

Discursive strategies for urban sound design and acoustic planning

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ABSTRACT

The fields of urban sound design and acoustic planning have emerged at the intersection of disciplines that range from urban design to environmental acoustics, and from urban sociology to sound art. As such, these fields incorporate methodologies extracted from a diverse assemblage of design projects, legislative imperatives, and interdisciplinary research programmes. Alongside practice-led design and planning initiatives that manifest as transformations to the public realm, these methodologies are formed through discursive means – through discourse that is embedded within different stages of education and planning processes. This paper will review a series of projects that have evolved in the city of Dublin since 2013. These projects range in scale, originating from public art frameworks and extending as interfaces with systems of design education, urban planning, and community engagement. These projects combine discreet outputs with strategies that expand through discursive elements, which encompass conversations, meetings, workshops, and symposia and involve students, design professionals, local authorities, and community groups. This paper explores the strategies that inform this body of work and demonstrates how these strategies contribute to the articulation of communities that are engaged with issues concerning the subjectivity of noise and the challenges of mediating the urban sound environment.

Keywords: Urban Sound Design, Acoustic Planning, Sound Art, Community Engagement

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1. INTRODUCTION

This paper explores strategies for building communities of active listeners who are engaged with issues concerning the subjective definition of noise and the growing challenge of mediating the urban sound environment within the context of the contemporary cityscape. These strategies are derived through a series of contemporary art projects and educational initiatives set in and around Dublin, Ireland and developed between 2013 and 2019.

Although varied in form, these projects and initiatives are rooted in the common principle that such strategies that seek to inform urban sound design and acoustic planning methodologies set in place within a given locale should be premised on fostering a plural perspective that accommodates different modes of listening and sonic experience, and that addresses the public as constituted of individuals and communities which possess different expectations regarding the experience of the sound environment in shared, public spaces. These strategies build on initiatives developed by other artists (Auinger and Odland, 2009; Cusack, 2017), urbanists (Di Croce, 2017; Maag and Munck Petersen, 2018), and theorists (LaBelle, 2010), and brings attention to the prominent role enacted by discursive methodologies that underlie these projects' formation.

The term *discursive methodologies* refers to the different forms of discourse, conversation, discussion, debate, and dialogue that often define projects involving sound in the public realm, and yet often lay outside of the these projects' official definition and presentation. This paper describes these discursive methodologies in relation to specific project-related strategies by working through a brief summary of projects that have taken place in the greater Dublin area. These summaries are organised via the following sections:

- Investing in Frameworks for Interdisciplinary Research and Production
- Implementing Projects in the Public Realm
- Prototyping Alongside Active Urban Developments
- Situating Public Interfaces at Street Level
- Working with Younger Audiences
- Addressing the Urban Sound Environment in Third-Level Education
- Emphasising Affinities Between Projects Within a Given Locale

These sections progress from a focus on projects established through the author's practice to a diverse range of educational initiatives, and finally to drawing attention to the affinities between projects created by other practitioners working to activate the sound environment within the same locale. The paper argues that the spatial and temporal linkage between these projects is enforced by a tight community of individuals and institutions operating in different fields and coordinating their efforts – largely through somewhat unseen, and undocumented discursive methodologies – to develop a substantial platform to present projects exploring sound, listening, and the public realm on a significant scale.

2. ESTABLISHING A FOUNDATION FOR SUSTAINED ENQUIRY

2.1 Investing in Frameworks for Interdisciplinary Research and Production

Much of the work documented in this paper is rooted in a long-term public art

commission developed with Dublin City Council. This project – *The Manual for Acoustic Planning and Urban Sound Design (MAP)* – commenced in 2013 and has persisted in the background to support a series of other projects that are still being established in 2019 (Anderson, 2013). *MAP* was established to create an interface between different communities and ideologies which were identified as stakeholders in the definition, regulation and exploration of Dublin’s urban sound environment, as well as in relation to the identification of terms such as *urban sound design* and *acoustic planning* themselves.

