engages the public in exploring elemental and atmospheric conditions (McCormack 2018). One of his artworks, *Museo Aero Solar*, is an enormous surface of flattened and attached plastic bags fabricated participatively by constituents in the different places where it has been installed. It can take on the air and fly, or it can rest on the ground. If the proper atmospheric conditions allow for, it becomes a dome where visitors can move inside and feel the modification of atmosphere by the coloration of light projected through the bags and the change of temperature. As McCormack (2018) notes, *Museo Aero Solar* is a playful, affective participative experiment that builds imagination on how to distribute capacities of sensing across different bodies and devices and how that can help in stirring public discussion and thinking on the types of infrastructures needed for caring for planetary life. With Saraceno's *Museo Aero Solar* and his entire *Aerocene* project, we see that attention to atmospheres and experimentation with techniques and devices are critical processes to engage collectively in thinking how atmospheres can dramatically modify but also sustain more

diverse forms of life in the city. It enacts the notion of urban life as an unpredictable and located force field of hybrid and coupled interactions between psychic and machinic potentials, and of art as a potential for “creating new worlds and new possibilities of experiencing them” (Grosz 2008, 79). One of the central motifs of Saraceno’s work is to democratize the access to experience and experimentation with elemental aesthetics and politics in a context of late capitalist, defined by colonial and extractive logics where water, air, soil have been highly manipulated and appropriated. While *Aerocene* delivers a critique of the acute demarcations between the physical body, society, economy, and nature (Frichot, Gabrielsson and Metzger 2016) performed by the global city as a capitalist hub, its intervention does not stop in the critique, but outlines the possibility of creating a space of transversal connections. This leads us to the third and last conceptual cluster, in which we problematize a body of literature around the right to the city that has linked urban studies with contemporary art. In this, art research is often framed in a political logic that does not always permit to think in the type of complex and more-than-human relationalities described in this second conceptual cluster and through the example of *Aerocene*.

Conceptual cluster #3: Thinking the right to the city through affect and the aesthetics of infrastructures

The discourse on the right to the city emphasises the figure of inhabitants in making and remaking the urban in the context of capitalism, further privatization, and restricted access to public space. Central to this right is the collective struggle for reimagining and creating another type of city that is not only defined by the primacy of exchange value but for creative activities and non-profit places of encounter (Lefebvre 1996). This means that more than an entitlement or a legal framework, the right to the city speaks of an *oeuvre* (Lefebvre 1996; also see Duff 2017), a process of appropriation and reorientation of urban spaces where the material and the subjective are entangled. It is the everyday experience of inhabiting a city that entitles anyone or anything to exert such right, thereby reframing the concept of use value as more important than property rights and ownership (Purcell 2014). Different from a liberal-democratic demand of getting more access to or control over existing urban resources, the right to the city is “a right to change ourselves by changing the city” (Harvey 2008, 23). This praxis, however, does not necessarily fit in with conventional human-right understandings of social justice, as Harvey argues, but it is rather intended to attempt collective, self-management forms of urban life.

The right to the city connects thus to a notion of urban experimentation to counteract the neoliberalization and gentrification of cities. Such interest for urban experimentation has not only been a concern of urban studies. Practices of contemporary art, known as relational aesthetics (Bourriaud 1998), participatory practice (Bishop, 2012), art as living form (Thompson 2017) and art as social-engaged practice (Helguera 2011) have also used the city as a laboratory of multiple experimentations, operating at the interstices of art and

everyday life. Creative art inquiry is seen as a way of activating communities in relation to public issues of concern (Pasternak 2017). A diversity of art and architectural projects address issues of redistribution of resources and power “between top-down forces of urbanization and bottom up social and ecological networks” (Cruz 2017, 61).

