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Hearing through the *théâtrophone*:

Sonically constructed spaces and embodied listening in late nineteenth-century French theatre

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Abstract

This article presents a historical and theoretical reflection of the théâtrophone, a late nineteenth-century telephone broadcast service that allowed users at a distance to listen in live to local theatre performances (spoken theatre, opera and musical concerts). Often cited as the first binaural experience in 1881, the théâtrophone's much longer history as a subscription service, which operated in Paris from 1889 through the mid-1930s, is relatively unknown. This article considers what hearing through a théâtrophone meant to nineteenth- and twentiethcentury users beyond its initial 1881 prototype. To hear through the théâtrophone means adopting a methodology mirroring the artefact itself: moving between social, professional, artistic, sensory registers. In doing so, the ways in which the théâtrophone was attuned to discourse and practice emerge, as do more subtle processes involved in new nineteenth-century constructs of hearing and listening. Precisely the théâtrophone's development is examined in relation to its particular social context: its installation on the spectacular Parisian boulevards and its relation to fin de siècle theatre culture. The article first investigates how theatrophonic listening was accorded to existent practices of theatre-going. Second, the article explores the more radical propositions of the théâtrophone in relation to important aesthetic and practical changes occurring simultaneously in theatre culture. The théâtrophone's virtual sonic experience multiplied the forms of a performance and its modalities of creation and reception. Through accounts of 'listening in' the aspects of the new sonically constructed space are described, as are postures of early mediatised listening. The article posits that new modalities of listening are articulated through the théâtrophone, with certain users, including Proust, defining it as a monitoring and creative tool. In this capacity, 'theatrophonic' listening contributed to the development of a refined ear, capable of detecting sonic nuance, which was central to artistic sensibilities at the time.

Introduction

Tucked away amongst late nineteenth-century administrative documents belonging to the Paris Opera, I discovered a pile of discoloured, brittle pieces of a map while visiting the French National Archives (Fonds AJ/13/1189, Archives Nationales [AN]). I began rearranging the rectangular fragments, testing my geographical knowledge of Paris, until a coherent vision of white roads and dusty pink buildings appeared on the table in front of me. The main arteries leading to and around the Paris Opera were depicted (Avenue de l'Opéra, Boulevard des Capucines, Boulevard Haussmann, etc.), and the names of about 30 theatres, restaurants, hotels, cafés and social clubs had been plotted along the streets extending from the Place de la Madeleine and the Place Vendôme to the Boulevard Montmartre. As I worked, a title materialised in the map's corner: 'Projet pour l'établissement dans Paris des auditions téléphoniques

au moyen du Théâtrophone'. I was staring at a proposal for a telephone broadcast service by two engineers, Belisaire Marinovitch and Geza Szarvady. A series of thin black lines connected the different points to a single address: 23 rue Louis le Grand, just around the corner from Garnier's opera house. This would become the head-quarters and telephone exchange of the Compagnie du Théâtrophone,¹ founded on June 18, 1889. The black lines illustrated how a series of microphones placed along stage ramps in theatres would be connected by telephone wire to individual telephone receivers installed in public venues nearby. The possibility to listen in to live performances of spoken theatre, opera, music and 'café concerts' from outside the theatre's auditorium began in 1890.²

This 'theatre at a distance' project would not have been entirely new to Paris residents. The idea was first presented by inventor Clément Ader as auditions téléphoniques at the 1881 International Exhibition of Electricity in Paris, where it received widespread attention and success. Ader equipped two rooms at the Palais de l'Indus*trie* with 20 individual telephone receivers. At any given time 40 visitors could listen for five minutes through earphones to live performances at the Paris Opera and the Comédie-Française (Du Moncel, 1887; Montillot, 1893). Ader's staging of telephony is a striking example of the strategies employed to acquaint a general public with processes of sound transduction and their possible applications; the telephone, phonograph and microphone were all introduced in the late 1870s (Van Drie, 2014a, 2014b). These listening demonstrations were multiplied at the 1889 Universal Exhibition (which inaugurated the Eiffel Tower): Ader's original telephone auditions had competition from Marinovitch and Szavardy, who presented a new portable listening apparatus named the théâtrophone, a sort of prototypical jukebox. Edison was also on site to unveil his improved phonograph model (Bertho-Lavenir, 1989). Common to all these early experiences of mediatised listening was the use of earphones; these helped interrupt direct communication between users and focus their attention on the machine and the sonically constructed space it proposed (Sterne, 2003, p. 163).

