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Soundful Cities
Sonic Performativity, Play and Ephemeral Micro-Communities

by

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Introduction

In our urban centers, the shrieks, beeps, and tweets, as with the vibrations, rumblings, and notifications, urge our bodies to move through space as fast as we can. We block our ears to some of these noises, while encouraging others, which act as sonic reminders that we exist and matter; that we have an identity. The noises emanating from our mobile devices, are soothing at times, when we feel the emptiness of anonymity in public space, while at other times, they amplify our anxieties, loneliness, and exhaustion felt by our overworked ears. And yet, amidst this sonic chaos, there are spaces where we feel human, where listening becomes a pleasurable and productive experience again, and where sound and noise afford alternative ways of perceiving and navigating through urban space, and coalescing with other people. These spaces often include performance venues, interactive museum exhibits, music/dance festivals, and immersive art installations. However, they might also include a carefully designed staircase,[1] lamp posts,[2] or even train stations.[3] The truth is that we evolved as listening beings, our sense of hearing was essential to our survival, and I should note still is for those whose vision is impaired. Yet gradually over time, as we began to prioritize vision and equate sight with truth,[4] our ability to listen has changed, and the sonic realm has receded into the background, except that is, when we consider the effects sound has on our behavior in urban settings.

Noise pollution affects not only our cities, it has increased tenfold in more than a fifth of protected wildlife areas in the U.S., with devastating impacts for the natural ecosystems.[5] Unlike vision, sound and noise do not have boundaries. With unwanted visuals we can close our eyes or look away, but as Marshall McLuhan once noted, we have no earlids[6] and no way to close our ears against the surrounding, ever-present soundscape. One way we have come to deal with the overwhelming sensations of sound in our urban landscape, is to add more noise, by choosing to wear headphones on the subway ride home, filling up time where quietness could exist with a playlist or podcast of our choosing. These "ear cocoons," to use Michael Bull's term (2007), become our earlids to the unpleasant sounds, intrusive noises, and unwanted conversations we would otherwise endure during our daily commute. And yet despite the

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[1] See the installation "Piano Stairs" (2009) by *The Fun Theory*, https://www.youtube.com/watch?v=2lXh2n0aPyw.

[2] See "Hello Lamp Post" (2013) by *PAN Studio,* a project which won Bristol's Playable City Award, https://vimeo.com/67889287.

[3] See "Station to Station" (2015), by the artist Doug Aitken, a month-long, moving art installation where musicians lived, collaborated and socialized while performing nightly multimedia "Happenings" at train stations across the country. http://stationtostation.com/about. Or check out "Play Me, I'm Yours," (since 2008) by Luke Jerram, where street pianos were installed in over 55 cities across the globe, including train stations. http://www.streetpianos.com.

[4] In Don Ihde's *Listening and Voice: Phenomenologies of Sound* (2007), he references what Aristotle said about the emerging preference for vision above all other senses. Aristotle said, "Above all we value sight…because sight is the principle source of knowledge and reveals many differences between one object and another" (Ihde, 2007: 7).

[5] Buxton, Rachel et al. "Noise Pollution is Pervasive in U.S. Protected Areas." *Science*. vol. 356, no. 6337, 2017, pp. 531-533.

[6] Immanuel Kant complains about this in his *Critique of Judgement* (2005), originally published in 1790.

affordances that the iPhone and headphones have given us, their function as "ear cocoons" deprives us of spontaneous social encounters with people. By looking at the growing levels of noise pollution, its negative effects on the environment, wildlife, and our own health and wellbeing, in conjunction with how we have responded to the increase in noise—drowning out unwanted sound, noise and social encounters with a layer of louder sound and noise—it becomes clear there is a need to address sonic overload, especially in our urban environments.

In my studies, I became aware of the dominance of the visual, and how attention was paid to the visual presence of screens, and technological objects in performance spaces. It wasn't until I was introduced to the work of Frauke Behrendt and her doctoral thesis entitled: "Mobile Sound: Media Art in Hybrid Spaces" (2010), and Adrian Curtin's *Avant-Garde Theatre Sound: Staging Sonic Modernity* (2014), that I began to study sonic phenomena with increased vigor. Behrendt (2010) articulated the benefits of using a sonic perspective to explore locative media, sound art and issues of mobility, embodiment, spatial perception and interaction with urban space. And Curtin (2014) reinforced my growing suspicion that sound was significantly understudied in the field of Theatre and Performance.[7] I became motivated to pursue my interest in this emerging area of study, and to search for ways of crossing disciplinary boundaries to extend the research on sound and noise in performance spaces. I went about this journey by putting theory into practice, co-developing an installation called *PODD* (Public Open Dialogue Device), where I could study the impacts of sound and noise performativity as experienced in public space. A second part of my journey involved my research and theoretical probing of the ways in which new configurations of community were emerging from interactions mediated by mobile technology, locative media, and playful, interactive performances.

To effectively explore the implications of such sonic phenomena within a performance context, I use Phenomenology to study my own experience and include concepts from media and performance theory as well as sound studies, to engage with the implications of play, performativity and embodied interaction within these sonically-mediated experiences. This methodological perspective, I use to address the central question guiding my research: *How do sonic qualities affect embodied interaction and spatial positioning of listeners in a range of performance contexts, to create the potential for ephemeral micro-communities to emerge? And how might the playful, performative and interactive affordances of sound and noise in performance be applied to urban design and city planning initiatives to transform our experience of public space?*

I use the concepts of performativity, play and interactivity as 'travelling concepts' (Bal, 2002),[8] to investigate the role of sound and noise in each case study: The David Bowie exhibit

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[7] Other influential works that have come about since the "sonic turn" include: Pavis (2011) *Theatre Noise: The Sound of Performance*, Brown (2010) *Sound: A Reader in Theatre Practice*, the *Theatre Journal* published an issue on "hearing theatre" (2006), and *Performance Research* featured an issue on "hearing theatre" (2006).

[8] Bal, Mieke. *Travelling Concepts in the Humanities: A Rough Guide.* Toronto: University of Toronto Press, 2002.

and *PODD*. The contexts I have chosen to explore, range from the more traditional performance venue of the museum exhibit, to site-specific, multi-media installation in public space.

   In the process of doing my research, I found areas of overlap between the types of play and types of sonic phenomena, so I developed the framework, "Playful sounds and sounding play." I use this to analyze the sonic performativity experienced in both case studies in playful terms, connecting the discussions of sound and noise to play and playfulness.

   It is through a phenomenological perspective and using the three concepts of play, performativity and interactivity as tools to analyze each case study, that I make a case for how sound and noise in performance spaces affect listeners' embodied experience, spatial positioning and our relationship towards others. And I posit, based on my critical analysis, that these sonic affects occurring in performance spaces serve as models for urban design, with the potential to transform our urban spaces into more inclusive, playful and community-generating places.

A Note on Organization

   I have organized my research into two parts: Part One, "Organized Sound and Audience Noise," and Part Two, "Sound and Noise as Sonic Intervention in Public Space." These two parts contain deep analysis of the case studies and in the first part I draw from my experience of the *David Bowie Is* exhibit, introducing some of the key concepts used throughout the study and engaging with theoretical considerations. Part two consists of a more practice-based approach to research, with the inclusion of one of my own projects, where the theories discussed in part one are applied to the design of the immersive and sonically performative experience, *PODD*. In addition to a more practical application of theory, part two explores the experience of *PODD* and the sonic performativity and playfulness of the sound and noise in comparison with the David Bowie exhibit, as a way of placing them in dialogue with each other. By letting the different experiences talk to one another, in a dialogic process, we can better understand how sound and noise function differently in each case, and what affordances each instance of sonic performativity provide for the experiencer. In a similar manner, we can also examine how the other concepts of playfulness and interactivity function in each case, and what their implications might be for micro-community formation in urban space.

   Each part is divided into a series of chapters, meant to signify a dominant theme, concept, and/or reflection I want to discuss. In each chapter, I weave together the threads of my argument by using the conceptual tools I have selected—performativity, interactivity and play, to discover how sound affects our relationship to space, embodiment and community. In order to make the reading process easier, I have included what I am calling "In Briefs" and "Within Earshots" as a way of signaling a shift from deep analysis of the case studies, to a brief description of concepts, terms, or relevant theories and scholars that are worth mentioning. These serve as interludes, transitioning from one thought to the next, in an effort to let the reader pause, reflect and enjoy before moving on to the next piece of research. In a way, this structuring embeds a rhythm within this text-based, silent work, reflecting my effort to immerse the reader into a sonic realm, not only with the content but with the style and flow of the reading process. Before launching into the first chapter of part one, I explain the methodological approach I use for my analysis and the theoretical framework that informs my perspective.

Methodological Considerations

The first part of my methodological approach is the method of using concepts as tools, as referenced earlier with Mieke Bal's (2002) "travelling concepts." For instance, I use the concepts of performativity, play and interactivity as "traveling concepts," in the words of Mieke Bal, the cultural theorist and critic (2002). It is an effective method by which new insights can be discovered through the process of describing and using the concepts. Bal writes in *Travelling Concepts in the humanities: A rough guide* (2002), that concepts travel between disciplines or between science and culture, they are not fixed. "They travel—between disciplines, between individual scholars, between historical periods, and between geographically dispersed academic communities. Between disciplines, their meaning, reach, and operational value differ" (Bal, 2002: 24). Using concepts as tools allows us to make clear from which perspective we are coming from. In a close reading of each case study analyzed, working with the concepts as tools unearths new findings, ideas, and perspectives from which to approach the phenomena at hand. During the process of defining and analyzing a concept, a research problem or phenomenon begins to take shape, and emerges "always-already" in conversation with the concept's predecessors.

"While groping to define, provisionally and partly, what a particular concept may mean, we gain insight into what it can do. It is in the grouping that the valuable work lies. […] The grouping is a collective endeavor. Even those concepts that are tenuously established, suspended between questioning and certainty, hovering between ordinary word and theoretical tool, constitute the backbone of the interdisciplinary study of culture—primarily because of their potential intersubjectivity. Not because they mean the same thing for everyone, but because they don't" (Bal, 2002: 11).

The concept of "performativity" for instance, has travelled extensively. The philosopher John L. Austin, first described the concept of performative language as consisting of utterances which function to transform something in the world, as distinct from constative language— which describes the world in terms of a true /false dichotomy. It continued to travel and transform with each new iteration, take Judith Butler, for instance, who developed the concept of performativity to describe how gender is constructed in the 1990s. Butler describes how gender is a continuous and socially constructed process which proceeds through a series of performative acts; a process of subject formation. The notion of a performative situation was introduced by Umberto Eco's "Semiotics of Theatrical Performance" (1977). It refers "…to a situation in which objects, bodies, actions and events are shown by and as a result or function as intentional signs" (Chapple & Kattenbelt, 2006: 30). The concept has traveled through linguistic studies, anthropology and sociology, ritual studies, economics and media studies, all the while changing, and yet maintained the idea that objects, technologies, concepts, rituals and yes, even sound and noise work performatively to have effects on the world. Rather than something being performed, whereby we usually mean that there is a degree of role-playing or acting that is essential to the identity we wish to present to the world, to be performative

means that it produces a series of effects, the way something or someone moves, or makes sounds, constructs the reality experienced and perceived.[9]

Another example of how the concept has traveled, comes from the fields of Theatre Studies and Media and Performance Studies, where scholars Chiel Kattenbelt (2010) and Irina O. Rajewsky (2005) have drawn connections between performativity and intermediality, extending the term's usage into the theatrical and more general everyday application. In the case of Kattenbelt, whose essay "Intermediality in Performance and as a Mode of Performativity" describes the performative turn emerging in the late 20th century with the intensification of mass media, and the increasing evolution and spread of digital technologies, he refers to intermediality as the inter-relations between media, their mutual affects, resulting in a redefinition of the media and provoking a resensibilized perception (Bay-Cheng et al., 2010:35). He relates the two terms by emphasizing "…the performativity of intermediality by arguing that intermediality is very much about the staging (in the sense of conscious self-presentation to another) of media, for which theatre as a hypermedium provides pre-eminently a stage" (Kattenbelt, 2010: 29). Rajewsky broadens the scope by speaking of intermediality in its larger sense, referring to "…relations between media, to medial interactions and interferences. Hence 'intermediality' can be said to serve first and foremost as a flexible generic term that can be applied, in a broad sense, to any phenomenon involving more than one medium" (Elleström, 2010: 51). Rajewsky qualifies this broad definition by pointing readers to an important underlying assumption, "…of tangible borders between individual media, of medial specificities and differences" (Elleström, 2010: 52). And she emphasizes that in order to discuss intermediality, one must make some kind of distinction and be able to perceive specific entities between which forms of interference, interaction and/or interplay are occurring.

Thinking with this idea of the performativity of intermediality, two concepts that have travelled across disciplines, I can explore how the concept of interactivity relates and why it becomes an appropriate tool to discover how through sonic performativity, the perceivers are more apt to experience a sense of micro-community and participate with others in the space, in an exercise of mutuality and co-presence. Making this connection can be achieved by operating within the theoretical tradition of using concepts as tools that 'travel' (Bal, 2002), whereby through the very process of trying to define, describe and situate a concept, we find meaning and discover its' potential uses. This element of discovery that Bal emphasized, is also featured in the influential work of Roger Caillois, who investigated different forms of play in his 1961 book, *Man, Play and Games.* Caillois, a French philosopher and writer, whose study on play is a careful characterization of types of games and ways of playing, emphasizes how essential the element of play is to human social and spiritual development. He describes the more exploratory end of the spectrum as free play or *paidia*, which includes spontaneity and discovery as forms of play (Caillois, 2001: 27-35). Therefore, one might suggest that this methodological approach of using concepts as tools, is a playful form of scholarly inquiry. Making this connection, brings the concept of play to the fore, and highlights how it even infiltrates the methodological approach used to analyze incidents where playful sounds and

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[9] Scholars who have written extensively on the performative and who have contributed to its emergence into the scholars' lexicon include: John L. Austin (1962), John Searle (1969), Emile Benveniste (1971), Umberto Eco (1977), Judith Butler (1990, 1993, 1997), and Jean-François Lyotard (1984).

noises afford forms of human social interaction and inter-relations that build a micro-community.

It is within this framework, where I find space to elaborate on what Rajewsky (2005) emphasized about intermediality. The ability for someone to perceive and make meaning of intermediality consists of the experience and participation with forms of interaction, interference and/or interplay. In the case studies I present, the experiencer is immersed in an interplay, interaction and/or inter-relation not only between different media, but also between their own corporeal bodies, and the social relations between people mediated by sounds in addition to images. Interactivity, often associated with 'new' digital media technologies, according to *The International Encyclopedia of Communication*, refers to "…the phenomenon of mutual adaptation, usually between a communication medium such as the Internet or a video game and a human user of that medium" (Neuman, 2008). A key component of interactivity is this mutuality and responsiveness, the fact that one's words, actions and sounds are dependent on another. It is rooted in communication and I argue it is a necessary ingredient in the formation of ephemeral micro-communities. I have now just indulged in a demonstration of using concepts as tools; a playful process of discovery.

In this brief reflection on how the concept of "performativity" has 'travelled' through different disciplines and contexts, we can begin to see how the meaning of any concept emerges from a collective endeavor with others who have written and spoken about it, and has the fluidity to be applied in unexpected yet thought-provoking ways to a variety of phenomena. This methodological approach of using concepts as tools, is consistently applied throughout my research, and gives my study the flexibility to draw upon scholarly work from a variety of different disciplines including: media, theatre, performance studies, the social sciences, sound studies and philosophy.

Phenomenology forms the second part of my methodological approach. It provides a particular perspective from which to discuss a case study, phenomenon, or concept from one's own experience. For instance, using a phenomenological perspective situates you, as the researcher, in the position of trying to make sense of things. It is about perspective taking, starting with one's own experience of the given phenomenon. The reflexive style, often associated with this methodology, signals a commitment to move beyond traditional notions of subjectivity and essentialist tendencies.

Don Ihde has written extensively on phenomenology and I use post-phenomenology as conceived by Ihde (2009), because of its concern with embodiment, its use of variational theory, its notion of a 'lifeworld', and its engagement with the philosophy of technology. Ihde says, technology is not just an object of study, but itself a way in which experience is mediated. In a similar fashion, I argue sound is not bound by sound-producing objects or materials, but a mediating force, modifying what and how we experience the world. Post-phenomenology, for Ihde is concerned with the documentation of these forms of mediation.

In variational theory there is an implied embodied position, with a certain degree of fluidity and movement as the viewer's perception continuously changes. Embodiment comes into play as active perceptual engagement, revealing "…the situated and perspectival nature of bodily perception" (Ihde, 2009: 15-16). Then we consider the notion of a "lifeworld," which intersects with variational theory, embodiment and technology (sonic mediation).

Listening and Voice (2007), an updated version of Ihde's 1976 influential, yet sometimes overlooked study of sound, engages with auditory perception and with the phenomenology of listening and voice as a connected whole. In other words, his concept of voice is not restricted to the human voice, but includes the voice of all things that make or produce sound in our listening activities:

"Listening to the voices of the World, listening to the 'inner' sounds of the imaginative mode, spans a wide range of auditory phenomena. Yet all sounds are in a broad sense 'voices' of things, of others, of the gods, and of myself…A phenomenology of sound and voice moves in opposite direction, toward full significance, toward a listening to the voiced character of the sounds of the World" (Ihde, 2007: 147).

"Doing phenomenologies," a phrase Ihde uses, satisfies my initial motivation for studying sonic phenomena in performance space—the desire to contribute to an emerging field of study often overlooked, in favor of the visual. It also enables a wide range of 'voices' as Ihde refers to them, of things/objects, others/audience, and of myself/the experiencer. This method applies well to the variety of sonic qualities I examine, from organized sound to audience noise. Ihde (2007) breaks from the "traditions of dominant visualism," where sounds serve as "…anticipatory clues for ultimate visual fulfillments" (Ihde, 2007: 54). He reminds readers that to listen phenomenologically is to hear sounds as they are, and to not perceive them as bound to some object (Ihde, 2007: 61). His emphasis on reclaiming sound as spatial, as occupying its own auditory space, and the unidirectional structure of the auditory field, in contrast to the forward-directed horizon of the visual, highlights the deep connection between sound and perception. It is through listening, for example that we can hear shapes and surfaces, that we can hear around the corner of a building or room, beyond what our vision allows. Even the absence of sound occupies space and has spatial presence. Therefore, one might argue that sound can position us spatially in particular ways, while simultaneously we perceive and position sound according to our location.

Sound and mobility share a connection, as we can only perceive sound and noise in its movement from source(s) to our ear, and as the auditor moves, the auditory field follows. In this way, sound is an inescapable part of our embodied experience, and with Nathaniel Stern's (2013) description of embodied interaction as "moving-thinking-feeling," we can see how sound is an integral part of this process. Ihde's listening method, as for Heidegger, considers the *horizon* (border) of sound to be silence and the concentrated attention-direction of listening as a "Gesture toward silence" And it is this gesturing towards silence that Ihde argues enhances listening (222). He characterizes the general field-shape of sound as both directional and surrounding: we hear (and sometimes follow) the direction of sound, while at the same time being surrounded by sound. He says, "The auditory field, continuous and full, penetrating in its presence, is also *lively*. Sounds 'move' in the rhythms of auditory presence…The fullness of auditory presence is one of an 'animated' liveliness" (Ihde, 2007: 82). Movement is very much a part of our perception of and experience with sound, and this perspective helps to bring together elements of embodiment and spatial positioning I analyze as affected by the sonic phenomena within performative contexts.

Ihde reflects on how technological culture has transformed our listening experience and he says included in this transformation are "…the ideas we have about the world and ourselves" (Ihde, 2007:5). He references the prominent media theorist and author Marshall McLuhan, who noted that instruments are the 'body' that extends and transforms the perceptions of the users of instruments. In this way, the role of instrumentation as a means of embodied experience, has changed the listening experience, extending our ability to listen through electronic amplification for example, directly impacting our perception of the world, other species, spaces and each other. Using Ihde's methodology affords a consideration for the role technology plays in our listening experiences within performance spaces.

Ihde's broad concept of voice presents a way to establish what the American music anthropologist Steven Feld called "acoustemology," as "knowing and being in the world through sound" (Feld, 2003). He suggests throughout his work that by maintaining a focus on listening and an auditory discourse in our explanations of our auditory experience, we avoid the trap of visual metaphors as well as the subjectivist interpretations that confine meaning of the auditory experience to the private experience. It is precisely this latter trap I aim to avoid, by emphasizing the participatory, inclusive and social attributes of the listening experience, and positing that sound and noise perception affect our embodied experience within a space, as well as our experience and perception of the space itself, occurring simultaneously with others. It is the social and community generating potential of sound, noise and the listening experience, that I hope will reverberate throughout my "doing a phenomenology" of sound.

Theoretical Framework

There are multiple threads that make up the theoretical framework for my study. I will begin with the self-reflexive threads embedded within my writing style, to describe some of the theoretical traditions and concepts as they relate to my research question.

The first thread is nonessentialism, an approach and worldview, which in my own interpretation of the term, I take to be an alternative to the philosophical doctrine of essentialism; the belief in an absolute truth or core, essential properties that give an object or concept its meaning and of which without, the object or concept would cease to exist. Rather than participating in what I believe to be a reductionist's view of culture, for example, I gravitate towards a view of the world colored with shades of grey, rather than black and white, where singular Truths, with a capital "T" do not exist, and instead infinite smaller "t" truths abound. As Adrian Holliday put it, a "small cultures" approach rather than a large culture approach, where "'large' signifies 'ethnic', 'national' or 'international'; and 'small' signifies any cohesive social grouping" (Holliday, 1999 :237). In the case of Holliday, the non-essentialist approach is used to introduce an alternative way to understand people's behavior as more of an exploration than a predefined definition of ethnic, national, or culture traits in people (1999). Holliday, is a British linguist, based out of Canterbury Christ Church University in Kent England. He is a strong advocate for the nonessentialist approach to studying cultures. And while his areas of research focus on things like the cultural politics of English language, education and intercultural communication, I find his conviction for using a nonessentialist approach to cultural studies helpful in articulating why it is an effective approach to academic inquiry.

The complexities and nuances of any given concept, object, individual person or group are what interest me, and it is through the very work of describing any given concept or phenomenon and experiencing the event(s), feeling the space and objects, and listening to the people you encounter, that I believe you can demonstrate *your* truth, *your* perspective and *your* situated reality. I find it helpful to describe this theoretical tradition as a communicative style, which in my opinion and experience can be far more effective and affecting, in terms of conveying your point in such a way to not alienate your reader/listener, maintaining a level of respect for their viewpoint, while at the same time managing to make a strong case for your argument through exploration, curiosity and empathic listening. As it relates to my research question and the dominant chords that ring throughout this study, a nonessentialist philosophical tradition enables a non-intrusive style of communication, positioning both listener and speaker, or reader and writer as equals, engaged in a nuanced and fluid dialogue or "dialogic" (Bakhtin, 1992). And this leads to the next self-reflexive thread, the 'dialogic', as a secondary theoretical framework shaping my research.

The term 'dialogic' comes from the work of Mikhail Bakhtin, the Russian philosopher, in *The Dialogic Imagination* (1992), and means that the 'dialogic work' carries on a continuous dialogue with other works and authors; it informs and is informed by previous works. It is a term that has evolved from literary studies to listening skills. A dialogic listening skill, means you are able to listen to the intent behind the words someone utters, not taking language as carrying a bounded set of meanings and rather making the effort to look at the intentions behind the words that someone might be afraid to say or simply cannot articulate. The impact of using such a term to describe where I position my research, is that it brings its own set of

specific affordances, just as with any tool, concepts afford users a range of actions and perspectives. A nonessentialist approach to studying the impact of sonic performativity on the body, involves a situational perspective-taking and results in a dialogic work. The 'dialogic' process provides more fluidity and is more dynamic than the kind of rigid and fixed, mind-body Cartesian dualism.[10] Taking a dialogic stance, means subscribing to the idea that we do not speak in a vacuum, and that all communication is dynamic and relational, therefore involving many voices and ideas.

The concepts and theoretical traditions of nonessentialism and 'dialogics', provide the theoretical framework for my exploration into different ways of thinking about sound and noise, as they relate to the listening experience, social interaction, and micro-community formation.

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[10] René Descartes popularized the mind-body distinction or "mind-body dualism" in his philosophical work *Meditations on First Philosophy* (1641).

In Brief
A Reflection on Two Terms

   I use this first *In Brief* to describe a couple key terms that are used consistently throughout this study. The first being "affordance," and the second being "experiencer."

   "Affordance" for the most part is a term I use in its general sense, as being the possibility of an action on an object or environment, or in other words all actions that are physically possible. The concept has developed over time as it has been used in a variety of fields including, psychology, industrial design, human-computer interaction, communication studies and artificial intelligence. It is important to note its more specific usages, for example James Gibson's (1977) article, "The Theory of Affordances," and later his 1979 book *The Ecological Approach to Visual Perception,* explores the concept in detail. Gibson defines "affordance" as what an environment offers the animal, or "an action possibility available in the environment to an individual, independent of the individual's ability to perceive this possibility" (McGrenere and Ho, 2000).[11] Gibson saw affordances as relational in that they characterize how an animal lives in its environment, while also depending on their capabilities. He says that learning to perceive an affordance is crucial to socialization, as affordances introduce ideas of benefits and harm to the perceiver.

   In contrast, Donald Norman (1988), conceived of an affordance as the design aspect of an object which suggests how the object should be used. Norman's book *The Psychology of Everyday Things* introduced the concept to the human-computer interaction community.

   In most instances, I use Gibson's interpretation of the term when it comes to what the sonic environment within a performance space affords its temporary inhabitants. However, there are a few moments where I refer to the specific 'affordances' of a piece of sound technology and here, Norman's interpretation of the term becomes useful.

   "Experiencer" is the second commonly used term in my research and is how I refer to the visitors, passerby's and participants in each performance context. My reasoning for using this term instead of "participants," "audience," or "spectators," is in line with how Robin Nelson describes it in the book he co-edited, *Mapping Intermediality in Performance* (2010). Nelson writes that "experiencer" in the context of contemporary arts and media stands in for these other terms, when they prove to be inadequate in articulating the shape of experience. It is aptly used in a work which engages an 'experiencer' as it suggests a more immersive engagement with a work designed to provoke a "visceral, sensual encounter" (Bay-Cheng and Kattenbelt, 2010: 45), more so than conventional performances. While sometimes I use the term 'experiencer' interchangeably with 'participant', as participation forms a key part of my argument, I do so as a way of conveying the specificity of that particular moment for the perceiving bodies. In most cases, I find using 'experiencer' to convey a deeper level of immersion and engagement, and as Nelson notes, in line with "Merleau-Ponty's (1962) insight

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[11] McGrenere, Joanna, Ho, Wayne. "Affordances: Clarifying and Evolving a Concept." *Proceedings of Graphics Interface 2000.* May 15-17, 2000, Montreal, Quebec, Canada, (179-186). Accessed: 15 Jul. 2017.

that the body is a medium for perception of the world and Deleuze and Guattari's (1980) notion of 'haptic space', which denies opposition between the senses" (Bay-Cheng and Kattenbelt, 2010: 45).

Part One
Organized Sound and Audience Noise

Ephemeral Micro-Communities Emerge from Sonic Performativity and Playful Noise in the "David Bowie Is" Exhibit

'Doing' a Phenomenology of Sound

The concepts of performativity, interactivity and play are used to describe the shape of my experience with sound and I use these as tools or theoretical objects (Bal, 2002), guiding my exploration of the role sound and noise in the *David Bowie Is* exhibit experience, and to what extent sound in this framework positions its listeners towards each other. While I have categorized the concepts according to the three elements of *Space, Embodiment* and *Sociality*, which I posit are key components for the formation of ephemeral micro-communities, I want to make clear that these pairings are formulated, to organize the analysis of this case study. This categorization is by no means, an attempt to relegate the concept of performativity, for example to the spatial realm only, rather, the groupings and combinations of concepts, elements and effects are fluid and overlap in varied ways. Simply put, I selected this set of pairings based on the case study at hand, the *David Bowie Is* exhibit, where the relationships between concepts emerged organically from my own experience. However, as the focus-to-fringe ratio shifts, and a new case study, with a different auditory experience becomes the focus, these pairings shift accordingly.

It was as if you were being handed the keys to a portal that would transport you into this parallel universe, or at least the keys to unlock the door to the exhibit. After the headphones

were securely covering your ears, and the guidePORT receiver (essentially a black box), was around your neck, you felt strangely prepared for the journey to begin and equipped with all the necessary survival tools. Stepping into the first room, apprehension took hold, as you waited for something. The physical and visual presence of headphones fastened to ones' body, brought a palpable, and I might add, collectively felt, expectation for sonic stimulation of some kind to occur. The moments leading up to the start of the audio narrative and music, were fraught with a collective anxiety, a sense that something should be happening. As with many of our interactions with technology, there is an assumption that it will function seamlessly, especially when it is situated in the context of a performance space, and a resulting sense of frustration if it fails to meet our expectations. Perhaps, these expectations and concerns were not shared by all visitors, as I do not presume to speak for others. However, in my phenomenological approach, I can reflect upon and describe the lived experience I had within the exhibit, working with my conceptual toolkit to unpack, interpret and understand the phenomena I encountered. As Ihde (2007) made note of, by starting at the perceptual level, he could describe the shape of experience, and uncover unvarying structures that shape human experiences, regardless of culture, race, gender and class. Following in this tradition, I do not attempt to assume the experiences of others, but to give voice to the lived experience, moving past pure observation to describe the shape of experience for myself, and perhaps others at least on a perceptual level. From my own experience at the Groninger Museum, the collective expression of anticipation could be seen in the smiles exchanged and looks of concern that it wasn't working properly. This changed to a satisfied nod as people discovered together that as they moved physically closer to the displays, their movement would trigger sound.

