Beyond standards: In search of heterogeneous approaches to sound in the design and planning of the public realm

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ABSTRACT

The public realm constitutes the integral connective tissue that defines the contemporary cityscape, within which different individuals, communities and institutions engage with each other through co-operation and negotiation. Sound remains a neglected dimension of this domain, generally coming into consideration only through efforts to ameliorate the urban soundscape and to attend to the impact of environmental noise. As the densification of urban territories continues, the role of sonic experience as a more critical and complex driver for urban design must be reassessed. The project Sound-Frameworks: Collaborative Frameworks for Integrating Sound Within Urban Design and Planning Processes (EC grant agreement ID 101032632) explores new methodologies to accelerate this area of research through the production of three resources: A sound in practice survey, a publication on guidelines for best practice and an online tool to guide the integration of sound in the design of the public realm. This paper discloses the project's initial trajectory and intersectoral objectives. It explores how the synthesis of heterogeneous approaches to working with and thinking through sound can be informed by perspectives developed through environmental acoustics, architecture, spatial planning, sound studies and artistic practice.

1. INTRODUCTION

The past twenty years have witnessed a sustained expansion of writing, research and projects that probe the role of sound within urban design and urban planning practices. Collectively, these practices embody two things: first, a concern with how considerations of sound are often neglected – or insufficiently addressed – within the context of city-making practices; and second, a realisation that considerations of sonic experience can significantly complement and extend practices that are rooted in architectural design and spatial planning. These concerns are particularly relevant in the context of community noise and planning, and in the domain of the public realm where this topic manifests as a complex scenario for different subsets of urban populations.

In the context of architectural design, interest in these concerns often manifests through explorations of how practices rooted in contemporary sound art can activate and extend the potential of the experience – and the discipline – of architectural acoustics. In the field of spatial planning, one of the primary discursive armatures through which these concerns have been addressed is the ongoing critique of quantitative methodologies related to legislation such as The Environmental Noise Directive

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(2002/49/EC) and the subsequent assertion of the ISO Soundscape Standard (ISO 12913-1:2014, ISO/TS 12913-2:2018 and ISO/TS 12913-3:2019), which posits an alternative mechanism to address the subjective experience of sound in different spatial contexts. The era of practice encapsulated by these propositions – roughly the twenty years between 2002 and 2022 – has been characterised by persistent dialogue and debate between practitioners who are invested in these concerns. Consequently, although sound still commands only a minor role in most city-making initiatives, the potential to reflect on the evolution of this field on a more systemic level (and to bring such critical reflections into contact with other dimensions of urban studies that integrate perspectives from the arts, social sciences, humanities and engineering) is becoming clearer.

This paper advances this position by providing an introduction to *Sound-Frameworks*, a new research project that explores this process of systemic reflection regarding sound in the context of city-making as a space of production. The project's core objective is to secure a foundation to advance diverse methodologies for working with sound – and sonic experience – within urban design, spatial planning and city-making practices, with a focus on projects sited in the public realm. Central to this objective is the maintenance of heterogeneous methodologies of production as itself a coherent methodological alternative that complements the progression of more dominant, centralising efforts such as the establishment of the ISO Soundscape Standard. The project postulates that such heterogenous methodologies might reflect – and more naturally complement – the nuanced working practices already established within the context of diverse urban design contexts. By disclosing the structure of *Sound-Frameworks* and considering the trans-disciplinary context in which it is established, this paper will clarify the significance of this objective, and simultaneously trace an alternative mapping of how this field of practice might evolve towards active opportunities for production and implementation.

2. OUTLINING THE INITIAL PROJECT TRAJECTORY

Sound-Frameworks: Collaborative Frameworks for Integrating Sound Within Urban Design and Planning Processes is a two-year Marie Skłodowska-Curie Actions Individual Fellowship (EC grant agreement ID 101032632) that explores how to introduce critical considerations of sonic experience within the design of the public realm. Based in London, I am leading the project as an individual fellow hosted by Theatrum Mundi, a centre for research and experimentation in the public culture of cities that expands the crafts of city-making through collaboration with the arts in order to develop imaginative responses to shared questions about the staging of urban public life.

