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## Mediated Listening Paths: Breaking the Auditory Bubble

Elena Biserna

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### Abstract

Drawing on interdisciplinary literature on urban walking, mobile media studies and sound studies, this paper explores how everyday walking is redefined by portable audio technologies. Above all, it considers how artists have reshaped mediated listening on the move since the 1980s, when the first Walkmans were launched on the market. I will discuss different artistic projects and suggest that many of these works infiltrate the dynamics between the walker and urban space by acting on the interference and hybridization between contextual and mediated experience, therefore breaking the “auditory bubble” (Bull 2007) created by headphone listening on the move. In particular, I propose three possible “tactics” – “revelation,” “overwriting” and “interaction” – as permeable and overlapping ways to establish alternative behaviour, spaces and times that reinforce the potentialities associated with walking by creating micro-practices of aesthetic inhabitation of ordinary spaces.

Since the beginning of 20<sup>th</sup> Century, urban walking and wandering have become pervasive practices in visual arts and literature (Arasse 2000, Davila 2002, Careri 2006, Coverley 2012, O’ Rourke 2013). From the first dadaist excursions in Paris to the surrealist strolls, from the situationist *dérive* to the current nomadic practices by artists such as Gabriel Orozco and Francis Alÿs, walking has emerged as a critical way of engaging the urban and everyday reality (in their many layers), while crossing disciplinary boundaries and redefining the artistic praxis and contexts. The same happened in the field of music when Max Neuhaus stamped the world *LISTEN* on the hands of the audience as they arrived for his concert and lead them, walking through Manhattan, thereby inaugurating a long tradition of artist-led listening walks (1966).<sup>1</sup>

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<sup>1</sup> Max Neuhaus’ *Listen* (1966-76) is a series of works in various formats revolving around collective listening walks led by the artist in different cities in the USA. For these “lecture demonstrations,” as Neuhaus defined them, he welcomed the audience as they arrived to listen to his concert or talk and stamped the word “listen” on

In the arts, but also in theoretical thinking, walking is often understood as a way to establish a privileged and dialectical relation with the everyday and the mobility of the city itself, of its physical and intangible transformations. The micro-practice of walking creates a constellation of relational possibilities. It allows the observation of urban becoming (Benjamin 1982) but also the rewriting and redefinition of its structure (Barthes 1985, de Certeau 1980, Augoyard 1979, Paquot 2008). It establishes an embodied and situated exchange with the environment (Sansot 2000, Le Breton 2000, Thibaud 2008, Thomas 2010), while providing an opportunity to participate in the public sphere and to encounter otherness (Jacobs 1961, Solnit 2001, La Cecla 1988).

On the other hand, sound is a mobile figure par excellence: as Jean-Luc Nancy argued, sound “is first of all presence in the sense of a *present* that is not a being [...] but rather a *coming* and a *passing*, an *extending* and a *penetrating*” (Nancy 2002, 13). Sound is transient, vibratory, in a constant state of displacement, dispersal and transmission. Thus, auditory knowledge emphasizes the movement and becoming of reality, its (connective, transitive) process of appearance and disappearance. Moreover, it is embodied, situated and relational – the listening subject is always part of a vibrational process with the environment and the other subjects (Connor 1997, Nancy 2002, LaBelle 2006, 2010) and always participates in the soundscape he/she listens to. If walking can be considered as a way to establish an embodied, situated and mutual relationship with the environment, the same could be said of listening.

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their hands. Then, he guided them in an exploration of everyday urban environments, sometimes adventuring into industrial or abandoned areas. In this way, *Listen* symbolically and materially operated the artist’s gradual exit from the musical system where he had until then been active. By the same token, he expanded John Cage’s aesthetic reevaluation of everyday sound. Rather than welcoming noise and non intentional sound in an aesthetic context (as Cage did in 1952 with his legendary *4’33’’*), Neuhaus took the listener outside to listen to the sounds of daily life, in the absence of any institutional framework. Through this shift, the aesthetic investment of everyday sound is no longer determined by its repositioning in the institutional and formal system of musical presentation, but simply by the artist’s request to focus on listening.

