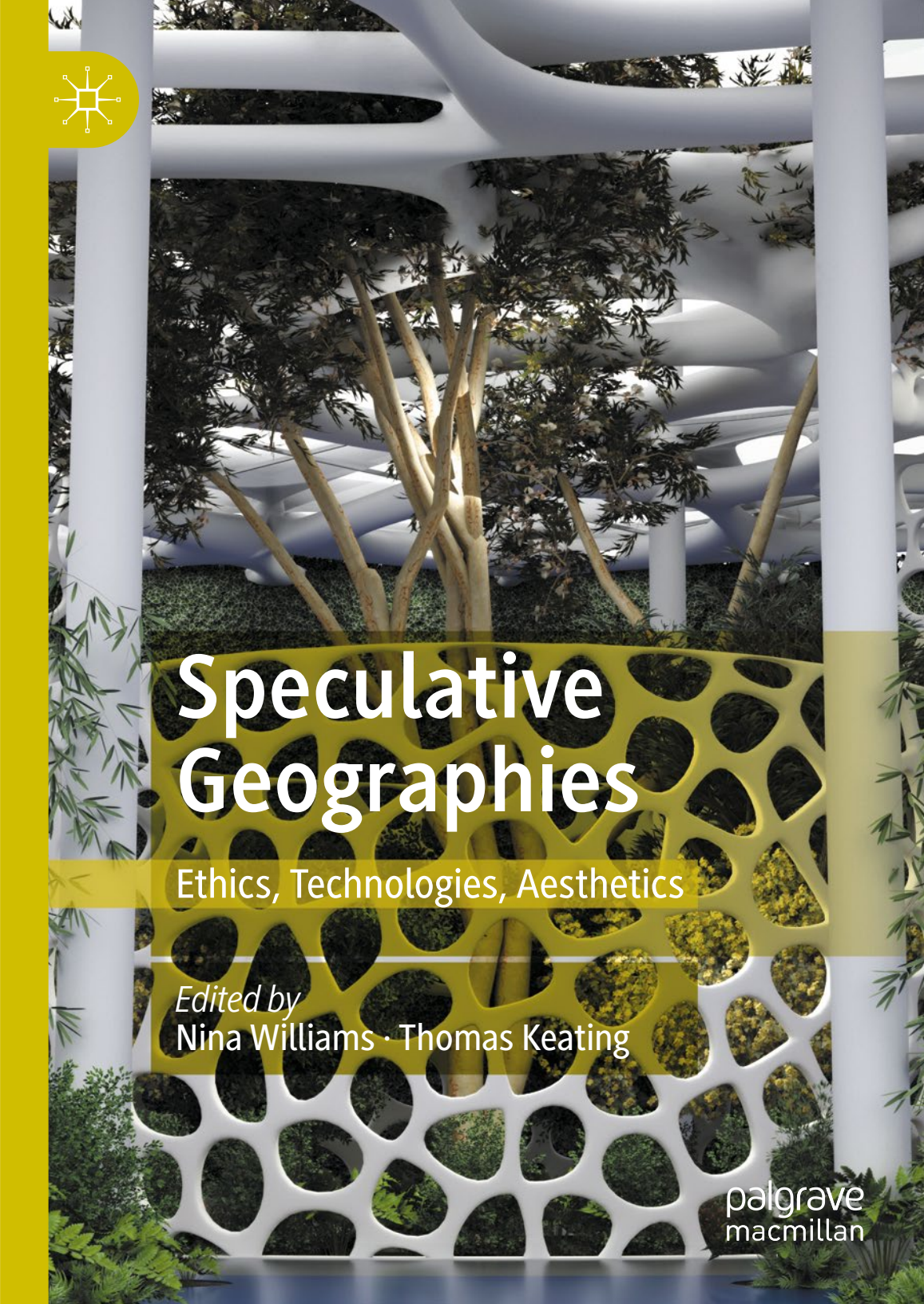
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Becoming Listening Bodies: Sensing the Affective Atmospheres of the City with Young Children