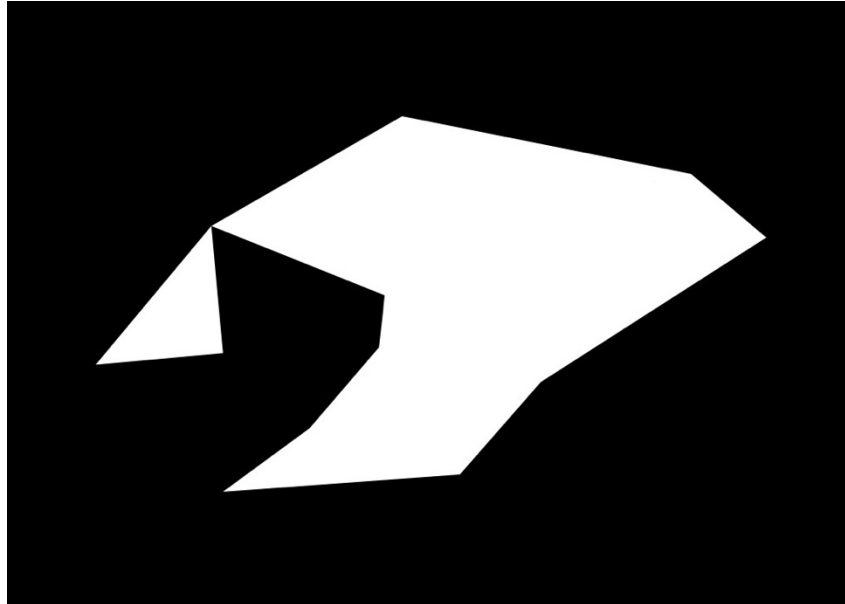


Fig. 1: The MAP project is identified by different permutations of this graphic icon. The vertices of the shape are determined by the geometry of the locations of the 14 ambient noise monitoring stations located in Dublin in 2013 when the project was initiated. Image courtesy of the author.

The structure of *MAP* was premised on working for one year within the city council in the experimental role of *Dublin City Acoustic Planner & Urban Sound Designer*, negotiating the projects’ agenda and workflow in response to how this concept was received internally within the council. The project emphasised a dematerialised practice through which practical outputs (in the form of workshops, public events, and public sound installations) emerged as residual artefacts that could be encountered as a design process executed within - and even by - the city council itself. This approach sought to open sustainable channels for the city as an institution to engender a sense of responsibility and possibility regarding new modes of working with sound in the urban context, and as an extension of existing design and planning processes.

MAP operated in a variety of discursive modes, originally seeking to avail of opportunities to audit city council meetings within different departments, before progressing to initiating meetings, delivering presentations, organising a symposium, and running workshops that set the foundation to develop several substantial sound-related initiatives in the public realm. Meetings with the city’s Air Quality Monitoring and Noise Control Unit led to submitting *MAP* for The European Soundscape Award, which it was awarded in 2014. This process itself opened a positive interface for different departments in the city council to realise that these local efforts linked to a wider initiative seeking new strategies to work more proactively with sound as a design asset, alongside more dominant regulatory processes related to the ongoing analysis and regulation of

environmental noise. Gaining this international recognition granted the *MAP* commission greater traction within the locale in and around the city of Dublin.

2.2 Implementing Projects in the Public Realm

The *MAP* commission provided resources to develop projects that sought more proactive means of working with Dublin's urban sound environment as it related to current issues evolving in the city's public realm. The most substantial project to emerge through these collaborative enquiries is the permanent public sound installation *Continuous Drift*, which allows members of the public to activate different sonic atmospheres to play back within a small (but centrally-located) city square (Anderson, 2015).



Fig. 2: A photograph of Meeting House Square, where the interactive sound installation *Continuous Drift* is permanently integrated within the four retractable rainscreens installed in the space. Two prominent blue signage elements mounted on the rainscreens describe the work and provide instructions for members of the public to change the sound environment in the square. Photo by Ros Kavanagh.