As Duff (2017) has noted, speaking of the right to the city in terms of a dualism between macro powers and local resistances has been a common tendency in the literature both of the right to the city and socially engaged art. While we agree with this literature that the right to the city speaks of collective forms of struggle reimagining urban life, we differ from its focus on a view of politics based on critique. Instead, we propose thinking the right to the city as enacted in the affective and material inhabitation of the city while considering human embeddedness in complex relational systems or infrastructures. In fact, the concept of city as *oeuvre* advanced by Lefebvre (1996) addressed urban transformation as something occurring at the performative level. However, little has been discussed about the specificities of embodied and situated styles of performativity in connection to how the right to the city is materialized (Duff 2017). How is that bodies and environments acquire new capacities, connections, and relationalities that make them become a new collectivity. The fact that the discourse of socially engaged art has focused on hard political forces and dualities (power-resistance) is partly due to a logocentric view of political participation that does not recognise things and ecologies as a vital aspect in the formation of the demos (Bennet 2010). This view considers aesthetics as political only at the extent that it stays in the realm of the human as well as in connection to artistic practices. Other forms of everyday aesthetics connected to social media (Brunner 2020), vernacular styles (Simone 2019), or infrastructures (Larkin 2013; Berlant 2016) are not seen as key in the creation of the mental, social, affective ecologies of the city.

Current developments in urban studies suggest an attention to infrastructures and practices of *infrastructuring* (Corsín Jiménez 2014), affirming that these carry the potential for remaking the city and its forms of sociality at the level of affect (Berlant 2016). While infrastructures are often seen as material forms that facilitate the possibility of exchange over space and thus thought as a materialization of the networked character of capitalism and neoliberal governance, current new materialist research insists on approaching them by considering their aesthetic powers (Larkin 2013). Infrastructures create the atmospheric conditions of the city including “sense of temperature, speed, florescence and ideas associated to such conditions” (336-7). Thus, infrastructures work sensorially at the level of the skin and nervous system and before any cognitive register occurs. An attention to infrastructures resituates the politics of the sensible in connection to spatial and temporal sensuous experiences emerging through relations embedded in wider material processes. This is connected to Whitehead’s concept of feeling as the capacity of different entities to feel even before knowing or recognizing each other. It is in the possibility that things encounter each other aesthetically that the new forms of collectivity anticipated by the right

to the city as *oeuvre* find a starting point. Urban experiments in building technological and material set ups, like public and/or collective attempts of developing and managing infrastructures, can generate forms of palpability connected to the material embeddedness of affectivity and sense.

An artist whose work resonates well with the notion of sensuous embeddedness in infrastructural ecologies is Mexican-Canadian Rafael Lozano-Hemmer. His *Border Tuner* (2019) enacted a relational architecture that re-composed affectively and infrastructurally an urban territory across the cities of El Paso, Texas, and Ciudad Juárez, Chihuahua, situated at each side of the Mexico-United States border. Three interactive stations provided with a speaker, a microphone, and voice-activated massive searchlights that were visible from a 10-mile radius, let users engage in dialogue with someone from the stations of the opposite city. To this end, a small dial wheel moved powerful beams of light over the border, which activated communication when colliding with beams coming from the other side. Sound intensity and brightness were also related: the louder participants spoke, the brighter the light beams would shine. Thus, *Border Tuner* functioned as “a visible ‘switchboard’” which brought together a “wide-range of local voices” previously co-existing from the two sides of the “largest bi-national metropolitan area in the western hemisphere” (Lozano-Hemmer n.d.). The installation not only allowed for new connections between El Paso and Ciudad Juárez but also used a rank of technological actants and material forms to intensify bodily capacities and make palpable existing connections that the border infrastructure—both an architecture and a legal system enforced by paramilitary and military forces—seeks to continuously contain and outshine.

In re-composing and re-assembling technological ecosystems to make them more speculative and sensitively fluctuating (de Freitas, Rousell and Jäger 2019), Lozano-Hemmer’s works emphasize how infrastructures are a means of controlling bodies along with practices of making these infrastructures aesthetic and atmospheric. His installations demand the corporeal involvement of participants in an environmental immediacy of shared experience, stretching bodies towards the events of a local whose limits are also challenged and dematerialized (Massumi 2019). Concerning *Border Tuner*, beams of light took voices over the border and made people sense the other side as a part of the same territory, for the searchlights, microphones and speakers *enveloped* both cities under a common atmosphere. As an infrastructure, *Border Tuner* enacted *oeuvres* for feeling the border, making in turn its hybridity, fluidity and heterogenous ecology more palpable.