David Rousell, Michael Gallagher, and Mark Peter Wright

Introduction

Increasing attention has been given to sound in recent studies of children's geographies (e.g. Philo, 2016; Mills, 2017), including research into the political, aesthetic and cultural implications of the sonic in children's everyday lives and environments. In some cases this work has figured within a broader turn towards sensory studies in the social sciences (Bull et al., 2006; Gershon, 2017; 2019), with the sonorous qualities of environments offering alternative theoretical and empirical entry points for researchers of childhood seeking to work outside of linguistic and

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representational modes of inquiry (Kraftl, 2020). Such work has developed in conversation with philosophical movements associated with affect theory (Thompson & Biddle, 2013), new materialisms (Coole & Frost, 2010), posthumanism (Braidotti, 2013) and non-representational geography (Thrift, 2008; Vannini, 2015). These developments have paved the way for speculative conceptualisations and analyses of the sonic in terms of vibrational affect (Gallagher, 2016), queer ecologies (Truman & Shannon, 2018), racialisation (Henriques, 2011; Stoever, 2016), resonance and indigeneity (Robinson, 2020; Wargo, 2018), justice (LaBelle, 2021; Schuppli, 2020) and performativity (Powell et al., 2017).

This chapter contributes to speculative approaches in childhood studies and sonic geographies by exploring sound walking as a method for experimenting with the shifting atmospheres of urban environments. We approach sound walking as a modality of participatory art and pedagogy, which we engaged collaboratively with 25 children (age 5–11) in a project called the Listening Body, carried out at a community arts centre in Manchester, UK. Building on theories of affective ecologies and atmospheric attunement (Brigstocke & Noorani, 2016; Choy & Zee, 2015 Engelmann, 2015; McCormack, 2018), the chapter describes how creative sound walking practices enabled children to improvise with the vibratory affordances of acoustic space, wearable technologies and the sonic milieus of nonhuman creatures. Sound walking is theorised as a speculative-pragmatic strategy for sensing the affective atmospheres of the city (McCormack, 2013), where the *speculative* aspect "relates to the character of potential native to the world's activity, as expressed eventfully in the taking place of change" (Massumi, 2011: 12). This necessarily involves a speculative shift in understanding how learning circulates through affective atmospheres that envelop and permeate bodies (Gallagher, 2016), while continuously modulating the environmental milieu through which urban space-times are experientially configured. Breaking with humanistic pedagogic models that typically see children's learning as being led, facilitated or scaffolded by teachers or arts workers, we aim to develop speculative methods for studying the more-than-human dynamics of pedagogy as it takes shape within a much wider range of atmospheric forces and events (Gallagher et al., 2018; Gershon, 2013; Kraftl, 2020; Rousell et al., 2020).

In what follows, we begin by developing the geographical context of our study within the neighbourhood of Hulme and the significant place of the community art centre within this multi-ethnic community. We then draw on scholarship at the intersections of affect studies and geography to conceptualise 'atmosphere' as both a theoretical and methodological analytic for discussing our sound walking practices with children. Importantly, we approach affective atmospheres as *transindividual* (Keating, 2019); while we acknowledge that atmospheres may be felt and experienced by individuals, our work aims to show how affects circulate through and beyond the corporeal enclosures of bodies, and can therefore bring bodies into relation in ways that can be described as ecological (Anderson, 2009; Manning, 2012; McCormack, 2018; Rousell & Diddams, 2020; Stewart, 2011).

In the second part of the chapter, we focus on children's sonic experiments with balloons as atmospheric objects that began to channel a micropolitical desire to disrupt spaces of pedagogical authority and social stratification. Specifically, we describe how children used balloons to interrupt the cloistered educational spaces of a university campus which had only recently taken over a large block of public space within their local neighbourhood. Through this example, we seek to demonstrate how children's play with atmospheric objects can critically attend to micropolitical tensions that emerge from within pedagogical events, while also contributing to the development of speculative methods for studying how these events take shape as they do.