However, today urban walking is progressively becoming defined through mediated listening experiences. Sound and music organize and demarcate urban space (Sterne 2005), creating an “ecology of sound” (Atkinson 2007) according to social, cultural and functional patterns. Urban soundscapes are generated through negotiation between these collective systems and individual practices (Arkette 2004, LaBelle 2010), shifting continually in relation to our behaviour.

In the last decades, personal audio technologies such as the Walkman and MP3 players have provided a powerful way to reconfigure these auditory dynamics between subjects and shared spaces. They have entered our daily rituals, acquiring a substantial role in both our urban culture and our ways of navigating the environment. Not only does the use of these devices re-contextualize mediated listening in the growing mobility of daily life, it also redefines our interaction with the city in general. On the one hand, we can superimpose our own sound track on the surrounding environment customizing the acoustic form of the city. This allows us to control, organize, aestheticize and, ultimately, re-write of our urban experience (Thibaud 2003, Bull 2007, Hosokawa 1984, Weber 2009, LaBelle 2010). On the other hand, such a superimposition of audio space over physical space becomes an instance of privatization and erosion of our participation, contributing towards a “schizophonic” attitude (Murray Schafer 1977) to our everyday mobility. Many media studies scholars have underlined that listening to Walkmans and MP3 players wraps us in “communication bubbles” (Flichy 1991) or “auditory bubbles” (Bull 2007), isolating us from the contingency and unpredictability of urban experience, from fortuitous encounters with strangers as well as from the media saturation of our cities. Transferring a private listening mode to the public space, the user is placed in an “other space,” an island of solipsistic listening that extends the “territory of the self” to the detriment of shared territories, thus reshaping the geography of urban space and its meaning. As Michael Bull (2007, 9) argued:

iPod culture represents an expression of personal creativity coupled with a denial of the physicality of the city. The city becomes individualized in iPod culture [...]. iPod culture is best understood as a mono-rhythmic approach to urban experience, as against the traditional understanding of urban life as polyrhythmic – a world of certainty against a world of contingency.

From this perspective, mediated listening on the move seems to undermine many of the potentialities associated with walking mentioned above and especially its embodied and contextual nature as well as its serendipitous and intersubjective possibilities.

However, according to some of the literature in sound and media studies, rather than isolating us from our context, headphone listening produces a constant cognitive ambivalence between physical and acoustic space, between a shared space-time and a private one. It establishes a process of multiple dwelling in which mediated and contextual experience interfere and hybridize (Thibaud 2003, Beer 2007, Pecqueux 2009). The French sociologist Jean Paul Thibaud, in particular, underlines three main interferences between headphone listening and the urban milieu (2003, 335-37). The first one is the “interphonic knot,” “the point of convergence between two sonic spaces of a different nature – that of the walking listener and that of the street.” The headphones don’t make us completely impervious to the outside world, the environmental sounds infiltrate our listening experience and, depending on the situation, we can adjust the volume to select the sounds that we deem relevant or, conversely, to blanket the shared soundscape. The second polarity is the “topophonic knot,” “the interference point between media listening and architectural space.” Radio listening, for example, is physically influenced by the urban fabric, so that our position and movement in the city becomes fundamental to the reception of sound. The last interference is defined as “visiophonic knot,” the point of convergence between what we see and what we hear, determined by subjective cultural associations between visual and aural landscape. This last interference involves

imaginary projections related to the music heard in the places we traverse, producing a process of “aestheticization” of urban space.<sup>2</sup>

Starting from these analyses, I would like to suggest that many artistic projects that use portable audio technologies to involve the public in listening paths intervene on the dynamics between walker and urban space precisely by acting on these interferences and hybridizations. In other words, forcing or deconstructing everyday uses and habits, they emphasize the permeability of personal audio technologies and aim to break the “auditory bubble” described by Flichy and Bull according to different approaches. In particular, I propose to look at artistic practice starting from the points of convergence underlined by Thibaud. This suggests three different but osmotic directions – I will call them “revelation,” “overwriting” and “interaction.” Rather than categories, these directions are conceived of as recurring, permeable and often overlapping “tactics,” reconfiguring the relationship between the walker and the urban. They traverse different technological platforms (from Walkman, MP3 players, portable radio to current mobile devices), display modes and categories. More often than not, they converge and co-exist in the same project.