Sound-Frameworks extends Theatrum Mundi's ongoing exploration of sonic urbanism (Theatrum Mundi & &Beyond Collective 2019; 2020; 2022), enacting a discursive space to accelerate dialogue between artists, architects and urban designers to advance an understanding of how sound and listening can influence the design of contemporary cities, and to support the more systemic objectives outlined in the introduction of this paper. The project is structured to incorporate perspectives from different practitioners, including those who work explicitly with sound, as well as those who work in other domains of urban design and city-making practices.

2.1 Establishing resources for other practitioners

Sound-Frameworks will evolve through three phases between 2021 and 2023, encompassing a sound in practice survey, a publication that explores emerging modes of practice and a preliminary version of a design tool that can be used to guide considerations of sound in the context of new projects.

These outputs will be crafted to support artists, architects, acousticians, urbanists and community organisations that want to activate sonic experience in the design of real-world projects.

2.2 Understanding the potential of sound in the public realm

Sound-Frameworks is focused on working with sound in the context of the public realm. The project conceives of the public realm as the integral connective tissue that defines the identity and experience of the contemporary cityscape, within which different individuals, communities and institutions engage with each other through cooperation and negotiation, as well as through conflict. The project considers the spaces – and experiences - that together comprise the public realm as erratic, intersectional and plural, as well as potentially held in common and experienced collectively. The public realm emerges as a territorial union of parks and city squares alongside networks of streets and paths that urban populations inhabit, traverse, repurpose and contest. Because sound is immaterial, dynamic and difficult to assess, sonic experience is rarely considered within this context; thus, sound remains a neglected dimension of the design of public space, coming into consideration only within later stages of design processes through remedial actions focused on ameliorating the impact of environmental noise or seeking to improve acoustic spatial qualities to support specific demographics, behaviours and uses of public space.

With this in mind, *Sound-Frameworks* is invested in developing new methods to prioritise the role of sound as a driver within the design of the public realm. While methodologies for working with sound proliferate within large-scale transportation infrastructure impact assessment and cultural projects where music and live arts are a priority, techniques for activating the sound environment within the wider public realm remain poorly understood and under-resourced and are thus considered only peripherally within larger-scale urban design initiatives. Consequently, the central practices that shape the public realm remain ill-equipped to address sonic, acoustic and aural cues within their clients' projects, as these modes of design lay outside of the ocularcentric modalities that dictate architectural and urban form.

2.3 Advancing through performative research

In order to advance urban practices focused on the use of sound in the public realm, *Sound-Frameworks* enacts an action-led, performative methodology to explore the role of sound in urban design practice. The central action described through the two-year project is the production of a design framework that provides methods for interdisciplinary teams to integrate considerations of sonic experience at *early* stages of urban design and planning processes, and to thereby embed proactive, context-specific strategies for urban sound design within public realm projects across a range of scales. These outputs are targeted at policymakers and professional urban designers alike; however, as it unfolds through a range of opportunities for participation, *Sound-Frameworks* will be open to others involved in city-making processes via different perspectives.

Sound-Frameworks' methodology has been structured as an extension of my own artistic practice, which has incorporated a variety of discursive tactics to engage with the fields of urban sound design and acoustic planning over the past fifteen years (Anderson 2019). Indeed, the project's roots in artistic praxis are crucial to its efficacy and intent. Artist and theorist Barbara Bolt posits that "artistic research cannot merely be subsumed under the qualitative research framework" (Bolt 2016), drawing attention to the means in which artistic research constitutes a *performative* paradigm. Bolt underscores the frequent uncritical usage of the concept of performativity in relation to artistic research

and asserts a more concise definition that highlights how "the performative act doesn't describe something but rather it does something in the world" (Bolt 2016). In other words, performative research does not constitute a model in which research is presented or experienced as a performance. Instead, it constitutes a paradigm in which research *performs* actions upon and within the subjects that it engages with, instead of more passively documenting, analysing or reflecting upon them.