Demolition and Renewal in Hulme

The *Listening Body* took place in the urban residential area of Hulme, one of several areas adjacent to Manchester's city centre which housed the growing working-class population during the city's industrial expansion in the late 1700s and 1800s. Hulme has remained predominantly working class to the present day. During the 1950s, many Caribbean immigrants from the Windrush generation settled in Hulme and neighbouring Moss Side, creating a vibrant Black community. In the 1960s Hulme's houses were deemed slums, unfit for habitation, and were demolished

and replaced with a mass development of low-rise, system-built modernist social housing constructed in 1971, as part of city-wide plans to improve living conditions.

During the late 1970s and 1980s the Hulme flats suffered problems due to poor construction, inadequate maintenance and growing social issues. They gradually became a kind of autonomous zone, squatted by artists, travellers, anarchists, drug users and other counter-cultural groups. Alongside a vibrant culture of reggae sound systems run by the Caribbean community, Hulme provided spaces for a growing independent music scene (the first Factory Records gigs took place there), illegal raves and graffiti art. Through the 1990s, a second wave of regeneration saw yet another demolition of Hulme, but the area retained a reputation for alternative culture, art and music. One of the few buildings to survive these successive demolitions was a church which later became the youth arts centre that collaborated with us on the Listening Body project. This arts centre continues to provide free multi-arts programmes for children in Hulme and surrounding communities.

In 2014 Manchester Metropolitan University constructed a new university campus in the middle of this neighbourhood. Its opening marked the latest stage of Hulme's urban regeneration and constitutes a form of creative gentrification that has drawn majority white, middle-class professionals to work in an area that is predominantly working class and racially mixed (Denmead, 2019). As researchers located within this newly constructed campus, our work in the *Listening Body* aimed to bring local children together with artists and researchers from the university to collectively map the sonic contours of Hulme as a rapidly changing urban ecology. This was the first in an ongoing series of collaborations with local children and young people associated with the *Local Alternatives* project (www.localalternatives.org) and led to a series of co-produced community events at the university, local galleries and museums, and other public spaces around Hulme.

Affective Atmospheres and Urban Ecology

Hulme is an urban area characterised by profound multiplicity; a prime example of the multi-layered nature of urban space highlighted by McCormack (2013), albeit one where many infrastructural layers have been largely erased and replaced. Through our project we came to understand Hulme as a posthuman urban ecology, in the sense mobilised in recent years by a number of theorists (Braidotti & Bignall, 2018; de Freitas, 2018) to indicate multi-temporal assemblages that involve differential processes and forces acting on each other, in such a way as to produce dynamic, lively, unpredictable effects. Departing from earlier cybernetic and systems theories which reduce ecological complexity to models of information exchange (Umpleby & Dent, 1999), posthumanist theories of ecology acknowledge the processual, speculative and atmospheric dimensions of life that elude the capture of any system, model or network (Bignall & Braidotti, 2018; Massumi, 2018). Such theories are broadly consistent with recent work in the ecological and biological sciences which emphasise the pervasive and polytemporal dynamisms of eco-evolutionary processes (Protevi, 2013; West-Eberhard, 2003).

Building on this work, we approached Hulme as an urban ecology constituted through mutually penetrating atmospheric processes, rather than a set of nodes or components in a system. As Massumi (2018: 10) notes, this hinges on a distinction between the internal/external dynamics of a system and the processual field of life which generates *an atmospheric excess* over any systematic functioning. Our focus on the processual dimension of urban ecology enables us to consider, for example, historical waves of urban demolition, community building, mass displacement and anarchic politics as elemental forces that continue to haunt the affective atmospheres of Hulme without being captured by any system or model.

Much has been written on the concept of affective atmospheres in geography (Anderson, 2009; McCormack, 2013, 2018), but for the purposes of our discussion here, an affective atmosphere can be defined as a shifting field of intensive sensations and environmental elements that generate a shared sense of mutual envelopment in space and time. This

means that affective atmospheres are by nature unstable and dynamically changing processes, but can also have a climatological tendency to linger, accumulate and (re)turn (Massumi, 2019). While an atmosphere requires the formation of a membrane or envelope of some kind to hold itself together, this membrane is always both porous and provisional, subject to continuous variation, extrusion and rupture (McCormack, 2018).