   The audio technology provided by the company Sennheiser,[12] afforded the exhibit with increased fluidity, agency and potential for spatial and embodied relations to arise. These qualities were enhanced by the shared co-presence, interests, and the experience of embodied interaction, or "moving, thinking and feeling" to use Nathaniel Stern's phrase (Stern, 2013),[13] among experiencers. The sonic performativity of the audio technology was dependent on each body's location in space. For example, the pair of Sennheiser headphones and guidePORT receiver enables each visitor to walk freely into 25 different 'display zones'. Behind the scenes of each exhibit, Sennheiser is constantly broadcasting 25 live audio streams through transmitters that are mapped precisely to the floor plan of the exhibit space. As a visitor approaches a particular display, the relevant audio stream activates, broadcasting the audio through the corresponding antennas located nearby. One of Sennheiser's application engineers, Norbert Hilbich, who assisted in the set-up of the guidePORT system for the exhibit at the Victoria and Albert Museum in London explained, "This is a fully automated yet entirely personal tour, as the exhibition can be explored in whatever order and at any pace whatsoever. The audio is always played at the right time for each visitor" (Sennheiser, 2013). The sound system affords each user (visitor to the exhibit) the feeling of a personalized sound journey, where your body guides the sequence of content as the audio plays according to your individual

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[12] *Sennheiser* was founded in 1945, Germany and is one of the leading manufacturers of headphones, microphones and wireless transmission systems.

[13] Stern, Nathaniel. *Interactive Art and Embodiment: The Implicit Body as Performance*. Cantebury, UK: Gylphi Limited, 2013. Print.

movement. This is because there are small trigger units called "identifiers" situated throughout the exhibit, which have the capacity to recognize the geo-location of each visitor and pick up the appropriate audio stream (sennheiser.com).[14]

What struck me about this exhibit, was how I felt while moving through the various rooms. The experience felt different than a traditional exhibition. On a physical level, I was wearing technology which was necessary and not optional, enabling me to perceive, listen and participate with the material presented. In terms of the visual experience, there were artifacts and objects, pictures both moving and static, dynamic light projections were seen on the floor of one room, or on the walls, immersing the visitor further into this interactive experience. While both the physical and visual forms of experience contributed to the sense of immersion within the story, life, and impact of Bowie's career, it was the sonic component of the exhibit which triggered the emotional reaction with the material and feelings of co-presence with the other visitors.

In the case of the Bowie exhibit, the experience for visitors was very much musical, as his songs were heavily featured from beginning to end. The fact that David Bowie was a music legend, has a devoted and passionate fan base, and had just recently passed away, were all factors that added to musical experience of the exhibit and played a role in the expressions of micro-community which emerged. Most of the visitors were familiar with his music and therefore shared a pre-existing interest in the material presented, however as someone who was not well versed in Bowie's music and life story, I still felt a connection with the other visitors. Except, rather than on a level of shared interests, it was a shared perceptual awareness. The structure of my experience included both "perceptual awareness" and "imaginative awareness," to use Ihde's terminology. Our perceptual awareness involves our external reception to stimuli, in this case the sound channeled through the headphones each visitor wore, but it includes other sensory modes of perception such as visual stimuli, the awareness of being in close proximity to other people, navigating through the space of the exhibit, the smell of a particular room or person's perfume as they pass by etc. The "imaginative mode" Ihde refers to is where listening becomes polyphonic. "I hear not only the voices of the World, in some sense I 'hear' myself or from myself. There is in polyphony a duet of voices in the doubled modalities of perceptual and imaginative modes" (Ihde, 2007: 117). In other words, the "imaginative awareness" stems from the listening that occurs within ones' own self-presence, and "…that accompanies the presence of the things and of others in the perceived world" (Ihde, 2007: 118). It has to do with the inner voice and inner experience we all have and the "voices of language" that takes on the "…focal role in human imagination in its auditory dimension" (118).

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[14] Sennheiser. "'David Bowie Is' Makes Its U.S Debut In September at Chicago's Museum of Contemporary Art." *Press.* 11 Aug.,2014. Accessed: 24 Mar, 2016.

Chapter One
Performativity and Spatial Positioning

The concept of performativity is used to emphasize the role played by the organized sound (Bowie's music) and noise (audience noise), both are sonic phenomena that give shape to the experience of the Bowie exhibit. The sound and noise performativity in this context, afford an awareness and spatial positioning of the visitors so that they are cognizant of one another. An important element of performativity is the presence of staging, with the implication of there being a performer and a spectator. Chiel Kattenbelt has worked extensively with the concept of performativity, and describes the different aspects, one being the performative utterance, which he says refers to a word, image, gesture or sound that constitutes what it presents (Chapple & Kattenbelt, 2006). In the exhibit, the sound of Bowie's music and audience noise, had the effect of mediating the spatial positioning of the individual, constituting what they present. In other words, the sound of Bowie's music for example, was designed in such a way to play certain songs that corresponded with a particular time period in the singer's career, and as the body moved, the song would fade into another. The effect of this sonic performativity, served to connect visitors, in an intimate way, with the space where artifacts were displayed. I often found myself lingering in front of a display so that I could finish listening to the song, as the lyrics, rhythm, and emotional tone of the music washed over me, adding an emotional layer of knowledge to the story of Bowie's life. The music also brought the visitor into a closer relationship with the artifacts displayed, many of them Bowie's costumes, animating the objects as the sound brought object, bodies, story and action into relation with one another. This inter-relationality brings us to the other feature of performativity, the concept of the performative situation, first introduced by Umberto Eco (1977). This refers "…to a situation in which objects, bodies, actions and events are shown by and as a result or function as intentional signs" (Bay-Cheng and Kattenbelt, 2010: 30). Thinking along performative lines, we can explore how a given object or element –relations between subjects, can transform in a performative situation. As in the case of the David Bowie exhibit, the sound of Bowie's music transformed in this performative situation, functioning as an intentional sign, with the element of staging, structuring the visitors' perception of space, positioning them as listening subjects, letting the sound determine their relationship with

space. Individuals were also affected on an emotional level and the effects, as they related to sound, amplified visitor's level of awareness towards others occupying the space. An example of this is the realization that as you stood in front of a wall of screens, depicting Bowies' final music video, *Lazarus* (2015), listening to the music, the other people surrounding you in that one part of the exhibit, were simultaneously experiencing the same audio-visual performance. The guidePORT receiver, equipped with motion sensor technology enabled the song *Lazarus* to be played as your body approached the display zone, co-structuring the listening space with the sound, because within the zone there were only a certain number of bodies that could fit in the space and listen to the song. If there were too many bodies, either people would have to squeeze together, with an uncomfortable/socially unacceptable level of proximity to one another, or, those at the edges of the display zone would not be able to access the sound of the display. Instead, as I noticed they would become frustrated by the fact that they could not hear what everyone around them was hearing and this emotional response to the lack of auditory stimuli, prompted them to re-arrange themselves in the space, moving their bodies in different ways trying to activate the sound. The sonic performativity of Bowie's music, transformed the visitors' relationship to the space, in such a way as to heighten their awareness of space in relation to sound, and positioned people in a kind of "embodied positionality" (Ihde, 2007: 75), with an awareness of each other, determining their navigations through space. The emphasis on proximity and a sensory experience as the primary means of 'community' creation, means that what is expressed and experienced within the space is shared by those within the boundaries of the community in a uniquely intimate way. Whether this feeling of presence manifests in dialogue during the event, or whether it's a more silent process of co-discovering the event with the awareness of sharing physical sensations with others, conjuring an immediate sensation of a shared reality, a shared 'lifeworld.' The term 'lifeworld', I use in the same sense as Ihde, where there is a doubleness shared by the participants, of both a micro perception (the immediate and focused bodily experience of seeing, hearing etc. of sensory perception) and a macro perception (hermeneutic or cultural), experienced at the same time, where one cannot exist without the other (Ihde, 1990: 29).[15] Ihde's modification to the traditional Husserlian distinctions,[16] allows us to consider how lifeworlds change across time and space. He even references the doubleness required when analyzing the range of human-technology relations and considering the limits of micro perceptual, bodily experience.

From Ihde's (2009) post-phenomenological perspective, we experience simultaneously how we use technologies to actively shape our perception of the world around us, while at the same time our technologies use *us* in particular ways; shaping our bodily perceptions of the world. In my exploration of sonic phenomena, this double awareness is felt as the simultaneous

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[15] Ihde, Don. *Technology and the Lifeworld: From Garden to Earth.* Bloomington & Indianapolis: Indiana University Press, 1990. Print.

[16] Ihde in his work *Technology and the Lifeworld: From Garden to Earth*, takes the concept of the "lifeworld" from Edmund Husserl, who developed the notion. Ihde modifies it to fit his own approach towards a philosophy of technology. For Husserl the lifeworld combined a genetic or historical aspect and a structural one. Ihde adds to this by distinguishing two senses of perception: micro and macro perception (Ihde, 1990).

experience of how we use sound and noise in artistic practices to shape our auditory perception of the world, and how the sound technologies use *us* in ways that shape our bodily perceptions of the world. When the doubling of experience that Ihde points out, is shared by a group of people in the same space, a playful sense of co-presence and collective sense of togetherness emerges.

Using Tristan Thielmann's concept of "geocommunity," from his 2010 article "Locative Media and Mediated Localities," as it applies to the case of *David Bowie Is*, necessitates a re-framing of these traditional performance spaces. I contend, for the purposes of my argument, that *you* the reader join me in such a re-framing, whereby we approach the experience of the Bowie exhibit as relying on location-based platforms of a sort, through the use of motion-based sensors. Of course, these are not the digital platforms we usually speak of, but they rely on the location-based technology for the staging of certain materials, sensory experiences, and ideas. The participation in what we might think of mapping practices, facilitated engagement with both the content and materials as well as sparking connections with others who occupy the same space at the same time. While the context is different, the role of the locative media in this performance context is similar to the way a social media platform or augmented reality game, as a digital platform, enables and encourages playful interactions between members and an engagement with concept of 'place' itself. The re-materialization of place and/or re-enactment of one's sense of place that Thielmann spoke of, lies in response to Doreen Massey (1994),[17] the eminent geographer, who professes her concern for how we will experience and understand 'place', in light of the anxieties and uncertainties we face in a global media era. The participation in mapping practices, which Thielmann argues is where "geocommunities" originate, is not confined to new and mobile media, and I posit that such mapping practices emerge within performative contexts such *as David Bowie Is*, where the body in motion is the trigger for the sound and therefore a trigger for the experience itself. The body in motion, or what Brian Massumi calls "the continuous body" (Massumi, 2002),[18] becomes the key to unlocking the entire experience of the exhibit, due to the use of and interaction with the location-based technology (e.g. motion sensors). For example, in the case of the Bowie exhibit, as I've previously referenced, the visitor's movements from one room to the next trigger the different audio tracks to play, so as soon as you cross the invisible line the music begins, or narrator's voice speaks. As your body moved through the exhibit, the acoustic environment reacted to your physical body, provoking people to stop, keep moving, explore the dimensions of the space, and play with the order in which they moved—sporadic vs. chronological order. In this way, people become part of a "geocommunity" of sorts, one that is fluid and ephemeral, orchestrated by the sound design and location-based technology (i.e. motion sensors and tracking system). The individual moves in and out of different formations and clusters of people, re-enacting and/or re-materializing one's sense of place by participating in a sonic and

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[17] Massey, Doreen. "A Global Sense of Place." *Space, Place and Gender*. Minneapolis: University of Minnesota Press, 1994.Print.

[18] Massumi, Brian. *Parables for the Virtual: Movement, Affect, Sensation.* Durham, NC: Duke University Press, 2002. Print.

embodied mapping practice, tracing one's own actions in the world, mediated in this case by sound and noise. It also became a collective tracing of the entire groups' actions within this space, mediated by sound and noise, and resulting in a dynamic of embodiment relations that enable ephemeral micro-communities to emerge. The sound is affective and results in embodied interaction, embodiment relations, and co-presence. As I argue, the empathy enabled by proximity extends beyond the immersion we feel within the performance, and towards fellow experiencers. For instance, to go back to the importance of the 'double experience' and 'double consciousness' established by the sonic performativity in the Bowie exhibit, I want to highlight the productive nature of this self-reflective state of being, because it gives the individual the opportunity to reflect on their one individual experience with a constant awareness of others within the space.

The sounds' efficacy served to structure the movement within the exhibit space, as it on the one hand, encouraged listeners to dwell in one section with other people, and on the other hand urged visitors to keep moving to either find a space where they could experience the sound for themselves, and/or to discover for themselves what part of the exhibit they visited next, because it was only with sound that the objects, story, and space itself became animated and engaging—and if you were to stand still, or look / rely on visuals only, without intention, or move without an awareness of space and others in that space, you would be left behind in silence. Here the concept of "performative orientation" / "aesthetic orientation," becomes important to consider as I further elaborate on this idea of the music's performativity transforming peoples' awareness and movement through space and orientation towards each other, resulting in a shared "aesthetic orientation," with potential to build an ephemeral micro-community. Kattenbelt (2010) refers to Jürgen Habermas (1985), who described the "performative orientation," as twofold: as the participant observations of social scientists and as a particular orientation of communicating participants who encounter other social actors inhabiting the same lifeworld (Habermas, 1988: 67). Kattenbelt uses the latter usage and says, "…the performative orientation of social actors implies two complementary perspectives:" a reflexive observer and a directly involved participant and that they encounter one another in "…duality, as both 'I' and 'you'" (Bay-Cheng and Kattenbelt, 2010: 31). This mutuality and positioning towards the other, plays an important role in the experience of the *David Bowie Is* exhibit, and represents one way of understanding how performativity can engender social interaction among those sharing the same space. While the "performative orientation," first introduced by Habermas (1985), highlights the duality, interactive engagement, mutuality and positioning towards one another in a performance space, Martin Seel (1985)[19] introduced the "aesthetic orientation" which Kattenbelt describes as a more specific form of the performative orientation of social actors grasping for a shared understanding of their (life)world (Bay-Cheng and Kattenbelt, 2010: 31). "An aesthetic orientation concerns an emotionally intensified, affective perception and a reflexive orientation toward one's own subjectivity within the context of a presupposed communality in the life experiences of contemporaries who belong to the same, that is to say intersubjectively shared, lifeworld" (Bay-Cheng & Kattenbelt et al.,

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[19] Seel, Martin. *Aesthetics of Appearing*. (Trans) John Farrell. Stanford, California: Stanford University Press, 2005.Print.

2010:31).[20] Here, the notion of a "presupposed communality" among those who belong to a shared lifeworld, opens the door for us to discuss connections between this specific performative orientation and how sounds and noise within performance spaces might further enhance and amplify this orientation, and I argue increase the likelihood of ephemeral micro-communities to form.

The Bowie exhibit uses the sound-listening object of headphones, as a performative element that was key to the experience itself. While, they are very common and often unnoticed fixtures in our daily lives, when they are re-contextualized I argue, they gain new significance, but more importantly they give new significance to what we are experiencing, and how we are perceiving the sounds, visuals and each other in that performative space. Allow me to reflect briefly on their familiarity and how they perform in our everyday lives, and how this translates when they are integrated into performances. The headphone has become — in a co-evolution with the mobile phone and personal audio content—integrated into our everyday commutes (in the car, riding public transit, walking, cycling) and daily routines. The recent uproar over the announcement that the next iPhone would have no headphone jack, demonstrates their pervasiveness in our consumer culture and personal lives. They physically and visibly tether us to our mobile devices, providing us with our own personal auditory cocoon, of sonic escape. It is a sonic mode of experiencing ones' physical movement through public and private space, entering into the auditory imagination—as a soundtrack to one's own inner thoughts and memories help establish the boundaries personal space—through a visual display of sonic immersion. As a performative act, the sound coming through the headphone signals to other people not to approach, because the person with headphones is busy, or does not want to be disturbed, and in some cases it functions as a point of connection —over a shared love of a certain song, podcast, or simply the unspoken acknowledgement of a subway car packed with people wearing headphones.[21]

When this ubiquitous listening-sound object is taken out of its familiar context and placed in the realm of the museum space, it brings the audience into a familiar state of shared listening, while at the same time its enhanced performativity estranges the listener from the technology. To put it another way, a familiar object and corresponding listening experience (where we choose the content) is made strange to us, in the sense that now this object is part of the performance and we are no longer in complete control. The content is less of an accompaniment to other activities, travel, work, etc., and has become the activity itself. The act of listening changes in the performative context, gaining more agency as the listener must listen more attentively; our perception of listening is changed and its value (temporarily) restored. Not only does the objects presence and performativity within the performance shape the experiencers' perception of listening, but it shapes their perception of each other through

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[20] See Chiel Kattenbelt's "Theatre and the Public Sphere," a forthcoming article, 2017.

[21] Michael Bull has written extensively on music and sound in urban culture, specifically the societal impact of personal stereos (iPod). Refer to relevant works by Bull: *Sounding out the City: Personal Stereos and the Management of Everyday Life* (2000); "The Seamlessness of iPod Culture" in *Paragrana* (2007) 16: 89-103; "Auditory" (Ed.) Caroline Jones. Sensorium: *Embodied Experience, Technology and Contemporary Art.* London & Cambridge: The MIT Press, 2006.

the embodied interaction with sound. A self-awareness was fostered by the performativity of the mobile sound devices (i.e. headphones and guidePORT system), of ones' own reliance on these devices to navigate and experience the space. At the same time, there was a double awareness of not only your movement being controlled by the performativity of the sound device, but that *you* as an experiencer controlled your own movements within the overall structured space. So, there was an ongoing tension between control (rule-based space) and freedom within the Bowie exhibit.

A sense of "we-ness" emerges

The aesthetic orientation is framed or staged in some manner and in this case it is the museum space with its' own set of conventions and corresponding expectations that visitors hold, which frames the aesthetic orientation cultivated within the space among the experiencers. The content that is perceived from an aesthetic orientation, occurs somewhat outside, or independent from the external world. As Kattenbelt made note of, following the work of Habermas (1985), the perceiver/experiencer's position is also granted relative independence, an escape from the conventions governing thinking and behavior in everyday life; a liberating experience. Within such a framework, space is created for an increased level of imagination and spontaneity, requiring "creative reflection of one's own experience" (qtd. In Kattenbelt, 2010). However, this does not mean that this kind of experience is disconnected from the life-world and rather, with an orientation towards one's own position, as an experiencing subject and subject of experience, "…creates the possibility of perceiving and experiencing oneself both within the aesthetic framework and in relation to the lifeworld" (Bay-Cheng and Kattenbelt, 2010: 32). A similar sort of "both-and" mode of thought is exercised in the discussion of sonic performativity and its positioning of subjects in relation to space. In my analysis, I describe how sound and noise function as performative utterances, in a performative situation and how the shared 'performative orientation', enables the performance to exist as the immersive, interactive and playful experience it was presumably designed to be. The framed or staged nature of the event, contributes to the qualities of the experience contained within what you might call the "play space," and so far, I have paid special attention to the affordances of the sonic performativity experienced within the museum space, and the possibilities for social connections to transpire, engendering micro-communities ephemeral by nature, yet powerful in their transience. While, at the same time, the performativity of sound and noise and the overall experience of the exhibit relied heavily on its relation to the lifeworld, with David Bowie as a cultural icon, it was inevitable that most people came with at least some prior knowledge about his music, life, and his influence on culture at large. The "aesthetic orientation" of the perceivers, as a specific form of the "performative orientation," is guided by the shared interest in the event, established outside the frame of the performance space, but which fully flourishes within the space. The hybridity of the experience comes from a clear double awareness that emerges from the set of conventions, experiences, and lifeworld brought into the performance space by each individual, and the immersion felt during the event which is somewhat independent from the outside space. An intersubjectively shared lifeworld manifests itself among a group of people, who might never have ordinarily encountered one another in everyday life. The "aesthetic orientation" adopted by experiencers, maintains the individual experience as independent creative and full of possibility, while at the same time

positioning the subject in relations to others on a spatial and embodied level, with a potential for the formation of micro-community bonds.

By engaging with performativity as a theoretical object (Bal, 2002), I can theorize and make connections between the type of performative affordances of sound and noise for the perceiving experiencer, (brought into existence) by their shared "aesthetic orientation," and the affordances of engaging with the concept of performativity itself, the positioning and perspective-taking that is required, brings us as experiencers into a state of double awareness. The doubleness stems from being on the one hand 'spectators' in the performance, and 'performers' simultaneously, as we are aware that without our collective presence and shared "aesthetic orientation"/ "performative orientation," the performance itself would not exist. In the examples I present, both performances engage with the visitor-participant and require the visitor-participant to engage, resulting in a series of immersive experiences provoked by the presence of sound and noise performativity. Therefore, we realize that without our movement through space, as in the case of *David Bowie Is* exhibit, the richness and immersive quality of the experience would not be felt. We become aware with our exploratory movements through the exhibit space, that we are positioned as both spectators and performers, existing in a reflexive state of double awareness.

A playful mode of perceiving

The concept of performativity, I have used in relation to its impact on the spatial positioning of experiencers. I would like to use the concepts of "double consciousness" introduced by Hans-Georg Gadamer (1986), and Eugen Fink's (1968) "double experience," to draw our attention to the ways in which a "performative orientation" and an "aesthetic orientation," afford a playful, imaginative mode of perception. In this way, the double awareness inherent to the performative situation, as it affects one's perceptual experience, brings embodiment into the discussion as an important element in the engagement with sonic performativity.

David Bowie Is produces a "double experience" (Fink,1968), and "double consciousness" (Gadamer, 1986) through the sensation of a shared 'lifeworld', as conceived of by Ihde (1990). The double awareness shared by participants of both micro and macro perception, the inherent ephemerality and reliance on users' geo-location within the confines of the exhibit produce this sense of shared 'lifeworld'. The second 'double experience' shared by all participants emerges from this tension between the individual exploration of space and the collective listening in synchronicity to the music of Bowie and the narrator's voice. Even these moments of perceived togetherness, of synchronous listening, are ephemeral, in the sense that the audio technology affords users the chance to browse at their own pace, to leave a room whenever they choose, and to move through the exhibit in whatever order they prefer.

The sonic performativity (the headphones and guidePORT system) establishes a unique way of moving through the exhibit space in dissonant and simultaneously harmonious ways with fellow 'members' of this particular ephemeral micro-community. Users can experience several videos, musical demonstrations or archival audio in the same space without facing a complete and utter cacophony *(Dragan, 2014)*.[22] However, this also means that as the effect on the

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[22] Dragan, Lauren. "David Bowie Is' immersive at the MCA Chicago." *Sound and Vision*. 22, Sept. 2014. Accessed: 24 Mar. 2016.

individual elicits a far more emotional response to the visual objects before them and the story of Bowie's life, it can be seen to fragment the collective of visitor's/ the collective experience of being a group of visitors to a museum exhibit. Through its use of sound, this exhibit strays from the more traditional museum experience, where visitors temporarily are joined by sharing 'membership' to the same category as museum visitor, who are then led on a guided tour, moving as a unit from one display room to the next. Instead, as I would argue, the sound design and audio technology produce an intensified experience of ephemeral micro-community, pronounced by the very fact that the communal is juxtaposed so starkly with the individual experience of traveling through the exhibit space. It is through this 'double experience' and resulting 'double consciousness', as I posit, that in fact a micro-community can be perceived by visitors, as their temporary unity and co-presence is only perceived in direct relation *to*, and simultaneously *with* its 'other'; two seemingly competing modes of being and perceiving, coexisting in the individual and collective experience of the museum exhibit visitor, producing a much richer and more complex 'both-and' mode of thinking and perceiving of the sensory phenomena presented.

The location is used to structure the boundary of these micro-communities, and visitors or let's call them 'members' for the purposes of this argument, can enter and exit different and continuously changing formations of communities, as they move and change location themselves. These gathered bodies arranging themselves in spatial and embodied relations positioned towards each other, and yet at the same time remaining somewhat distanced from one another, equipped with the mobility (through the use of audio technology) to explore the space freely. The tension between what is experienced as intimate connections occurring with those in your immediate locale, and elements of distance experienced at the same time, brings the visitor into a double experience, and this doubleness leads to a playful state of negotiating the rules of engagement within this ephemeral micro-community.

While my focus is primarily on the impact of sonic performativity in these kinds of cross modal interactions, cross modal perception inherently involves the interactions between two or more different sensory modalities and therefore I do not discount or dismiss the impact on visitor's emerging sense of togetherness, co-presence and micro-community ties, of the visual elements in the exhibit. Following in this vein of thought, it makes sense that any intermedial performance, whether a piece of theatre, installation art or in this case a retrospective exhibit on a renowned musician, performer and artist David Bowie, be considered in all its (sensorial) complexity and multi-media relationships.

The notion of presence as it is experienced within the exhibit-performance space, necessitates further discussion because it connects one's experience of sound and noise performativity, interactivity and playfulness within the performance, to show how shared embodied experiences facilitate the emergence of ephemeral micro-communities. Sun-ha Hong's notions of presence is useful in making the connection between the example of the Bowie exhibit and the experience of sound more generally within performance as it relates to embodiment and micro-community formation. Hong details how today we come to feel connectivity and intimacy which are often inconsistent with more traditional markers of "…physical proximity, the human face or the synchronicity of message transmission" (Hong, 2015) and he terms this affective property as "presence: conventionalized ways of intuiting sociability and publicness" (Hong, 2015). A double experience manifests within the

performativity of sound and noise. Hong addresses this ambiguity expressed by the feeling of being more connected while at the same time feeling more lonely, when he speaks about our complicated relationship with digital technology and social media. However, I posit that the physical presence of headphones in the Bowie exhibit and the subject's embodied interaction with the sonic elements of the performance, produce a similar level of doubleness or ambiguity; as I felt on the one hand connected to others sharing the same experience, while at the same time feeling somewhat separated from others, not lonely, but on an independent sound journey. There are two (technological) elements which significantly shaped this double experience/ or perceived tension between intimacy and distance. The first is the presence of headphones, which were necessary to wear in order to hear the music and narration of the exhibit, without them the exhibit would be a silent one. They shape the experience of connection and co-presence with others because they were not only worn by everyone in the exhibit, so visually and physically you felt, at least temporarily, as being a part of a group, a member of a community, with very clear boundaries for membership—i.e. everyone not wearing headphones was outside the boundary of the community. Another effect of the presence of headphones, which fostered connection was that they reminded everyone that even though you couldn't hear what others were listening to, with the headphones' embodying a kind of homogeneity, with their appearance and the kind of ritualistic manner in which each visitor was given their pair, that you assumed everyone within close proximity to you could hear the same thing. So, when walking up to a display area, you assume those who walked before you heard what you were listening to in that moment, and while you didn't hear the same thing at the same time, you both still shared the experience albeit asynchronously. However, the headphones have an opposite effect, in that they limit the amount of interpersonal dialogue that might otherwise preside in such a space, encouraging an individual experience. From what I remember, the headphones created a feeling of distance from others, as they inhibited in some ways the amount of conversation possible between the person I came with and with strangers. Another distancing effect, brought about by the performativity and presence of the headphones was the realization that indeed, the design of the space and the headphones allowed for an individualized experience of the exhibit, whereby one individual could reach the end of the exhibit and not have heard the entire performance, because they skipped certain displays or failed to stay in one place long enough to finish listening to the audio clip. This fact created the idea or awareness of distance, that each visitor's experience was slightly different and everyone navigated through the space choosing their own path. You became aware of the sonic dissonance between individuals sharing the same space, while simultaneously being aware of the intimacy created by the feelings of togetherness and shared membership to this group, no matter how short-lived the identity might be. The "double consciousness" (Gadamer, 1986), that is enhanced by the performativity of such sound technology, means that you, as the experiencer, are aware of both states of being, distanced from others—on an individual journey, and simultaneously having feelings of intimacy with others in the space—a collective journey where you rely on others for the experience to exist in the first place.