Bolt's assertions about performativity are potent in the context of *Sound-Frameworks*, and within the wider field of practice in which artistic research has been persistently interwoven with the emergent fields of urban sound design and acoustic planning. Indeed, the trans-disciplinary nature of these fields represents one of their greatest assets, as it is this characteristic that often serves to link urban sonic praxis with other (potentially more active) domains of urban studies and urban design practice.

3. ESTABLISHING A TRANS-DISCIPLINARY FOUNDATION

From its outset, *Sound-Frameworks* aims to link sonic concerns with other dimensions of urban praxis to more securely integrate these concerns within practices that contribute to the definition of the public realm. To achieve this, the project draws laterally from the ongoing research themes and methodologies of its host Theatrum Mundi, from my own artistic practice and from the perspectives of five inter-sectoral partnerships that support different stages of the project's evolution.

3.1 Exploring sound as a component of public culture as well as public space

Sound-Frameworks is hosted by Theatrum Mundi, a centre for research and experimentation in the public culture of cities, which works by expanding the crafts of city-making through collaboration with the arts to develop imaginative responses to shared questions about the staging of urban public life. Theatrum Mundi evolves its work with diverse audiences through adaptable discursive formats including public events, residencies, research, publications, digital media, educational programmes and creative commissions. The organisation extends these methods to provide consultation services that are focused on cultural strategy and urban development, drawing together a range of backgrounds and perspectives on cities and culture drawn from artists, activists, architects, urbanists, students, scholars, community and organisational leaders as well as the broader public. Founded in 2012 by Professor Richard Sennett, Theatrum Mundi's formal genesis is rooted in a series of conversations driven by a curiosity about the links between the crafts of performance and of city-making, which took place at New York University (NYU) and the London School of Economics (LSE).

Situating *Sound-Frameworks* within Theatrum Mundi establishes the project's trans-disciplinary intent. The project draws not only from Theatrum Mundi's research focused on the concept of *Sonic Urbanism* (sound-informed approaches to designing for human and non-human voice), but also the organisation's other core research themes. These include *Designing Politics* (design interventions to stage commoning, free speech and respect); *Choreographing the City* (embodied approaches to urban design and mobility justice); *Enactments* (storytelling and fiction as tools for narrating common urban futures); and *Urban Backstages* (the making and maintaining of infrastructures for cultural production. These research themes are encapsulated in publications that distil their significance in relation to conceptions of cultural infrastructure (Haslam 2022) and urban backstages (Theatrum Mundi 2020). *Sound-Frameworks* is informed by these cues, which approach urban space and the public realm as territories of cultural production, as well as spaces shaped by architectonic form and spatial planning.

3.2   Integrating methodologies developed through artistic practice

Of equal significance to its establishment within Theatrum Mundi, *Sound-Frameworks* draws from a specific set of projects developed within the last ten years of my artistic practice. This practice has focused on establishing durational sonic enquiries with collaborators ranging from regional authorities to interdisciplinary design teams, from architecture firms to local communities. As described earlier in this paper, my approach is action-led, often constructing participatory frameworks such as publicly controlled urban sound installations (*Continuous Drift*, 2015) and ambiguously defined community spaces (*The Office for Common Sound*, 2016 & 2019) to encourage diverse stakeholders to engage with each other through considerations of sound and listening. More recently, this practice has expanded through collaborations with architecture firms, focused on integrating sonic concerns within larger-scale international design competitions, for example my collaborative proposals with Heneghan Peng Architects and Gustafson Porter + Bowman landscape architects for the UK Holocaust Memorial International Design Competition (London, 2017) and the Pulse National Memorial and Museum International Design Competition (Orlando, 2019).

Together, this series of projects demonstrates the role of artistic practice as it might inform urban sonic praxis as well as higher-level strategies for urban design. Artist, researcher and curator Barbara Holub explains this relationship between art and urban issues as follows: "The main prerequisite for involving art in urban issues is the understanding and accepting of the fact that art is not a problem solver. However, art and artistic strategies can create a very different angle for looking at things. […] We differentiate between art and artistic strategies. What we consider 'employing an artistic strategy' can be achieved, for example, by reconsidering a problem from a different perspective (reframing the problem) or by broadening the context" (Holub 2015, 35). Establishing this difference between *art* and *artistic strategies* is crucial in advancing praxis involving the role of sound in the public realm, as it provides a foundation through which to more intuitively involve artistic practice to support the activities of *reframing the problem* and *broadening the context*, as Holub asserts.