Continuous Drift features contributions from over 30 artists and collectives, which can be triggered to play back in Meeting House Square via a simple interface accessed via mobile phone. These different sound environments can be started and stopped at any point during the installation's opening hours, allowing members of the public (as well as those working in adjacent buildings) to participate a continuous re-negotiation of the location's sonic character. The installation's focus on issues related to agency and control link the project to an awareness of the competing functions that define the surrounding area of Temple Bar, which is simultaneously identified as Dublin's cultural quarter and its most overwhelming tourist destination. *Continuous Drift* has been expanded for further enquiry via two new sequences of contributed works added under the themes *An Introduction to Work and Energy* and *Balance*, supported both by Dublin City Council and the Arts Council of Ireland (Anderson, 2016 & 2017). The continually-evolving presence of this installation enables opportunities for a multitude of conversations regarding the possibilities of urban sound design within dynamic, multi-use public spaces.

2.3 Prototyping Alongside Active Urban Developments

In parallel to the establishment of *Continuous Drift*, the strategy of positioning gestures relating to experiments in urban sound design alongside areas undergoing significant urban development was employed to initiate work towards a larger installation for Smithfield Plaza, titled *Glass House* (Anderson, 2014). This project is premised on integrating a series of networked computers and loudspeakers within 12 public lighting elements that line one side of this square and linking this network to a system that reacts to the sounds produced within a popular cinema located adjacent to this significant public space.



Fig.3: Looking south across Smithfield Plaza, where the prototype for the sound installation Glass House has evolved in several stages since 2014. The installation links the evolution of sounds in an underground cinema with the public space of the square, using the infrastructure of 12 public lighting elements as an infrastructure for power and distribution of loudspeakers. Image courtesy of the author.

As films are screened in the cinema, the system installed in the square receives a series of numbers representing tonal values extracted from films' soundtracks. The system releases traces of these tonal elements in subtle envelopes of sound that slowly appear and disappear around the bases of the lighting elements. Currently inactive, this installation has been developed through several phases of prototyping between 2014 – 2018. It has been identified within meetings of local businesses and community stakeholders and positioned as a means of revisiting a consideration of this district's sound environment. This sound environment – as a significant component of the public realm - has received increasing focus as the surrounding neighbourhoods are undergoing a wave of gentrification and social displacement. *Glass House* seeks to preserve an open space within this area, positioning its subtle sonic dynamics and blurring of interior media-space with exterior public space as a gauge to assess the atmosphere generated by the other initiatives, businesses, activities, and communities that share this space.

3. BUILDING COMMUNITIES OF ACTIVE LISTENERS

3.1 Situating Public Interfaces at Street Level

In order to develop communities of interest – and of active listeners – within a given locale, it is necessary to accompany larger project frameworks (as described in the previous section) with interfaces that offer approachable avenues for the public to engage with these initiatives and to form their own perspectives of urban sound design, acoustic planning, and other issues relating to the urban sound environment. The project *The Office for Common Sound* established this manner of interface, occupying a store-front location in the coastal town of Bray between May and June 2016 (Anderson, 2016).



Fig. 4: The Office for Common Sound was open for two months in 2016 in Bray, County Wicklow (20km to the south of Dublin), with an open-door policy inviting anyone passing by to come in to discuss the locale through sound. This photograph shows the author introducing sound-related texts to passersby. Photo by Louis Haugh.

This project established its identity by prominent vinyl signage installed on the street-facing office windows, and by word of mouth spread via a diverse array of community organisations. The project was funded by a strategic project initiative led by Wicklow County Council, and as such benefited from support from the local authority and other cultural partners that helped build an awareness of its presence and potential function.

Over the course of its two-month existence, the consistent presence of activities taking place within this space during business hours (9AM – 5PM) prompted many people to enter, and to enquire about the office's function. Of those who entered and began this line of questioning, a smaller percentage stayed to discuss things beyond an initial introduction. From this group, an even smaller percentage scheduled times to return to participate in secondary conversations, interviews, field recording sessions, and other activities working with the office. As such, *The Office for Common Sound* developed entirely by inviting sustained open-format discourse within an approachable, street-level, public interface established in a simple commercial shop-front format. The subjects considered in the office were introduced by members of the public. These subjects ranged

from changes in the local sound environment to council support for acoustic insulation in residential dwellings, from notating prominent areas for capturing field recordings to recounting the presence of local electronic music subcultures that had been repressed via changing local demographics. Working with different people in these discursive modes from day to day, and from week-to-week, the office built up an active index of information that could be taken as an indicator of the issues that (together) comprise a definition of the *common sound* of this locale.