The second (technological) element shaping the double experience, of intimacy and distance, was the guidePORT sound system designed by Sennheiser. Together the system enables each visitor to freely move around the space and listen to the audio corresponding to whatever display they decide to approach. It creates the feeling of a very intimate and

personal tour, where you can choose the order of event. You feel as if you are directing the experience for yourself, while at the same time always aware that your movement are being tracked by something or someone. The sound system itself encapsulates the entangled and interdependent relationship between embodiment, sound and space. The design required a careful mapping out of the space, and each museum space required a different yet equally precise mapping technique. This consideration of the space was intertwined with a consideration of which sounds would be played when (e.g. narrators voice and clips from Bowie songs were paired with the artifacts displayed). What was not taken into consideration, were the moments of audience noise, as a result of a delay in the audio for one individual, which inevitably would lead to others nearby trying to help, or share a laugh in recognition that they were experiencing a similar difficulty. These surprising, unexpected moments of noise, injected the exhibit experience with a playfulness and renewed sense of collective engagement with the space and each other. In fact, the presence of noise juxtaposed with the continuity of the sound (music and narration), enhanced feelings of intimacy within the space, between experiencers. While it might seem like a distraction or annoyance, extracting you momentarily from your sonic cocoon, its playful presence highlights the relational potential of the space and defines our perception of the sound as controlled, immersive and in fact sound itself is often understood in relation to its other (be it the absence of sound or what we recognize as noise). Both can only be understood in relation to one another, and so noise in this space functions as a very productive sonic element shaping the performance to be one of collective engagement where dynamic and ephemeral micro-communities emerge. In addition to the intimacy created between the sound and the individual experiencer, via the performativity of the sound system and its' consideration of space, the intimacy was also cultivated by the nature of embodied interaction afforded by the motion sensors. The visitor, through the process of "moving-thinking-feeling," to use Stern's (2013) notion of embodied interaction, becomes a part of the exhibit, through their interaction with the sound system. The direct connection between bodily movements and sound (triggered by those movements) brings the experiencer into an intimate relationship with sound itself.

The performativity of the sound system at the same time brings about a sense of distance, where the design of the system considers and tracks the geo-location of the individual, and was not designed with the intention to promote social interaction among visiting members to this micro-community. The distancing effect was further amplified by the fact that the sound system seemed to only recognize a certain number of bodies in one space at one time, which led to some frustration by those who tried to approach a crowded display area and were not able to hear anything. However, these moments, as I mentioned above, actually led to intimacy. In other words, from distance which occurred between the experiencer and the sound (they were trying to hear), came the feeling of intimacy, not with the pre-recorded sound, but between subjects who were within close physical proximity to one another. The intimacy was experienced through the exchange of audience noise, and the distancing effect created by the performativity of the sound system, as people acknowledged their shared experience.

A note on re-mapping urban space playfully

One of the concepts that will help me to make the connection between sound and noise performativity and the formation of micro-communities, is the concept of "geocommunity," proposed by Thielmann (2010) in his study on locative media. I will introduce the concept as a way of expanding traditional understandings of space, locality and place-making, before I explore how it operates within the case of David Bowie exhibit. Thielmann (2010) says "geocommunities" emerge from the participation in such mapping practices as those found in locative media, for example "geocaching," GPS-enabled social media, or augmented reality games that rely on location-based platforms. He also distinguishes between 'mediated localities' as a more phenomenological "tracing the action of the subject in the world" and 'locative media' as a more annotative "virtual tagging of the world" (Thielmann, 2010:2). I consider his theoretical positioning towards locality, "geomedia," and the relationship between technology and community formation to be a perspective relevant to my own study of the ways sound and noise performativity, playfulness and interactivity affect the spatial and embodied positioning of listening subjects. Thielmann counters the assumption made by Massey (1994) and others, of an erosion of a "sense of place," resulting from the growing ubiquity of new media, which some argue amplifies the sense of dislocation. He points to the geographical and phenomenological studies on mobile media practices, that have recently shown a trend toward "re-enacting the importance of place and home as both a geo-imaginary and socio-cultural percept. Thus, to talk about global mobile media today necessitates the discussion of locality" (Hjorth 2007; Yoon 2003; Butt, Bywater, and Paul 2008; Varnelis and Friedberg 2008). This calls our attention towards the topos of a "re-materialization of place" or a re-enactment of one's sense of place, mediated in the case studies I present by the presence and performativity of sound and noise. The use of locative media within performance spaces can be seen as a playful exercise in mapping the world anew, not geographically but "geosophically" (Wright, 1947: 9).[23] This field of inquiry, "geosophy," coined by the American geographer John Kirtland Wright, proposed studying the world as people conceive of and imagine it. He recognized that artistic practices and local folk knowledge were valuable ways of understanding places. This humanistic approach to geography, brings in to the discussion of place-making and the role of "geomedia," play, embodied interaction and social co-presence or 'geocommunity'. Michiel de Lange, a play studies scholar adds:

"Hybrid mobilities, playful immersion and pervasive co-presence in location-based platforms...afford users the ability to inscribe their physical and digital environments with their own routes and experiences and get absorbed in playful ways of place making while in the enduring company of other people" (Souza e Silva & Sutko, 2009: 68).

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[23] John Kirtland Wright. "Terrae incognitae: The place of imagination in Geography." *Annals of the Association of American Geographers*. 37. (1947): 1-15.

In Brief
The Performative Turn

    Kattenbelt refers to the scholar Erika Fischer-Lichte and her 2004 book *Ästhetik des Performativen,* where she discusses the "performative turn" in the arts. She views this turn as a shift where two relationships are solidified, the relationship between subject and object and the relationship between the material and corporeal nature of the elements and their sign character (Fischer-Lichte, 2004: 19). According to Fischer-Lichte, the performative turn has a liberating function for the arts, because it occurs in performance and as performances (as events) which cannot exist independently from producers and perceivers. She describes how they only exist in the creative activity of the artist and in the experience of the observer, listener or spectator (Fischer-Lichte, 2004: 29). However, while she focuses on the post-war avant-garde, Kattenbelt considers that art by definition might be performative. He explores the performative turn in contemporary arts as a "*radicalization,*" whereby the performative aspects of art reinforce the materiality or expressive qualities of the aesthetic utterance (Kattenbelt, 2010: 33). He says this in turn emphasizes "…the aesthetic situation as a staging and world-making event taking place in the presence of the here and now, and… [intensifies] the aesthetic experience as an embodied experience" (Kattenbelt, 2010: 33). It is this emphasis on the world-making potential of the aesthetic situation and the intensification of the aesthetic experience as embodied experience, occurring within contemporary art with the advent of the performative turn in society, where I find value. In the arts, if the performative aspects are "radicalized," to emphasize the aesthetic situation as a staging and world-making event, in the words of Kattenbelt (2010), then we might theorize that in fact by emphasizing such qualities of the aesthetic utterance, those same qualities may emerge as a result of their reinforcement. What if we were to draw from the insight garnered from these reflections on how the performative turn is a "radicalization" of the performative aspects in the artistic realm, and apply them to principles of urban design?

    The concept of performativity can extend well beyond the confines of the museum, theatre or other performance venue, it infiltrates our everyday lived experiences and therefore deserves the attention of scholars and practitioners from a diverse range of disciplines, including city planners, urban designers, architects and artists.

    The "performative turn" can be used to refer to the growing significance of performance in our current culture, society, and our everyday lives. For example, Jon McKenzie in *Perform or Else* (2001), explores different paradigms of performance and the specific challenges related to the various understandings of performance. McKenzie describes the paradigm of Performance Studies, for example, as "cultural performance," characterized by its "challenge of efficacy," how performance carries the potential to affect change in societies and for individuals (qtd. in Kattenbelt, 2010: 34). Other areas where McKenzie identifies performance paradigms at play include, Performance Management ("organizational performance") and the paradigm of scientists and engineers ("technological performance"). Once it becomes clear that the significance of performance has penetrated almost every aspect of our lives, from work, to home and everywhere in between, concepts like "performativity" can travel from the

productive, yet somewhat restrictive spaces of performance venues, to the more public and open everyday spaces we so easily take for granted. The affordances of sonic performativity for example, which I outline in the case of the *David Bowie Is* exhibit, with the ability to (re)position subjects spatially towards one another, and provoke reflections of our encounters with the impact our bodies and activities have on the spaces we inhabit, have the potential for great affect if we give them value outside academic discourse within Media and Performance Studies for instance, and integrate some of the techniques or modes of performativity that worked to effectively cultivate an ephemeral micro-community, within our built-environment and public spaces.

Let's re-imagine our urban environments, and public spaces by framing and/or staging urban design differently. In other words, in addition to applying some of the design choices, techniques, or use of intermediality in performances to our built environment and public spaces, let us also consider ways of creating similar frames/ stagings as those in performances so as to enable the cultivation of a shared "performative orientation," or more specifically a shared "aesthetic orientation," a sense of "we-ness" among experiencers.

Chapter Two
Embodiment Amplified—Some Terms to Consider

"Sound permeates and penetrates my bodily being. It is implicated from the highest reaches of my intelligence that embodies itself in language to the more primitive needs of standing upright through the sense of balance that I indirectly know lies in the inner ear. Its bodily involvement comprises the range from soothing pleasure to the point of insanity in the continuum of possible sound in music and noise. Listening begins by being bodily global in its effects" (Ihde, 2007:45).

The auditory turn

When making the auditory turn in the model of phenomenology, as Ihde does, it is important to understand when speaking of perception, that at the primordial sense of experience is global (Ihde, 2007: 43). For Husserl, this point is highlighted in his work where he insists that it is the *same thing* that presents itself in different ways and in various modes of experience. In comparison, for Heidegger and Merleau-Ponty, the primordial experiences of being embodied in a world are even more strongly dependent on the global character of primordial experience. In the case of Merleau-Ponty, he has made clear that a theory of perception is already a theory of the body and vice versa. Ihde, who extends the work of such scholars, says that "In an existential phenomenology it is the body-as-experiencing, the embodied being, who is the noetic correlate of the world of things and others" (Ihde, 2007:43). By "noetic correlate," he is referring to what he also calls the "subject correlate," or the "noetic act," an act of experience or the experiencing. This occurs in correlation with the "noema," or the "object-correlate" or noematic correlate" —that which is experienced. These concepts make up the hermeneutic rule of correlation, in First phenomenology, it is "…all experience, whether fulfilled or remaining 'empty', [which] is found to have a specific shape in that all experience is 'referential', 'directional', and 'attentional'. All experience is experience of ————-. Anything can fill in the blank. the name for this shape of experience is intentionality" (Ihde, 2007: 35).

When we are speaking about 'embodiment', through the lens of phenomenology, the term 'experiencer' comes to the fore, as a way of describing, what in other contexts might be called "audience," "spectator" or "spect-actor" (a term from Augusto Boal).[24] As I have noted earlier the term 'experiencer' is the best term to use in the context of the contemporary performances I analyze, because of its suggestion for immersive engagement and visceral, sensual encounters within the event. The *David Bowie Is* exhibit, with its unique design and engaging use of sound and sound technology, is different from conventional theatre, or art gallery spaces where the spaces are often designed to appeal to one of the sense organs, usually the eyes or the ears. As

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[24] Augusto Boal, the Brazilian theatre practitioner, educator and activist, used this term "spect-actor," as opposed to "spectator," as a way of describing and humanizing the audience in the Theatre of the Oppressed. The term, in a general sense refers to an audience who becomes active and takes on a dual role, as both spectator and actor. "Spect-actors" explore, show, analyze and are capable of transforming the reality in which they are living.

I attempt to understand the shape of my experience, I am struck by how the work engaged me as an 'experiencer' and while it did not involve every form of sensory perception simultaneously: touch, smell, taste, sight and hearing, the technological, structural, and sensory design of the exhibit placed the body as central to understanding and engaging with the content.

Embodiment

  Embodiment is a process and Kurt Vanhoutte, Professor of Performance Studies and visual Arts Criticism at the University of Antwerp, in the collection *Mapping Intermediality in Performance* (2010), gives a brief outline of some of the issues with this term and implications of its usage in digital performance discourses. He notes that the fact we can say "we *have* a body; we *are* a body," represents a key issue in the field of digital performance at this time. It implies a clear and discernible difference between a body and its embodiment. Vanhoutte says this implication and these dialectics causes us to believe in a division between material reality and simulation (associated with digital technologies), or the dialectic between the virtual and the real. However, he says our digital era can not be understood by this simplistic dichotomy, rather "The individual at the beginning of the 21st century is instead perpetually undulatory—in orbit—through a continuous network of embodied states of presence that are increasingly defined according to participation and agency, rather than physical co-present" (qtd. in Bay-Cheng & Kattenbelt, 2010: 45-46). The effect within digital performance is that the embodied self is "…extended, hybridised and delimited through technologies" (qtd. in Bay-Cheng & Kattenbelt, 2010: 46). This framing of embodiment within the context of digital performance, provides us with a more synchronous and co-creative relationship with the technology used (headphones, sensory and tracking guidePORTS). The sound and sound technology used in the David Bowie exhibit, enables this relationship to be perceived through the auditory realm, as it is only through the perception of sound-triggered by bodily movement- through which embodied states of presence can by felt.

  While the exhibit in this case, is not a typical digital performance (where motion capture, artificial intelligence or virtual reality headsets play a central role), it does rely on the sound technology (headphones, motion sensors/tracking, and 3D sound system) to mediate and shape the immersive experience for the participating members.

  Don Ihdes' (2009) post-phenomenology, and his (2007) phenomenology of sound, guide my research because of their concern with embodiment, its use of variational theory, notion of a "lifeworld," and engagement with the philosophy of technology. Post phenomenology is concerned with the documentation of the forms of technological mediation, Ihde says that technology is itself a way in which experience is mediated. This concept is a "…step away from generalizations about technology…and a step into…an appreciation of the multidimensionality of technologies as material cultures within a lifeworld" (Ihde, 2009: 22). In variational theory there is an implied embodied position, with a certain degree of fluidity and movement as the viewer's perception continuously changes. Embodiment comes into play as active perceptual engagement, revealing "…the situated and perspectival nature of bodily perception" (Ihde, 2009: 15-16). Ihde and Vanhoutte both seem to share the understanding that 'embodiment' is a fluid process and the individual moves through a changing network of embodied states of presence, perception, where the embodied self is extended, hybridized and determined

through technologies.

Presence and Co-Presence

Hans-Thies Lehmann (2006)[25] refers to presence as the temporal and spatial proximity between performer and audience, what Lehmann noted could also be defined as "co-presence" (Lehmann, 2006:141-142). In phenomenology, this notion of presence features prominently, where it is defined in relation to the body, for example Edmund Husserl's "lived body" (Leib),[26] or Maurice Merleau-Ponty's idea of perception "through the body" (Merleau-Ponty, 1974: 138-139). In the collection *Mapping Intermediality in Performance (*2010), Russell Fewster discusses how digital media complicates the notions of a live presence presumed in discussions of the concept. Fewster has directed theatre for over 30 years and his research includes topics such as the use of video in performance. He directs our attention to the ways technologies construct a liveness and media presence beyond physical proximity, he references Philip Auslander's example of the immediacy of live television (Auslander, 1999).[27] Presence, in this sense is not defined by the body's spatial proximity but by temporal proximity, sometimes referred to as "telepresence" (qtd. in Bay-Cheng & Kattenbelt, 2010: 46). "Virtual presence," is the "sense of the self in a simulated environment," characterized by the social exchange between participants (qtd. in Bay-Cheng & Kattenbelt, 2010: 46-47). With the rise of social media and networking, presence becomes about participation, rather than shared physical or temporal space. In summary, with the pervasive use of screen media and emerging technologies, Fewster says, "Notions of presence, then, exist increasingly as transitional spaces between the live and the digital more than as an absolute ontological condition" (qtd. in Bay-Cheng & Kattenbelt, 2010: 47).

Based on these understandings of 'presence' within the field of phenomenology and media and performance studies, it is interesting to reflect on what form of presence felt most pronounced in the David Bowie exhibit. Each manifestation of presence, affords its own set of relationships. For example, the sense of presence experienced on Facebook, is characterized by participation, as the subjects do not necessarily share the same physical or temporal space, instead presence is gauged by one's participation, the more you post, update profile, add pictures, friends and scroll through your feed, the more you might experience a sense of presence— a transitional space between the live and digital— and I would argue membership to the micro-communities propagated by the platform. The membership however, using this example, would be felt as ephemeral, in the sense that presence is experienced as a semi-transitional space within social media platforms and within the context of networking. With regards to the space of an immersive and interactive art exhibit, experienced primarily through sound and sound technology, the intermediality of the performance renders a hybrid experience, where presence is characterized by participation and a shared physical and temporal space.

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[25] Lehmann, Hans-Thies. *Postdramatic Theatre*. (Trans) Karen Jürs-Munby. New York: Routledge, 2006.
[26] "Leib" is the German word for body or corpus.
[27] Auslander, Philip. *Liveness: Performance in a Mediatized Culture*. London & New York: Routledge, 1999.

Intimacy, performativity and interactivity

Bruce Barton, is a scholar-practitioner who teaches playmaking, dramaturgy and intermedial performance at the University of Toronto. He draws on the work of the psychologists Karen J. Prager and Linda J. Roberts (1995), who identify three basic operations that together define intimacy: "self-revealing behavior, positive involvement with the other, and shared understandings" (Prager and Roberts, 1995: 45).[28]

If we consider intimacy as an element often present in what we think of as community formations, then an exploration of the possibilities for intimacy within this specific intermedial performance process, reveals the texture of "intimate interactions" (Prager and Roberts, 2004) present, which can be interpreted as a precursor to the emergent ephemeral micro-communities. Prager distinguished between "intimate interactions" and "intimate relationships," and said "…each refer to a different and clearly distinguishable notion of *space* and *time*" (Prager and Roberts, 2004: 19).[29] Barton summarizes her work, and says "intimate interactions" refer to "…behaviour that exists within a clearly designated space-and-time framework; whereas, intimate relationships exist in a much broader, more abstract spatial and-temporal framework and continue in the absence of any observable behaviour between partners" (Barton, 2010). Intimate interactions are therefore influenced by the conditions of the immediate context, and so the performativity of sound and audience noise in the case I present, are important to consider in terms of their impact on the intimate and embodied interactions experienced. Barton emphasizes that intimacy adopts a performative quality when associated with interaction. Within intermedial spaces, considering the emphasis on "momentary intensity and complete attention" (Barton, 2010), intimate interaction, Barton points out is inevitable because the spectator is informed, and anticipates the "heightened self-disclosure of increased visibility, engagement, perhaps even interactivity" (qtd. in Bay-Cheng & Kattenbelt, 2010: 46). He adds:

"Intermedial intimacy is thus, not generated through the portrayal of shared cultural attitudes and beliefs (a relationship that reinforces 'timeless' and 'universal' values), but rather through the performance of shared perceptual frames and dynamics (interaction that posits ambiguity and de/reorientation as the constants of contemporary existence)" (qtd. in Bay-Cheng & Kattenbelt, 2010: 46).

Embodied experience, performativity and interactivity

Erika Fischer-Lichte (2004) argues that a performance only comes into being by the "bodily co-presence of actors and spectators, by their encounter and interaction" (Fischer-Lichte, 2010: 1). The two groups of people Fischer-Lichte describes who act as 'doers' and 'onlookers', must coalesce in the here and now, at a given time and place, in order to share the event/'lifeworld.' She says that a performance comes into being out of their encounter—out of their interaction (Fischer-Lichte, 2010:1). However, while Fischer-Lichte (2010) raises some valuable points about the emergent nature of how a performance comes into being, through its process or

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[28] Prager, Karen J. *The Psychology of Intimacy*. New York and London: The Guilford Press, 1995.
[29] Prager, Karen J. and Linda J. Roberts. "Deep Intimate Connection: Self and Intimacy in Couple Relationships." *Handbook of Closeness and Intimacy*. (Eds). Debra J. Mashek and Arthur Aron. New Jersey aand London: Lawrence Erlbaum Associates, 2004.

course, it is my inclination to caution against a generalization about all performances arising from the bodily co-presence of such binary roles as actor—spectator. Not all performance events involve a clear distinction between spectators and actors, or at least these roles do not present themselves according to our conventional understanding of them. For instance, in the case of the *David Bowie Is* exhibit, as with the other case study I present, the distinctions between actor and spectator, and event and audience are blurred, as the experiencer is gently guided into a kind of hybrid or double position of being simultaneously actor and spectator, event and audience member. In fact, the actors or 'doers' in performances have evolved and transformed to include non-human others. In this case, the combination of sound and technology, just as a human actor might have done, guide the spectator, turned participant, through the space in increasingly engaging, immersive and interactive ways. The human body, with its varied perceptual modes of understanding and sensing the world and others in the world, is becoming increasingly mobile, perceptually active and more and more the body actually guides the performative experience, and sometimes even the direction of the event itself. Referencing Fischer-Lichte's understanding of the term 'embodiment,' from her 2000 essay "Embodiment—From Page to Stage: The Dramatic Figure," enables the concept of 'presence' to make its way into this discussion. She does not use the term to refer to the process of giving one's body to something (be it an idea, concept or meaning etc.) which needs a body in order to articulate itself and become visually perceived, gaining an appearance. Instead, the term 'embodiment' she says, "…aims at such bodily processes by which the phenomenal body brings forth himself as, in each case, particular body and at the same time specific meanings" (Fischer-Lichte, 2004: 7). Therefore, the actor (human and non-human alike) by the processes of embodiment, produces her phenomenal body in particular ways, sometimes experienced as *presence*, while simultaneously producing a "dramatic figure" (e.g. a character, an identity, social 'role', or symbolic order) (Fischer-Lichte, 2004). She argues that both *presence* and "dramatic figure" (or meaning and experience) exist because of the processes of embodiment, brought about by the actor in the course of the performance.

In the exhibit space, I remember how unique the experience felt to me in comparison with previous exhibits I had visited. It felt from the beginning, from the first few steps inside the exhibit space, that a transformation had already occurred. While you were in a space populated with fellow visitors (with an overall shared interest in David Bowie) and felt a part of this group, at the same time, you felt as if you were the director of your own experience, somewhat independent from others, it was your body, your movements and your particular interests which would trigger the audio content. The result was a "double experience" of being on the one hand a part of this collective movement of people, walking from one artifact to the next, sharing in the multi-sensory and intermedial performance, and on the other hand, empowered by the awareness that at any moment, you could choose to break away from the 'herd' so to speak, and forge your own path. In other words, you were a participating member of a group or micro-community, sharing an aesthetic orientation and space, while simultaneously aware of your own independence to move through the space in whatever way you chose, to freely break away from the group progressing in a somewhat linear fashion through the exhibit, and then rejoin at a time of your choosing. The performativity of the sound technology, music and audience noise fostered this playful "double experience," by guiding the body through the exhibit space in such a way so as to trigger certain behaviors, lingering in front of one display

for instance with other visitors, or promoting playful discovery of the space itself by provoking the body to keep moving through the space, exploring where different audio segments were hidden.

However, this sense of empowerment was tempered with the realization that you, as an individual, experience yourself as a subject in the performance who has the ability to co-determine the actions and behavior of others, while your own actions and behaviors are determined by others. The reciprocal and co-creative nature of this relationship within performance spaces, affords not only a heightened sense of self-awareness, but also a heightened awareness of the other, as you must navigate the space, moving with and through other participants, sharing words, nods, laughter, eye contact, acknowledging each other's embodied and auditory presence. For example, numerous times throughout my experience at the exhibit, I would encounter a crowd gathered around a video display with a clip of Bowie discussing his work, and whatever sense of autonomy briefly felt (largely because of and enhanced by the materiality of the headphones and guidePORT hanging around your neck), quickly evaporated as you were faced with the task of encountering other bodies in the space, engaging, interacting and navigating with and through them, in order to find a space where you could experience the content. At times, these clusters would feel like cohesive groups of people, listening privately, yet simultaneously to the music and sounds delivered to your ears via the headphones, while at other times, it felt as if the experience was shared but at different times, listening and watching the same content, yet occurring in an asynchronous fashion. People would stay with you for a little while, before moving quickly to the next display case, and you in turn, could choose the pace at which you moved through the space, revisiting a particular display that caught your attention, or avoiding a display you had no interest in experiencing. These ephemeral interactions occurred without much in the way of verbal communication, and yet the interactions were acknowledged by way of people's bodily co-presence with one another and with the non-human, actor-event, in this case the sonic elements, including the sound technology. The embodied interaction, between non-human and human actors and spectators, brings forth the performance, and it is this interaction of the sonic (actor) and mobile, embodied subject-listener (spectator), that I argue produces a bodily positioning of oneself in relation to others within the space. Fischer-Lichte argues that any performance should also be considered as a social process, "In it, different groups have an encounter and negotiate and regulate their relationship in different ways" (Fischer-Lichte, 2004: 3). She goes on to assert that "…Such a social process turns into a political one the very moment when during the performance a power struggle between actors and spectators is started because one group attempts to force on the other certain definitions of the situation or the relationship between them, certain ideas, values, convictions and modes of behaviour" (Fischer-Lichte, 2004: 3). For example, the tension I noted earlier, between the awareness of being apart of a group, moving en masse through the exhibit space, as a unified body at times, and the awareness of your mobility and relative independence to move through the space at your own pace (afforded in part by the sound technology utilized, where sensor technology tracks your bodies' movement and plays the audio corresponding with your location within the exhibit space). It is a social process and a political one at the same time, I would argue, as you playfully navigate between the two, and/or embrace the ambiguity of the "double consciousness," or "double experience" afforded by the interaction of bodies within the

performance space. Engaging with others, in a social process, on an embodied level through the shared "aesthetic experience," co-presence, and interactions through audience noise and physical navigations. And the political process emerges from embodied interaction ("moving-thinking-feeling" as Stern would describe), where the individual breaks from the movement of the group to experience the sonic performance according to their own rhythm, resisting the non-human actors' (i.e. the sound and noise) attempts to cultivate a particular situation, relationship and/or mode of behavior. The social and political processes among bodily subjects and non-human 'actors' (the sonic) co-determine the course of the performance, and each element is in turn determined by it, and out of this relational and embodied experience, emerges an ephemeral micro-community. Fischer-Lichte raised this point, while not spending any great length of time exploring its implications, when she pointed out that in a performance, there is usually some kind of grouping that occurs among the spectators, she says, "It is even possible that for the whole duration of the performance or at least for certain stretches of time a community among the spectators or even actors and spectators may come into being" (Fischer-Lichte, 2004: 3).

So while Fischer-Lichte refers to perhaps a more traditional performance, in the sense that 'actors' and 'spectators' are assumed to be human agents, I would like to extend her argument to include non-human participating agents, as equally affecting, performative forces deserving of consideration as they play an important role in the creation of a shared state of 'we-ness', and shaping the process by which participants together share the experience and as Fischer-Lichte would assert, it is through their interaction that they bring forth the performance.

Embodiment and micro-community formation

Using a post-phenomenological perspective, enables us to explore how our experience with technology modifies what and how we experience the world and each other. Interactive art is an ideal space for exploring such encounters, and I use a case brought to us by Nathaniel Stern (2013), which reinforces the link between embodiment and micro-community formation. The work of media artist Scott Snibbe (2006)[30] invites us to playfully engage with how we perform our social and embodied relations. Stern summarizes the impact of Snibbe's work insisting that the "Social anatomy couples embodiment with the emergence of a kind of actively produced and differentiating community, and community with the emergence of the body, in a way that amplifies each as not only relational, but a moving, sensible concept that we experience and practice, as it is formed" (Stern, 2013: 164). To further emphasize this point about the connection between embodiment and community formation, Stern drawing from Nick Crossley (1995), asserts that individual embodied action is inextricably linked to the social, embodied world, "…we are, reciprocally, a relational part of, active in, and instantiating, a collaboratively embodied culture. Here we, as continuously embodied and individualized agents, emerge along with the social world around us. We collaboratively make the societies we interact in, as we are acting in them" (Stern, 2013: 149). In this example, the elements of embodiment relations, play and performativity coalesce in such a way as to create an ephemeral micro-community within this particular space.

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[30] Snibbe, S. "Artist Statement." *Scott Snibbe.* 2006. Web. 31 Jan. 2016.

Interactive art, embodiment and play

I will engage with the element of embodiment further by turning to a scholar and practitioner of interactive art, Stern (2013), for his philosophical meditation of embodiment. Interactive art parallels nicely with a post-phenomenological approach, because it provides a reflective space for exploring the relationship between the human body and technology. Stern argues that interactive art frames 'moving-thinking-feeling' as embodiment. He references Massumi's (2002) concept of a "*continuous body,*" always in motion, and adds that this "*continuous body*" includes the "…static, the moving, and the incorporeal—all our images, actions, and potentials—in it" (Stern, 2013: 56). A double consciousness arises from an awareness of our incorporeal- virtual and positioned- physical body as moving together in one "*continuous body*" and the effort it takes to recognize this double experience, as I argue is inherently playful.