Focalizing in affects and in the infrastructural materiality of the city as a way of enacting the urban experimentation connected to Lefebvre’s (1996) right to the city seems important for the speculative vision of arts-based research that we have defended through this introduction. It is so, because it moves the attention away from the human dualism top-down/bottom-up politics and concentrates on what Bennet (2010) calls a politics centred on the vibrant vitality of things and the apersonal qualities of affect. This allows conceiving

what is a political collective in processual terms. Socially engaged art considers that people act because they have become aware of a given issue (Pasternak, 2017). Becoming part of an informed collective is what determines their capacity to act. However, in a materialist perspective focused on affects, a collectivity does not pre-exist the action but it is formed performatively by entering in relation with other entities. Therefore, experiments on new ways of composing or infrastructuring bodies in the city are important creative endeavours for art-based research to take on. As *Border Tuner* exemplifies, they are at the centre of remaking the cities as based on remaking bodies and infrastructures.

Book's organization

The book is organized in three parts each one respectively focused on the ontology, aesthetics, and ethics of participatory arts-based research in the city. Part 1 Ontological Reorientations further elaborates on one of the central arguments discussed in this introduction, the need of fostering understandings of life in the city beyond anthropocentric frames. So far, we have proposed an idea of the city as a posthuman ecology (Bignall and Braidotti 2019) where collective life involves more-than-human agentive assemblages (Bennet 2010), and where multispecies collaborations among different constituents can take place to generate a multispecies justice of living and dying (Haraway 2016). We have foregrounded the city itself as a relational assemblage where human bodies live in infrastructural and material envelopments that have urban agency and generate the existence of specific styles of urban life (Amin and Thrift 2017). The chapters in part 1 pick up on some of these ideas and with their own specificities engage in the discussion of more-than-human approaches to urban becomings.

Chapter 1 "Relocating the cinema in the city. The case of El Solar de la Puri", by Aurelio Castro-Varela, is situated in Barcelona, Spain, and more specifically in the neighbourhood of Poble Sec. The chapter proposes a critical intervention in film studies, where the relation of the cinema and the city is mainly theorized in representational terms as the creation of urban views. Castro-Varela suggests that a new materialist ontology reorients such an approach and makes cinema something constitutive in the creation of specific styles of collective existence in the city. Castro Varela writes,

that the cinema exists and shelters collective modes of existence within an urban territory is still an unaddressed area of study, and one that requires, too, an account of how the filmic apparatus comes to matter (in the sense of both becoming meaningful and becoming material). This means focusing on the shape that screening technologies and practices take when remaking the city and setting in motion an urban politics of attention, pleasure, and friendship (Amin and Thrift 2002).

With this, the chapter proposes a reframing of Lefebvre's notion of the right to the city as an *oeuvre* through an entity-oriented ontology (McCormack 2018). It focalizes on the study of

an open-door cinema as a more-than-human infrastructure with an onto-aesthetic agency that mobilises different possibilities for feeling and staying at the city as well as a different politics for creating space in the highly gentrified urban geography of Poble Sec.

Chapter 2 “Fred Herzog's affective engagements with things in the city of Vancouver”, by Dónal O'Donaghue and Matthew Isherwood, look at the photographic practice of Vancouver-based artist Fred Herzog as an environmental response to the emplaced, temporal and material conditions of the moment. Inspired in the work of queer theorist José Esteban Muñoz (2009), O'Donaghue and Isherwood propose an associative analysis of two Herzog's photos featuring second-hand stores window. It gives rise to a reading of the city's present not limited to the spaces that are currently given, which only promote majoritarian ways of belonging. Such reading opens these spaces “to alternative temporal and spatial maps provided by a perception of past and future affective worlds” (Muñoz 2009, 27). Thus, O'Donaghue and Isherwood illuminate ways to cultivate a sense of *in-betweenness* in responding to these images. They argue that *in-betweenness* belonging could be thought as a “constant movement”. Things, like the ones exhibited in the featured second-hand store, are felt through their vibrant materialities and the evocation of multiple past and future urban trajectories (Bennet 2010).