The presence of Marinovitch and Szavardy's project map in the Paris Opera's archives indicates the entrepreneurial step that was taken to develop Ader's original idea into a full-fledged media. Diverse correspondence found with the map indicates how the founders of the Théâtrophone Company negotiated exclusive rights to broadcast voices from the Opera's stage before Ader, winning the race (Fonds AJ/13/1189, AN). These broadcast rights (officially obtained in 1891) were a main asset and one reason behind Radiola's acquisition of the Théâtrophone Company in 1923 (Bertho-Lavenir, 1989, p. 68; Testavin, 1930). When Louis Montillot wrote in 1893, 'It is near the fire that one can perceive the most delicate nuances of musical works executed in the principal theatres', he was not alluding to the phonograph, but to this early application of telephony. If only a few venues plotted on the 1889 map initially agreed to a trial installation of the théâtrophone, this number

increased, as did the number of participating theatres. Around 1891 the Théâtrophone Co. added an expensive 'théâtre chez soi' home subscription service. Public and private théâtrophone listening was available until the 1930s in Paris.

The théâtrophone is a relatively obscure artefact and forgotten media in histories of sonic culture and theatre. When mentioned in historical narratives of radio and acoustics, electricity and telecommunications, it is characterised as a surprising precursor that accomplished a series of firsts well before its time. Notably, Ader's 1881 apparatus produced the first binaural listening experience (Paul, 2009): Listeners could sense an actor's movement across the stage. Second, these broadcasts multiplied where and how a theatrical or musical performance could occur. Indeed, this virtual sonic experience, in which the listener was simultaneously present in two distinct spaces, inspired numerous audio-visual imaginaries (Robida's telephonoscope from 1883 is the most famous example [Van Drie, 2014a, p. 177]). For Jonathan Crary (2000, p. 74), the ways in which Ader's dispositive staged mediatised listening exemplified the types of spectacle founding a modern 'politics of separation'.

The Théâtrophone Company's 1889 map attests to a much longer history, the traces of which are still being uncovered. There are many details concerning how the théâtrophone functioned, which still need to be specified. Presenting some

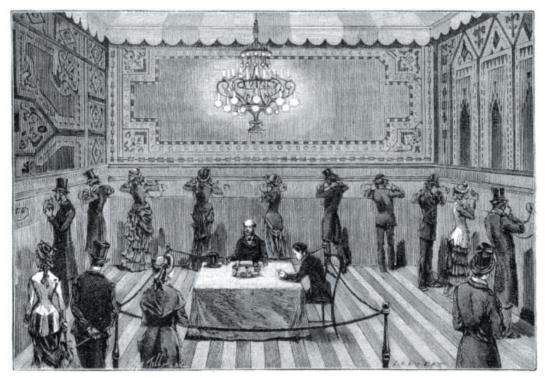


Figure 1: Drawing of the listening dispositive of Ader's 1881 theater telephone system. "L'Exposition d'électricité. Auditions téléphoniques théâtrales système Ader" La Nature, no. 434, 24 Sept. 1881, p. 257.

newly uncovered historical material, this article addresses what hearing through a théâtrophone meant to nineteenth- and twentieth-century users beyond this initial 1881 encounter. It examines how these anachronistic concepts of stereophony, simultaneity and virtuality are engaged in the technology's social applications. Thus, the article underlines the archaeological relevance of the théâtrophone for media and performance studies. The théâtrophone was, of course, not the only telephone broadcast system emerging in the 1890s. Yet, an article announcing the demise of the théâtrophone due to radio underlines its particular, even unique proximity to the scenic arts:

Since the spirit of waves has imposed its dictatorship everywhere, the théâtrophone could not, by definition, fight against such progress. Its expanse of action was more limited and its artistic domain more specifically circumscribed. ("Oraison funèbre", 1936)