Following McCormack (2018: 9), our work in the *Listening Body* can be understood as a series of "modest experiment[s] that make atmospheres explicit in different ways while also distributing and stretching capacities to sense their force". Attending to affective atmospheres involves speculative experiments in modes of collective experience which "never present themselves as fully tangible, discrete, or unified entities" (p. 7). In our project this involved speculative practices of "listening to bodies listening" (Gallagher et al., 2017), and the exploration of what this excessive listening might produce across multiple registers and modalities of experience.

> Expanded listening addresses many different registers of sound: aesthetic, compositional and timbral qualities; affective, material and embodied characteristics; the ways in which sound is both spatial and temporal, evoking a sense of time, distance, direction or movement; sound's capacity to produce knowledge of events and processes; and the semiotic associations produced by listening, including the tendency of sound to trigger memories. (Gallagher et al., 2017, pp. 620–621)

Significantly, this redefinition of listening within an expanded field equally includes those processual aspects of environments which are unheard, inchoate, unformed, imagined, or unconsciously felt, and therefore difficult to register or capture within the gamut of a system. Our use of the term 'listening body' therefore gestures towards an atmospheric image of the body itself (Manning, 2012), where the porous membrane between body and environment is always processual and provisional (Frost, 2016), and that which is unheard and unseen still registers as intensity collectively felt, even in its perceptual absence or fugitivity.

Becoming Listening Bodies

The *Listening Body* took place through a series of eight workshops with primary school aged children who were attending weekly art sessions run by the community arts centre. The workshops involved playful activities in which children experimented with different modalities of listening and sounding, discussed sounds they considered significant within their local area and conducted sound walks in the area where they were invited to both listen and make sounds themselves. These activities were conceived not so much as a way to generate phenomenological, cochlear-centric experiences of auditory awareness, but rather as a speculative, playful pedagogies that—we hoped—would generate new encounters between children, technologies, objects, ourselves as researchers and the wider sensorial environment. Our focus on sound aimed to explore how speculative acts of *listening*, as an amodal event in which bodies sense and vibrate with one another, can generate all kinds of embodied, multi-sensory, more-than-sonic sensations and affects (Fig. 16.1). Part of this

Fig. 16.1 Children experimenting with sonic affects during a sound walk around Hulme Hulme. Author's photograph

exploration involved the use of wearable sensory technologies to augment the capacities of the 'listening body' in a variety of ways, including the use of wearable GoPro cameras, condenser microphones and biosensing wristbands that record electro-dermal skin activity, heart rate, temperature and acceleration rate.

In the first phase of the project we introduced children to these technologies and explained that they would be used as creative media for making art over the course of the sound walks. Children chose to wear body cameras or biosensors depending on their own preferences. Sound artist and co-author Mark Peter Wright then led an initial series of experiments with the vibrational contours of the labyrinthine interior spaces of the community arts building: an art gallery, a studio, a stairway, a balcony, a theatre, a cafe, a corridor. Each experiment involved different techniques of listening and sounding the environment through the body as a vibrational medium, using everyday objects and materials. In one experiment, children were invited to place cotton string into their ears, hang a metal coat hanger on the string, and then experiment with the vibrations that resulted when the coat hanger was brought into contact with other objects and bodies in playful interaction. Hangers banged chaotically against walls, other bodies, other hangers and the body cameras and microphones that children were wearing at the time. The children described how this practice generated a strange vibratory sensation in the inner ear, which they variously characterised as "a vibration", "like a drum", "a clock", "a bell", "a body" and "a heartbeat".

The next series of walks began to explore the material and affective qualities of environments around Hulme, including the sonic atmospheres of children's schools, parks and neighbourhoods. We began in the interior spaces of the arts building and then walked out onto the main road, into a local park, along various side streets, past schools and playgrounds, and then back into the building. As we walked, Mark introduced a variety of interventions into our collective process of environmental listening and sounding. Earplugs were used to disorientate and modulate the sensation of sound and locational awareness. Small bells were placed on the shoes of children, whose steps began to introduce a polyrhythmic syncopation into the sonic field. Yet the sensory atmospheres of these walks were not necessarily dominated by sound. The fluorescent yellow of

the safety vests worn by children seemed to imbue the walks with its own chromatic imprint, as did the dampness of the Northern England climate, the flashing red lights of GoPros strapped to children's bodies and the pungent smell of wet autumn leaves.