The part Ontological Reorientations ends with Chapter 3, “Black life and aesthetic sociality in the Subúrbio Ferroviário de Salvador, Bahia”, by Brais Estévez. This chapter reflects on the politico-aesthetic activities and urban sociality of Acervo da Laje, a self-managed museum located in a prominent outlying district, called Subúrbio Ferrioviaro, which city's elits and corporate media has associated with Black death and dispossession. Estevez, a trained geographer with interest in grassroot processes of urban participation and auto-construction, found himself in Salvador de Bahia in need of a different ontology for recognizing and attuning to the materiality of Black life taking place in and around Acervo da Laje. Thus, the chapter approaches this case study through an onto-aesthetics inspired by the Black radical tradition. More specifically, the chapter focuses on concepts such as *fugitivity* (Moten 2003), the understanding of Blackness as movement, escape and refusal to be reduced to a single thing, and *Black sociality* (Harney and Moten 2013). In dialog with these concepts, it advances the idea that aesthetics and being are always connected to collective processes of moving and feeling with others that are clandestine, underclass and peripheric. As a result of an ethnographic study, Estévez proposes Acervo da Laje as an arts-based method, the *laje method*, for rematerializing and reimagining Black life in Suburbio Ferroviario through Black study, inhabitability, thingliness and sensuousness.

The second part is titled Aesthetic Practices and includes two chapters that draw on parallelisms with several issues discussed in this introduction. One of these is that their approach to aesthetics is clearly centred on sensational and affective processes emerging in relation with other bodies, objects and histories in the city. The two chapters highlight how urban objects and spaces are not inert but constitute the nexus of multiple relations and

occasions. Additionally, both examine pedagogical projects led by the authors in collaboration with university students, something that emphasises the role of art and education in creating conditions for other forms of attention, relationality and materiality to take form in the city.

Chapter 4, “Lively pathways: Finding the aesthetic in everyday practice” by Valerie Triggs, Michelle Sorensen and Rita Irwin, discusses an assignment used in a diversity of postgraduate courses. The authors build on their well-known a/r/tographic research practice to formulate thinking at the intersection of aesthetics, pedagogy and research. The assignment promotes an aesthetic involvement of the students with the city through art and writing with the aim of attending to “what they have not previously noticed”, and thereby fostering a view of aesthetics as relational, affective and atmospheric (Morton 2013, 2013b, 2018; Massumi 2008). Located in the Canadian cities of Regina and Vancouver, Triggs, Sorensen and Irwin discuss their relation to them through Morton’s (2015) concept of *agrilogistics*. Agrilogistics refers to an extractive and mechanistic logic that manipulates environments at a distance and that functions as a matter of fact in the management of the land. Aligning with Morton’s critique of this concept, the authors put the assignment in terms of providing spaces to think outside this logic and to sensitize bodies to the generative aliveness and interdependence of all things in the city. Pedagogically, the chapter connects with Ellsworth’s (2005) notion of pedagogical address to make students aware of *something* in their mundane daily routes that “forces one to think” (55).

Chapter 5 “A Hauntological enlivening of the Coma Cros archive through pedagogical inquiry and live performance”, by Judit Vidiella, centres on a project of reencountering objects, events and histories at Coma Cros, an old industrial building in the city of Salt, Spain, that houses the undergraduate program of performing arts where Vidiella teaches. Methodologically, the chapter blends an affective new materialist perspective to archival research (Tamboukou 2014) with performance studies. It delves into the archive of Coma Cros from the time the building was a textile factory, approaching it as an agentic assemblage for experimental and aesthetic encounters with the minor, the silenced and the haunted within archival data (Blackman 2019, 2012). In collaboration with a group of students, Vidiella utilizes live performances and the theatre of objects, which she both teaches in her university module, as arts-based methods “to resist a literal, linear reading of the archive and to mobilise it as a vibrant aesthetic object and ecology”. The encounter with the archive and with former workers from the Coma Cros factory informed the students in the creation and curation of a series of live performances enacted in different spaces of Salt. The performances re-lived and re-materialized stories and affects haunted in the Coma Cros archive, contaminating the university and the city with them, and thus opening both the building and the surrounding area to non-self-revealing presences and histories.