If we are to pause for a moment on this idea of a playful experience, I would like to point out that it is derived from the feeling of moving in two different realms at the same time. This is what Hans-Georg Gadamer described as "double consciousness" (Gadamer, 1986), the awareness that we are crossing barriers, however blurred they may have become. And the playful experience, is both exploring the boundaries of the play space and reflecting upon our everyday world. I contend here that this playful experience carries overlap with what Eugen Fink termed a "double experience" (Fink, 1968). Fink emphasized how this double experience is essential to play itself, in his description of a "play world," he says the player must be aware of his 'real' self who plays the game while at the same time doubly conscious of the identity created by the role within the play. The player "…retains a knowledge of his double existence… in two spheres simultaneously….[and] this double personality is essential to play" (Fink, 1968: 23). In *David Bowie Is*, it is my contention that the sonic design of this performances affords a level of embodied interaction (an awareness of the double experience within the "continuous body"—incorporeal-virtual and positioned-physical body moving together), which heightens the playful "double experience," moving in two spheres simultaneously. In the case of David Bowie, I felt on the one hand utterly immersed, sonically, in the auditory world created by the music and narration, where my body and its movements through space were represented sonically—as my incorporeal body aware of the identity created by the role within the play space of the exhibit, while at the same time, I was doubly conscious of my positioned-physical body moving through the space, encountering others, aware of my position as a visitor — playing the game of the exhibit, to use the analogy of the "play world" proposed by Fink (1968). The double experience which Fink describes as crucial to the play itself, is brought into being through sonic embodiment and interactivity — which stages the relational body. The body, as Stern puts it, is "…a performed and emerging emergence. It is a process that is constituted in and through and with its relations. The performance of embodiment *is* our potential; it *is* our relationally" (Stern, 2013: 62).

The work of Mark B. Hansen, provides an alternative way of conceiving of embodied performance. He describes two bodies, the *body-image* as the recognition of the body and identity, through mainly visual representation, and the *body-schema*, as a "… preobjective process of constitution" (Hansen, 2006: 39), in other words it is becoming a body. The per-formed body, as opposed to "pre-formed" body, is a distinction Stern (2013) makes, which highlights the "emerging emergence of the body in performance" (Stern, 2013: 62).

The interactional domain implies a movement beyond the self; a connection with another. The work of both Hansen and Stern, connect the concepts of embodiment, interaction and a playful double experience to my encounter with the David Bowie exhibit. Stern argues that "Embodiment only is through its ongoingness and continuity. 'The body' is not a static 'thing,' but rather an active relation to other forces, matter, and matters-in-process" (Stern, 2013:57). Ihde (2009) also suggests a certain degree of fluidity and movement in his use of variational theory, with its implied situated, embodied perception and perspectival nature, where the viewer's perception continuously changes. The auditory experience within the exhibit space illustrate this relational quality of embodiment, where the physical body is called into a state of attention, as the experiencer is forced to encounter the immediate emotional, embodied state of the other. I posit that such interactions, while ephemeral, are affective moments of connection between people.

(Re)-imagining interaction: from tyranny to its potential

In a discussion of the concepts' limitations, Massumi (2011) describes there being "a kind of tyranny to interaction" (Massumi, 2011: 47). There are similar descriptions within sound studies literature focusing on noise, particularly the work of Katharina Rost (2011) and her notion of "intrusive noises" in the context of theatre. After identifying criticisms of 'interaction' within the artistic space, and similar limitations associated with the presence of noise within performance, I explore the potentials of each within the David Bowie case study. Stern (2013) reflects on the potentials of "interactivity" within art, and other scholars such as, Kelli Fuery (2009),[31] acknowledge its limitations while also exposing its potentials. Fuery argues that there should be a cultural knowledge of how to "participate interactively," in other words, an understanding of the practices that technology and interaction establish (Fuery, 2009:28). Scholars, such as Erin Manning, are skeptical of extolling the virtues of interactive art, and point out that interactivity can become a limiting factor, by diminishing the qualities of movement and the body, and focusing on function (technology) rather than relation (the body and movement) (Manning, 2009: 64). Others, like Karen Barad[32] are equally cautious and she offers the concept of "intra-action," where she says relation is primary and individuation is secondary. Stern (2013) summarizes Barad's claim: "In intra-action (and performativity), component phenomena only become determinate, material and meaningful through their relational performance. They do not pre-exist their relation, or differentiation. Interaction, on the other hand, assumes a prior existence of independent entities" (Stern, 2013: 64). However, those like Fuery (2009) view interactive works as positioning us as interactive, and do not simply stop and start, thus drawing attention to our interaction and how we are "becoming interactive" (Fuery, 2009: 44). From this perspective then, interactivity in artistic spaces, uncovers and makes explicit the assemblages we are always a part of, and draws attention to how the society at large and we as individuals are changed by, through and with them (Stern, 2013: 65). As with the case of the David Bowie exhibit, while the assemblage is technological, our focus is on the movement and relation, and less on the technology and interaction as thing or utility. Taking

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[31] Fuery, Kelli. *New Media: Culture and Image*. New York: Palgrave MacMillan, 2009.

[32] Barad, K. (2003). "Posthumanist Performativity: Towards an Understanding of How Matter Comes to Matter." *Signs: Journal of Women in Culture and Society*. 8 (3): 801-30.

my own experience as an object of study, and letting the shape of my experience guide my theoretical exploration into the depths of these conceptual journeys, I am inclined to side with the likes of Fuery (2009), Stern (2013), Mussami (2011) and others, who find the potential of "interactivity" within the artistic space, despite the possibility that interactivity could become a limiting factor in the overall experience. Another voice, I wish to bring into the conversation about "interactivity," is Sarah Bay-Cheng, who makes the case that the "…efficacy of intermedial performance often relies on interactivity, the perceived (if not actual) engagement of the viewer and a virtual, or simulated, environment" (Bay-Cheng & Kattenbelt, 2010: 186). In the intermedial performance of *David Bowie Is*, the visitor physically and perceptually engages within the work from an immersive perspective. Bay-Cheng references the shift from a two-dimensional perspective (a viewer looking at a painting or drawing) towards an interactive perspective, which "…enables the viewer to see from within the image controlling both one's own position in relation to the image, and the dimensions (even ontology) of the image itself. *How* one looks can largely determine the image that one sees and the experience of the virtual image" (Bay-Cheng & Kattenbelt, 2010: 186). While we can see here the tendency to give primacy to the visual, by only considering "a viewer's" two-dimensional perspective, the same general idea can easily be applied to the listener and the shift from hearing only things within our immediate surroundings, to the multi-dimensional and dynamic soundscapes we now have access to, with technologies of amplification, our own personal soundscapes in the form of our mobile devices, or new developments with four-dimensional soundscapes. Therefore, if we qualify what Bay-Cheng says about interactivity, to include the sonic as well as visual, then we could also describe how an interactive perspective transforms the listener's experience within an intermedial performance space.

As it has become clear, this term, "interactivity," like the terms "ephemerality," and "community," are not unproblematic and come with a myriad of interpretations. Instead of trying to proselytize about what the "real" understanding and interpretation is for these kinds of concepts, I want to simply highlight their complexity and dwell in their ambiguity with its infinite possibilities. By doing so, we can appreciate how subjective and varied the embodied experience is within performance spaces, and reclaim concepts or ideas that have been marred in controversy because of its usage in the commercial world, for example, or the perceived limitations it imposes.

Chapter Three
Play and Social Positioning Through Noise

    What I want to take away from these reflections on concepts of embodiment and interactivity, is how their presence in a performance space, such as the David Bowie exhibit, positions the subject into a double experience, whereby their engagement is on an embodied level, a virtual level and the interactivity brings these two bodies into a "continuous body," "moving-thinking-feeling" through the space in synchronicity with those around them. I have alluded to the playfulness of the "double experience" and double consciousness, which arises from our awareness of our incorporeal-virtual and positioned physical body, moving as one 'continuous' body, and in the following section I will expand on the notion of play as it relates to the experience of noise within performance spaces.

    Noise is probably not the first thing that comes to mind when we think of a playful activity, and yet noise is very much intertwined with our expression of play and communication to fellow participants during play. While it is cursed with many negative connotations, noise in and of itself is not necessarily negative. Max Neuhaus, in a 1974 *New York Times* article, "Bang, BOOooom, ThumP, EEEK, tinkle" wrote about the concept of noise pollution and how the public has been misled to think that sound in general is harmful to people. He makes the point that our response to sound is subjective and that no sound therefore can be intrinsically bad, "How we hear…depends a great deal on how we have been conditioned to hear it" (Neuhaus, 1974). The law, Neuhaus continues, defines noise as "any unwanted sound" and this is similar to how it is defined from a geographic perspective, as "a sound which is out of place" (Atkinson, 2007: 1905). R. Murray Schafer, the acclaimed composer, educator, environmentalist and scholar, describes noise as an unwanted sound, "any undesired sound signal" (Schafer, 1969: 17). In the context of communication, where a message consists of signals being transmitted, noise is any sound or interferences which impair the accurate transmission and reception of the message (Schafer, 1977: 4). This definition indicates noise as something we don't necessarily like to hear falls in line with many who follow acoustic ecology's understanding of the term. Whereas, Edmund Gurney's (1880)[33] understanding of noise as being a sound out of place, implies that our sense of volume is subjective and one urban location might change according to temporal rhythms of each day, with an ebb and flow of varying types of sounds and noises, constantly in flux, and at the same time a relative fixity when we think about the rhythmic cycles of certain sounds, traffic for example. It also implies a set of boundaries within which sound can exist or where it is perceived as normal, and outside those boundaries sound might be perceived as noise. There is a tendency with urban sound Rowland Atkinson says, for repetition and spatial order, while they are not fixed, "…also displays a patterning and persistence, even as these constellations and overlapping ambient fields collide and fade in occasionally unpredictable, multiple and purposeful ways" (Atkinson, 2007: 1906). In his 2007 article for the journal *Urban Studies*, Atkinson demonstrates the power of music, sound and noise to denote place and demarcate space, and uses the concept of "sonic ecology" to examine how there exists a spatial and temporal ordering quality of sound in urban space. This term 'ecology' encapsulates the

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[33] Gurney, Edmund. *The Power of Sound*. London: Smith, Elder, & Co., 1880. Print.

shifting aural terrain of the city and the interconnected and fluid constellations of noise, sound and music coming from patterns of daily activities (traffic, leisure, talk, industry etc.). It brings all sounds into a networked web of relations and in doing so does not cast noise as unimportant or irrelevant for academic study. In fact, I bring in Atkinson's work because he integrates noise into his study on the power of sound to shape and re-shape our relationship to space and each other. And while his study focuses on the urban soundscape, his exploration into effects and affects of sound and noise on behavior, social ordering, and relationship to space apply to my study of how noise playfully interacts within the theatre space.

I will return to his concept of sound's power to shape our experience within urban space, and our perception of space and how using this concept of sonic ecology can give us a means of exploring different elements of urban life. For now, it is enough to introduce his ideas and emphasize how in fact understanding noise beyond its traditional definitions as merely undesirable or out of place, is very important to understanding any soundscape as a whole, and its socially organizing capacity.

Through a phenomenological approach to the study of noise in performance space, I engage with the concept of play to explore its potential to create the preconditions for ephemeral micro-communities to emerge.

The shape of our experience with noise in performance spaces will be explored in the following section, and the concept of play will serve as a force guiding us through playful encounters with noise as well as providing a framework through which to re-conceptualize our relationship to noise. I explore the role of noise in the case of the *David Bowie Is* exhibit, and reflect on its potential to position experiencers socially, in relation to one another.

The concept of play

The concept of play serves an important role in my exploration of the affective power of noise in performance spaces. There is a whole field of study dedicated to exploring the individual and societal implications of play in all its dimensions and as it shows up in a variety of contexts. And while it would be quite feasible to dedicate my entire study to the concept of play in performance, I have chosen to use it as a tool, focusing specifically on how (audience) noise is in fact a form of play in a performance context and to uncover its potential for micro-community formation.

Johan Huizinga's "Magic Circle"

I will begin by framing my discussion of play with the influential play studies scholar Johan Huizinga (1955), whose work has shaped many of the contemporary play studies scholars of today. He developed the concept of the "magic circle" to distinguish his notion of play from everyday life, both spatially and temporally. Huizinga suggests that the circle literally contains "…the movement of the 'playful' body and [distinguishes] it from the more mundane movement of the 'everyday' body" (Huizinga, 1955: 9). These rule-governed spaces contain inherently playful behavior, as the body must explore the boundaries and navigate through the space to discover the rules. In Huizinga's study, he also mentioned that one of the most important characteristics of playing a game is that it is 'free' in terms of there not being a need or task in order to achieve something else (Huizinga, 1955: 8). And while I might not accept the clear distinction he made between the 'playful' body and the 'everyday' body, I do agree that

there does not need to be a task or order when playing a game. However, I think it can be useful to think about play on a continuum, where different manifestations can be recognized and a certain level of specificity reached when it comes to distinguishing between different types of play. The continuum model is used by the play studies scholar Roger Caillois, whose work I will use as a way of positioning my research on sound and noise in the context of play. And while I think a strict separation between play and the everyday life is not an accurate framing of playful activity, I agree with Huizinga (1955) and Michiel de Lange that discerning the boundaries of play to some degree is necessary and the presence of boundaries give shape and meaning to the playful body and experience. De Lange argues all locative media as being playful, and that the "boundaries have to be somewhat discernible in order to turn the use of this locative platform into a playful activity by which meaning is given to places and social proximity" (de Souza e Silva & Sutko, 2009: 58-59). De Lange also suggests locative media, as "hybrid spaces" are inherently playful (59). As I have suggested above in my discussion of the performativity of sound and noise, the presence of locative sound media (motion sensors within sound system tracking geo-location of each visitor and the headphones) in the David Bowie exhibit, does affect the experiencers' relationship to space and embodied interaction within the space, but it also affords a playfulness, because as de Lange suggests locative media are inherently playful. As "hybrid spaces," locative media gives user-participants a double experience of place and space, and a double consciousness of their bodies moving in two realms at once alongside other people experiencing the same thing. In this section, I will explore how the instances of audience noise within the exhibit space interact with the locative sound media and result in a double experience and playful positioning towards other people within the space. The playfulness of noise and sound will be further explored as I propose using Caillois' (2001) continuum of play as a framework for understanding the social impact of sound and noise in performance spaces.

"Playful Sounds and Sounding Play"—A framework for researching sound and noise in performance spaces

Caillois' influential work *Man, Play and Games* (2001), builds on the theories of Huizinga by presenting a comprehensive reflection on play forms. He distinguishes four forms of play: competition (*Agön*), chance (*Alea*), simulation (*Mimicry*) and vertigo (*Illinx*). And he situates play on a spectrum ranging from the realm of *paidia* (spontaneous, impulsive, joyous, uncontrolled fantasy) to the realm of *ludus* (absorbing, rule-governed, for its own sake and amusement, involving skill and mastery), these notions articulate the end points of a continuum (Caillois, 2001: 27-35). I draw from Caillois work and the concept of play to not only explore the *David Bowie Is* performance space and experience of sound and noise within that space, but to more broadly develop a framework for categorizing sonic phenomena according to their playful counterparts. While I disagree with some of Caillois' assumptions about what characterizes play, specifically his contention that it is separate from ordinary life occupying its own time and space as an 'escapist'[34] activity and that it is an unproductive, I do find his perhaps overly

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[34] Play Studies Scholars like Brian Sutton-Smith (1997) have criticized Caillois' 'escapist' definition of play. Sutton-Smith for example, wrote in *The Ambiguity of Play* about how in a leisure-based Western culture, individuals are not 'free' to play, with social and cultural pressures to spend their leisure time 'wisely'.

simplified framework for understanding the complexity of play useful in drawing connections with an equally complex array of sonic phenomena. His forms of play provide a productive way to discuss how different forms of sonic phenomena we encounter can be experienced as forms of play. As an extension of Caillois' framework for play, I make note of the distinction between play and playfulness, as I will elaborate further when I bring Miguel Sicart (2014) and other contemporary scholarly contributions into the discussion. As Sicart described:

> "play is an activity, while playfulness is an attitude. An activity is a coherent and finite set of actions performed for certain purposes, while an attitude is a stance toward an activity—a psychological, physical, and emotional perspective we take on" (Sicart, 2014: 22).[35]

> Both the activity of play and the attitude or positioning of playfulness are present in the cases I present and the role that sound and noise play in not only giving a sensory shape to the play activity (of say an interactive exhibit or theatre performance) as well as the psychological, physical and emotional positioning towards that activity.

So just as with the different forms of play and types of games Caillois investigated falling on a continuum ranging from free, and exploratory forms of play to more regulated and rule-based forms of play, I propose we can begin to think about different forms of sonic phenomena as falling on a similar sort of continuum, and corresponding to the different types of play Caillois outlined. There are four types of sonic phenomena that I use to develop this model for thinking about 'playful' sounds, they include: music, organized or communicative sounds, noise (intrusive noise and audience noise), and rhythm/vibrations. This model is developed to be used when encountering sound and noise within both traditional performances spaces such as, theatre, opera, museum, and more contemporary performance venues including but not limited to: installation art, interactive art, site-specific art, mobile/pervasive games, performance and community art. Here's what I came up with when I categorized what I am calling "playful sounds and sounding play:" music fell in the realm of more *ludus* forms of play, as they were structured in very particular ways, most often according to compositional rules (e.g. a certain number of beats per bar, tempo, rhythm, chords, etc.), and these types of sounds are often very absorbing and we could say their rule-based nature governs our behavior, movement and in some situations acts as the social glue, enhancing the fluidity of communication between two individuals for instance. Instances and encounters with organized sounds, or what Barry Truax calls 'sound signals' (1984), I also attribute to the *ludus* realm of play on Caillois' continuum, and within that there are elements of *mimicry* or simulation in the form of role playing to the extent that each experiencer upon entering the performance space adopts the role of theatre-goer, or museum exhibit visitor, positioned by or 'hailed'[36] into this

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He understood that play forms were influenced by social and economic pressures, therefore definitions of play are open to negotiation. It was his interpretation that play should involve all its forms from child's play, gambling, sports, festivals, imagination and even nonsense.

[35] See the work of Bateson & Martin (2013); Deterding (2014); de Jong (2015); and Stenros (2015) who also make a similar distinction between play and playfulness.

[36] The term 'hail' I use in the sense that Louis Althusser, the French philosopher used it in his concept of 'interpellation'. He asserts that we are 'always-already subjects' and our engagement with daily rituals,

role, in part by the "sound signals" within that acoustic community. For example, if I am entering the space of a theatre, not only are my expectations and previous history going to other such events shaping my behavior within the space and relations with others in that space, but they are also being shaped and reinforced by the sensory elements which help to define the environment in the mind of the perceiver. In the case of my study where I am focusing on the impact of sonic phenomena within performance spaces, the sonic cues ("sound signals") within the overall acoustic community or environment of the space, communicate to the listener-experiencer about the conventions, codes of behavior, cultural and social norms within the space, function as a regulating force for those entering the space. If we take the space of a theatre, almost as soon as we enter the performance space, and find our seat we are guided by the sonic cues within the space, such as the low murmur of other people's voices, speaking in somewhat hushed tones compared to what we would consider a 'normal' volume in a public space, or maybe there is already music playing from the PA system as the audience finds their seats. The "sound signals" which characterize the acoustic community, position us in the role of audience member, as we adapt our behavior and the volume of our own voices to match others around us, our voices become hushed as we converse with those around us, and wait in anticipation for the show we are about to experience.

Audience noise as Alea or chance

As I discussed in my introduction, noise has been left unstudied for the most part in the realm of theatre and performance and in our everyday lives it has a largely negative connotation. What I propose then with my framework for "playful sounds and sounding play" is one way of bringing (renewed) attention to the study of noise in Media and Performance Studies by using the concept of play to explore the importance of noise in shaping people's social positioning towards one another and towards the experience itself (space). From here we might then extrapolate from the effects of noise on the sociality of experiencing bodies within a performance space, and imagine what potential playful and performative strategies might have for urban design more generally in our cities and public spaces. I adopt a perspective on noise in line with Luigi Russolo (1986), who established a continuity between sound and noise, recognizing noise as inherent and inseparable from sound, as imbedded in musical materiality. His perspective was featured in Douglas Kahn's *Noise Water Meat* (1999), in a section exploring the separation of sound and noise from an historical perspective. Kahn emphasizes that Russolo's "noise presented timbre as a resident noise that invoked the world without incorporating it" (Kahn, 1999: 81). In the context of the *David Bowie Is* exhibit, the timbre of noise which managed to invoke the world without incorporating it, were the instances where audience noise seemed to erupt unexpectedly among small clusters of people gathered around one display. The juxtaposition between the musical sounds and their pre-recorded continuity, and the instances of audience noise invoked sensations of familiarity, annoyance, and curiosity guiding the experiencer into a momentary state of double awareness, between their position and role within the performance space of the exhibit as an individual experience, led by the continuity of pre-recorded sound and music, and the position of being part of a collective of

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subjects us to ideology, which 'hails' or 'interpellates' us as concrete individuals or concrete subjects. See Althusser's 1971 work, "*Ideology and Ideological State Apparatuses.*" (Ed). *Lenin and Philosophy and Other Essays*. New York: Monthly Review Press, 1971.

people, exploring and testing the sonic boundaries of the space together, which required communication, both verbal and non-verbal, to coordinate where and how to position one's body in relation to others so one could access the auditory content. These moments where audience noise interrupted the otherwise continuous sonic experience, were productive moments which brought those in close proximity to the noise into a playful positioning towards the acoustic environment, their own embodied interaction with the space and each other. Even those for whom these interruptions were annoying, for a moment they acknowledged visibly and audibly the presence of others who might have been equally annoyed, or those who were responsible for the noise. A transient sense of intimacy would permeate the immediate location where the noise occurred, bringing all "ear witnesses" (Schafer, 1977) into a state of playful auditory captivation. I argue it is a playful state because of the "double experience" it engenders for listeners (the tension between intimacy and distance, and continuous/ regularity of music and sound vs. the irregular vibrations and quality of the noise) and the (self)-reflective position it fosters through what Russolo (1986)[37] described as its worldliness. And the form of play which I attribute to the audience noise in the David Bowie exhibit is what Caillois calls *Alea,* or chance, and it is experienced as being more spontaneous, exploratory and therefore falling into the *paidia* realm of play. The point being that what are perceived to be noisy interferences in the context of a performance space, draws those experiencers into a deeper state of auditory captivation and into an intimate constellation of embodiment relations which encourages social interaction and a sense of togetherness to form.

Henry Cowell's article "The Joys of Noise" (1929)[38] is worth mentioning for his discussion of how to begin thinking of noises, that are at once so pervasive and utterly despised. He suggests that those in the field of music should think of noise in terms of being cultured (as with food) and repressed (as with sex). He says, "since the 'disease' of noise permeates all music, the only hopeful course is to consider that this noise-germ, like the bacteria of cheese, is a good microbe, which may provide previously hidden delights to the listener, instead of producing musical oblivion…Although existing in all music, the noise-element has been to music as sex to humanity, essential to its existence, but impolite to mention, something cloaked by ignorance and silence. Hence the use of noise in music has been largely unconscious and undiscussed" (Kahn, 1999: 82). In similar ways, the activity of play and the attitude of playfulness have been chastised as belonging to childhood and not appropriate for the average adult to engage in, unabashedly. And just as Cowell in 1929, or Russolo (1986) there are those who have argued for play and playfulness to be considered worthy pursuits, which are already deeply integrated into our everyday lives (although in some cases highly regulated or commercialized e.g. sports) and therefore should not be seen as so separate from ordinary life. Some of these scholars include: Brian Sutton-Smith (1997) *The Ambiguity of Play*, Thomas Henricks' (2015) *Play and the Human Condition*, or even Gadamer's (2004) *Truth and Method,* in which he analyzes "the mode of being of play" as something universal, pre-human and not created by human agency.

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[37] Russolo, Luigi. "Physical Principles and Practical Possibilities." The Art of Noises. (1916). Trans. Barclay Brown. New York: Pentagon Press, 1986.

[38] Cowell, Henry. "The Joys of Noise." *The New Republic*. 31 Jul. 1929 (287-88).

Rhythm and vibrations as Illinx or vertigo

   An element of sound given even less attention, especially as it relates to performance studies, is rhythm and vibration. Both qualities are inherent to what we perceive to be sound and music, the pitch of a sound for instance is based on the frequency of vibration and the size of the object vibrating, so the slower the vibration and the bigger the object, the lower the pitch will be, and likewise, the faster the vibration paired with a smaller vibrating object results in a higher pitch. Rhythm can be defined as the pattern or placement of sounds in time and beats in music, it involves repetition and movement by regularly recurring elements. There are rhythmic patterns found in the natural soundscape as well as organized music, however we are not usually aware of the larger rhythms and cycles within our environments because we so quickly pass through them. Sounds themselves exist in time and our perception of them create and influence our sense of time, and so it seems natural that our sense of the character of an environment is closely related to the temporal relationships exhibited by sound (through rhythms and cycles). Therefore, by studying the rhythm (either on a micro-level or macro level with circadian and seasonal variations) of an environment (in nature or of human energy) where the interplay of regularity and variation exist, we can better describe the shape of experience within the acoustic community.

   Exploring the quality of rhythm in performance spaces brings the embodied experience to the fore, as the effect of rhythm on the body is involuntarily experienced, for example with the act of tapping ones' foot to the music. Truax (1984) described how the rhythm of sound impacts the coherence of a soundscape and what he calls "acoustic communities." And in his discussion, Truax notes how scholars have ascribed our "sense of rhythm to corporeal regularity found in the bodily functions of the heartbeat, breathing, and bodily movement of the hands and feet" (Truax, 1984: 66-67). There is a universal quality to our ability to mark regular units of time and the "'…unison' effect of synchronized bodily movement is easy for any group to create" (67). Not only does a discussion of rhythm bring attention to the individual body, but it has the potential to create a sense of unity and highlight the co-presence of multiple bodies breathing, moving, feeling, in synchronicity; a key ingredient to the emergence of a micro-community. An example of how rhythm in the David Bowie exhibit communicated to the listening and perceiving bodies a degree of balance and efficiency, was the rhythm felt in the music, but also the rhythm created by the continuous sound alternating between Bowie's music and the voice of a narrator. And the presence of the chance elements of audience noise, interrupting the rhythmic precision only possible with machine produced sound, introduced a human-like variation to the otherwise continuous sound. The malfunctions of the sound technology, which resulted in short periods of relative quiet, mimicked the periods of rest found in the natural soundscape, the circadian and seasonal rhythms which are deeply rooted in the human psyche. Truax makes the connection between rhythm and community when he describes how in a coherent environment rhythm is a key factor in the balance or imbalance of a soundscape, because not all sounds can "talk at once" (Traux, 1984: 67). He says, "Community sound traditionally follows cyclic patterns but (just as at the micro level) with room left for meaningful variation. In tribal society or the traditional community, daily activities of each of the members follow predictable patterns, and hence a strong circadian rhythm can be observed in the resulting soundscape" (Truax, 1984: 69). The reason for bringing up the natural soundscape, is

that it is a model of a balanced acoustic "community" where form and function are in equilibrium (Truax, 1984: 69), and when a similar balance is integrated into a performance space, the effect can be to form a similar acoustic (micro) "community." The characteristics of such a community, as Truax has asserted are: a variety of different sounds, a complexity within the sounds themselves and in the levels of information they communicate so only listeners within the community can decode and interpret them, and a functional balance within the environment as a result of spatial, temporal, social and cultural boundaries or constraints on the system (71). A key difference between Truax's (1984) work and my own, is how we comprehend the role of noise (intrusive noise) on the acoustic community. Truax repeatedly refers to intrusive sounds (noise) as a hindrance to the acoustic definition of the community and as presenting a threat to its overall coherence. And while he does make an honest effort to address the element of noise in a subjective manner to address its role in a process, rather than any kind of fixed objective definition, I have chosen to also adopt a subject definition of noise as "unwanted sound," however, rather than limiting its effects (negative associations) as purely disruptive and obscuring the clarity of the acoustic environment, I try to uncover the moments when noise can actually enable clarity, connection and even strengthen the acoustic community. I use the concept of play to unearth the community forming potential of noise.

A connection to urban design

What I hope to demonstrate by devising a framework for analyzing the interconnection between the sonic and forms of play, is not only a perspective from which to explore instances of sonic play within performance spaces, but also to explore and imagine potential uses (implementations – design) within our everyday spaces. I will further develop and elaborate on this framework as I move through the performance spaces, from this more traditional setting of a museum exhibit to the site-specific and mobile iterations where performative, interactive and playful encounters with sound are equally affective and powerful for shaping our perceptions and relationships to our environment, ourselves and each other. By spending some time explaining my thought process behind this framework, in the next two chapters, I will spend more time implementing the framework and engage in a more dynamic comparison of how each performance incorporates sonic play, performativity and interactivity and highlight the ways these sonic affordances could be applied to our urban designs and everyday spaces.

Within Earshot
Sicart's Perspective on Play

    In the case of the Davie Bowie exhibit, where I have already discussed the performativity of sound and noise and its impact for the positioning of experiencer towards space and as calling attention to the embodiment relations which were enhanced by the sonic interactivity embedded within the exhibit, I have introduced how the concept of play can be applied to a study of sound in performance. Bringing the discussion back to play, I use Sicart's (2014) work to focus the discussion on the notion of an ecology of play.