Following these initial sound walks, we held another series of workshops in the building's creative studio to collectively explore the photographs, GoPro videos and biosensory data that had been recorded during the walks. We experimented with mapping the sensory geography of Hulme through children's annotations and drawings on printed maps of the local area. This work extended the initial practices of walking, listening and sounding the environment into a collective practice of speculative cartographic analysis and reimagining. Children used the maps to annotate their sonic sensations and imaginaries of Hulme, often developing their own particular modes of cartographic labelling and sonic notation. We also asked the children to highlight places on their maps that could become sites for the next series of walks. These maps then became the entry point for the children to design their own sound walks around Hulme using a variety of materials, media and performative interventions. In some cases, these materials were found in the studio where the maps were being created, such as the cardboard tubes left over from large rolls of drawing paper. In other cases, unusual materials were imagined as media for listening and sounding the environment atmospherically. One child suggested we listen to the sounds of Hulme through a bowl of 'wobbly jelly' (a gelatine-based dessert), which we eventually accomplished using a hydrophone and portable amplifier. Another child's map located a range of sonic qualities and values at his local primary school, including the intimate, scratchy sounds of teachers marking the students' homework after school.

These ideas were eventually incorporated into the next series of afternoon and evening sound walks designed by the children themselves. One walk involved using the long cardboard tubes from the studio to rattle the steel fences surrounding the local school, with the intention of disrupting the private adjudications of the teachers inside. A second walk responded to the children's desire to enter the MMU university campus at Birley fields and disrupt the educational environment with a series of sonic interventions (Fig. 16.2). One child placed long tubes in a series of holes

Fig. 16.2 Child-led sonic disruptions at the local primary school (left) and university campus (right). Author's photograph

in the landscaped park outside the university building, in an attempt to hear and amplify the cries of creatures living underground. Another suggested that we use red balloons to disrupt the sonic atmospheres of the university building itself, which we discuss in more detail below.

Following the child-led sound walks we entered a final phase of the project, which focused on the co-production of multi-layered cartographies as a process of speculative analysis. We set up an upstairs space in the community arts centre by covering the walls and tables with drawing paper. Digital projectors were used to project data captured by wearable GoPro cameras and biosensors during the various walks onto satellite images of Hulme. High-fidelity audio recordings of the walks were played through speakers, and photographs from the walks were scattered across the table. This setup came to resemble an interactive installation in its own right and enabled us to create a series of multi-sensory cartographies with the children in a live space of atmospheric immersion. This final phase also involved discussions with children regarding their experiences of participating in and co-designing sound walks, and how their engagement with the project had affected their understandings of sound, art, technology, learning, movement, environment and place.

An Atmospheric Turn: When Play Becomes (Micro)political

When given the opportunity to design their own sound walks, we found that children were consistently drawn to the university building that had only recently appeared in the midst of their neighbourhood. Most of the children had never entered the grounds of the university since its construction, and their orientation to the building seemed to be infused with a mix of trepidation and wonder. And yet, their chosen manner of entry into the building was via an act of sonic disruption, employing balloons as atmospheric devices to temporarily rupture the hierarchical stratifications of the university as a place of work and study. It is precisely at this stage of the project that we noticed a palpable shift from playful experimentation towards politically charged interventions in sonic atmospheres. This turn was not something that we, as artists and researchers, were intentionally provoking or fomenting. It really seemed to arise from the affective tendencies and desires of the children themselves, while also carrying a sense of consistency with Hulme's history of radical politics and community organising that we discussed earlier.