The third part of the book is titled Ethics of Participation. It examines modes of relation that bring different actors in urban spaces, like the art museum, where they could

be thought as being out of place. Seen as atypical, displaced or hard-to-reach audiences, these actors are subjected to initiatives of participative engagement that ultimately seek to widen accessibility and representation in such spaces. Differing from a moral-based approach to ethics, the two chapters of this part separate from the assumption, common in art as a participatory practice (Bourriaud 1998, Bishop 2012, Thompson 2017, Helguera 2011), that art inquiry starts by activating collectives around decided notions of what is right and wrong. Both chapters suggest that ethical and political concerns take form performatively as bodies are embedded in emplaced, moving, fluid relations in given environments. An art-based logic of speculative inquiry concentrates on the creation of collective events that creatively intensify relationality, affect and sensation among bodies, spaces, technologies and objects (Manning and Massumi 2014). It is when bodies and other entities enter in relation that different concerns about collective life can be formed, experienced and negotiated. Thus, we suggest an ethics of vital materiality, in which we recognize things and bodies being bound by aesthetic-affective styles, public moods and impersonal potentials.

Chapter 7, “The Lynden Sculpture Garden’s Call and Response Program: To wonder, encounter, and emplace through the radical Black imagination”, by Rina Little and Portia Cobb, discusses the Call and Response Program (CRP) at the Lynden Sculpture Garden in Milwaukee, Wisconsin. Joined by Cobb as artist and experienced by Little as educator, the CRP drew its methodology from “a format originating from many African traditions and present in the African diaspora. [It is] often thought of as a pattern where one phrase is heard as commentary in response to another”. In Lynden such methodology and museum program brought Black artists “to co-create in response to artwork made, performances enacted, and materials displayed”. Little and Cobb examine how CRP makes Lynden’s land resonate differently with publics. Being a former private state of a family of prominent industrialists and philanthropists, it is easy to fall into a romanticization of the garden as a scape from the gritty and complex racial dynamics in the city. However, the chapter shows how CRP permitted the cultivation of spatial experiences “through material and social practices that are speculatively in tune to a Black presence not recognized before (Nxumalo 2018)”. Little and Cobb see this as “an important political gesture in a city like Milwaukee where Blackness and space can be easily connected to dispossession” rather than to creativity and collective life. Theoretically, the chapter is influenced by Black geographies and afrofuturistic aesthetics. Through these lenses, it reflects on how art and social practice can generate “alternative tellings and different spatial imaginaries of the world”, which enable that Black presence can be multiply experienced.

Chapter 8, “A poetics of opacity: Towards a new ethics of participation in gallery-based art projects with young people” by Elizabeth de Freitas, Laura Trafí-Prats, David Rousell and Riikka Hohti, elaborates on an ethics of participation in the context of creative inquiry with young people in art galleries. It centres on a project called *Sensing Time*, which

engaged the authors and a group of youth at the Whitworth Art Gallery in Manchester. In this project, the gallery was approached as a creative space for working collaboratively with young people to cultivate new techniques for sensing the complex temporalities of contemporary art, and more specifically William Kentridge's exhibition *Thick Time*. The focus of the chapter is on how the *Sensing Time* project generated a distinctive ethics of participation. For this the authors draw on the ideas of Édouard Glissant (1928-2011) to reframe participation in terms of a poetics of opacity. They emphasize the ways the project involved "the collective making of a rhizomatic network of errant relays". Thinking with the concept of opacity delivers an alternative way for conceptualizing urban art projects "that might productively stray from standard gallery practices for cultivating youth participation through a politics of identity". *Sensing Time* delivered an ethics of collective becoming based on opacity, through creative practices that grew as "an open proliferation of relays and improvisations". This made intentionality and identification, which are important markers of youth creativity in many museum programs, to be impossible to trace, favouring instead relationality and hybridisation. It delivered a model of participation where the aim was not to cohere with the project but to infuse it with a "fugitive métissage" that opened the network of potential relations.

Chapter 9 is an Epilogue that aims to consider the notion of arts-based speculative inquiry in the city through emerging insights and learnings provoked by the experience of COVID, and the consequent lockdowns and experiencing collectivity in public space as life threatening.