    I draw upon Miguel Sicart's *Play Matters* for his theory of an *ecology of play*, emphasizing that we adopt an understanding for the activity of play and that we situate play within the world. This second part, dislocates play from Johan Huizinga's notion of the "magic circle," and contextualizes it directly in tension with reality. While his definition for play is rooted in the current social structure, based on a postmodernist view on play, his theory is useful because it situates play within the world, as an expression in constant dialogue with reality. Here again the idea of a dialogic process shows up, aligning with my own theoretical positioning. For the purposes of my own study, Sicart's *ecology of play* involves a discussion of playfulness and of the relationship between play and environment (play spaces), particularly in his chapter on "Playgrounds." Play becomes a conceptual and mobile tool for being, he argues. It is not something that is object-bound, but is something that people bring into their daily encounters and interactions in the world (Sicart, 2014: 1), in the same way that sound operates. Following this line of thinking, we can see how activities of play function as a form of understanding our environment, who we are, and as a way of engaging with others. The idea that play is contextual is an important point to note in my effort to connect playful positioning through sound and noise and micro-community formation. As Sicart makes clear however, that context is complicated "…it's a messier network of people, rules, negotiations, locations, and objects. Play happens in a tangled world of people, things, spaces, and cultures" (Sicart, 2014: 7). This lies in contrast to a more traditional understanding, where the context of play *is* the rule-based space and community within the formal boundaries of play. In our culture, some designers have fully embraced playfulness in their work, whether it be the late Steve Jobs' use of "playful" design in *Apple* products, or an architectures' incorporation of play into our built-environment, the social and functional value of play is being gradually realized. It is my understanding that a playful situation, space, or interaction arises not just from people alone, but is aided by the affordances of factors including: urban design, technology, and/or sound and noise performativity. In the cases I explore, it is the sound and noise performativity within the performance space which I posit enables the emergence of a playful situation or space, involving social engagement and expression, and resulting in micro-community formations. Play, seen as a way of expression, participation and an activity of production, is a valuable and essential means of encouraging more social cohesion within our public spaces, a sense of togetherness and fostering the potential for more understanding between people.

Sicart's emphasis on the ecology of play brings to mind what sound studies scholars have written about ecologies of sound. By framing something as being or existing within an 'ecology', one immediately raises in the mind of the perceiver an awareness of spatial relations, an emphasis on context, an interdependence of different elements as essential to the functioning of the whole (systems thinking) and a consideration for the relationships of all kinds within that constellation of interlocking and inextricably linked elements.

Sicart identifies playfulness as an attitude which expands the ecology of play and "…shows its actual importance not only in the making of culture but also in the very being of human, on how being playful and playing is what defines us. We are because we play, but also because we can be playful" (Sicart, 2014: 34). Playfulness could be interpreted as on the *paidia* end of the continuum, and play as within the boundaries of formalized "autotelic" (Sicart) events resides in the *ludus* realm.

Play can be seen as something individuals do and experience, as patterns of play, but it can also be viewed as an activity or interaction, as a broader pattern of relationship or interaction between all the elements that are in play at any one time. The latter perspective suggests that play can be understood as a social or cultural form. Huizinga addressed both perspectives, looking at the concept of play and playfulness as a particular orientation within societies, but also in a macro sense, where societies have always distinguished frameworks for playful behaviors, sometimes with clearly defined and protected times and spaces, for example games (a cultural format that have helped people interact in a particular manner). As the sociologist Erving Goffman (1974) asserted the models for behavior as "frames," and play as he proposed, is a general cultural 'frame' within which people learn to recognize, anticipate and orient themselves. When we participate in these cultural forms we are considered to be "playing."

Thomas Henricks gives a concise overview of the many different ways of looking at play, he summarizes the most common descriptions of play by prominent scholars from the past and present. He says it has been described as: "…a pattern of individual behavior, as a 'spirit' or orientation that people bring to their behavior, as a quality of experience that people have when they are in certain kinds of events, as the cultural rules or 'frames' for those events, and even as the special patterns of real-time interactions that make up those events. Even more generally, play can be seen as some relatively predictable event or form or as the much more unpredictable processes that occur within that form. People can be said to play 'with' or 'at' the objects and relationships of the world, but they may also be 'in' play. Finally, play occurs in many different settings and involves many different kinds of objects. People not only play with one another, they play with their own bodies and minds, with the elements of the physical environment, and even with cultural forms like ideas, norms, and language" (Henricks, 2008: 164).

Chapter Four
The Performativity and Playfulness of Noise

The chance encounters and eruptions of audience noise, as a form of play (*Alea*) within the David Bowie exhibit, positioned experiencers not only in a state of double awareness ("double experience" and "double consciousness," as a "both-and" mode of being), provoking a playfulness, but it positioned them socially in the playful co-presence of others. I will engage with other perspectives on noise in performance, as a way of situating my research in the context of others working in the field. I explore the concept of "intrusive noises" in theatre and performance with respect to their performative power within such contexts, and from there I draw a connection between the spatial positioning and embodiment relations produced by the presence and playful engagement with noise and how this playful quality to noise might invoke a sense of sociality among perceiving bodies; an ephemeral micro-community in the making.

As referred to earlier, Douglas Kahn (1999), a professor of Media and Innovation at the National Institute for Experimental Arts at the University of New South Wales in Australia, is known for his research on the use of sound in the avant-garde and influential in both the scholarly and practical areas of sound studies. His historical approach, outlining the separation of sound and noise, demonstrates the importance of paying attention to noise.

The performativity of noise has the ability to procure a sense of playfulness for those producing the noise or in close proximity to it, and as a result builds a relational dynamic into the experience itself; a quality which I argue is one of the necessary precursors in order for any kind of community, large or small to form.

Katharina Rost, a scholar of Theatre Studies who researches sonority in contemporary theatre at Frei Universität, Berlin, investigates the performative power of "intrusive noises" in theatre. I draw on her work because Rost highlights the potential for noises in contemporary theatre to have positive benefits (although these are not her exact words). Rost defines "noise" as those sounds found in our everyday lived spaces and "…physically defined as sounds with an irregular vibration pattern" (Rost, 2011: 44). In her definition, when compared to the definitions of others, notice how she does not refer to noise as "unwanted" sound. In fact, she argues that the "intrusiveness of noise should not be judged as solely destructive and unwanted; rather it can derive from an enticing and wanted character of the sound as well" (Rost, 44). The intrusive sonic effect/affect of noise touches the listener in a direct physical way and has the power to capture their attention, whether they want it to or not (Rost, 45).

"Intrusive noise" and audience noise experienced in the David Bowie exhibit
I assert that in the particular context of the Bowie exhibit, the instances of audience noise occurring between small clusters of headphone-wearing experiencers, are examples of "intrusive noise." However, I want to make clear this is an assertion made with respect to this specific example and unique context. Just as sound and noise can be interpreted in wildly different ways, where in one culture and context a sound might be heard and perceived as a noise, and in another scenario, it is part of a musical composition or communicative "sound signal," giving the local acoustic community very important information, so too "intrusive noise" is very context dependent. While in the case of the exhibit experience audience noise as

"intrusive noise" acted as a form of what Rost calls "auditory captivation," in my other case study the noise does not always function the same way. In my experience of the *David Bowie Is* exhibit, the performativity of noise (as audience noise) is felt as intrusive because of the specific context, where each visitor has a pair of headphones snuggly fastened over their ears, and the continuity of the individual's auditory journey is their primary focus and when functioning properly, they are fully immersed in the dynamic interplay between music and narration; bringing a fluidity and momentum to their experience. Therefore, when these instances of noise would manifest, they were juxtaposed against the 'private' listening experience and immediately brought the experiencer into a "double experience" –a tension between private and public and intimacy and distance— which I contend is a playful mode of being, however in this context it was also felt as an abrupt intrusion and its impact was to overwhelm the ear, enhancing the emotional and physical state of distress and discomfort at least initially. I must point out, that after this initial overwhelming of the senses, a perhaps surprising effect of the intrusive noise was its unifying impact, as people's initial annoyance faded and gave way to communication with their fellow community members, helping them position their body so they could access the same sounds as everyone else. The effect of this form of noise, is double in that it produces an initial response of surprise, distress, distraction and discomfort and soon after a feeling of release and connection with others. It is out of this double experience and intrusive sonic effects that a form of "auditory captivation" emerges, affecting how the performance as a whole is experienced and how meaning is constituted. Unlike another performance where noise might be intentionally integrated into the performance, where the duration and pitch would be manipulated in such a way to intrude upon the bodily sphere, the presence of noise in the Bowie exhibit was much more spontaneous in nature. The element of chance with respect to when the intrusive audience noise presents itself, is associated with the form of play known as *Alea*, and the effect of engaging with this form of noisy play is the emergence of playfulness within the ecology of play, functioning to instill pleasure into the experience, and encourage social bonding between 'players'. Sicart (2014), who makes a distinction between play and playfulness, reflects on why playfulness matters. In my study, I contend that a playfulness emerges from and within the activity of play that is the "moving-thinking-feeling" through the exhibit space and the spontaneous activity of audience noise. Since playfulness is an attitude, "a projection of characteristics into an activity" (Sicart, 2014: 26), and relies on the activity for its own integrity, therefore while a playful attitude might result in a relative disruption of the environment it does not destroy it entirely. In the case of the exhibit, the spontaneity of audience noise brings about a relative disruption to the otherwise continuous flow of sound, heard through each set of headphones and yet, its "intrusive" affect does not destroy the play activity itself –upon which its existence relies. These moments of playfulness afford a creative approach to the role of experiencer. I noticed that after most instances of audience noise, there was a surge in exploration of the space, and people would playfully position their bodies in different ways, either individually exploring how they might access the sound, or in a collective sense, moving to include others within the display zone. Sicart says that playfulness "…assumes one of the core attributes of play: appropriation" (Sicart, 2014: 27), or to put it another way, "to be playful is to appropriate a context that is not created or intended for play" (27). A more traditional encounter with sound in a museum space might include a guided headphone tour, or an in-person tour guides' voice,

ambient noises of people's conversations, footsteps etc. In the Bowie exhibit, one could say that the entire experience was imbued with playfulness, because of the unexpected private quality to the listening experience and because of the embodied interaction with the sound and overall experience, achieved by the use of motion sensors and tracking each visitor's geo-location. And within the exhibit itself, there are layers of play and playfulness; a system within a system. For example, if we think of the play activity as the experience of being guided sonically through the exhibit, with headphones supplying a steady stream of continuous sound directly to our ears, then playfulness emerges in those instances of noise which break up the sonic continuity—functioning to bring us the story of Bowie's life and his music, with expressive, and personal interactions, essentially making the overall performance more our own.

I agree with Rost's assertion that the power of intrusive noises lies in their ability to "…invade and penetrate each spectators' 'safety zone' in a radical way" (Rost, 2011: 47), and I posit that this radical invasion is productive and creates space for playfulness to emerge, leading to a more socially aware collective body; an acknowledgement of each other's presence signaled by the production of noise.

Silence plays a key role in this whole process, as a precursor to the production of noise. In this context, it was out of the moments of relative silence from which noise emerged, and the sound was amplified. While not intentional, the silence was positioned rather by chance in the moments where technical malfunctions with the transmission of sound occurred, or a visitor managed to stand in between auditory zones, however it had the performative power to amplify the sound and helped to form an intimate space where the visitors could interact with one another. According to the philosopher Bernard P. Dauenhauer (1980)[39] silence is deeply performative and while it is often thought of as occurring in conjunction with sound, it is itself a "rich and complex phenomenon" which can also be seen as necessary in many forms of human communication and performance. Using Dauenhauer's notion of silence, we can understand it as a break in communication which functions to enhance what is being communicated (Tacchi, 1997: 105), and I would argue it not only enhances but is itself a form of communication, as well as a tool (of sorts) for micro-community formation – through audience noise. Not only does the audience noise—emerging from silence construct an intimate space for social relations, but it also serves to heighten the sensory engagement with the performance itself, as a point of contrast or juxtaposition. In other words, without the moments of (accidental) silence, audience noise would be less likely to be present and the organized sound (music and narration) would feel less continuous, and less immersive without something to compare it to. In Rosts' work she in fact makes the connection between noise and sound, when she suggests that noise in the theatre space, might otherwise be dismissed as unwanted, annoying sound, instead they are received as performative dimensions, provoking a more "musical listening mode" (Rost, 2011: 47). And in addition to this "musical listening mode," the noise positions experiencers in a playful listening mode. For instance, by examining the "intrusive" character of noises in the Bowie exhibit, we can frame these sonic encounters as procuring a "double experience" (Fink, 1968), bringing about a playful position. Rost asserts that within theatre

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[39] Dauenhauer, Bernard P. Silence, *The Phenomenon and Its Ontological Significance (Studies in Phenomenology and Existential Philosophy)*. Bloomington: Indiana University Press, 1980.

performances, "the intrusion into the body sphere can result in an oscillating attitude between repulsion and attraction by the noises. Paradoxically, in the extreme case, the two dimensions might even be perceived simultaneously" (Rost, 2011: 47). Here, Rost identifies a similar "both-and" mode of being and experience—illustrated by the tension between repulsion and attraction using her words, and we can see parallels to the "double experience" within play, I have explored above. In the case of "intrusive noises" (audience noise in this case), the oscillating attitude Rost refers to and the potential for both repulsion and attraction to the noises, to be perceived simultaneously, invites a discussion of the impact of such a double awareness brought to visitors in the Bowie exhibit through the presence of noise. It seems to me that such a double experience/ double consciousness would result in a feeling of ambivalence for experiencers, however in this specific case, the intrusive noise is audience noise and consists not only of reactions or vocal expressions to the performance itself, but is far more interactional --- communicating with fellow members of the experience. These instances, might at first conjure ambivalence towards the event, however quickly transform into what I am calling "micro-communities" (or, "wispy communities"), as small but reoccurring forms of vocal/ expressive connection between people. The experience of feeling aversion while at the same time a sense of intrigue and curiosity, brings about a state of self-reflection, self-awareness and from that comes a social positioning, awareness and consideration for others, a sense of togetherness from this noise-induced double awareness.

I will point out that because the experience of sound itself is so subjective and dependent on context, one could say there is always-already a doubleness inherent to any encounter of the sonic. Rost (2011) is not the only scholar to identify the role of noise in theatre spaces, Pieter Verstraete wrote his PhD thesis on what he identified as "auditory distress." His work entitled "The Frequency of Imagination: Auditory Distress and Aurality in Contemporary Music Theatre" (2009), makes the connection between his notion of "auditory distress," embodied listening and the self-reflexive mode of reception in the theatre space. I compare Rosts' concept of "intrusive noises," which I have identified as having a performative and playful impact within the Bowie exhibit experience, to Verstraetes' analysis of "auditory distress," as a way of extending the discussion into a broader conversation beyond purely theory and towards "praxis" (Nelson, 2013).

Noise in theatre space

Verstraete (2009), closely examined the role of sound, including music and noise within the theatre space and its impact on the listener and his or her embodied and imaginative experience. He made the claim that "Sound—including music or any other sound experience in theatre—produces a level of auditory distress" (Verstraete, 2009: 12), which then provokes a response in the listener to try and control the auditory distress. The auditory distress signals the uncontrollability of sound within the controlled spaces of the theatre. Let me interject here to emphasize his point that a performance space such as the theatre, and I would add *any* performance space, produces a level of "auditory distress." However, distress in Verstraete's use of the word, does not mean that what we encounter in a performance space causes us suffering, extreme pain or sorrow, although of course it could hypothetically. Instead, he describes the distress as stemming "…from a necessary intervention of sound in surpassing certain thresholds of exposure in an acoustic horizon, and in the ear, in order to address the

listener" (Verstraete, 2009: 18). From this perspective, distress is an embedded or inherent part of the experience within a theatre or other performance space, it is not caused by the "intrusiveness" of noise alone. In the case of the David Bowie exhibit, the use of headphones to transmit the sound directly into our ears, results in a form of distress and so too were the instances of audience noise, resulting in a "double experience" or what Verstraete calls a crisis for the listener. He attributes the crisis for the listener as interpreting subject to the inescapable nature of sound, with this level of uncontrollability. The "double consciousness" (Gadamer, 1986), I referred to earlier resulting from the performativity of sound and sound technology in the exhibit space, is also felt in response to the performativity of noise, and using Verstraete's theory –whereby all sound within a theatre space leads to auditory distress—I contend that the distress emanating from the performativity of sonic phenomena, leads to the tension between a controlled yet simultaneously uncontrolled experience. It is these moments of tension, felt by those in the space, that create the doubleness, it is a positioning of the experiencer into a self-reflective and self-reflexive state of being, an awareness of their own destabilization, their relationship to the space around them, to their own body, and I argue a positioning outwards beyond themselves, and towards others; a social mode of being. While of course, to some extent we are aware of others as we go about our daily routines, I argue there is a level of apathy, or self-involvement that is socially-culturally conditioned into our Western way of being in the world, which I find intensifies when we are in urban spaces. For example, when walking down a city street on your way to work, home, or to meet a friend, you might notice others, but are you aware of them on a spatial, embodied and social level to the same extent as when you are within a theatre or museum space? There is a difference between noticing others and taking someone else's whole being, their presence, their movements, feelings and words into consideration. Passing a homeless man or woman in the subway, might cause you to notice them, feel pity for them, and maybe stop briefly to give them some food or money, however there is little in the way of sharing an experience together (simultaneously), and while you share the physical space for that brief moment in time, you are not brought into a deeper state of mutual consideration, co-presence and social positioning towards the other. The divide between our self and others is too great when going about our daily lives, and I argue that the performativity of sound and noise and their ability to invoke a playfulness among listeners, brings everyone in the performance space into this deeper state of consideration for those around them. This is caused by the shared "double experience"/ consciousness, the affective power of sound and noise upon the body and emotional state of the listener, and the playfulness/ intimacy that transpires between individuals.

Here, we can see the similarities between "auditory distress" and "intrusive noises." Not only are both inescapable, but they share the quality of ambivalence. The affect on the embodied experience of the subject, according to Verstraete, also involves a doublenss. He says that the "…auditory distress destabilises the sense of unity and coherency in the self, while at the same time it can evoke pleasure and aural bliss" (Verstraete, 2009: 230). In my own experience, I agree with the performative power of auditory distress to have a destabilizing impact on the individuals' sense of unity in the self, and I believe this leads to a greater ability for the 'self' to recognize its reliance on other, a positioning beyond the limits of the individual and towards a social mode of being in the world—for the duration of the event that is.

Verstraete says "…the excess in listening gives rise to an ambivalent way of listening that either circuits the listener's attention…or makes her or him acutely alert to hidden meanings…In this way, listening is externalised and turned towards itself: it makes the listener aware of her or his role as listening subject" (Verstraete, 2009: 124). Here is what I have described as a self-reflective or self-awareness developing in the individual, as both a performer and spectator when faced with the performativity of sound and noise in the performance; a "double consciousness." He also points to the moments of awareness which occur in the midst of trying to make sense of and move between listening modes, and he says there can be great pleasure in suspending immediate knowing in a state of "hovering" attention "…in order to be open for 'new' or at least alternative meanings to emerge" (Verstraete, 2009: 124). The openness for alternative meanings, what he describes as "hovering" attention, is similar I would argue to the sensation Caillois described of play within the *paidia* realm: filled with joyous, spontaneous, "free play" and exploring the boundaries of the play space itself. The interplay of the various tensions experienced simultaneously by the experiencers, forms a playful encounter with the "intrusive noises" (as audience noise), and general auditory distress within the performance space. This playful "double experience" (Fink, 1968), is the awareness of such tensions and is both exploring the boundaries of the play space and reflecting upon our everyday world.

The "double experience" of listening and its ephemerality

Teri Rueb, an artist and scholar, gives a description of sound which encapsulates the inherent "double experience" of listening, at once intimate and all-encompassing and at the same time invisible without edges or boundaries, remaining distant and just out of grasp:

"Sound presents us with a world in which hard and fast boundaries do not exist. We cannot clearly distinguish the edges of a sound as we might with objects and physical spaces. Sound is mutable, fleeting and ephemeral. It bleeds, it leaks out, it attenuates and disappears. Sensually vibrant and immersive, sound is almost tangible, yet ultimately invisible. Yet for all its elusiveness, sound is everywhere and all encompassing. Unlike vision, which demands the proper orientation of our frontally located eyes, we hear sound with our whole bodies, not just with our ears" (Behrendt, 2010: 48).

Verstraete's work represents another perspective, articulating the performative power of sound and noise in theatre and performance spaces. I have used the concept of play to analyze what both Rost (2011) and Verstraete (2009) have illustrated as sound and noises' potential within a theatrical context. In a similar fashion, I engage with the work of Stephanie Pitts and Karen Burland (2014), who address the audience experience and the significance of audience noise in the live performance space, as a way of exploring further the community forming potential of audience noise.

Pitts at the University of Sheffield, and Burland at the University of Leeds, co-edited the book *Coughing and Clapping: Investigating Audience Experience*. The collection of essays is varied, yet centers on the physically embodied experience of audience members and the individuals' experience of "live" listening. The nature of what it means to be an audience member is explored, and the book asserts that audiences contribute to the live performance experience in a number of ways and therefore challenges assumptions of spectator passivity. In

addition to a broad definition of what it means to be an audience member, the definition of the performance event is expanded to include anticipation before, and the sharing of memories long after the curtains have been drawn. Technology has changed how we think of ourselves as 'audience members', but as Burland and Pitts state, "the most meaningful experiences for audience members relate to a combination of social, personal and situational factors, but […] the latter have a more powerful impact on an individual's engagement and response during a performance" (Burland and Pitts, 2014: 176). The situation, social and personal factors are inextricably intertwined and shape the experience of a live performance, and allude to a community of sorts which begins to form within that space and for that period of time.

In the meantime, as a way of wrapping up the discussion on audience noise, its performativity, and impact as a form of play (*alea*), resulting in a playful positioning towards others in the Bowie exhibit space, I turn to Burland and Pitts' (2014) insights on audience noise, as a way to signal one's presence within the performance space. While they focus on a different form of audience noise, and explore the audiences' response to a performance, rather than the performativity of sound and noise, I find their perspective useful as a different way of articulating the performative power and community generating potential of audience noise.

In their introduction, they cite the research of Chris Spencer, a collaborator on audience research for BBC's Radio 4 Today news program (2013). In Spencer's research, Susan Tomes, a pianist and Andreas Wagoner, an economist discuss their findings, which suggest that people cough twice as much during performances than they do in everyday life (Burland and Pitts, 2014: 2). They also found that quiet contemporary music with slow movements would promote such a response and coughing in a concert hall showed signs of predictable patterns, where when one person coughed, it set off a wave of others (Wagoner, 2012). As a performer Tomes, observed that the cough seemed more vigorous and unrestrained in this particular space than in real life and described it as distracting and startling to the performers. In the audience noise of coughing, Wagoner suggested there was a deliberate motivation at play and described an inherent ambiguity to the sound, "…you cannot really distinguish whether it is a deliberate thing that happens, a sort of comment that you wish to make on the music, or whether it's something that is just a reflex because you have an itching throat […] and this ambiguity makes a cough a rather attractive way to comment on the music, to participate in the performance, to show your existence in the concert and to break this concert etiquette" (Burland and Pitts, 2014: 2). This points to how audience noise functions as a "sound signal" (Truax, 1984) communicating one's membership, presence and participation within the acoustic community of the performance space. In Tomes and Wagoner's research, they made clear that the specific sonic qualities of a performance, for example volume and rhythm or tempo are key factors influencing how the audience (or, as I call them experiencers) communicates or signals their membership to this community. In their example, the authors found that a relatively quiet music played at slower tempos, encouraged a coughing response, while my experience and research suggests that in a different context, audience noise (talking and laughing) emerge from a disruption in the continuity of sound. Whatever the context may be, I emphasize the value of studying the impacts of audience noise and noise in general within performance spaces, as a way of investigating and exploring how micro-community connections form and under what circumstance. I will explore how an acoustic community formed within a performance space can be replicated in our everyday spaces, applying concepts and design

principles from theatre and performance to our urban environment. I believe it is possible to create spaces along our everyday routes which activate our imaginations, engage our senses, and position our bodies and minds outwards towards others. Imagine what the effects of such an integration (of the performative and playful into our everyday spaces) could be for how we engage with each other socially in public, create an enhanced awareness of how important our environment is on our physical and mental health, safety, and social wellbeing, instilling moments of spontaneity, joy, human connection, laughter, and playfulness back into our otherwise anonymous, "non-places" (Augé, 1995)[40] we so often find ourselves in.

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[40] Augé, Marc. *Non-Places: Introduction to an Anthropology of Supermodernity*. (Trans). John Howe. London & New York: Verso, 1995.

WITHIN EARSHOT

Noise, Play and "Territorialization"

The performativity and playfulness of noise can be explored from a different perspective with the help of scholars like Gareth White who elaborate on the potential of noise in performance space. He explored the productive potential of audience noise as de-territorializing the theatre space, while at the same time creating the potential for micro-community bonds to emerge. White is a lecturer in Applied Theatre and Community Performance at the Central School of Speech and Drama in the UK. His essay, "Noise, Conceptual Noise and the Potential of Audience Participation" (2011), explores the participatory and de-territorializing potential of audience noise. White focuses on the noise and sounds manipulated by theatre makers, and references the concept of noise that Jacques Attali (1985) describes as "the term for a signal that interferes with the reception of a message by a receiver, even if the interfering signal itself has a meaning for the receiver" (White, 2011: 198).

In the context of Bowie exhibit, the signal is the sonic cue (or lack thereof) from the technological malfunction whereby the sound is not triggered by an individuals' movement, this form of a sonic cue, is indeed from the awareness on the part of the experiencer that there should be sound, however the absence of the sound, disrupts the traditional conventions of the space, in this case the otherwise silence of the experiencers. The signal interferes with the reception of the music and narration, both telling the story of Bowie's life and music career, and working in conjunction with motion sensors and the guidePORT system to guide visitors through the space in an interactive and immersive manner. However, while this lapse in sound interferes with the intended message, the interfering signal has a meaning for the receiver, in this case it draws attention to the rules of the space, where bodies must be positioned in a certain way, to receive the sound signal. The unexpected nature of the interfering signal, leads the experiencers to respond by making their own noise, whether in the form of laughter or talking etc. The spontaneity of these noisy ruptures in the performance, became welcomed moments in which experiencers could interact with one another, sharing these moments of interruption and even participating in the collective acknowledgement of the lapse in sound by laughing or talking with one another. I contend these moments of audience participation through noise, transformed individuals visiting the exhibit into members of a micro-community collectively engaging with each other and the content of the performance simultaneously.

White situates the concept of noise in relation to "the social structure of the conventional theatre event [which] is coded and exhibited through a domestication of noise-making, chiefly through the silence of the audience, and through the use of approved vocalisations and other bodily noises" (White, 2011: 199). The aim of his study is to consider where strategies are used to disrupt the domestication of noise-making. He makes the points that traditional conventions of the theatre space are familiar in that "...the audience is to avoid making a noise—we can make sounds, but only those which complement the signal being transmitted from the stage. Unwelcome noise, then, is interference, with the capacity to interrupt the flow of the significant, privileged, material" (White, 2011: 200).

These unsettling moments can be productive, and White explores this potential with reference to Félix Guattari and Gilles Deleuze's, *A Thousand Plateau's* and their concept of "territorialisation" and its companion concept, "de-territorialisation" (1988). Guattari perceived the unsettled nature of subjectivity as a positive attribute, and White notes he found that "…subjectivity is enriched by becoming unsettled" (White, 2011:201). The subjectivity enriched in the case of *David Bowie Is*, is that of the experiencer, as it is in these moments that they are made aware of the importance of their role within the performance space. Their role as at once audience—spectator and participant—co-creator is felt most acutely in these moments of "unsettled" audience noise, upending the social structure of the conventional exhibit event with what White describes as "domesticated noise-making," and positions experiencers in a more participatory and self-reflective state. White takes the concept of "territorialisation" and connects it to theatre by emphasizing how:

"…the repeatable patterns and images we use to mark out our home ground, to make it safe and secure from the chaos of the wider world, can also be inverted to become the material with which we improvise with that world…Clearly the theatre is territorialized in part by the domesticated sound making of the audience, and might be de-territorialised by a sudden, unsettling change in that behaviour" (White, 2011: 202).

The concept of "de-territorialisation" fits within the context of a postdramatic theatre with what Hans-Thies Lehmann described as a practice of unsettling the culture of art and the "irruption of the real" (Lehmann, 2006) out of representational forms. White says this can result from an immersive theatrical environment "…which does not merely surround the audience member, but invades their space…through some kind of sonic assault and reciprocal opportunities for sound-making by the audience member" (White, 2011: 202-203). Here again we hear a similar description of unexpected sound as a "sonic assault," akin to what Rost described with her notion of "intrusive noises," however it is presented as being accompanied by what White says are the reciprocal opportunities for sound-making. In this sense, we can understand the experience of sound and noise in performance spaces as involving a doubleness, as the "domesticated noise-making" while also allowing for opportunities of "de-territorializing" the conventions of the space through playful unexpected sound-making. White's suggestion of there being something reciprocal about the invitation of noise, unsettling the audience through participation, he says also brings "chaos into the work itself, and potentially de-territorialises it" (White, 2011: 206).