The théâtrophone was never a mass media: Questions of poor sound rendition quality and cost are often cited as reasons for the Théâtrophone Company's recurrent financial problems and limited expanse (Bertho-Lavenir, 1989; Testavin, 1930). Yet, unlike other telephone broadcast systems, the théâtrophone was defined by and in its specific broadcasting of local theatre. I posit that the théâtrophone's social and cultural significance emerges through examining the technology in its precise historical context. Hearing through the théâtrophone means returning to its installation on the boulevards, to its elaboration in regard to fin de siècle Parisian theatre culture. The name théâtrophone itself invites intermedial reflection between new sound technologies and the older media of theatre (Bolter and Grusin's [2000] theory of remediation; Van Drie, 2010). The article first investigates different ways that theatrophonic listening was accorded to existent practices of theatre-going. This means investigating how it extended practices and radically transformed those practices. Second, the article explores how people seemed to attune their senses to the théâtrophone's sonically constructed space - which reconfigured familiar theatre sounds and drew attention to sound's materiality. New modalities of listening are articulated through the théâtrophone, and certain theatre practitioners discern it as a monitoring and creative tool. In this capacity, theatrophonic 'listening in' attests to new nineteenth-century constructs of hearing and listening (Sterne, 2003) and contributes to the development of a refined ear (capable of detecting sonic nuance), which was central to artistic sensibilities at the time (Kaltenecker, 2010).

Staying grounded: New registers of mobility

Let us return to the Théâtrophone Company's project map, back to the electric, nervous, twitching heartbeat of *fin de siècle* Paris. Along wide Haussmanian boulevards

and cramped passages, mobility was omnipresent, entertainment options abundant, and *flâneurs* in no short supply. Theatre touched all layers of society, inciting Jean-Claude Yon's (2012) use of the neologism 'dramaticratie' to describe the period. Historian Christophe Charle (2008) concurs in his work on nineteenth-century capitals, where he recalls the centrality of theatre in public life and its paramount role in the constitution of the société de spectacle. In Paris, legislation in 1865 made it easier to build new theatres. A proliferation of performance sites and genres followed, as did the development of media for further prolonging the theatrical event into everyday life (specialised journals, public posters, Musée Grévin; see Schwartz, 1999). Additionally, new sensorial experiences abounded on these boulevards, constructed through the juxtaposition of old and new media. One could choreograph an evening in the 1890s to begin at a café, moving on to test a phonograph in a speciality salon on the Boulevard des Italiens, then attending an act at the Opera before ending in a private salon. There were also single sites, even single performances, that proposed a mix of sensorial registers. For example, after gazing at diverse wax figure scenes, visitors to the Musée Grévin could experience Reynaud's théâtre d'optique or listen to a théâtrophone – which in 1893 broadcast from the 'café concert' Eldorado, the Théâtre des Variétés and the Théâtre des Nouveautés (Schwartz, 1999, p. 115). Additionally, the spectacle mixte was a popular form that combined different spoken drama, song and dance acts with moving images and recorded sound (Pisano and Pozner, 2005). Famous for her nineteenth-century salon, Marguerite de Saint-Marceau (2007, p. 500) described a composite mediatised experience on the boulevards:

[In t]he evening, we went with Jean to the cinematograph. A small voyage to Shanghai, with a view from a battle ship on a raging sea. One sees these things sitting in a armchair. Then crossing the boulevard, with help of a phonograph, one heard Mademoiselle Pacini, an admirable singer and unknown by Parisians. Progress is good (December 28, 1907).⁷

In being installed on the boulevards, the théâtrophone also contributed to the different types of urban entertainment options. If Saint-Marceau described both the phonograph and the cinematograph as ways of discovering a distant unknown, the théâtrophone, by contrast, was firmly rooted in its finite urban network. It was defined principally by its connection to main local theatre events, and its telephone lines were literally embedded in the sewers. The black lines on the Théâtrophone Company's 1889 map graphically allude to the sort of virtual movement that was possible between different environments, between exteriors and interiors. In multiple ways, the théâtrophone elucidates and expounds on the porosity existing between events, spaces and sensorial modalities at the time. Portable théâtrophones were also placed in lobbies or hallways of theatres such as the *Théâtre de*