3.2 Working with Younger Audiences

Curiosity relating to the perception of sound, noise, and the presence of a field of sensory events which might be considered as constituting the sound environment can be fostered from an early age, with appropriate support within the educational system. In 2015, the independent project framework Art School curated by Jennie Guy provided the context to develop a short residency working with a class of 14- and 15-year-old students at Blessington Community College in County Wicklow (30 km southwest of Dublin). The residency was premised on working with sound and considering how the students might wish to alter their day-to-day acoustic environment.



Fig. 5: This image shows students of Blessington Community College in an exterior passageway between two school buildings. The linear wooden elements installed under the ceiling are a sound installation titled Blessington Sound Line, that the students created and installed with the help of the author during a short residency at their school. Image courtesy of the author.

The residency provided an opportunity to discuss projects such as *MAP*, *Continuous Drift*, and *Glass House* with the students, as well as to offer an opportunity for selected members of the class to travel to Dublin city centre to experiment with listening and capturing field recordings. Working as a group, the students decided that they wanted to try to develop a sound installation for their school, to be situated in an outdoor corridor connecting the two primary architectural spaces of their school. Students of all ages pass under this passageway every day, and the students wished to use a series of wooden boards fit with full-range acoustic transducers mounted to the ceiling to play back a series of field recordings captured in different locations around the world, that they

had downloaded from an open access website with a Creative Commons licence.

As with projects enacted on a larger scale in cooperation with various local authorities, the students' project progressed largely through its discursive dimension. The students were required to prepare a presentation outlining the project, which they delivered to their school principal for approval in order to begin installation. They approached different members of school staff to contribute to the process, eventually mobilising a series of parallel events that led to an efficient installation of the core computer, electronics, audio transducers, and system cabling. The students contributed to every dimension of the project's conception and installation and were able to experience having created a semi-permanent sound installation – *Blessington Sound Line* – that would be heard by other students, staff, and parents at their school for a duration of approximately one year (Anderson, 2015). The experience of formulating the concept and proposal for this project – and working through the numerous administrative conversations required for the project to take place – offered the students a number of opportunities to learn to discuss what it means to position new sounds within a day-to-day working environment, and to navigate the different attitudes presented by those who they needed to bring on board to establish their project. Developing a vocabulary through which to address the differences between noise and sound was

3.3 Addressing the Urban Sound Environment in Third-Level Education

Integrating the emergent disciplines of urban sound design and acoustic planning within the wider design culture of a given locale is something that takes time. It can be significantly aided by devoting resources to developing sustained enquiry into these subjects in third-level education, placing particular emphasis on introducing these disciplines within a diverse array of educational contexts.

The course *Vibrant Forms: Reconsidering the Built Environment Through Sound* was established at the National College of Art and Design (NCAD) in Dublin for this purpose. The course is offered with the School of Visual Culture as an elective for second- and third-year students from a variety of disciplines including fine arts studio practice, visual culture, interaction design, and design education. Enrolment for the course is between 25 – 30 students per year. The course prioritises a critical enquiry into the different disciplines that inform the interaction between sound, space, the built environment, and the experience of urban space. Drawing equally from sound studies, contemporary art, architectural theory, philosophy of perception, environmental acoustics, and urban sociology, the core sessions of the course are organised under the following titles:

- Beyond Noise and Silence
- Site Specific Sound
- Atmosphere and Ambiance
- Architecture and the Senses
- Strategies for Active Listening
- Sound, Infrastructure, and the Built Environment
- Mobile Music
- Sound in the Public Realm
- Aural Tactics: From Acoustic Territories to Sonic Warfare

This course has been offered in 2018 and 2019, thus it is impossible to detect its

impact within the fields of design that are emerging graduates of NCAD. However, the level of enthusiasm and the quality of the assignments advanced by participating students is an indicator that the issues addressed in the course are relevant to their practices, and that these subjects will manifest within their professional outputs in years to come. Introducing different perspectives considering these forms of practice relating to sound and the public realm at this stage of the education process provides time for students to develop their opinions through active discourse related to this field, so that these subjects are familiar territories when they encounter them later in their careers.