Chapter Five
Noisy Play and Micro-Community Formation

Barry Truax is a Professor at the School of Communication and the School for the Contemporary Arts at Simon Fraser University, where he teaches courses in acoustic communication and electroacoustic music. In addition to his scholarly contributions, he is also a composer specializing in real-time implementations of granular synthesis,[41] incorporating sampled sounds and soundscapes. In his 1984 book *Acoustic Communication*, he adopts a new approach to the topic of sound, concerned with exploring "…how sound connects us to the environment and to others, how it affects human behavior, [and] what the impact of urbanization or technology will be on such relationships" (Truax, 1984: xi). The term "acoustic communication" Truax uses because of its ability to describe in a general manner all the phenomena involving sound from a human perspective. I find it useful to use Truax's concept of "acoustic communication," developed using a communicational approach to sound and noise, in my own discussion of how micro-communities form in these performance environments where sound and noise play a formative role. Much of the literature on sound, music and noise has been (and still is to a large extent), focused on understanding sound in isolation from real-world environments, separate from the less technical and more fluid, dynamic complexities of human relationships. Therefore, we can rely on traditional intellectual disciplines to explain to us how sound functions and behaves in a particular context, often described to us in very technical terms, however we do not have enough in the way of sustained academic attention being paid to understanding individual and collective experiences of sound and its social and behavioral effects. For example, Truax points out that while a scientist studies "vibratory motion," the individual experiences its effects as a form of communication (xi). However, not only is there room for further studies on the communicative potential of sound, but as Truax notes, in communication studies, listening (via sound) is often ignored, or at least taken for granted, in much the same way as we in the public tend to take for granted the presence and impact of sound in our everyday lives. The framework of communication studies with its set of concepts, Truax says, is useful for understanding the complex system that sound creates between people and the environment. Likewise, in my own study, I draw from Media and Performance studies, Communication, the Social Sciences and Play studies, among others, to better understand not only the social potential that emerges out of environments where sound

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[41] Follow this link to hear an example of granular synthesis sounds like Excerpt from song "Agon" This is a piece of music composed with fast and slow granular synthesis. A faster demonstration of synthesis illustrates how initially each grain is distinct, but after a while they blend together, creating a new timbre. Granular Synthesis faster demonstration. You can hear an example of Truax's work "Riverrun" (1986) here: Granular Synthesis. The sound environment created from this method of sound production, is dynamic where stasis and flux, solidity and movement co-exist in a vibrant balance. Small units/'grains' of sound are produced with very high densities and each grain has a separately defined frequency and duration. The result of using granular synthesis is a level of specificity when it comes to the composition, and sounds in the piece are in a constant state of flux, mimicking our natural, environmental sound.

and noise play a performative role, but to also reflect on playful affordances of sound and noise when experienced in performative situations.

In this way, the study of sound and noise in different performance contexts, provides some insight into the social potential of sonic performativity, playfulness and interactivity. It does so in part because of the phenomenological methodology (emphasizing experience, meaning) I use to analyze each case study, and because of including the works of those like Truax (1984, 2000), who intentionally provide alternative perspectives from which to study sound and noise, from the human, embodied, relational and communicative perspective. For instance, Truax goes back to the idea that listening is a key issue in communication, because it is the "…primary interface between the individual and the environment. It is a path of information exchange, not just the auditory reaction to stimuli" (Truax, 1984: xii). "Soundscape," he says is therefore a simple term of acoustic communication, because it refers to the way individuals and societies understand the acoustic environment through listening. He does acknowledge that listening habits, just as any form of experience, differ according to the individual, context, subjective tastes etc., where in some cases they might be highly sensitive and actively engaged, in other contexts, they are "distractedly indifferent" (Traux, 1984). In both cases, he says, they "interpret the acoustic environment to the mind, one with active involvement, the other with passive detachment" (Truax, 1984: xii).

Listening habits create a "…*relationship* between the individual and the environment, whether interactive and open-ended, or oppressive and alienating" (Truax, 1984: xii). Two people positioned spatially in the same sound environment, can have wildly contrasting relationships to it and perceptual experiences, and so what becomes the point of difference between them is the pattern of communication, Truax argues (xii). So, while in the space of the exhibit two subjects listening to the same audio content (at slightly different times) might have radically different relationships to the sonic experience, however they share the same pattern of communication. What I find so useful about Truax's notion of acoustic communication, is the recognition he gives to the interlocking nature and behavior of sound, the listener and the environment as a "system of relationships, not as isolated entities" (Truax,1984: xii). On a theoretical level, this idea of interrelations, systems and networks flows through much of the work I have included from scholars studying intermediality and performativity, embodiment and interactivity, the philosophical tradition laying the foundation under most of these fields, and play studies. Dialogic art, for instance, is a great example of where this kind of thinking manifests in a productive way, as it emphasizes the relational potential of art and the artistic context. I would argue that the Bowie exhibit exemplifies some of the key qualities involved in what most would categorize as dialogic art.

"Dialogic Aesthetics"

Grant Kester, a Professor of Art History in the Visual Arts department at the University of California, San Diego and author of numerous books including *Conversation Pieces: Community and Communication in Modern Art*, has described "dialogical" art as "a process of communicative exchange rather than a physical object" (Cohen-Cruz, 2010). I use his notion of relational or dialogical art to connect the 'dialogic' framing of my own writing, with the moments of social connection that form during the performance events I analyze. While the term is often associated with community art or as Jan Cohen-Cruz terms "engaged art," I find

that the concept highlights the value of the resulting social behavior and micro-community orientation, enhanced or even instigated by the interactive, playfulness and performative qualities of sounds and noise. Sennett argued for how dialogic processes can improve our urban design and likewise, I make a case for how certain qualities of sound and noise afford moments of communicative exchanges to occur, enabling a more dialogical art practice to emerge; a "dialogic aesthetic" (Kester, 2004). Within the meaning of a dialogic social exchange, is the idea of connection with another. As Bakhtin (1982) emphasized, it is an unclosed system, involving a type of listening to the other, facilitating cooperation, a search for common ground and resulting in a kind of interrelationship. The qualities of sound and noise I analyze through the lens of play create dynamics that affect the embodied experience and spatial positioning in such a way as to connect the performance world inside to the everyday world outside, often directly addressing the audience. It is this positioning outward towards the other, that I argue creates an atmosphere ripe for micro-community bonds to grow.

The interactional quality of sound that Truax identifies in his discussion of the systemic nature of acoustic communication, is a similar process of social exchange where the listener is also a soundmaker, or with 'engaged art' the viewer is simultaneously participant and performer. We can identify this interconnected system of relationships, not only in the context of art, but also in play activities, where in more *paidia* types of gameplay (using Caillois' term, 2001), the players can simultaneously occupy the role of player (following the rules of the game), while at the same time becoming co-designers of the game itself with fellow players. Another area of similarity between Truax's understanding of acoustic communication and Caillois' discussion of play and games, is in their use of the continuum model. Truax, identifies Speech-Music-Soundscape as the three major systems of acoustic communication, existing along a continuum. He says he employs the continuum model because it allows comparisons to be made among the phenomena and relationships between them to be clarified. It is not meant to be a one size fits all model, where everything is forced into a single system, however it allows us to understand the three systems to be 'points' along the continuum, suggesting tendencies of a certain 'direction' towards the other points, and therefore draws attention to the relationships between and among the sonic phenomena. In a similar fashion, Caillois (2001), argues that there are four classifications of play: Competition, Chance, Simulation and Vertigo, and contends that there is a spectrum of organization and different levels of sophistication for each. The continuum for Caillois ranges from *paidia* (free, improvisational) to *ludus* (disciplined, highly rule-based), and highlights the rule-based nature of play, where each type of play spans the continuum. While there are deficiencies with what Caillois proposed, a big one in my view is that he distinguishes between play and work with his claim that 'play is essentially a separate occupation', the continuum model allows for comparisons to be made, a certain level of fluidity is implied, and the relationships between types of play can be analyzed and clarified. A key benefit of using this model for either studying acoustic communication or play, is that it serves as a reminder that all parts of the continuum are inextricably related and they cannot exist in isolation.

Once we have developed an understanding of the areas of overlap between the concept of play, acoustic communication and community, we can analyze the ways in which they converge in a case study such as the *David Bowie Is* exhibit, and explore what affects and types of relationships emerge. Truax (1984) focuses on systems of acoustic communication with the aim

of developing principles for 'acoustic design', I take the idea of an "acoustic community," developed in part by the playful positioning of listening subjects, and use my analysis to suggest possible applications to urban design projects.

'Community' in relation to performance

   A good place to start is to situate the concept of community in relation to performance, and to do so I draw on the work of Baz Kershaw, a scholar and professor in Theatre and Performance Studies who describes the concept of "community" as an effective tool in the exploration of how performances can achieve efficacy. He uses it as a mediating concept between the experience of individual audiences and larger societal structures. He emphasizes that the idea of "community" can be "...the conceptual lynch-pin which links the experience (and action) of individuals--including that of performance--to major historical changes in society" (Kershaw, 2007: 87). Anthony Cohen in *The Symbolic Construction of Community* (1985), posits that all "communities identify themselves by creating boundaries between what is included and what is excluded as part of the community" (Kuppers & Robertson, 2007: 88). Here we can draw the connection between these notions of 'community' and the integral role played by performance, of which I claim is important in the creation of ephemeral micro-communities staged through sound and noise performativity.

   Coming back to the idea of Truax's (1984) "acoustic community," I will draw together what I have discussed as the emerging ephemeral micro-community, which is at least in part due to a series of technological, cultural and social transformations in our society, and what role sound and noise play in this process of becoming. In chapter five of his *book Acoustic Communication*, Truax shifts from a focus on the individual listener to the larger social unit and introduces the idea of the "acoustic community" as a means of describing environment in which sound plays a formative role. He brings in the concepts of "soundscape" and "acoustic ecology" to re-frame the discussion from one focused on the perspective of the listener, to an exploration of the entire system – the listener (as soundmaker) plus environment as constituting the 'soundscape', where communication goes both ways. In a balanced system, referred to as a "hi-fi" environment, there is a lot of information being exchanged between its elements and "...the listener is involved in an interactive relationship with the environment" (Truax, 1984: 57). This lies in contrast to a "lo-fi," relatively unbalanced environment, characterized by a high level of redundancy and a low amount of information exchanged. In this context, the listener feels isolated and disconnected from the environment. A more macro level examination of these systems, would consider the behavior as a whole, for instance in the case of a natural soundscape, it could be heard and analyzed as a system of interrelated parts, and its "acoustic ecology" reflects the natural ecological balance. However, in order to perceive and study such systems, there must be a listener experiencing them, therefore the listener is just one part in the behavior of the whole. Truax draws from this point that "...acoustic ecology understands natural soundscapes as being part of human soundscapes, as well as providing a model from which much can be learned" (Truax, 1984: 57).

What contributes to a positively functioning acoustic environment?

   Truax describes what he means by "acoustic community," when he says:

"[It]…may be defined as any soundscape in which acoustic information plays a pervasive role in the lives of the inhabitants (no matter how the commonality of such people is understood). Therefore, the boundary of the community is arbitrary and may be as small as a room of people, a home or building, or as large as an urban community, a broadcast area, or any other system of electroacoustic communication. In short, it is any system within which acoustic information is exchanged" (Truax, 1984: 58).

In the definition Truax proposes, I would like to highlight what he says about the boundaries of communities being arbitrary, when it comes to an acoustic community and the flexibility he implies here, in terms of scale, structure, shape of embodied experience and/or terms of membership (range of shared interests), suggests that communities can form in a variety of ways along non-traditional lines. From my perspective, this gives legitimacy to the idea of ephemeral micro-communities forming, with the boundaries being quite fluid and small, and the duration of the social, affective bonds formed being limited. Therefore, Truaxs' theory on the acoustic community, as any system where acoustic information is exchanged, lends credibility to the claim I make in the case of the Bowie exhibit, where I propose that ephemeral micro-community formations emerge from the exchange of music and audience noise. This is a point where my own perspective differs from Truax, in the sense that he identified noise as "…the chief enemy of the acoustic community" (Truax, 1984:58) and creates a negative definition of community. The negative connotation he has of noise, is most likely informed by the time and context in which he was writing, and I bring a different perspective on the productive potential of noise in performance spaces and draw connections to its community forming potential in the context of the designed space. By analyzing the playful, interactive and performative potential of noise, in an environment where the sound is highly staged, we can study the effects that such noise has on the perceiving bodies, with an increased level of (self)-awareness. The close proximity between audience members, and the durational aspect of performances, increase our level of self-awareness, in which various sensory elements can be juxtaposed and experienced in relation to one another. And I contend, that this heightened level of (self)-awareness obtained (or perhaps inherently apart of the performative orientation and playful positioning), is a key component of being able to encounter noise, in this environment with a greater openness and ability to see beyond any unpleasant physical sensations towards its potential as a playful sonic element, bringing spontaneity, expression, and even dialogue into the space. For example, in my experience of the *David Bowie Is* exhibit, the instances where audience noise would manifest, were in the moments when many visitors would gather around one display, so when there was a collection of bodies within close proximity to one another, and noise occurred more often towards the "fringe" (Ihde, 2007) of the sonic encounter, the space where the boundary for the auditory experience was set. And when these instances of audience noise, in the form of laughter or brief dialogue, would occur, it was a sonic event that positioned you in relation to all those around you; in a kind of playful engagement with not only the content and technology, but with the other people occupying the exhibit space. Laughter, as a human noise rarely experienced in isolation, is often described and remembered as a playful and social sound in and of itself, and when situated in this kind of performative context, its playfulness and sociality afford a sense of a collective, a sense of togetherness in the here and now. In one moment, I remember there was a group of people hovered around one display and towards the focus point, or the middle everyone seemed

totally immersed in the audio being played through their headphones, eyes fixated on the display, and bodies attentively listening. In contrast, the further away one was from the display zone, the listening experience became less immediately felt, less of an all-encompassing sensory experience and your attention could wander, picking up on conversations between fellow visitors, listening to two audio streams almost simultaneously as your body swayed between the boundaries of one display zone to the next, or dwelling in the relative quiet, palpable when your body was perfectly balanced in between auditory zones. When occupying this peripheral space, the listening experience shifts from one of intense auditory focus and immersion, to an in-between state, between boundaries, and positions the subject as a playful listener, because in part of their embodied, spatial positioning and resulting "double experience," and forthcoming "double consciousness."

Paidia expressions of play are found in the instances of audience noise experienced and produced within the performance space. In the generally rule-governed space, the organized sound structures the environment according to specific rules of engagement. At first the sound might seem exploratory, but turn out to be an orchestrated form of discovery, especially noticeable in the moments when the audio fails to work. When there's a lapse in continuity, audience noise erupts, almost as a necessary sonic antidote to the interruption in fluidity. These moments of disruption could not have been planned and were experienced as spontaneous and playful. The sound of an audience member laughing, sometimes in combination with a gesture, or eye contact, I perceived as playful, in the sense that it was in response to the collectively felt tension when a display zone was not as responsive, or the audio didn't seem to be working properly. Once the noise was made, it set off a chain reaction with people closest to the source. The audience noise functioned as a form of temporary relief from the interactive, immersive, and playful, yet rule-governed experience of the exhibit. It was a brief reprieve from the sonically driven experience, urging you to keep moving, to get to the next level; a very ludic quality. For me, it was a noise, which brought my attention into the here and now, and to the interactivity and performativity of the physical space, my embodied experience, and the social potential of this sonic element. When someone would laugh, all those nearby, were immediately brought into a state of double awareness (conscious or not), as spectator and performer. The state of doubleness was also fostered by the listening experience itself, where *ludus* and *paidia* forms of play exist as organized sound and noise, sometimes occurring simultaneously within the space, causing one to feel absorbed with the sonic content, while at other times feeling free to explore the space, changing the order of your movement, and becoming more engaged with others in the space who are also exploring the boundaries of play.

Having used Caillois' (2001) concept of play to explore the performance space in the *Bowie* exhibit, we have seen how elements of *paidia* and *ludus* manifest in the listening experience. This playful tension, amplified the "double experience," and awareness of being both performer and spectator, feeling intimate and distanced from others, and as a singular body and a collective body of people moving through the interactive space, dependent on one another for the performance to be effective. The interplay between *ludus* and *paidia* forms of sound and noise created playful encounters between fellow experiencers, and the resulting shared experiences signaled the making of a micro-tribe or ephemeral micro-community.

Part Two: Sound and Noise as Sonic Intervention in Public Space

Micro-Community formations in Urban Space—Playfully engaging citizens

Moving from a more traditional museum space to a contemporary installation in public space, I use *PODD* (Public Open Dialogue Device) as my second case study to focus on how the sonic elements of the performative situation shaped people's embodied experience with the device, their perception of each other and their environment. Through the exploration of my own work, as a research-practitioner entering the field of Media and Performance, I can bring a deeper sense of self-reflection to my analysis and an unique perspective to the conversation about how sound in a performative situation can shape space, embodiment relations and community formations.

This particular event is relevant to the claims I make, because the experience and design of the interaction rely on sound to function. As I will explore in more detail, *PODD* incorporates the performativity of sound as a way of initiating the call to engage with another person and the installation itself. In addition, I will examine the affect sound has on the visitor's body, shaping their perception of space, themselves, and another person; triggering a sense of responsibility to engage through its intimate qualities. By using concepts explored in the first chapter, I will engage in a comparative form of analysis whereby the case studies are examined in conversation with one another; a dialogical practice. The concepts are used as tools to uncover some fundamental effects of using sound in performance spaces and the impact of noise on experiencers.

In this case, of a pop-up installation—only appearing temporarily in one location, usually in a public space—the performance is infused with an ephemeral and transient quality, which provides a different experience for the participant-audience. In my efforts to create a varied and comprehensive collection of different performance spaces, ranging from the more traditional venues (Bowie museum exhibit) to site-specific works of art and interactive, participatory performance (*PODD*), I encourage readers to embrace broader conceptions of terms such as "audience," and "performance space." I use these terms from Media & Performance studies and Theatre research in the hopes that by incorporating theories and terminologies from these fields into ideas from sound studies, we can build complexity and nuance around the use and experience of sonic phenomena within all types of performance spaces traditional and contemporary alike. And in the case of *PODD*, to experiment with ways of extending some of these concepts and theories into public spaces and urban design; innovating our experience of the city and how we shape our local community.

Chapter Six
PODD—Public Open Dialogue Device

    I explore my own work, not as any sort of self-promotion, but because it was the first project where I could engage in a practice-as-research approach (Nelson, 2013),[42] and put some of the theories and concepts I have studied to the test. My experience of this installation therefore, is biased in that I played an active role in its creation, so in the spirit of full transparency, I admit that my views are shaped by personal commitment and involvement in this project. With this bit of self-reflection out of the way, we can begin to describe, from a phenomenological perspective the shape of the auditory experience and its implications for urban space and micro-community formation. I analyze my own experience developing this project, and draw from my observations of experiencers engaging with the installation to explore how sonic performativity shaped the overall performance, transformed the immediate space, and affected social interaction. My analysis of *PODD*, focuses on one of two installations, the first was the initial experiment, implementing our concepts and theories into practice and the second shaped by our previous experiences. The first staged a series of performative encounters between Church St. in Burlington Vermont (U.S.) and the Theatre Avenue Festival in Arnhem (Netherlands). And the second performance was "The U.S. Election Coverage" (November 8th, 2016), located in Amsterdam, which created a performative situation (Eco, 1977), for dialogue between those in the Netherlands attending Election Night and a group of American voters from different sides of the political spectrum.[43, 44] I am going to focus on the first installation, which gives the opportunity to explore the playful and performative encounters that participants had with each other and their environment. In the first iteration of *PODD*, we staged an intervention or disruption of urban space with two live streams simultaneously occurring in different countries. The framework for interaction was open and resulted in a playful dialogic exchange, was triggered by sound but led by the participants themselves. Referring to the framework I proposed for thinking about how sonic phenomena correspond to playful counterparts, this first performance involved more *paidia* aspects of play, free, spontaneous, and exploratory.

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[42] Robin Nelson (2013) book *Practice as Research in the Arts: Principles, Protocols, Pedagogies, Resistances*, insists the Practice as Research (PaR) methodology should be full accepted in the academy, and has written extensively on the performing arts and media.

[43] The second iteration of *PODD* was re-named *Pop-Up Journalism* for the purposes of a start-up competition supported by The Dutch Journalism Fund (SVDJ). Shortly after the competition, we received word that we were one of four winners, and were pleased to have the government funding. To read our project proposal submitted to the Fund follow this link: https://files.acrobat.com/a/preview/c011df58-c13d-421a-bfde-9e601e2a13e2. We found in the second iteration, that a more structured, rule-based (or *ludus*) framework for the experience resulted in dialogue and debate focused on one topic.

[44] To see a short video of the U.S. Election Night Coverage, follow this link: https://vimeo.com/193854107.

PODD[45] is a creation developed in collaboration with Sofie Willemsen, which began in the Spring of 2016. *PODD* became a way for citizens of one country to connect in an open and direct manner with citizens of another, engaging with others in public space, cultivating dialogue, storytelling, connection, interaction and empathy between strangers. The project used elements of sonic performativity, embodied interaction and a playful framework to provide a stage for encountering the 'other', and provoking dialogue across cultural or social differences.

PODD in its U.S. location, on Church St. in Burlington Vermont, August 2016.

To give a sense of what it felt like to be an experiencer of *PODD*, I draw from notes I took during the installation as I operated the technology and observed the interactions that transpired and behaviors provoked by the performativity of sound. Since I am using my experience and observations, the following description focuses on the perspective of those in the U.S. who engaged with the installation.

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[45] To see a short video of what the experience entailed visit: https://vimeo.com/195273871.
The name changed and at the time of these videos it was "Pop-Up Journalism." Since, it has changed back to *PODD*.

As you're walking down a bustling city street in Burlington, the sound of a phone rings. Only it is one of those older ringtones and therefore clearly not coming from one of the many iPhones and Android devices clutched in the hands of passerby's. There is no immediate and visible source for the sound, and yet it cuts through the noise of a busy city street with piercing clarity. What was an ordinary and mundane sound, is transformed by its volume, unexpected context, and its antiquated texture, or vibratory pattern. The latter signaled a sound from the past, somehow dislocated from the present moment, provoking a similar sense of dislocation upon the perceiving bodies, struck with confusion and curiosity that disrupts their private journey through public space. The amplified sound 'calls' passerby's into a state of attention, re-directing their bodies towards the sound source. Once your attention has been caught, first by the sound and then by the visual and material presence of a screen, you come to the realization that on the other side of the ringtone is a person waiting to speak with you. In this case, it was someone from the Netherlands, attending the Theatre Avenue Festival in Arnhem, a city situated in the eastern part of the Netherlands. In some cases, instead of the sound of an old phone ringing, the sound of voices functioned as the 'call' to attention. The performative use of sound brings someone who is physically far away and a place geographically at a distance into the "here and now" of one's immediate environment. I would argue, that if we were to construct the same installation without the use of sound, and attempted to get people to stop and talk to a stranger using visuals alone, we would have a much more difficult time. Visual displays in commercial, public settings like this one, are so commonplace that they easily blend into the background of a city space and can be easily ignored, or dismissed as a cheap marketing ploy. Whereas, when someone addresses you directly, in real-time, asking to talk it is much harder to ignore. And in fact, this kind of direct experience, facilitated by a live audio/visual feed, was welcomed by many people we encountered. For example, one user's comments addressed the value such a device has for public space:

"It's wonderful in terms that it is somewhat like bumping into someone on the street, even though we're separated by the Atlantic Ocean…This lets the people be the director of their own experience" (Clarissa Siglio, August 2016).

Once you have approached the installation, standing directly in front of the large screen (in the U.S. version), or stepped within the box shaped structure sitting or kneeling in front of the old television (in the Netherlands), you are presented with the choice to engage with the other person, visibly waiting to speak with you, or to stand back and observe an interaction occur. Many people decided to engage, and on a visceral level the sound of another's voice transmitted via a video chat connection and then to the listeners' ear through a telephone, created an intimacy rarely experience in public space, let alone with a stranger. In one instance, a twenty-minute conversation was struck between two young adults, who afterwards asked for each other's e-mail addresses, to continue talking. Or, in another instance a young gentleman, voluntarily began promoting the experience to others nearby and began playing his ukulele as an accompaniment to those engaged in conversation. Soon after the music began, those on the Netherlands side began dancing to the song the young gentleman was playing, this in turn provoked those on the U.S. side to join in, dancing in virtual synchronicity with people they just met. In this case, what was an intimate and semi-private conversation between two people, turned into a public display of social connection, a micro-community.

The ukulele player, serenading *PODD* participants.

The closer encounter with the sound source, invoked a degree of responsibility on the part of the visitor towards the 'other', whom they could see on the screen and now hear through the phone. This sense of responsibility on numerous occasions resulted in people lingering a while longer on the phone, engaging in conversation, or if they had to leave, trying to hand the phone to someone else on the street (their friend or even a stranger), as if they were now responsible for the feelings of another, from a different country, on the line and leaving them hanging would be rude. The trigger for this sense of responsibility towards someone you've never met, was driven by sound—the human voice and the presence of someone signaled by the sound of a phone ringing. In one case, a student saw the installation the first day, asked how long we would be in Burlington, and came back the second and third day, after thinking about what she wanted to ask someone from the Netherlands. This example, illustrates the excitement the experience generated within the local community and the ability of sonic performativity to intervene in public space, to serve as a kind of aural refuge from the cacophony of many urban landscapes and a gathering spot or public forum where you feel safe, meet new people from your own neighborhood or across the ocean, and have meaningful conversations with people beyond your immediate social circle.

Experiencers of *PODD*, who gathered around the device and took turns engaging in conversation with the Dutch participants in Arnhem. This group returned a couple times to the installation.

The impact of such an intervention was striking in this public and mostly unstructured, *paidia* iteration of *PODD.* After each interaction lasting more than five minutes, I interviewed the participants, asking their permission to record our conversations. At the time, my efforts to record and observe were for the purposes of gathering research and to use the feedback I received from participants, to improve the installation for the future. One of the passerby's who stopped to observe the interactions and conversations occurring was Liam Connors from Colchester Vermont and a Vermont Public Radio announcer and producer for *NPR's* Morning Edition. He stopped on the third day of our exhibition and expressed how his experience was jarring at first, but upon reflection, he said that is not necessarily a bad thing, it's just not something you're used to when walking down a busy street in any city. Most people's everyday experience of navigating urban space, tends to be highly individualistic, personalized and solitary.

 I include this anecdote because it illustrates the hesitation to engage, the self-reflection on personal habits with our devices in public space, and the double experience or double consciousness that the sonic performativity within the experience engendered in participants; resulting in a performative and playful ephemeral micro-community.

Church St. Marketplace in downtown Burlington Vermont, August 2016.

As Connors expressed when I asked him what he thought, he said:

"The project caught my eye, because it was a little jarring to see a giant screen with people talking at you saying they wanted to talk with you. But after we've been talking a little bit, I guess it's not that different than how we would normally be using Skype or a cell phone, so I guess just the presentation, that it's in a place you might not expect it. It's easy to feel like you have a choice when you're talking on your cell phone, but this makes you almost make a more public choice about it, which I think makes people feel a little more uncomfortable about it, I mean I know I sometimes feel uncomfortable about it."

He went on to explain what he meant by feeling uncomfortable when faced with this public choice:

"I think people just like to think they have a sense of control and this feels like you kind of don't have that sense of control maybe. When someone's kind of pushing it into your face almost, and not that that's a bad thing, I think it's cool and really great. It just makes you think a little differently about how you're behaving, especially in public, like if you're walking around looking at your cell phone all the time."

Connors expresses exactly what my partner and I were hoping to accomplish, a disruption of how we move and behave in public space, and re-inserting an element of chance and spontaneity into our everyday social encounters. Taking personal control away from the individual when it comes to deciding who, when and where you meet someone (usually someone you already know), and instead shifting the agency so that a different kind of freedom can be experienced when it comes to making a public choice about whether to engage or not with someone from across the world, can feel unsettling. I contend that it is from these moments of "intrusive noise" (Rost, 2011), which may feel uncomfortable at first, where playful and performative embodiment relations emerge, a re-positioning towards one's environment occurs and a self-reflective listening environment creating a space ripe for what I term ephemeral micro-community formation.

With the freedom to be the director of your own experience with someone from a different country, *PODD* provokes a sense of self-reflection and relativism upon its "user-participants." The sound is first played over a speaker into the public realm and once someone makes the choice to pick up the phone, the voice of another can be heard so that a private conversation between two strangers can occur. The overall framework creates a dialogic and interactional space where you *see* yourself in relation to others (I only use visual terms to convey the message of the relational mode of being). This occurs quite literally, in the sense that the technology we used afforded this kind of self-reflective and relational positioning— the video chatting platform Google Hangouts displays the faces of those in the conversation. As an experiencer, you see an image of yourself displayed in a smaller box at the bottom right hand side of the screen, while at the same time you see the other person you are speaking with, displayed in the center of the screen at a much greater scale.