References

- Amin, Ash and Nigel Thrift. 2002. *Cities. Reimagining the Urban*. Cambridge: Blackwell Publishers.
- Amin, Ash and Nigel Thrift. 2017. *Seeing like a city*. Cambridge and Malden, MA: Polity Press.
- Barad, Karen. 2007. *Meeting the universe halfway: Quantum physics and the entanglement of matter and meaning*. Durham, NC: Duke University Press.
- Barone, Tom and Elliot Eisner. 2012. *Arts Based Research*. Los Angeles: Sage.
- Bennett, Jane. 2010. *Vibrant Matter: A Political Ecology of Things*. North Carolina: Duke University Press.
- Berlant, Lauren. 2016. The Commons: Infrastructures for troubling times. *Environment and Planning D: Society and Space* 34, no. 3: 393-419.
<https://doi.org/10.1177/0263775816645989>
- Bignall, Simone and Rosi Braidotti. 2019. "Posthuman Systems". In *Posthuman Ecologies: Complexity and Process After Deleuze*, edited by Rosi Braidotti and Simone Bignall, 1-16. London: Rowman & Littlefield.
- Bishop, Claire. 2012. *Artificial Hells: Participatory Art and the Politics of Spectatorship*. London: Verso.

- Blackman, Lisa. 2012. *Immaterial Bodies. Affect, Embodiment, Mediation*. London: Sage.
- Blackman, Lisa. 2019. *Haunted Data. Affect, Transmedia, Weird Science*. London and New York: Bloomsbury.
- Boumeester, Marc and Andrej Radman. 2016. "The Impredicative City, or What Can a Boston Square Do?". In *Deleuze and the City*, edited by Hélène Frichot, Catherine Gabrielson and Jonathan Metzger, 46-63. Edinburgh: Edinburgh University Press.
- Bourriaud, Nicolas. 1998. *Relational Aesthetics*. Paris: Les Presses Du Réel.
- Brunner, Christoph. 2020 "'Making Sense" Aesthetic Counterpowers in Activist Media Practices". *Conjunctions* 10, no. 7: 3-16.
- Corsín Jiménez, Alberto. 2014. "The right to infrastructure: a prototype for open source urbanism". *Environment and Planning D: Society and Space* 32: 342-362.
<https://doi.org/10.1068/d13077p>
- Cruz, Teddy. 2017. "Democratizing Urbanization and the Search for a New Civic Imagination". In *Living as form socially engaged art from 1991-2011*, edited by Nato Thompsom, 64-71. Cambridge, MA: MIT Press.
- De Freitas, Elizabeth, David Rousell, and Nils Jäger. 2019. "Relational architectures and wearable space: Smart schools and the politics of ubiquitous sensation". *Research in Education* 0: 1-23. <https://doi.org/10.1177/0034523719883667>
- Deleuze, Gilles. 2003. *Francis Bacon: The Logic of Sensation*. London: Continuum.
- Deleuze, Gilles and Felix Guattari. 1987. *A Thousand Plateaus. Capitalism and Schizophrenia*. Minneapolis: University of Minnesota Press.
- Deleuze, Gilles and Felix Guattari. 1994. *What is Philosophy?* New York: University of Columbia Press.
- Duff, Cameron. 2017. "The Affective Right to the City". *Transactions of the Institute of British Geographers* 42 (4): 516-529.
- Grosz, Elizabeth. 2008. *Chaos, Territory, Art: Deleuze and the Framing of the Earth*. New York: Columbia University Press.
- Ellsworth, Elizabeth. 2005. *Places of Learning: Media, Architecture, Pedagogy*. NY: Routledge.
- Frichot, Hélène, Catherine Gabrielson, and Jonathan Metzger. 2016. "Introduction: What a City Can Do". In *Deleuze and the City*, edited by Hélène Frichot, Catherine Gabrielson and Jonathan Metzger, 1-12. Edinburgh: Edinburgh University Press.
- Haraway, Donna. 2016. *Staying with the Trouble. Making kin in the Chthulucene*. Durham: Duke University.
- Harney, Stefano and Fred Moten. 2013. *The Undercommons: Fugitive Planning and Black study*. New York. Minor Compositions.
- Harvey, David. 2008. "The right to the City". *New Left Review* 53: 23-40.
- Helguera, Pablo. 2015. *Education for Socially Engaged Art: A Materials and Techniques Handbook*. New York: Jorge Pinto Books Inc.