### **Revelation: Augmented Soundwalks**

Many projects aesthetically invest the contextual sound environment by simply “revealing” it through a “poetics of noticing” (Johnstone 2008) that brings attention to the ever changing sound events and rhythms in the spaces we traverse. Although present in many projects, this

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<sup>2</sup> These possibilities of interference between contextual and mediated experience are then multiplied by current networked mobile platforms that establish a continuous bridge between our experience in urban space and in electronic space, thus redefining urban walking as a dynamic of simultaneous presence in multiple space-times or in a “hybrid space” where virtual and material, global and local, collide (Bassett 2005; Kluitenberg 2006; de Sousa Silva 2006; Varnelis, Friedberg 2009). In this paper, I mainly discuss projects using non-networked portable technologies. For a study and taxonomy of projects using networked mobile audio technologies see Behrendt 2010.

direction is particularly evident in works focused on soundscape that, following the tradition of soundwalking, propose listening on the move as an aesthetic experience in itself; as an embodied and situated way of participating in the environment and as a tactic of perceptual re-orientation with respect to the prevalence of vision in everyday experience (Westerkamp 1974).<sup>3</sup>

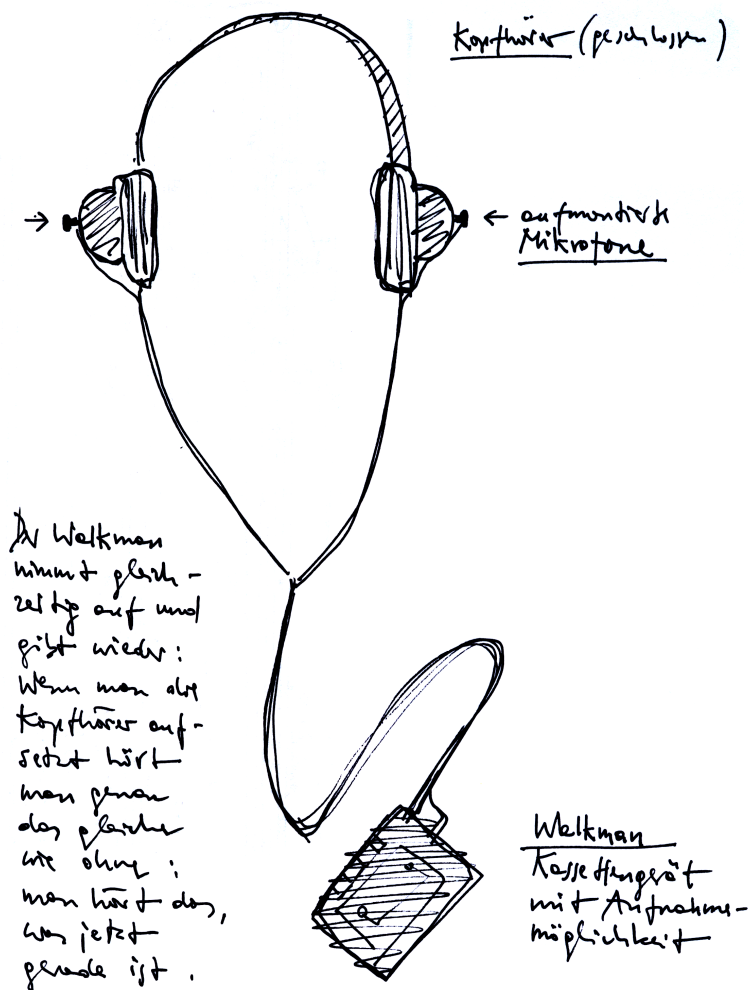


Fig. 1: Peter Ablinger, *Weiss/Weisslich 36, headphones*, 1999. Sketch. Courtesy the artist.

Peter Ablinger's *Weiss/Weisslich 36, headphones* (1999) is a pioneering example of a wider series of projects "augmenting" (Manovich 2006) active listening to environmental sounds

<sup>3</sup> For a historical overview on soundwalking see McCartney 2014, Drever 2009.

through mobile devices. The piece consists of microphones connected to headphones that directly amplify the auditory situation that the listener is in. Therefore, *Weiss/Weisslich 36* creates a short-circuit by using the headphones with the same function as that of Max Neuhaus's stamp in his *Listen* series: inviting us to switch from *hearing* to *listening*. As the artist declared, "What you hear with headphones is the same as without. But: the same is not the same. There is a difference. At least the difference between just being here and: listening. That difference is the piece" (Ablinger 2008, 71).