We describe this turn as *micropolitical* not because it is small, but rather because it mobilises a politics that is affective, ecological and intricately connected to the vital forces of the surrounding environment (Rousell et al., 2020). As Rolnik (2017) notes, micropolitics affirms experience as dispersed, atmospheric, affective, and relational, resisting the cut of subjectivity from the environmental forces which are its conditions for life. It is of particular interest to us that the children's turn to the micropolitical was also marked by the use of balloons, a prime example of an atmospheric object that is often used to calculate the sonic decay time and resonance of acoustic space. As McCormack (2018) writes, balloons hold a particular allure due to their capacity to paradoxically embody a sense of atmospheric envelopment, withdrawn suspension and sensorial dispersal. As a device for experimenting with the micropolitics of affective atmospheres, McCormack (2018: 13) describes how "the balloon moves with the conditions in which it is immersed, offering an image of

thinking and moving sustained by the currents and trajectories of the atmosphere".

In the *Listening Body*, these atmospheric currents and trajectories became palpable in a series of film clips captured entirely by children wearing GoPros as they entered the university campus. In these recordings, we follow the adventures of a balloon hovering in front of a child's GoPro camera, enveloping the field of vision within a tensile red membrane (Fig. 16.3). We hear the screeching sounds of balloons in the voluminous space of the university's entry foyer, provoking annoyance from students and academics. We follow a young child chasing a balloon that gets out of hand on the staircase, and then again, on the terrace outside the university building. Each time the child nearly falls over as the balloon bounces away, just barely out of grasp. On returning to the community arts centre, we hear children popping the balloons with great

Fig. 16.3 Montage of still frames from GoPro videos created by children during sonic disruptions in the local university building. Author's photograph

enthusiasm. One child breaks into tears and hides under a table. She tells us she is terrified because the popping balloons sound like "bodies being blown up". We suddenly realise this was only three months after the trauma of the Manchester Arena bombing, but we never learn why the exploding balloons terrified this child so much.

The children's GoPro footage reveals a confluence of micropolitical forces and intensities that gather around the balloons as atmospheric objects. This includes a strange and yet resonant confluence (orchestrated by the children themselves) between the balloons and the GoPro cameras as mutually affecting atmospheric media. As sensed through the perspective of the chest-mounted camera as 'technical witness' (de Freitas et al., 2020), it is the *balloon* which increasingly appears to be the protagonist and the affective driver of this event. The children's bodies appear to *follow* the currents and trajectories of the balloons rather than direct them, as the balloons shift the event's affective register from playful experimentation towards politically charged disruptions of social feeling, oscillating between joy, allure, ambiguity and terror from moment to moment. By viewing the event from the speculative, oblique perspective of the balloon as a nonhuman atmospheric thing, we begin to sense how an affective atmosphere can move, gather, rupture and extrude itself without losing its internal consistency and metastable capacity for mutual envelopment. We are fascinated by how children's play contributed directly to the development of a speculative method in this case, and how their artful use of balloons as atmospheric devices might open new ways of considering nonhuman affects and pedagogies within complex urban ecologies.

Concluding Thoughts: Towards an Atmospheric Pedagogy

By way of conclusion, we would like to suggest that the atmospheric and micropolitical approaches shared here carry particular resonance for rethinking the role of pedagogy in co-produced projects and artful community building with children. While pedagogy might traditionally be seen as directed or facilitated by the practices of the artist or teacher, our

work in the Listening Body suggests that a more atmospheric and collectively improvised pedagogic relation is possible (Ellsworth, 2005). This also holds implications for our earlier distinction between systems and processes, to the extent that pedagogy is seen to occupy the "immanent outside" of any system through which it operates (Massumi, 2018: 9). Such speculative pedagogical operations necessarily rely on complex factors of collective improvisation, where the affective charge of atmospheric intensities amongst bodies generates a surplus pedagogical value in/of the event (de Freitas & Rousell, 2021). Through a processual confluence of sensations, concepts, affects and other atmospheric elements of the environment, something is always learned through (and even *by*) an event as it takes shape in just this way, and no other. Our project suggests that the pedagogical orchestration of atmospheres cannot be designed or controlled by individuals; instead, it shows how atmospheres might be more modestly shaped, played with and tuned through speculative experimentation as a collective 'listening body'.

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