- Irwin, Rita and Alex de Cosson (eds.) 2004. *A/r/tography: Rendering Self Through Arts-Based Living Inquiry*. Vancouver: Pacific Educational Press.
- Jacobs, Jane. 2012. "Urban Geographies 1: Still Thinking Relationally". *Progress in Human Geography* 36 (3): 412-22.
- Knight, Linda. 2016. "Playgrounds as Sites of Radical Encounters: Mapping Material, Affective, Spatial, and Pedagogical Collisions". In *Pedagogical Matters: New Materialisms and Curriculum Studies*, edited by Nathan Snaza, Debbie Sonu, Sarah E. Truman and Zofia Zaliwska, 1-12. New York: Peter Lang.
- Kruse, Jamie and Elizabeth Ellsworth. 2011. *Geologic City: A Field Guide to a GeoArchitecture of New York*. New York: Smudge Studio.
- Larkin, Brian. 2013. "The Politics and Poetics of Infrastructure". *Annual Review of Anthropology* 42: 327-343. <https://doi.org/10.1146/annurev-anthro-092412-155522>.
- Leavy, Patricia. 2018. "Introduction to Arts-Based Research". In *Handbook of Arts-Based Research*, edited by Patricia Leavy, 3-21. New York: The Guilford Press.
- Lee, Nicole, Ken Morimoto, Marzieh Mosavarzadeh, and Rita Irwin. 2019. "Walking Propositions: Coming to Know A/r/tographically" 38 (3): 681-690. <https://doi.org/10.1111/jade.12237>
- Lefebvre, Henri. 1996. *Writings on Cities*. Translated by Eleonore Kofman and Elizabeth Lebas. Oxford: Blackwell.
- Lozano-Hemmer, Rafael. n.d. "Border tuner / Sintonizador fronterizo". Accessed May 15, 2021. https://www.lozano-hemmer.com/border_tuner__sintonizador_fronterizo.php
- Manning, Erin (2016). *The Minor Gesture*. Durham, NC: Duke University Press.
- Manning, Erin (2020). *For a Pragmatics of the Useless*. Durham, NC: Duke University Press.
- Manning, Erin and Brian Massumi. 2014. *Thought in the Act: Passages in the Ecology of Experience*. Minneapolis: University of Minnesota Press.
- Manning, Erin, Brian Massumi, and Christoph Brunner. 2019. "Immediation". In *Immediation 1*, edited by Erin Manning, Anna Munster, Bodil Marie Stavning Thomsen, 275-293. London: Open Humanities.
- Massumi, Brian. 2002. *Parables of the virtual: Movement, Affect, Sensation*. Durham, NC: Duke University Press.
- Massumi, Brian. 2008. "The Thinking-feeling of What Happens". *Inflexions* 1, no.1 (How is Research-Creation? May 2008): 1-40. www.inflexions.org
- Massumi, Brian. 2011. *Semblance and event: Activist Philosophy and The Occurrent Arts*. Cambridge, MA: MIT Press.
- Massumi, Brian. 2019. *Architectures of the unforeseen. Essays in the Occurrent Arts*. Minneapolis, London: University of Minnesota Press.
- Mazzei, Lisa. 2020. "Speculative Inquiry: Thinking with Whitehead". *Qualitative Inquiry* 27 (5): 554-566. <https://doi.org/10.1177/1077800420934138>.