Fig. 2: Peter Ablinger, *Weiss/Weisslich 36, headphones*, 1999. Version 2004, *Hängende Gärten*, Wienerberg, Wien Modern, Juli-August 2004. Courtesy the artist.

More recently, several artists have played exactly on this "difference" either by developing mobile devices to process the environmental sound in real time or by creating field recording compositions to be listened to *in situ*. A good example of a mobile soundscape processing platform is *Ambient Addition* by Noah Vawter realized at MIT Media Lab in 2006: a simple device made up of headphones, binaural microphones and a portable digital signal processing



unit that analyses, manipulates and replays environmental sound in rhythmical forms.<sup>4</sup> Other projects, involve a compositional process using field recordings of the area to create a sound path that the listener is invited to retrace.<sup>5</sup> An example is *Untitled #290* (2012), an audio walk by Francisco Lopez commissioned by Soundtrackcity in Rotterdam, that overlays a route with five sound compositions created from field recordings collected in the same locations as those where the listener is invited to walk.

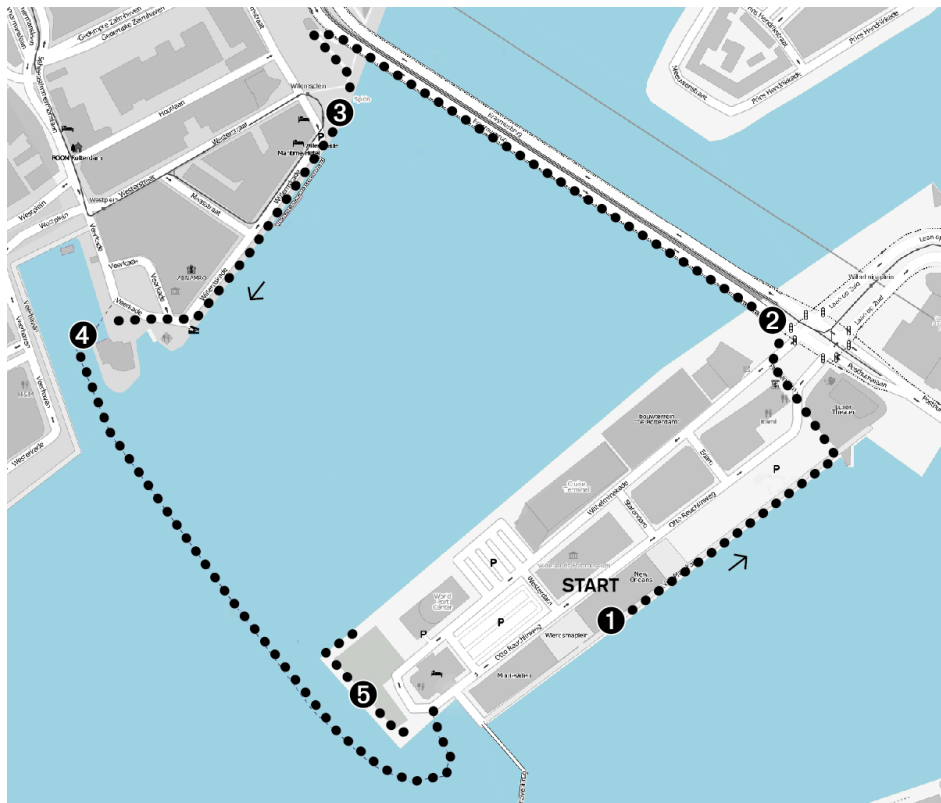


Fig. 3: Francisco Lopez, *Untitled #290* audio walk, Soundtrackcity, Rotterdam, 2012. The map. Courtesy the artist and Soundtrackcity, Amsterdam.