The context for the installation (a busy festival in the Netherlands and a busy marketplace-street in the U.S) and the interaction itself, created a space for this relational positioning of the self with the other, by forcing people to acknowledge themselves as seen through another's eyes and ears. This meant that people had to find a common language and develop a form of communication that would bridge language and cultural divides. While the experience of encountering the unexpected can feel jarring as Connors described, or uncomfortable, because we might feel as if we are not in control of the situation, that same sense of openness and lack of control can feel equally freeing. There is a certain sense of joy that we saw people experience after engaging in this form of face-to-face communication and the interviews and conversations with participants we had reflect the value of creating such unpredictability, spontaneity and playfulness in the midst of an otherwise predictable navigation through a city street.

Clarissa Siglio, an experiencer of *PODD*, speaking with a woman in Arnhem.

Clarissa Siglio, assistant Professor of Digital Humanities at the University of Connecticut, described her experience, as interesting because it's random, in the sense that you don't know who will pick up on that end and they don't know who will be on your end of the line. The element of chance is re-ignited within the public space of a city, even if those cities are thousands of miles away, geographically. Siglio's comments and others, reflect the aim of our first experiment, to create a safe space in the city, where you can explore, play, connect, share, converse and create something with someone else "live," while in different physical space. The responsive element of *PODD*, where the video feed is activated as someone approaches the device, amplifies the element of chance and pulls your whole body into the experience, as an example of embodied interaction. It is these kinds of artistic, non-commercial interventions in urban space, that I believe have the potential to re-engage citizens, to humanize abandoned spaces or "non-places" (Augé, 1995), and rekindle a sense of exploration and social connection with others in public space.

This image is taken from the short video we produced. The video is available here: https://vimeo.com/180079105.

Aim of the project

From this description of the shape of the auditory experience within *PODD*, we notice the impacts such an intervention has upon the space it disrupts, in this case a city street. It creates a dialogic aesthetic for embodiment relations to thrive, disrupting the banality and anonymity of the urban space or "non-place" (Augé, 1995), and injecting it with sound and noise, in playful and performative ways, enabling social interaction, embodiment relations, and a renewed and more engaged spatial awareness.

These brief encounters in public space, where we can feel alive, momentarily connected with those sharing the experience, a positioning towards one another, to consider each other's movements, thoughts and feelings in relation to us and to the space around us. I posit that such transient titillations with micro-community sensations, would inspire people to begin re-imagining their urban cityscape and prompt discussions of how they would want to move through urban space. The performativity of sound provoked a curiosity towards encountering others, a listening space for self-reflection and embodied interaction, and provoked a re-mapping of the immediate space into a playful environment where listening and a consideration for others was encouraged, transforming the space into a place for connecting with others.

I would argue that the value of our project extends beyond the frame of a singular profession. There is room for improvement, but my point remains that this is an example of using concepts from Media and Performance Studies and applying them to real-world designs, incorporating theory and research into practice, or "praxis" to use a term form Nelson (2013). The feedback we received pointed to the potential this kind of sonic intervention had for public, urban space, whether in the form of an artistic project or start-up company. More research and many more experiments should be performed not only with this idea, but with many others

attempting to re-imagine public space. I convey my own experience in the hopes that more can be done by scholars, practitioners, artists, and business professionals to unlock the potential that sound and noise performativity have on creating ephemeral micro-communities as sonic oases in our urban desert.

Chapter Seven
Sonic Performativity Transforming Urban Space

Think of a musician playing piano in the train station as you wait to meet someone, or think of climbing a set of stairs in the subway, only this time instead of the sound of your own feet, you hear a different note with each step you take. How do these examples change our behavior in these spaces of transit? Sonic performativity has the potential to transform urban space and affect the spatial and social positioning of its inhabitants.

In Adrian Curtin's (2014) research concerning *Avant-Garde Theatre Sound*, he argues that a comprehensive analysis of the sonic environment within the theatre space cannot be conducted with a semiotic analysis alone which cannot give a complete account for the idiosyncratic elements of performance sound. And rather, he says the "interpretation of auditory 'signs' is dependent on ones' location, hearing ability, knowledge, experience and disposition" (Curtin, 2014: 7). And because a 'soundscape' is not only an autonomous grouping of sounds, but includes historically situated and a culturally informed acoustic impression, it is therefore "...a phenomenological construction, open to divergent points of hearing" (7).

Emily Thompson[46] compares a 'soundscape' to a 'landscape', making the connection between sound and space, as well as how important it is to consider the social, cultural aspects of an environment:

"Like a landscape, a soundscape is simultaneously a physical environment and a way of perceiving that environment; it is both a world and a culture constructed to make sense of that world. The physical aspects of a soundscape consist not only of the sounds themselves, the waves of acoustical energy permeating the atmosphere in which people live, but also the material objects that create, and sometimes destroy, these sounds. A soundscape's cultural aspects include scientific and aesthetic ways of listening, a listener's relationship to their environment, and the social circumstances that dictate who gets to hear what. A soundscape, like a landscape, ultimately has more to do with civilization than with nature, and as such, it is constantly under construction and always undergoing change" (Curtin, 2014: 7).[47]

My aim for this section is to uncover not only the soundscapes created by each performance from a phenomenological perspective, but to explore how the performativity of certain sound elements impact the spatial and social positioning of listening bodies.

With the discussion thus far focusing on how the performativity of sound and noise in *PODD* and Bowie positions the experiencer's body in relation to space and others within the space, I bring the concepts of "de-territorialisation" and "détournement" as a way of exploring how the sonic performativity transforms the space itself. I used the concept "de-territorialisation" and its companion "territorialisation" as conceived by Guattari and Deleuze (1988) and later

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[46] Thompson, Emily. *The Soundscape of Modernity: Architectural Acoustics and the Culture of Listening in America, 1900-1933.* Cambridge, MA: MIT Press, 2002 (1-2).

[47] For more on "Soundscapes" see: Schafer, Murray R. *The Soundscape: Our Sonic Environment and the Tuning of the World*. Rochester, Vt.: Destiny Books, 1993; Smith, Susan J. "Soundscape." *Area*. 26.3, (232-240), 1994. Accessed 05, Feb., 2017.

referenced by White (2011), to understand how the unsettling moments of audience noise in the David Bowie exhibit could be re-framed as productive. The noise was a "de-territorialisation" of the traditional museum space, and enhanced the experience by challenging the conventions of "domesticated noise-making," enriching the subjectivity of the individual, increasing the audience participation and their sense of playfulness through the unsettling nature of the noise. In the case of Bowie, the instances of audience noise were productive, in that they brought people together in that moment, in collective participation with each other and the work itself, de-territorializing not only the conventions of the space, but the work itself. In this way, the performativity of noise and the playfulness it brought to people's experience of the performance positioned experiencers spatially and transformed the space in such a way that enabled the formation of ephemeral micro-communities.

The concept of "de-territorialisation," as it applies to the case of *PODD* works in different ways, and yet also enables the formation of ephemeral micro-communities. *PODD* is positioned in a public space, and its spatial context results in a "de-territorialisation," because the previous space (a museum) operated according to certain rules and conventions, which White asserted are coded and exhibited through a domestication of noise-making (White, 2011: 199). Without the clarity of a confined and traditional performance space, it is more challenging to point to distinct instances of "territorialisation" (Guattari and Deleuze, 1988). Public spaces are governed and "territorialised" by what is deemed acceptable or "domesticated" (White, 2011) noise-making, varying to some degree depending on the social and cultural context. This differs from what occurs in a theatre or museum space, as audience silence is not one of the domesticated noises, upholding the social structure of the event as in theatre. Instead, one could say that speaking at relatively loud volumes is a noise which "territoralises the space," or perhaps the non-human noise-making contributions of mobile phones (ringtones, texting sounds, loud music spilling out from headphones etc.) becomes a domesticated noise, giving structure and a sense of anonymity—a depersonalized and disconnected feeling—to the urban experience of walking down a busy city street.

For example, while spending hours observing the throngs of people who flocked to the main shopping street in Burlington Vermont (U.S.), I noticed the volume of the noise, maintained a constant buzz, with people's chatter and the sound of technology (various ringtones, beeping, dings, vibrations, and clicks that signifies a picture was taken). This combined with the other atmospheric sounds and noises filled up the soundscape so that it was difficult at times to capture people's attention. [48]

The space, filled with artists and craftsmen, was maybe not your typical city street or "non-place" to use Augé's term (1995), but in many ways it was like any street you would find in the U.S. or around the world. The rules governing the behavior, interactions and movements through public space is different than the conventions within a traditional performance venue, however there are still rules, codes, and boundaries that guide the actions, interactions and connections (or lack thereof) which occur in these spaces. One of these structuring elements,

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[48] For a deeper discussion of the urban mentality see Georg Simmel's *The Metropolis and Mental Life* (1903), in which he explores how the "intensification of nervous stimulation" in city life leads to a blasé attitude, promotes a highly personal subjectivity and socially reserved sometimes indifference towards strangers.

from my own observation was the that if people were not conversing with someone they were with, they were talking on their phone, or appearing to be busy on their phones as they walked. Others, put in place a very visible structural, sound-producing barrier to any social contact— headphones—whose presence could be seen and heard, as the music spilled over into the street. In a similar fashion as in the Bowie exhibit the "territorialisation" of the space is achieved in part by using headphones. In a busy city street, such as Church Street in Burlington, the use of headphones is a "domestication of noise-making" (White, 2011), upholding the conventions and social structure of the urban soundscape. It is still noise-making, even if the headphones cancel out much of the noise to those nearby, it is a sonic activity which cocoons the ear in the sound of your choice and enables you to navigate the urban landscape with a sense of control over your own emotional and sensorial state of being. It gives you a sense of control in what can be an often slightly chaotic space. However, such sonic engagement in public space, while it might "domesticate" the space, it does close oneself off from others. Chance encounters, spontaneous interactions, meeting a stranger and even simply reflecting on one's environment are not encouraged by many of the "domesticated noise-making" activities maintaining the social structure and conventions of urban-city spaces. The installation *PODD* disrupted the norms of this city street, by "de-territorialising" the space through sonic injections, communicative "sound-signals" and unsettling noise. The result was increased participation from passerby's with each other, with the installation itself, and with people from across the oceans.

Here we can expand on the concept of "de-territorialisation" by introducing Guy Debord's concept of "détournement," which I argue is a kind of "de-territorialisation" itself. Debord described a détournement as appropriating and disrupting an existing structure, situation, media artifact etc. which is familiar to the audience, in order to give it a new subversive meaning, "…rendering a certain kind of sublimity" (Debord and Wolman, 1956).[49] In doing so, the constructed nature of the existing, conventional structure is amplified, unsettled and subverted to become something else, resulting in a subversive form of play and a self-reflexive mode of participation. In *PODD*, the moment of unsettling noise—the sound of a ringtone and noise from a soundscape in Arnhem (NL), challenges/ "de-territorialises" the existing conventions of the public urban space. While the sonic order of a traditional performance space (an acoustic community) is more readily perceived, with very clear physical and visible cues that shape visitors noise-making, I argue that in urban spaces the cues might be less obvious, however their existence is no less powerful or affective.

Rowland Atkinson's (2007) use of the concept "sonic ecology" enables a discussion of how acoustic territories exist in urban spaces and how they have a variety of social and spatial functions and influences in a city. Atkinson proposes that "Music, sound and noise can be seen as spatial and temporal territories in the city, which suggests that for certain groups the soundscape has a profound effect on patterns of social association, physical movement and interaction" (Atkinson, 2007: 1915). His research explores the city as an ordered ecology of spaces with specific acoustic qualities affecting the patterns and quality of sociability, and it highlights the "double experience" inherent to the auditory experience itself. For example,

[49] Debord, Guy and Gil Wolman. "A User's Guide to Detournement." Situationist International Anthology. (Trans). Ken Knabb, [1956], 2006.

through case studies and data he and others collected,[50] he was able to point out how "…our engagement with the auditory experience of the city can be significant in ways that shape, exclude and otherwise affect our emotional, physiological and social engagement with a differentiated series of spaces connected by the relative presence or absence of different sound sceneries" (1915). The ambient architecture of place, in other words has the power to empower and excite us, while at the same time depending on the context, exclude or provoke anxieties about or ability to be in particular spaces.

Returning to Debord's notion of "détournement" as subversive and subliminal force, a playful disruption I argue, we can conceive of how this plays out not only in a theatre or museum space, but in our everyday spaces as well. In the case of the installation *PODD*, the sound signal of a telephone ringing is détourned, as this code is subverted to become something else, an invitation to speak to a stranger from another country, rather than someone you know, usually within close geographic proximity. It subverts the predictable, familiar, and privacy usually associated with such a "sound signal" (Truax, 1984), for the unpredictable, spontaneous/foreign and public. As creators, we took the performative "sound signal" of a traditional ringtone and used it in a performative way to communicate with passerby's and enact a moment of sublime play with the experiencers who engaged with the installation. Upon hearing this sound-turned-noise, some people were clearly unsettled, confused and curious about where this familiar-yet strange noise was coming from, and either kept walking, while others succumbed to their curiosity and were determined to discover where the source of the sound was, and to understand its meaning. I will admit, that while the sonic performativity is the focus of my study, the presence of a large screen, positioned in front of red curtains gave a visual cue to passerby's adding to their curiosity. However, we discovered through a process of trial and error, that even without the visuals (consisting of a live video feed of the corresponding *PODD* in the Netherlands), the "sound signal" alone could entice people to stop and engage. Performing together the visual and sonic elements were most effective at getting people's attention and we were constantly playing with different ways of combining the two modes of sensory perception, as a way of exploring their affect on the perceiving bodies.

A form of subversive play, détournement and "de-territorialisation" are brought into existence by the noise of the ringtone and inserts spontaneity, chance encounters and playfulness into an otherwise familiar environment.

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[50] Atkinson, Rowland. "The Aural Ecology of the City: Sound, Noise and Exclusion in the City." Occasional Paper No. 5, Housing and Community Research Unit, University of Tasmania, 2006.

Within Earshot
Embodiment Relations

The installation, in the midst of mostly commercial activities, provides a small sonic refuge from the role of consumer that these shopping streets force upon us, and the anonymity and de-personalization that often characterize urban space. For instance, the presence of this installation, in place for four consecutive days, enabled some locals to adopt the position of tourist, as they experienced a familiar space (in their home town) in a new way, through the presence of a live feed to a parallel space, a portal into someone else's' reality. Everyone who engaged with the installation, in the U.S. and the Netherlands, were offered a chance to reflect on their hometown, our country of origin by sharing their perspective with a citizen from another country. However, these exchanges between strangers revealed that it was not only a matter of spatial awareness and reflecting on where you were in that moment, which the installation provoked amongst participants, but also a reflection on one's embodied performance in relation to those within their immediate location as well as those on the other side of the screen—a kind of suspended, virtual set of embodiment relations forming through vocal communication. Stern (2013), defines interactive art as including works of electronic and digital art featuring different forms of sensors or cameras for input and any form of sensory output, "…where all are placed together in a system that responds to the embodied participation of viewers, either in real-time, and/or over lengths of time. And in these circumstances, interactivity is understood as the required physical activity of a viewer-participant in order to fully realize a technology-generated and process-based work" (Stern, 2013: 5-6). Stern points out the problem with his definition, where an emphasis on the tools themselves, rather than the situations they create, puts the focus on the technical abilities and detracts from the social potential of the embodiment relations formed. He emphasized that "we should rather approach what interactive art does—and what we do—when it frames our moving-thinking-feeling…I pose that we forget technology and remember the body" (6). It is within the frame of interactive art, where embodiment is staged, and use the term 'embodiment' in line with Stern's perspective, because he adds 'movement' to Brian Massumi's (2002)" thinking-feeling" as embodiment (Massumi, 2002: 252). Stern (2013) describes the phrase "moving-thinking-feeling" as representative of what we are, a body. A body which he frames as constantly changing (i.e. relational). It is "…a dynamic form, full of potential. It is not 'a body', as thing, but embodiment as incipient activity" (Stern, 2013: 2). According to Stern, embodiment is a "…continuously emergent and active relation. It is our materialization and articulation, both as they occur, and about to occur. Embodiment is moving-thinking-feeling, it is the body's potential to vary, it is the body's relations to the outside" (Stern, 2013: 2). I would add, a social element to this articulation of 'embodiment'. Stern acknowledges the relational potential and possibilities, and I would simply add there is an inherent concern for others, when we reflect on our own 'moving-thinking-feeling'. In most works of interactive art, participants are mobilized together, we are often in the presence of others and therefore collectively engage in the practice of listening-moving-thinking-feeling, as members of an ephemeral micro-community.

Chapter Eight
A Playful Disruption of Urban Space

In our everyday journeys through urban space we are not often provided the opportunity to connect with someone across the world. What would happen if the typical, "segmented and utilitarian human relationships" (De Lange, 2010: 155) which characterize the type of interactions in city space, were to be disrupted through playful engagements with sonic performativity? The connection between the concept of play and Western notions of the city, Michiel de Lange (2010) made clear in his study on mobile media and playful identities. De Lange is a scholar specializing in new media technologies, play and identity and he asserts that in much of the literature on urban space and city life Caillois' four types of games are discernible. For example:

"*Agôn* underlies the ecological view of the city life as competition for scarce resources. *Alea* is present in the view of urban life as serendipitous. *Mimicry* informs the view of urbanism as social role-playing. *Illinx* occurs in metropolitan life as characterized by rapid impulses, sensory delusions and shock experiences" (De Lange, 2010: 160).[51]

His illustration of how the city as long been described in playful terms and how we might frame our thinking of the urban experience along categories of play, is helpful to my own analysis of sound and noise performativity and how they amplify a playful experience within the city, understanding of urban space, and our relations to other people.

The performativity of sound and noise also provoked a self-reflexive positioning and "double conscious" mode of being among the experiencers, as they were aware of their own position in space and relation to others as a 'spectator' of sorts or audience member, while at the same time they were called into being an active participant, co-creating the performance. The result, I argue produced a "double experience" (Fink, 1968), of being a player in a 'game' while also helping to constitute the rules of the 'game.' A playfulness was injected into the urban soundscape, where the noise again can be classified as the form of play Caillois (2001) called *Alea*, or a form of play involving the element of chance. Once lured into the experience by the initial sonic cue, the subliminal form of play (*Alea,* chance encounter), the détourned noise of the ringtone unsettled or "de-territorialized" the conventions of the space. At first perceived as intrusive, it quickly transformed their role within public space to be much more engaged, playful and social, as the "de-territorialization" of the 'sonic assault' produced reciprocal opportunities for sound-making. My point being, that the performativity of noise and sound in an urban space have the potential to transform the space itself –re-invigorating the idea of a truly 'public sphere'—and transforming the positioning of people within that space, to be more aware of their environment, themselves, and others.

The act of walking, as a performative utterance, representing the geographical space, plays an important role in the visceral, sonic experience. The act of walking is a physical gesture,

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[51] For de Lange's summary of the literature's playful description of the urban experience see his work *Moving Circles: Mobile Media and Playful Identities*, pg. 160. His list of scholars include: (Baudelaire, 1964; Benjamin, et al., 2008); (Simmel, 1971, 1997; Goffman, 1959); (Niewenhuys, 1974; De Mul, 2009); (Debord, 1958); (Baudrillard, 1994); (De Certeau, 1984); (Florida, 2004); and (Pine & Gilmore, 1999).

which constitutes the embodied navigation that it presents. And in the case of David Bowie and *PODD*, it is an intentional act that is performed and simultaneously staged, implying the presence of a spectator (Bay-Cheng & Kattenbelt, 2010). This physical performative utterance represents a shift from a stable location to mobility, as embodied mobile interaction with space. While this form of embodied mobile interaction is present within both performance contexts, I find it obtains the most resonance in the Bowie exhibit, where walking and moving play a crucial role in constituting the performance itself. For example, in the Bowie exhibit, the bodies of visitors must move and walk through the spaces to perceive the sound. Walking is transformed from an everyday, mundane activity getting you from point A to point B, into a performative and playful process of discovery and creativity; amplified by the sonic elements. Its performativity, which involves a double experience between being an act that is performed and simultaneously staged (double consciousness of being spectator and performer at once), results in a playful mode of being, as you are aware of the boundaries for play and yet are immersed in the play activity, you are aware of being a 'player' in a 'game', following the rules while at the same time aware of your ability to make your own rules and explore the boundaries of the space. Especially in an exhibit, where your physical body and its movement through space is so central to the performance and its very existence depends on individuals coming together and exploring the space as a collective. *PODD* also depends on people's movements, walking through the space, and in this case the performativity of walking is enhanced by the additional presence of the screen with a 'live' video chat, which adds a participatory element to the experience. The participation in the Bowie exhibit was not immediately felt or perceived as a collective experience. The sensations of togetherness emerged from instances of audience noise, spontaneously interrupting the continuity of the sound heard through headphones (privately), resulting in a moment of collectivity. However, in *PODD,* participation is actively performed and intentionally integrated into the design of the event, in a much more public manner compared to David Bowie.

I return to the centrality and performative utterance of walking within the overall experience of *PODD*, because I find the work of Michel de Certeau important in the consideration of walking as a form of playful navigation, and its impacts on the experience within the performance and beyond. I also draw from the research performed by Frauke Behrendt, a senior lecturer in Media Studies at the University of Brighton, who has written extensively on sound studies, digital cultures, mobility and media theory. Her PhD thesis, "Mobile Sound: Media Art in Hybrid Spaces" (2010),[52] explores the relationship between sound, mobility, and urban space, and Behrendt's ideas fit with those proposed by de Certeau. I use both scholars to understand the role that sound plays in performance contexts and how it functions in everyday urban experiences. Behrendts' work incorporates not only mobility into a discussion of sound, but also considers spatial elements, the experience of urban spaces, as well as embodied media practices and multi-sensory perception of reality. And de Certeaus' concepts of strategies and

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[52] For more from Frauke Behrendt on sound and mobility in urban space see: "Author Commentary: Mobile Music Technology: From Innovation to Ubiquitous Use." *A NIME Reader: Fifteen Years of New Interfaces for Musical Expression*, 2017. (261-265); "Creative Sonification of Mobility and Sonic Interaction with Urban Space: An Ethnographic Case Study of a GPS Sound Walk." *The Oxford handbook of mobile music studies,* 2014. (189-211).

tactics can be applied to Behrendt's discussion of sound art, as they deal with issues of temporality and spatiality (Behrendt, 2010: 209). In *PODD*, the everyday urban architecture is re-appropriated, and a sound-art layer is applied to the space, creating an experience in which you become aware of the environment and a re-sensibilization of navigation occurs, momentarily changing one's relationship to others in that shared space.

In de Certeau's *The Practice of Everyday Life*, walking is considered tactical and mapping as strategic. Strategies he asserts, belong to the realm of institutions and systems of power, and tactics belong to everyday actions by ordinary people, placed within the strategic construct of society. De Certeau goes on to describe mapping as a "flattening-out" where "time and movement are thus reduced to a line that can be seized as a whole by the eye and read in one single moment, as one projects onto a map the path taken by someone walking through a city" (Certeau, 1984: 35).[53] There is an immediate satisfaction and pleasure that comes with the visual mapping of an event, in juxtaposition to the embodied task of walking and listening. While de Certeau does not address sound specifically, Behrendt makes this connection and asserts that sound acts as a reminder of temporality and spatiality, she says, "travelling over time and through space" (Behrendt, 2010: 209). There is more freedom in the tactic of walking, and in *PODD* and *David Bowie Is*, walking is designed into the experience, elevating the senses and contributing to the playfulness of the moving body in a state of "double experience" and exploration. In the case of the Bowie exhibit, the layout of the space is mapped into display segments with corresponding audio triggered by the motion of the visitor's body. This kind of sound mapping can be viewed as a "strategic" force, structuring the course of events, ordering the movement of bodies on a certain path through the space. Within this construct reside the instances of audience noise, 'tactics' which disrupt and I contend benefit the larger framework. In the case of Bowie, the noisy 'tactics' gave listeners the chance to experience the exhibit together, positioned by walking and noise towards one another.

In each performance context, the tactic of walking is a key component to the embodied interaction, spatial positioning, and development of sociality between participants. Mobility and sonic performativity (with their double experience) together establish a playfulness within the performance space. Taking the example of *PODD*, the inclusion of *paidia* forms of play enable moments of joy, ambiguity and unstructured exploration to be experienced, in turn allowing locals to temporarily become tourists in their own city. As Huizinga (1955) said one of the most important characteristics of playing a game is that it is "free" in terms of there not being a need or task to achieve something else (Huizinga, 1955: 8). De Lange argues all locative media as being playful, and that the "boundaries have to be somewhat discernible in order to turn the use of this locative platform into a playful activity by which meaning is given to places and social proximity" (de Souza e Silva & Sutko, 2009: 58-59). De Lange also suggests locative media, as "hybrid spaces," are inherently playful (de Souza e Silva & Sutko, 2009: 59). The "augmented space" involves a physical space containing elements from digital space, and if we consider the experience in both case studies: *David Bowie Is* and *PODD*, they take place in both spaces at the same time, constituting "hybrid spaces." The hybridity in these performances is not a seamless blending of the digital and the physical, but rather a space where distinct

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[53] Certeau, M.D. *The Practice of Everyday Life.* Berkley: University of California Press, 1984.

element and borders remain somewhat discernible. Hector Rodriguez (2006)[54] argues that central to the play experience in hybrid space, is the playing with boundaries. The playfulness of the experience is in part derived from the feeling of moving in two different realms at the same time. This "double consciousness" (Gadamer, 1986) is the awareness that we are crossing barriers, however blurred they may have become. The playful experience involves exploring the boundaries of the play space, reflecting upon our everyday world in new ways, and I argue in performance spaces, it requires a level of sociability among participating members; a positioning towards others sometimes resulting in micro-community connections. The social bonds are established in part because of the shared sensory experience. And the performativity of sound and noise in both case studies serves as a kind of social glue between community members, positioning people's bodies so they face one another. In contrast, more vision-focused performances position viewers towards the visual stimuli, all facing the same direction without direct engagement with one another. When sound is made responsive, it provokes a playful and dynamic interaction between listening bodies.

The performativity of sound and noise in both contexts, while differing in technique and design, contribute to the playful attitude through "sonifying mobility" (Behrendt, 2010), drawing attention to how we perceive sound and noise (inherently playful mode of perception), and amplifying the doubleness of the experience. In *PODD* for example, the playful "double experience" (Fink, 1968)[55] is emphasized further when we consider the relationship between our senses and how they influence our spatial perception and navigation through space.

In Behrendt's work, she draws on the German musicologist, Helga de la Motte-Haber's academic and artistic work with sound art, emphasizing that despite the current regime of visualization, we do not actually see with our eyes. De la Motte-Haber asserts that "…only light reflecting objects are perceptible to the human eye" (Behrendt, 2010: 48). Sound art allows participants to explore non-visual aspects of spatial perception. As de la Motte-Haber adds, sonic forms of navigation are quite effective, "we can see in the dark, because the reflection of sound sources gives us information about the volume of a given space" (de la Motte-Haber, 1998).[56] Sound is ephemeral and does not impose the rigid boundaries of visual perceptions of space. Ulrich Loock explains that "sound as an object of sensual perception […] differs fundamentally from visible and tangible things that can be grasped from a distance as discrete objects" (Loock, 2005: 89).[57] We are constantly immersed in sounds and the ear places us at the centre of the sonic realm, whereas the eye creates a distance. This tension between intimacy and distance is also experienced within performative frames and the experience of play—and I argue that the double consciousness that transpires, provokes a playful experience. Our auditory perception of space is therefore a playful experience, as we perceive and feel the

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[54] Rodriguez, Hector. "The Playful and the serious: An approximation to Huizinga's Homo Ludens." *Game studies: The International Journal of Computer Game Research*. 6.1 (2006). Web. 26 Mar. 2017.

[55] Fink, Eugen. "The Oasis of Happiness: Toward an Ontology of Play." *Game, Play, Literature*. 41. Yale University Press (1968): 19-30.

[56] Motte-Haber. H.d.l. "Sound-Spaces-Fields-Objects." (Ed.) B. Leitner. *Sound, Space.* Ostfildern: Hatje Cantz Verlag, 1998.

[57] Loock, U. "Times Square. Max Neuhaus' Sound Work in New York City." *Open. Cahier on Art and the Public Domain, 09. Sound in Art and Culture*. (2005): 82-92.

tension between intimacy (the sonic) and distance (the visual). However, as I have described even within the sonic realm, there are sounds and noises which can be felt as more intimate than others, and so I bring this tension between sound and vision as a way of highlighting, in more general terms, the kinds of affects each sensory mode brings to the table. Encounters with sound involve a more intimate exchange, spatial positioning and embodied sensation than visually-driven experiences.