- McCormack, Derek P. 2018. *Atmospheric Things: On the Allure of Elemental Envelopment*. Durham: Duke University Press.
- McKittrick, Katherine. 2011. "On Plantations, Prisons, and a Black Sense of Place". *Social & Cultural Geography* 12 (8): 947-963. <https://doi.org/10.1177/1077800420935927>.
- Morton, Timothy. 2013. *Realist Magic: Objects, Ontology, Causality*. Ann Arbor, MI: University of Michigan Publishing.
- Morton, Timothy. 2013b. *Hyperobjects: Philosophy and Ecology after the End of the World*. Minneapolis, MN: University of Minnesota Press.
- Morton, Timothy. 2015. "What is Dark Ecology?". *Changing Weathers*. <http://www.changingweathers.net/en/episodes/48/what-is-dark-ecology>
- Morton, Timothy. 2018. *Being Ecological*. London, UK: Penguin Random
- Moten, Fred. 2003. *In the Break: The Aesthetics of the Black Radical Tradition*. Minneapolis: University of Minnesota Press.
- Muñoz, José Esteban. 2009. *Cruising Utopia: The Then and There of Queer Futurity*. New York: New York University Press.
- Nxumalo, Fikile. 2018. "Situating Indigenous and Black Childhoods in the Anthropocene." In *Research Handbook on Childhoodnature*, edited by Amy Cutter-Mackenzie, Karen Malone, Elisabeth Barratt Hacking, 2-19. Cham, Switzerland: Springer.
- Pasternak, Anne. 2017. "Foreword". In *Living as form socially engaged art from 1991-2011*, edited by Nato Thompson, 7-15. Cambridge, MA: MIT Press.
- Powell, Kimberly. 2010. "Making sense of place. Mapping as a multisensory research method". *Qualitative Inquiry* 16(7): 539-555. <https://doi.org/10.1177/1077800410372600>
- Purcell, Mark. 2014. "Possible worlds: Henri Lefebvre and the right to the city". *Journal of Urban Affairs* 36, no. 1: 141-54. <https://doi.org/10.1111/juaf.12034>.
- Rajchman, John. 2000. "General introduction". In *The pragmatist imagination: Thinking about "things in the making"*, edited by Joan Ockman, 6-15. New York: Princeton Architectural Press.
- Rousell, David. 2020. "A Map You Can Walk Into: Immersive Cartography and the Speculative Potentials of Data". *Qualitative Inquiry* 27 (5): 580-597. <https://doi.org/10.1177/1077800420935927>
- Rosiek, Jerry. 2018. "Art, Agency, and Ethics in Research: How the New Materialisms Will Require and Transform Arts-Based Research". In *Handbook of Arts-Based Research*, edited by Patricia Leavy, 632-648. New York: The Guilford Press.
- Sauvagnargues, Anne. 2018. *Deleuze and Art*. London: Bloomsbury.
- Shaviro, Steven. 2012. *Without Criteria: Kant, Whitehead, Deleuze, and Aesthetics*. Cambridge, MA: MIT Press.
- Simone, AbdouMaliq. 2019. *Improvised Lives: Rhythms of Endurance on an Urban South*. Cambridge, UK: Polity Press.

- Springgay, Stephanie. 2011. "'The Chinatown Foray' as Sensational Pedagogy". *Curriculum Inquiry* 41(5): 636-656. <https://doi.org/10.1111/j.1467-873X.2011.00565.x>
- Springgay, Stephanie and Sarah Truman. 2017. "On the Need for Methods Beyond Proceduralism: Speculative Middles, (In)Tensions, and Response-Ability in Research". *Qualitative Inquiry* 24 (3): 203-214. <https://doi.org/10.1177/1077800417704464>
- Springgay, Stephanie and Sarah Truman. 2019. "Counterfuturisms and Speculative Temporalities: Walking Research-Creation in School". *International Journal of Qualitative Studies in Education* 32 (6): 547-559. <https://doi.org/10.1080/09518398.2019.1597210>
- Stengers, Isabel. 2008. "A Constructivist Reading of Process and Reality". *Theory, Culture & Society* 25 (4): 91-110. <https://doi.org/10.1177/0263276408091985>
- Stewart, Kathleen. 2011. "Atmospheric Atunements". *Environment and Planning D: Society and Space* 29: 445-453.
- Tamboukou, Maria. 2014. "Archival research: unravelling space/time/matter entanglements and fragments". *Qualitative Research* 14 (5): 617-633.
- Thompson, Nato. (2017). *Living as form socially engaged art from 1991-2011*. Cambridge, MA: MIT Press.
- Thrift, Nigel. 2008. *Non-Representational Theory: Space, Politics, Affect*. London: Routledge.
- Whitehead, Alfred North. 1978. *Process and Reality*. New York: The Free Press.