3.4 Emphasising Affinities Between Projects Within a Given Locale

Developing legible connections between contemporary art projects that relate to the fields of urban sound design and acoustic planning requires consistent communication amongst local stakeholders. The greater-Dublin region has benefited from the sustained interest and commitment of a small network of public art managers, independent curators, public art consultants, and organisations who have worked together to foster opportunities for projects involving sound to be considered equally alongside other forms of public art, and even implemented within a number of prominent commissioning schemes. Considered together through their affinities, these artworks project a confident stance towards integrating sound installations in the public realm, inviting the public to consider how the sound environment might be cultivated instead of merely regulated in order to produce valuable forms of spatial experiences.

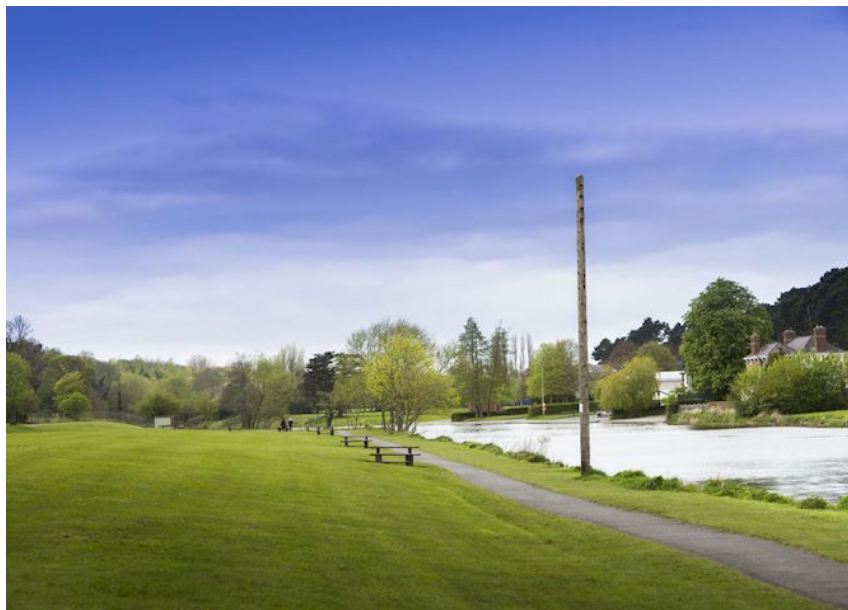
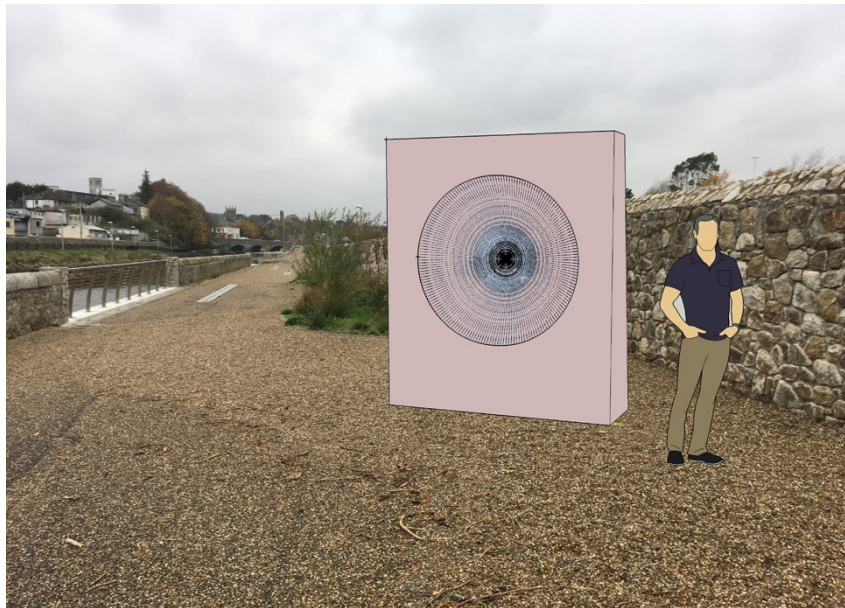