Rafael Lozano-Hemmer is an installation artist who often works with sound. He developed *Voice Tunnel* (2013),[58] an interactive mapping of voice into light, situated in a tunnel in New York City. He argues that it is the "…environments that are poetic or connective, critical, that create community, that brings us closer together, my feeling [he says] …is that art is helping society create these cohesive bonds, that ultimately make us safer" (Lozano-Hemmer, 2013). Such a reflection by Lozano-Hemmer reminds us of the important role artists play in our society, and the value of their work in areas outside the walls of a performance venue, in our urban design, community development projects, transit spaces and public parks. *PODD* is an example of creating or re-creating connective places within public space, where people can engage with each other and their environment in new ways, perhaps even reflecting on themselves and their own behavior in public space (and with technology). Everyday technologies are used and re-appropriated in a public setting, activating the space and positioning participants in such a way so that connections and cohesive bonds manifest between people. In *PODD*, the use of Google Hangouts, a video conferencing platform, was taken out of its everyday context – where people most often use it to interact with someone they already know, or for work purposes—and transformed into a portal, transporting you into another country. It became a safe space for cohesive bonds to form between not only those using the device directly, but between those observing the interactions. *PODD* became a gathering spot and space for connection, amidst the business of the city street. Many people's comments reflected there might be a need and desire for something like this in their lives, as they would say things like: "I could use this in my school," or "There is hardly the opportunity for an ordinary citizen from one country to speak to an ordinary citizen from another," "I would like this in my city." Not only could participants envision something like this in their home city or country, but it gave a renewed perspective on what possibilities exist for our public spaces, and how we can envision them differently. It also showed the potential for sonic interruptions in public spaces to create moments of playfulness, connection between strangers, meaningful dialogue, and shared sensory experiences which brought those participating into an ephemeral micro-community.

In our discussion of what types of relations, interactions, participation, and community formations are possible within 'hybrid spaces', the experiencers' perception of space and navigation are challenged, re-negotiated and explored in playful ways. For example, in the case of *PODD*, the sonic performativity invites experiencers to reflect on their engagement with everyday spaces, through the elements of sonic movement and navigation embedded within

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[58] *Voice Tunnel*, was a participatory sonic experience where experiencers became part of the performance. It represents a transformation of urban space, as it re-appropriated a functioning tunnel in New York City into a micro-community. To see what it looked like follow this link: https://youtu.be/rGazLQKb948.

the performance. In this case, I would argue there is an active re-inscribing of meaning to place (a busy city street). The site-specificity of the installation, situated in a space heavily trafficked, represents a playful intervention and an artistic re-mapping in a "goesophic" sense (J.K. Wright, 1947 :9). A term referenced in the first chapter, whereby Wright used the term "Geosophy," to re-imagine how we understand place. I previously drew a connection between this alternative form of mapping and Thielmann's (2010) concept of "geocommunity," as emerging out of the participation in such mapping practices found in locative media. In *PODD*, the re-enactment of one's sense of place was mediated by sound—voice and a ringtone. We (the designers) manipulated the technology in such a way as to mimic a responsive, sensor-based system whereby people's proximity to the device triggered a reaction, instigating a conversation with someone from the Netherlands, or vice versa. The 'geocommunity' consisted of a small number of people, and the virtual tagging of the world was dependent on the virtual presence of another person, on the other side of the live video feed. Communication technology was re-purposed into something which facilitated a response-driven, interactive system using "sound signals" to provoke the possibility of connection with a passerby on each end, embedding exploration and playfulness into the mundane commute of daily travel routes. In this way, there is an emphasis on re-enacting the importance of place and home, as something defined in relation to another person, and not experienced in isolation. It became something fluid and the sense of connection was derived not by physical proximity, but by the co-presence and simultaneous participation in the playful mapping practice of describing one's home to the distant other, and at the same time listening to the background noises of the parallel space, intangible yet audibly present and immersive. It represented a collaborative, playful and performative form of place-making and mapping. The emphasis is on re-defining maps and navigation along affective points, rather than traditional co-ordinates.

Two aesthetic forms and their community building potential

From this discussion of how sound and noise can change our perceptions of space and how we navigate through our everyday urban landscapes, I will draw on Kester's (2004) concept of "dialogical art" to make a connection between recognizing sound as an intimate form of perception and exploring the potential of sonic performativity to build ephemeral micro-communities. Kester describes his notion of a dialogical aesthetic as an open-ended process in which the work is produced through the process of communication and where communication itself is considered art. Artists involved in making dialogue-based socially-engaged art embrace a performative and process-based approach which "…involves the creative orchestration of collaborative encounters and conversations well beyond the institutional boundaries of the gallery or museum…these exchanges can catalyse surprisingly powerful transformations in the consciousness of their participants" (Kester, 2004: 76). It is often the case, though not always, that dialogical aesthetic projects are tools used to break down barriers (of race, gender, cultures, class, etc.), and/or form networks between people from different groups through interaction and participation. *PODD* is an installation designed to provoke collaborative encounters and conversations in a public space, creating an opportunity for connections between people from different backgrounds to emerge. And in this way, can be described as adhering to the "dialogic aesthetic."

Nicolas Bourriaud wrote about what he called the "relational aesthetic" (1998), and described it as an art that "…takes as its theoretical horizon the sphere of human interactions and its social context, rather than the assertion of an autonomous and private symbolic space" (Bourriaud, 2006: 160).[59] From this description, we can see the similarities between Kester's (2004) "dialogical art" and relational art, where participation is a key component and the audience is actively engaged, and where at least part of the artwork involves the element of chance or randomness, as it is somewhat dependent on the audience's contribution. The difference, according to Bourriaud, is that relational aesthetic works usually have institutional connections, and appear in gallery spaces. In addition, they are not for a specific community, but rather attempt to 'create' communities. Bourriaud considers these works as a "microtopian: it produces a community whose members identify with each other, because they have something in common" (Bishop, 2004: 54).[60] Bourriaud describes 'relational aesthetic' works of art, as having the potential to create communities.

The aim of my research is not about identifying an entire genre of art as a community generating process, instead I explore how the presence, perception, affects and design of sound and noise in performance contexts have the potential to create what Bourriaud calls a "microtopian" (Bishop, 2004: 54), and to set up situations, using Bourriaud's words, in which "…viewers are not just addressed as a collective, social entity, but are actually given the wherewithal to create a community" (Bishop, 2004: 54).

Kester and Bourriaud both refer to community, and keeping their perspectives in mind, we can begin to explore what I have been calling "ephemeral micro-communities," as they are enhanced, encouraged and formed in relation to sonic phenomena. Kester concedes that "dialogical works are not just visual but aural and tactile as well" (Kester, 2004: 189). A parallel between sonic performances and the dialogical aesthetic can be drawn by referencing Kester's emphasis on listening and empathy. Listening, he asserts, is an active mode of knowledge producing, involving the full range of senses, highlighting the embodied, situated, contextual knowledge. It is interesting to note the similarities in what Behrendt (2010) describes as the knowledge gained from aesthetic experiences, from a mobile sound art perspective, as being "…about perception, body, emotions, not only about the mind" (Behrendt, 2010: 54). Golo Föllmer, who researches audio practice and sound art, emphasizes the ability of mobile sound art projects to enable ephemeral communities to emerge. He says in his 1999 piece, *Organic Sound in Public Space*, that public sound art "enables participants to perceive public spaces as meaningful and interaction with art resonates back into everyday life…art in everyday life effects everyday life" […] "sound art in public places sets the conditions for a space for social encounters" (Behrendt, 2010: 54). In the David Bowie exhibit and *PODD*, there is a visceral shared experience, rather than a rational form of communication, where both art space and everyday space co-exist, and the tensions which arise from this co-presence, gives experiencers a "both-and" mode of perception of world-making and staging (play and performativity). Föllmer articulates the social value of these types of performative situations, and the resonance that art (particularly sound art) has for our everyday lives, and urban spaces. Raising the

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[59] Bourriaud, Nicolas. "Relational Aesthetics." *Participation (Documents of Contemporary Art).* (Ed). Claire Bishop. Cambridge, Mass.: MIT Press, 2006.Print.
[60] Bishop, Claire. "Antagonism and Relational Aesthetics." *October*, no. 110, 2004, pp. 51-79.

question that I present in my research, of why sound isn't considered more in urban design plans and community development projects, with all its performative, playful, and social potential?

From this alternative notion of how and under what conditions a community can emerge, let us refer to some scholars who have spent a lot of time thinking about what the concept of 'community' means. In Cohen's *The Symbolic Construction of Community* (1985),[61] he theorizes "community" as "…that entity to which one belongs, greater than kinship but more immediately than the abstraction we call 'society'. It is the arena in which people acquire their most fundamental and most substantial experience of social life outside the confines of the home" (Cohen, 1985: 15). Cohen was focused not on the material boundaries or established institutions, but rather with the imaginary and psycho-cultural way people experience and interpret their community. We observe this sort of community formation in the experience of *PODD* and *David Bowie Is*. Both performances become spaces where people can become engaged in an active and participatory process of playful exploration, reflection, and gain embodied knowledge of their own position within the (micro)community. From the voluntary participation and a shared desire among the members to explore the space in a playful and performative way, ephemeral micro-communities emerged from both contexts. A (micro) community involves a collective of shared values and experience, a sense of belonging among members and acts as a powerful motivating site for implementing change; a strong case for the efficacy of performance and play.

Behrendt's (2010) research addresses ways of mobilizing and shaping public space through auditory means, and this will help transition from a Community Arts' perspective on 'community' to the efficacy of sound and noise. She asserts that public space can be mobilized by being made auditory, and when groups of people participate in these types of experiences, they not only co-create the piece, but they mobilize public space by generating a trajectory (walking), a path that becomes sonified mobility (Behrendt, 2010: 277). *PODDs'* mobile bodies, embodied interactions and sonic performativity, shape the experience and engage people in a subtle form of resistance. Such collective experiences challenge dominant assumptions of computers, as associated with rational thought, screens and immobile bodies (Behrendt, 2010: 278), by embedding these technologies into the artistic experience, where they gain embodied, multi-sensory, and poetic potential.

I have referred to "ephemeral micro-communities" throughout my study, and this ephemeral quality in part comes from the temporal limitations imposed by a performance, but also it comes from the inherent quality of most of our experiences with sound, intensely immersive and yet oftentimes fleeting. This notion of social ties that form along different axes than traditional concepts of 'community', is discussed by the authors Gary Alan Fine and Lisa-Jo van den Scott in their article "Wispy Communities: Transient Gatherings and Imagined Micro-Communities" (2011). The authors use Benedict Anderson's concept of "imagined communities"[62] to explore a swath of social locations they call "wispy communities." Fine and van den Scott describe the term as referring to "social ties that exist within evanescent, limited micro-publics—worlds of action that are temporary, limited in time and space, and have the

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[61] Cohen, Anthony. *The Symbolic Construction of Community*, London: Ellis Horwood, 1985.Print.

[62] Anderson, B. *Imagined Communities*. London: Verso, 1983.Print.

potential of being displaced by more insistent identities" (Fine & van den Scott, 2011: 1319). The authors focus on what Anderson emphasized as emotional connections to local communities, and lived worlds having the potential to create broader affiliations. To bridge the gap between solidarity around citizenship for example, and participation in performance events, the authors recognize that such 'wispy communities' depend on the creation of a shared concern. Participants come together acquiring membership for a finite period of time within a particular group, sharing common interests. The transitory and voluntary nature of these communities serves an important expressive role. Karla Erickson (2009)[63] points out, wispy communities have value in that they are domains of play and social interaction, where the sharing of these emotions persuades participants that others care for them, however temporary this may be (Fine & van den Scott, 2011: 1322).The performativity of sound in *PODD* for example, illustrates what Erickson (2009) describes as the value of 'wispy communities', through the sonically triggered social interactions, occurring virtually between experiencers on either side of the live feed and also with physically co-present others occupying the same space. Communities emerge not simply from shared geographic space, but also from personal interest, affective commitment, shared perceptual and sensory experience, embodiment relations and playful engagements with sonic performativity. In both cases, participants become mobile sonic explorers. The affective ties that develop between experiencers as they playfully and poetically navigate the (city) space, could be something that urban designers, artists, city planners and scholars collectively integrate into our everyday spaces. These types of playful and creative social interactions could be experienced outside the restricted frame of a performance and the community forming potential of such sonically derived social bonds could be realized with effects beyond the limited scope or duration of a single event.

I explore how ephemeral micro-communities emerge in *PODD*, by comparing it to a playful encounter in a game community. The authors Christian Licoppe and Yoriko Inada (2009) provide an ethnographic study of *Mogi*, a Japanese game, to explore the implications of mediated co-proximity and the resulting community formation. The authors demonstrate how a community of players unites in collective action to maintain the boundaries of behavior and playfulness of the game (de Souza e Silva & Sutko, 2009: 10). Licoppe and Inada describe how a pattern of roles begins to emerge, as players collaborate to achieve the best outcome. They note how this playful narrative frame, encompasses players' actions, and binds them together in a community (de Souza e Silva & Sutko, 2009:123). This example from the perspective of game studies, represents how through play and performativity, an ephemeral micro-community forms with the ability to collectively mobilize the space. In *PODD* there are roles that form, disperse, shift, and reform. For instance, an experiencer might go from being an observer ('spectator'), to an engaged audience member, or a co-creating 'performer', a citizen or tourist. Those gathered around the installation at one time form a connection with those on the other side of the screen through conversation, and with those in their immediate location. Their shared sensory and perceptual experience developed, as people took turns speaking into the phone, asking questions, or trying to get someone's attention on the other side of the 'live' feed. There is also a sense of care for fellow members of this micro-community, developing in part because of the

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[63] Erickson, K. *The Hungry Cowboy: Service and Community in a Neighborhood Restaurant.* Jackson: University of Mississippi Press, 2009. Print.

'liveness' of the event, being unpredictable, spontaneous, and filled with undefined possibilities. This was noticeable when two young children in the Netherlands were speaking into the device and an older gentleman entered the conversation in the U.S. When the older gentleman's speech was determined to be inappropriate, those standing by intervened by ushering the young girls away. This exploration of *PODD,* encourages further reflection on how we navigate urban spaces in relation to each other, and the ways in which sound in a performance context shapes embodiment relations, mapping practices and our social interactions within these spaces; creating ephemeral micro-communities of shared affective moments.

That's a Wrap!

I have used two primary case studies to analyze the role of sound in different performance spaces, ranging from the more traditional museum space to a contemporary installation in public space. Using the concepts of performativity, interactivity and play to analyze the sonic phenomena in each performance, enabled an exploration of how sound positioned listeners spatially, affected their embodied experience, and shaped their relationship towards others.

I argue that through sonic performativity, interactivity, and playfulness, each performance positioned listeners spatially and enhanced embodiment relations, creating the potential for ephemeral micro-communities to emerge. Applying concepts and theories from Media and Performance Studies, Sound Studies, Urban and Cultural Studies, Community Arts, and Play Studies, I worked in an interdisciplinary manner to examine how sound and noise performativity functioned differently in each case and created different kinds of social bonds and micro-community formations. In each section, I highlight the reasons why the playful, performative and interactive affordances of sound and noise should be applied to urban design and city planning initiatives. The idea that the experience of 'community' denotes one kind of relationship with place, people, culture, religion etc., or that kinship ties can only form from shared ideologies, ethnicities and locations are traditional constructs I reshape throughout the course of my research. I propose in addition to these more conventional forms of establishing community and social bonds, that there exists, on a micro-scale, ephemeral social ties which emerge from shared sensory, perceptual and emotional experiences. And these ephemeral micro-communities, are as equally powerful, affective, meaningful and socially beneficial as traditional community structures. Their fleeting, or 'wispy' nature does not detract from their ability to shape people's behavior and relationship to their environment and each other. I argue that their ephemeral quality and the elements of sonic performativity and playfulness, can transform pockets of urban space and our experience of them into more inclusive, playful, and micro-community-generating places.

A phenomenological approach guided my discussion, taking my experience as an object of study and enabling a thorough accounting of the shape of the auditory experience in each context. This methodological perspective was used in conjunction with the approach of treating the concepts as "travelling concepts," or conceptual tools, which helped to construct my theoretical framework and make connections between theories and concepts from different academic fields.

In part one, I took the *David Bowie Is* exhibit as my primary case study and applied the concepts of performativity, interactivity and play to the organized sound and instances of audience noise within the performance. Using a phenomenological approach, I critically analyzed my experience walking through the exhibit. The concepts of 'territorialization', 'geocommunity', a double awareness and playful tension, were deployed as tools to uncover how the instances of audience noise disrupted the exhibit space and continuity of sound, serving as moments where social interaction among experiencers and playfulness flourished, playfulness abound and a transformation of spatial relations occurred. In part one, I also

developed a "Playful Sound and Sounding Play" framework from which to analyze how different types of sound can be explored according to their playful counterpart. Drawing from the work of Caillois (2001), I analyzed sonic phenomena ranging from music, organized sound, noise and rhythm according to the four types of games: *Agôn, Alea, Mimicry* and *Illinx*. I proposed that music fell in the realm of *ludus,* or *Agôn,* organized sound 'signals' as *Mimicry*, audience noise as *Alea,* and rhythm as *Illinx*. This framework represents my effort to bridge the divide between the field of sound studies and play. It uses the concept of play as a theoretical object (Bal, 2002), to explore the affective potential of different types of sonic phenomena within performance contexts.

In part two, I built on the more theoretical and conceptual arguments made in part one, with an exploration of more practical applications of theories as they function in urban space, using *PODD* as the case study. I brought my own experience of designing, building and implementing a project into the discussion and explored how sonic performativity, play and interactivity functioned, and focused on how the community-forming potential of these elements could be integrated into urban design. Integrating the same concepts that were used to describe the Bowie exhibit, I built on the discussion of how sonic performativity and play can transform public space, by disrupting established norms and providing opportunities for creative re-imaginings of our shared civic identity. It is not just my belief that our cities would benefit from the thoughtful integration of sonic performativity and playfulness into urban design. I have experienced, the emergence of ephemeral micro-community bonds from performance spaces where sound and noise function as key elements in constitution of the experience itself.

A Reflection

Moving beyond a summary, I reflect on what I found to be crucial sonic elements in the creation of ephemeral micro-communities in performance and urban spaces.

The body, space and sound in playful mobility bringing people together

In part two, I found the sonification of mobility to be a method of engaging people with their environment, their own bodies, and each other. In both performance contexts, the "sonified mobility" (Behrendt, 2010) signified a transformation from functional movement to playful and sonified mobility. *PODD* was designed to provoke a public staging of social interaction between those whose paths might otherwise never intersect and mobility was a key element to achieve this goal. Behrendt's use of the term "sonified mobility," describes the kind of mobile sound art that involves the audiences' mobility, usually in the form of walking, to influence the sound that the audience is listening to (Behrendt, 2010: 75). In *PODD* and the Bowie exhibit, if the participants stopped moving the piece would not be experienced and so mobility is a crucial element for sonic performativity to be perceived and to be affective. "Sonified mobility" also occurred experientially in *PODD*, as each participant was virtually transported into the world of another. Mobility therefore also relied on the presence of sound and noise to be perceived, for example it was the sound of a person's voice that transported the listener and positioned them towards the other, with a level of intimacy not achievable with visuals alone. Sound and noise have the tendency to convey a sense of closeness for the listener, however this proximity is not always perceived as a positive or pleasant sensation, as Rost (2011) pointed out in her study. I argue that when sound and noise are designed and implemented in performative and playful ways they have the capacity to instill a deep sense of intimacy and create an 'acoustic

community' conducive to social interaction and connection. The concept of "sonified mobility" becomes a useful tool to explore the relationship between elements of sonic performativity, urban space, movement and play, and to reflect on the ways that sound and noise shape the experience of an installation but also more broadly everyday interactions in public space.

A transformation of public space through sonic disruption and de-territorialization

The ways in which we navigate space is multi-sensory, as we use all our senses to navigate through the world, perceive our own experience and reflect on the state of others. One of the powerful implications of sound art according to de la Motte-Haber (2002), is that is breaks through the automatizations of everyday sense perception and that the "new contextualisation of sense perception then disturbs our belief that the learned routines of daily orientation provide an objective image of reality" (qtd. in Behrendt, 2010). *PODD*, as a form of mobile sound art, challenged not only how those on Church St. navigated the urban space, but how we use sound and mobile media in our everyday lives. By introducing *PODD* into a city street, we provided a stage for engaging all our senses when we navigate space and interact with others. The performativity of sound and noise (as a new contextualization of sense perception) disrupted the learned routines of daily orientation (de la Motte-Haber, 2002) and reorganized space according to more social, self-aware, and dialogic coordinates.

In my study, I found that sonic performativity transformed urban space through the processes of "territorialization" (Deleuze and Guattari, 1988), enabling experiencers to discover new ways of listening to space, interacting with others and expressing their shared identity as micro-community members. Instances of subversive play, such as "de-territorialization" and "détournemt," brought spontaneity and a playful attitude into an otherwise mundane experience of urban space.

The performativity and playfulness of sound and noise in the experience of *PODD*, transformed the everyday interaction with urban space, one's own embodied practices with media, and positioning towards others. What the performativity of sound and noise in this case constitutes is a sense of place, physicality, and sociality; an ephemeral micro-community existing within the larger expanse of urban space, and resistant to its anonymity, de-personalization, and disconnection.

The importance of a double awareness for micro-community formation

The production of what I call the double awareness, first emerges with self-reflexivity and self-reference as two primary features of performance and the performative orientation. A performative orientation Kattenbelt says involves "constituting (i.e. world making) and staging aspect…[and]…by definition refers to, and reflects on, itself and on the event in which the performance occurs" (Kattenbelt, 2010: 32). Everyone who participated in the *Bowie* exhibit were aware they were engaging with a staged 'reality'. Not only was the performance self-referencing and self-reflexive, but the performative orientation and the aesthetic orientation of the experiencers was characterized by self-reference and self-reflexivity. "The aesthetic orientation facilitates a liberating confrontation with one's own experience, which is made perceivable through engagement with the aesthetic object" (Kattenbelt, 2010: 33). Martin Seel (1985) wrote about the aesthetic experience as affording a confrontation with the constraints of daily life, and creating possibilities for change. The sense of "we-ness" that emerges out of a

shared "aesthetic orientation," as a form of exploration and reflection, positions individuals as social beings, and reinforces their communicative competence (Kattenbelt, 2010: 33). I would argue that out of this self-reflexivity and self-reference, a "double consciousness" emerges, of being immersed in the experience of audience member, while at the same time aware of your own positioning. The shared nature of this "double consciousness" among all those within the performance space, or sense of "we-ness," I argue produces an ephemeral micro-community.

The other form of double awareness I reference, involves an inherently playful positioning. The "double experience" (Fink, 1968) of being immersed within the activity of play, while at the same time aware of your position as a 'player' in a game, was present in both *PODD* and Bowie. It manifested in the feeling of intimacy and distance simultaneously experienced in each performance. This playful tension, in the case of *PODD*, disrupted the existing structure by helping to form a micro- "acoustic community," offering people an opportunity to privately interact with someone. In the urban setting where distance is maintained between strangers and spontaneous encounters are few and far between, *PODD* represented a way to actively connect with others, inserting intimacy into the public sphere. The tension between public-private, effects the spatial positioning of people and increases the level of intimacy experienced by people who share the experience.

Playful tension between structure and freedom
 I found that experiences which contained a playful tension between *ludus* and *paidia*, or structure and freedom, imbued the immediate space with a dialogic and relational aesthetic. The tension was amplified and brought to people's attention through the performativity of sound in *PODD* and noise in David Bowie. In both performances, it cultivated a shared sense of identity in public space, encouraged experiencers to engage with the built environment and each other in more playful and participative ways. I argue that the experience of sound and noise in these spaces is an important element in the transformation of people's perception of public space, perhaps not at a compositional level, but on an emotional and social one. *PODD* represents an attempt to resist and challenge the dualism that exists between public and private space, in favor of shared territories.

Noise as productive force
 The initial distance we feel from any unexpected or 'intrusive' noise, at first is perceived as a disruption, however I argue that when it is experienced in a performative situation, the distance engenders a greater sense of intimacy among all perceiving bodies who shared the experience. In this way, noise is framed as a productive force, rather than a destructive one, to the formation of ephemeral micro-communities. The inherently playful "double experience" of intimacy and distance, positions listening bodies towards one another, inviting people to engage with others and explore the space. What is felt as distance acts as a prelude to an increased sense of intimacy, whether it be in a museum space or a busy city street.

What if our everyday spaces were designed to accentuate our bodies as listening beings? And the urban noise was transformed into collective sound-making opportunities, amplifying the "sensually vibrant and immersive" (Teri Rueb, 2010) qualities of sound? I propose there is a

value to the ephemeral qualities of sound and by intensifying this quality, the urban space becomes more meaningful and the connections between people are amplified.

The more researchers, scholars and practitioners in the arts can communicate about the role and potential for performative, interactive and playful uses of sound in performance spaces, the more this type of research can cross disciplinary divides to include those practical fields that don't often explore the creative potential of sound (e.g. city planners, architects, urban designers. These fields do consider things like noise pollution, the acoustics of a space, and other practical implications of sound, however, there has been a lack of serious engagement with sound and its potential social benefits. Throughout this study, I have consistently raised questions concerning the potential of using sound in performative ways for urban design. Could we experiment more with playful sounds in our public spaces to re-imagine these spaces as incubators of a sort for micro-community formation, where positive social interactions take place? I want my research to raise these kinds of questions and it is my hope that it does so by exploring the David Bowie exhibit and *PODD*, where sound and noise create the potential for ephemeral micro-communities to form. The performative uses of sound and noise can serve as practical models for re-imagining how our cities and public spaces could be transformed into sites of social potential.

Soundful Cities for Future Research

I believe academic communities from a broad range of fields should be considering the effects of sound and noise performativity on our spatial awareness and perception, on our own bodies and embodied experience, and perhaps most importantly, how sound and noise influence our social interactions. The social transformations that occurred when sonic performativity was embedded in urban space are evidence that with more research and cross-collaborations between the sciences, humanities, and design, we have the chance to radically re-shape our cities into places where tremendous social understanding, sustainability and creativity can flourish.

As a continuation of my research, I want to keep developing projects like *PODD,* where concepts and theories from Media and Performance Studies can be implemented into practical designs and transformative interventions into everyday urban spaces. For example, it would be interesting to experiment with ways of convincing local city officials to implement sonic performativity into the city's existing structure. One such experiment might include spending a significant amount of time mapping out the city space, which you would like to sonically enhance. Then once you have identified which elements of the urban space, or which streets could benefit most from the inclusion of sound, you might re-map the city according to its sonic potential. At which point, one could set out on a series of projects to implement designs of sonic performativity and playfulness within the existing landscape, gathering qualitative and quantitative data and feedback on the impact of such designs, and present one's finding to the city council. By showcasing the economic, social and community-building potential of sonic performativity and playfulness, once embedded into urban design, city planners, architects and politicians, making the decisions for urban renewal projects, are more likely to approve a project.

I want to acknowledge the projects already exploring innovative ways of using sound in public space and applying theory to our built environment. The first is an example of how sonic performativity is used affect change in everyday situations and the second is an example of an academic scholar implementing theory into the practice. Julian Treasure's, *The Sound Agency*, is a company which combines scientific research with creative business expertise, to consult with businesses on how to use sound to enhance their brand. Treasure creates soundscapes for public space, as well, to showcase the positive effects certain sounds have on our psychological, emotional and social wellbeing. He has argued for re-designing urban space by demonstrating the benefits of carefully designed sound in public space.[64] For example, a nature soundscape reduced levels of crime, increased a business' customer base, and improved the overall feeling of wellbeing among passengers waiting to board their next flight. In our current moment, fraught with anxiety and uncertainty about our future, there is a need for disruptive change in the way we design our urban centers and public spaces, that encourages social interaction and cohesion.

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[64] Treasure, Julian. "Why Architects Need to use their Ears." Edinburgh: TED Global, June 2012, https://www.ted.com/talks/julian_treasure_why_architects_need_to_use_their_ears?language=en#t-11420.

In *PODD,* I took concepts of performativity, play and interactivity, which manifested in the presence of sound and noise, and applied them to urban space, transforming people's spatial and social positioning and embodied experience within the city. In a similar sense, Richard Sennett (2012), a sociologist at Harvard's Graduate School of Design, applied the concept of 'dialogic' to urban design and architecture, arguing for an architecture of cooperation. He described how dialogic processes invites an open exchange between people, is less competitive, and more suitable for facilitating cooperation, because such exchanges find common ground; a kind of interrelationship (Sennett, 2012: 19:56). He asks, "how can we design spaces in the city which encourage strangers to cooperate?" And makes a case for why research from the social sciences about cooperation is highly valuable to current issues in urban design. Sennett's work is an example from academia of the kind of further research that should be pursued. I would suggest that one could insert sound into Sennett's proposal to amplify dialogic exchanges which facilitate cooperation in urban design and public space, increasing social interaction and enhancing the community generating potential of a given place.

Shared affective moments between strangers in our urban settings, have the potential to strengthen community cohesion, and increase civic engagement among local inhabitants. These moments transpire from a combination of sonic performativity, play and embodied interaction, and deserve more scholarly attention than they have thus far been granted. It is my hope that this research adds to the small but growing body of literature, which addresses sound and noise from a cultural and urban studies perspective, and at the same time draws attention to the social potential of sound when analyzed in performance contexts. Drawing from Media and Performance, Theatre and Play studies, I have attempted to develop a framework which, upon further study, could be applied to urban design projects, public spaces, and artistic interventions, staging sonic encounters where ephemeral micro-communities can emerge.

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