<sup>4</sup> One of the first projects in this field is *Sonic Interface* by Akitsugu Maebayashi (1998), then other projects processing soundscape in real time on the move were developed. Today, these possibilities have already been absorbed by mobile phone applications such as RjDj (defined by the developers as “the soundtrack to your life”) that allows to process the soundscape via “scenes” corresponding to different sound effects. Locus Sonus is experimenting in this direction with LocusCast, a mobile audio streaming app and Pure Data for Android (See: <http://locusonus.org/w/?page=Locuscast>. Accessed November 20, 2014).

<sup>5</sup> One of the first field recording audio walks is probably Cilia Erens’ *China Daily*, 1987 (Erens 2013), although in this work the artist overlays a completely different soundscape on the physical context. On field recording compositions *in situ* see also Kaye 2013 and Thulin 2012. I thank Owen Chapman for directing my attention to these two contributions during the Locus Sonus Symposium *Audio Mobility*.

As in soundwalking, the movement of the listener in space and his/her interaction with the environment become means to orchestrate auditory experiences that welcome the randomness and temporary nature of sound events, but that are also based on their contextual character linked to the acoustic and architectural qualities as well as the social, cultural and functional connotations of each area. Thus, the compositional process takes into account the sonic patterns present in each location and aims to create a track that is complete only if listened to while walking along the route and integrated with the environmental sounds.

By replacing music with compositions based on field recordings, by allowing the listener to directly process the soundscape or simply by amplifying it, these projects force the permeability of headphones – Thibaud’s “interphonic knot” – emphasizing the process of interpenetration between mediated and environmental sound and, more broadly, the relationship between the walker and the space he/she traverses. Paradoxically, our focus on listening and our attention to and interaction with soundscapes is thus underlined through a technologically mediated auditory practice.

### **Overwriting Urban Space: between “Audio Directed Theatre,” “Embodied Cinema” and “Aural Memorials”**

Many projects overwrite the environment by superimposing a narrative acoustic time-space over the physical one. By doing so, they “dramatize” everyday reality immersing the walker in urban adventures, in cinematic experiences on the move, or in a multiplicity of stories, testimonials and interpersonal traces left by the inhabitants of the area returning a fragmented and manifold “image” of the city.

Overwriting takes advantage of the possibilities of “aesthetic colonization” (Bull 2007) of everyday life granted by mobile media. The interference between what you hear in your headphones and what you see in the environment – the “visiofonic knot” mentioned by Thibaud – is emphasized through contextual narratives that reinforce the process of projection of the imagination related to the track being heard in the places being traversed (and vice-versa). Thus, the track re-writes the context as much as the (evolving) context re-writes the track.

By 1981 – that is, just two years after the launch of the Walkman into the market – these potentialities were already being exploited by the Dutch Fluxus artist Willem de Ridder. His project *The Walk* comprised a series of audiotapes and a booklet sold at De Appel Foundation in Amsterdam, that would lead the listener to wander the entire country following the artist’s instructions recorded on a soundtrack that overlaid music, voice and story telling.



Fig. 4: Willem de Ridder, *The Walk*, 1981, one of the participants. © de Appel arts centre, Amsterdam & the artist. Courtesy the artist and de Appel.

Interestingly, De Ridder connects this work to the performing arts and, in particular, to his “Audio Directed Theatre Events” – projects that, through audio recordings or radio transmissions, invited the public to stage actions, micro-performances or to explore the space in random ways on foot, by car or on public transport.



Fig. 5: Willem de Ridder, *The Walk*, 1981, audiocassettes from the collection of de Appel arts centre.  
Photographer: Jan van Geem. Courtesy the artist and de Appel.

Since then, several interdisciplinary artists have used mobile audio technologies to involve the listener in a narrative, to transform him/her into a performer – or, using a term coined by Debord (1963), into a *viveur* – in his everyday sphere. By combining field recordings, narrating voices, music and sound effects as in a soundtrack, these projects suspend the walker between the real and the imaginary and, in many cases, transform ordinary places into a backdrop against which we can act in the first person.