Fig. 6: Photograph of the artist Christina Kubisch's project Voices of Memory: A Riverside Sound Art Installation at the Irish National War Memorial Gardens. Photo by Eugene Langan, courtesy of The Goethe-Institut in Ireland.

One of these projects, the artist Christina Kubisch's installation *Voices of Memory* (active between 2016 and 2018) enacted a subtle mode of memorialisation to the western edge of Dublin in the Irish National War Memorial Gardens on the southern banks of the Liffey (Kubisch, 2016). Building sonic textures from recordings of volunteers of different ages reading out the names of over 49,000 Irish people who died in World War 1, this artwork attracted prominent national attention. Fusing a consideration of sound with a historical element in this significant geographical location, Kubisch's installation

introduced a concise method of integrating new sounds in a public space that complemented the natural sound environment of the park. The project was realised with support from Dublin City Council, The Office for Public Works, and The Goethe-Institut in Ireland.



*Fig. 7: A render depicting the form of a sculpture with a parabolic sound-focusing mirror from the artist David Beattie's project *Listening Points* (working title). This project will be completed in summer 2019, complementing new public realm works along the river Dargle in Bray, County Wicklow (approximately 20 km south of Dublin). Image courtesy of David Beattie.*

More recently, the curators Jennie Guy and Eilis Lavelle managed a public art commission along a prominent riverside development in the town of Bray for Wicklow County Council. The artist David Beattie's proposal *Listening Points* (working title) was selected for this commission (Beattie, 2019). Conceived of as a reflection on the physicality of sound and of our experience of sound in public space, Beattie is creating a series of sculptures along the river walk that will highlight and accentuate the flow of the river and the tidal shift of the sea in Bray port. A number of free-standing parabolic mirrors and listening funnels will be located along the walkway, arranged and positioned to gather ambient sounds from the surrounding environment. Rather than creating or producing sounds of their own, these sculptures will act as listening points, and as a collective gathering of environmental noise and sound that positions the individual within a wider public context.

Concurrently, the artist Adam Gibney has developed a permanent sound installation sited in a recently-renovated public school in County Dublin. This generative sound work responds to environmental data that is commonly related to the growth of plants (Gibney, 2019). The moisture of the soil, light and temperature outside of St. Catherine's National School provides organic compositional parameters for the manipulation of an eight-channel vocal composition. With over 1,000 syllabic samples to call upon, this installation unravels ideas surrounding the theory of biolinguistics, providing the school with an experimental language which will evolve in its main stairwell to become integrated with the other sounds of the school. Gibney's installation was funded by a per cent for art commission and managed by the curator Jennie Guy.



Fig. 8: Photograph of the artist Adam Gibney's sound installation in St. Catherin's National School in Rush, County Dublin. These eight speakers are suspended in a primary stairwell in the school, generating a real-time acoustic response to environmental sensors integrated outside of the school. The project will be launched in summer 2019. Photo by Claire Nash.

4. CONCLUSION

The projects and educational initiatives documented in this paper have arisen in a relatively concise locale over the timeframe of six years. The work that has occurred to support these projects through meetings (both public and with selected stakeholders), artist talks, public art commissioning schemes, project reviews, workshops, formal symposia, and informal debates constitutes a field of discursive activity that provides the foundation for these projects' continued existence over time. Including detailed documentation and the provision of resources that emphasise and enable this discursive dimension of new projects might aid in progressing current methodologies that lay at the intersection of contemporary sound art, sound studies, urban sound design, and acoustic planning.

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