3.3   Supporting practice-led enquiry through intersectoral partnerships

In order to provide a context through which to ground the propositions defined in the previous sections of this paper, *Sound-Frameworks* is strengthened through five key partnerships with the Faculty of Music at the University of Oxford, the Sound Studies Lab at the University of Copenhagen, the urban design consultancy UrbanIdentity, the regional municipality Struer Kommune and the international engineering consultancy firm Arup.

The partnership with the University of Oxford provides an opportunity for *Sound-Frameworks* to draw from the experience developed through *Sonorous Cities: Towards a Sonic Urbanism (SONCITIES),* a research project formed at the intersection of sound, urbanism, and critical spatial practices (ERC Grant Agreement No. 865032). The partnership with the Sound Studies Lab embodies a space to review the legibility of the *Sound-Frameworks*' outputs within the wider field of sound studies in the final stages of the project. The partnership with UrbanIdentity builds from long-term dialogue focused on advancing new methodologies for engaging with sound in the public realm (Maag et al. 2019). Working with Struer Kommune provides a chance to review how the city of Struer has approached integrating considerations of sound at multiple levels of policy, culture and urban strategy (Kreutzfeldt 2019). Finally, the partnership with Arup establishes a substantial platform to advance *Sound-Frameworks* through dialogue with practitioners working at different levels leading

international practice in the field of urban design, drawing insight from different divisions ranging from acoustics to integrated city planning.

The development of *Sound-Frameworks* within the context of these partnerships – working outwards from its base at Theatrum Mundi – demonstrates how the project's enactment is itself performative, as the dialogue that it establishes draws together these different perspectives to synthesise new opportunities to discuss shared interests in working with sound in the public realm.

4. NEXT STEPS: CARRYING OUT A SOUND IN PRACTICE SURVEY

At the time of writing this paper, *Sound-Frameworks* is in its first stage of production. This stage involves the development of a sound in practice survey, which is focused on carrying out a systemic enquiry within the disciplines in which considerations of sound might be integrated within existing approaches to the design and planning of the public realm. The survey will comprise a series of questionnaires that are distributed to selected practitioners drawn from the project's extended network of partners. The survey will include both professionals and students, to ensure to engage with both experienced and emergent perspectives. Selected participants will be asked to select a specific project (or series of projects) to focus on within the context of the survey. These might include public space masterplans, pedestrian network strategies or urban district regeneration initiatives; equally they might include urban sound design projects that operate through architectural interventions or sound installations. The questions in the survey will probe not only where sonic considerations were taken into account but will also seek opportunities where such considerations might have been introduced at earlier stages of design.

Following the survey, more detailed case studies of a smaller subset of the surveyed projects will be developed, taking place through semi-structured interviews and roundtable discussions with urban design professionals focused on the role of sound in the specific context of their practice and experience. The open format of these discussions will draw from Theatrum Mundi's model of semi-structured discursive praxis to encourage open dialogue concerning the potential of working with sound and sonic experience within different urban contexts.

Through the two-stage process of the survey and case studies, the first phase of *Sound-Frameworks* will produce insight that support the project's subsequent stages, which include producing a publication on guidelines to support practitioners in this field and distilling this information into an openaccess web-based design tool. These outputs will continue to reflect the project's initial ambition to sustain the copresence of heterogenous modes of practice that stem from perspectives that are rooted in different fields of practice. These outputs will support the clarification of methods that are relevant and accessible to those working in similar practices on projects in related or equivalent contexts. The methodology advanced through *Sound-Frameworks* is thus presented as a means of moving *beyond standards*; not to contest them, but to encourage and sustain a proliferation of approaches to integrating considerations of sound in the design of the public realm.

5. ACKNOWLEDGEMENTS

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