One of the best known artists in this field is Janet Cardiff who, starting from 1991, has produced with George Bures Miller a long series of audio walks conceived both for museum spaces and urban areas immersing the viewer in what she calls a “physical cinema” (Schaub 2005, 100). Her walks are based on site-specific narratives that accept and welcome the unpredictability of the random processes of synchronization that may occur between the soundtrack and the physical context in the here-now of the experience. The listener – provided with headphones, MP3 players and a map – finds his/herself immersed in a complex interplay between reality and fiction, where present, past and imagination are layered over the same place. Urban space is thus reinvented and overwritten: mundane places become venues of extraordinary events and clues of possible stories, activating processes of defamiliarization that renew our physical, psychic and interpretative relation with the environment.



Fig. 6: Janet Cardiff, *Her Long Black Hair*, 2004. Audio Walk with photographs, 46 minutes. Curated by Tom Eccles for the Public Art Fund (June 17 – September 13) Central Park, New York © Janet Cardiff; Courtesy of the artist and Luhring Augustine, New York.

Others artists are working on less individual cinematic processes by creating collective performances and flash mob formats, an example being Circumstance – a group of artists who, for several years, have been developing “subtle mobs,” urban performances enacted by groups of strangers transformed into participants and lead by a downloadable audio track.



Fig. 7: Circumstance, *As If It Were The Last Time*, subtle mob. Courtesy the artists.

Yet other projects use the potentials of overwriting to inscribe *in situ* “counter-histories” or “micro-histories” that create a supplement to official or established narratives of urban space by lending voice to the inhabitants and by collecting memories, testimonies or simple traces. Many of these projects aim to unearth personal, forgotten or deliberately deleted stories; to create an image of the urban as a palimpsest – a layering of histories, anecdotes and micro-occurrences – where the past is experienced “almost as if” it was present.<sup>6</sup>

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<sup>6</sup> On the potentialities of audio walks as an embodied and multi-sensory way to present oral history and cultural geography on site, see Butler 2006.

*Linked*, for example, commissioned in 2003 by the Museum of London, is a project by theatre director Graeme Miller staged in the outskirts of London, between Hackney Wick and Redbridge. It's a site-specific audio walk that makes use of twenty radio transmitters installed along the way to bring back to life the history of the neighbourhood before the contested construction of the M11 ring road in the early 1990s. The work could be experienced by borrowing headphones from local libraries and following a four mile path alongside the ring road. The fragmented narrative of *Linked* is the result of interviews with residents and local groups, an aural monument to the families forced to move and the expropriated homes. The discrepancy between the visible landscape and the memories heard creates a collision of past and present in which the voices of the witnesses haunt a completely transformed landscape.

A specific practice of headphone listening, the audioguide, is critically targeted by several of these projects. They disrupt its narrative strategies and its "heroic" or didactic perspective on the world by directing our attention to more mundane aspects of places, to hidden layers of history or by disorienting, rather than guiding, the listener. Nevertheless, the audio guide format – the sense of proximity of the guiding voice and its peculiar discursive modalities that address the listener in the first person and invite him to act – is often exploited, linking these projects with a longer genealogy of artistic appropriations of the guided tour practice such as the dadaist excursion to Saint-Julien-le-Pauvre in Paris (1921) or the Free-Fluxus Tours (1976).

### **Interaction: Bodily Improvisation Devices**

A third direction is the intensification of the relationship between body and environment through interactive processes where listening and sound making become interwoven through

movement. This strategy is particularly evident in projects that use custom built “bodily improvisation devices” or that modify common technological devices.

The German artist Christina Kubisch is among the pioneers of such practices. She started to explore the potential of mobile listening devices in the early 1980s by making a series of installations in which small telephone amplifiers were used to capture sounds transmitted by colored electrical wires installed in the environment. Moving through the installation space, the listener would create a personal mix between the various sound textures composed by the artist and transmitted via the cables. Since 2003, Kubisch has expanded this strategy into urban space with her *Electrical Walks*. In this series, the listener is equipped with a parasitic device – headsets able to pick up and amplify the ubiquitous waves and magnetic fields present in the urban environment – and, wandering in urban space, finds him/herself immersed in a continuous sound field that is constantly redefined according to his/her location and movements.





Fig. 8: Christina Kubisch, *Electrical Walk*, Ikon Gallery, Birmingham, July 25-October 1, 2006. Courtesy the artist.

This form of interaction with the environment is further expanded in projects by Jessica Thompson. *walking machine* (2003), for example, is a wearable device consisting of lapel microphones attached to the walker's shoes, a mini amplifier and a set of headphones. The unit allows the walker/listener to hear the amplified sound of his/her footsteps – that is to say, the fundamental bodily contact with the environment while walking. Therefore, it becomes a platform of playful interaction both with the different materials and surfaces and with the micro-movements related to walking.<sup>7</sup>



Fig. 9: Jessica Thompson, *walking machine* (2003), Psy-Geo-Conflux, New York 2004. Courtesy the artist.

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<sup>7</sup> Nowadays, several projects make use of advances in the field of sonification or sonic interaction design for mobile networked devices to translate the movement of the listener in sound textures, an example being another recent project by Jessica Thompson: the application for Android *Triangulation Device* (2014). See Jessica Thompson's essay in this issue.

In these projects, the flow of sound heard in the headphones is produced through our actions and our interplay with the environment and listened to in real time – it is the result of indeterminate and indeterminable processes of contingent inhabitation of urban space. Rhythms are superimposed on urban soundscapes, but this “musicalization of the step” (Thibaud 2003, 329) is reinforced by a feedback loop – the mobility of the body and its interaction with the situation is the input that determines the sound track output, while, in turn, sound constitutes the basic rhythm to which we respond in real time reconfiguring it. The sound form is therefore the result of a relational process in which the listener is called to “play” the city. This reinforces the interference between mediated and contextual experience and, in particular, the interference between the position and movement of the body and the environment that Thibaud calls “topophonic node.” Walking becomes a form of behavioural and perceptual experimentation, a way to explore a relational sound universe, as well as the discovery of an expressive language based on micro daily actions. The city is turned into a field for playful improvisation, while mobile technologies become amplification devices for the relationship between body and environment in a generative, subjective and contextual process.

### **Breaking the Auditory Bubble**

This overview suggests that these different directions can be considered as ways to infiltrate the relationship between the walker and the city, paradoxically, by using headphones and private listening to intensify it. As George Bures Miller declared, “We build a simulated experience in the attempt to make people feel more connected to real life” (Schaub 2005: 18).

Playing on the limits between art and everyday life, artists force or break up our practices related to listening on the move and our perception and interpretation of urban space. They contradict the sensory hierarchy based on sight that guides our movements and emphasize listening as way of relating to reality. They defuse the personal control introduced by the Walkman to underline the multiplicity of histories and relationships that makes up every place or the possibility to participate in urban adventures. They transform the supposedly passive experience of headphone listening into a creative and ludic process. Overall, they try to deconstruct the erosion of our participation in urban life.

In any case, when using mobile devices, artists often emphasize a key effect: the continuous oscillations between mediated and contextual experience and the mutual interplay between these two spheres. Mediated listening becomes “a mode of embracing rather than of excluding external impulses” (Gleber 1999, 26), giving space to that “receptive disposition” that Anke Gleber attributes to the *flâneur*. Revealing, overwriting and creating physical interactions are all ways to amplify the interference between mediated listening and the urban; all ways to break the “auditory bubble” by collapsing the boundaries between aesthetic and everyday experience.

Thus, the artwork is redefined as a contextual, embodied and subjective experiential process addressing everyday contexts and habits as much as (and sometimes more than) the aesthetic experience itself. From this point of view, we might consider these works as tactics of temporary suspension of the ordinary forms of experience or experiments of reactivation of everyday practice that reinforce the potentials associated with walking by providing possibilities of aesthetic inhabitation of ordinary spaces.

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## **Biography**

Elena Biserna is a researcher at Locus Sonus, École Supérieure d'Art d'Aix-en-Provence and École Nationale Supérieure d'Art de Bourges. Her interests are focused on listening and on contextual, ephemeral and participatory practices in relationship with urban dynamics, socio-cultural processes and the everyday sphere.

She is part of Sant'Andrea degli amplificatori – an independent association for experimental music and radical sound practices – and collaborated with several organizations for the development of cultural, curatorial and editorial projects. Among her recent projects: *bip bop* – a radio programme conceived as an exhibition space on Radio Città Fujiko 103.1|Bologna, co-curated with Rita Correddu and Alice Militello – and *Walking from Scores* – a collection of artists' scores and instructions on walking, listening and soundmaking in urban space.