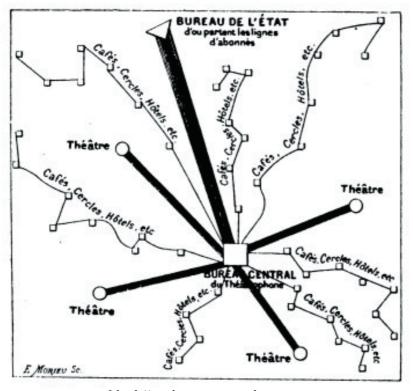


Figure 2: Diagram of the théâtrophone city network. Source: G. Mareschal, Le Théâtrophone, La Nature, June 25, 1892, p. 56.

Nouveautés (1890) or the *Opéra Garnier* (Testavin, 1930). In this way, modes of live and mediatised listening experiences were juxtaposed: One could attend a live performance and then, stepping just outside of the auditorium, listen through earphones to another performance happening nearby.

The théâtrophone also permitted listening to multiple theatre performances in a single session, whether as a public user or private subscriber. A listening session at a théâtrophone placed in a public venue was likely to be short and relatively costly: After inserting a 50-cent coin, one held earphones to each ear and listened in for five minutes; an additional 50 cents bought 10 minutes total. This 'virtual wandering' was inscribed on the portable 'jukebox' model itself: An electric dial indicated which theatre was being broadcast at a particular moment and was changed periodically by the *théâtrophoniste* at the company's exchange. Theoretically, different théâtrophones in the same place could be simultaneously broadcasting different performances (Mareschal, 1892; Testavin, 1930). Author Richard O'Monroy chronicled this fragmented listening experience in *Services de nuit*:



Figure 3: Marinovitch and Szarvardy's portable théâtrophone model, circa 1889. Source: Larousse universel en 2 volumes, Librairie Larousse, Paris, 1923.

One saw them [théâtrophone users], after having slid their fifty-cent coin into the opening, listen with beatitude at a selection of *Miss Helyett*, at a duet of *The Venus Family*, at a choir of *Sigurd*. (O'Monroy, 1892, p. 95)⁸

The home subscription service offered unlimited access to performances. Additional sets of earphones could be purchased so that groups could listen simultaneously, but individually, to the same telephone line. Weekly programmes were distributed to subscribers in which performances were listed by theatre and included the artists' names. In 1891 one could find listings for the *Opéra Comique*, the *Théâtre de Nouveautés* and the *Théâtre des Bouffes*. By 1892 the programme also included the *Opéra*, the *Comédie-Française* and the *Concert Parisien* ("Programmes des auditions du Théâtrophone", BNF). From home the subscriber could interrupt one performance at any time by calling the *théâtrophoniste* and asking to be switched to a different venue (Testavin, 1930; Van Drie, 2014a).

Attuning new modalities of listening and theatre practice

The théâtrophone altered traditional boundaries of the theatrical event and social codes of theatre-going. It defined alternative modalities for a performance's reception-creation, as the performance was transformed into sound and imagined in the spectator's mind. Audition is granted a creative role. This concrete multiplication of a performance's space and means of creation is conceptually radical and should be considered in relation to important aesthetic and practical changes occurring simultaneously in theatre culture at the end of the nineteenth century.

First, let us consider how theatrophonic listening dispositions developed in relation to theatre-going practices. In 1930 Eugène Testavin, the last director of the Théâtrophone Company, described the théâtrophone experience as an extension of attending a performance through the act of concentrated listening. The théâtrophone customer demanded a seamless connection to the theatre's interior and a quality of signal that allowed for easily finding one's sonic bearings within the predefined (pre-imagined) acoustic environment. According to Testavin, the théâtrophone subscriber 'only notices the musical side of things, he asks to have nothing to regulate' (1930, p. 6). Testavin contrasted this posture with those of phonograph and radio users, for whom manipulation of the machine was incorporated into the listening experience (Testavin, 1930, p. 6; Van Drie, 2014b, pp. 185-186). Testavin's characterisation of the théâtrophone user further underlines the technology's precise 'artistic' function cited above.

Theatre in the nineteenth century was an important site for performing social roles: One went to be seen in society. When the audience paused its looking and speaking with one another to direct its attention to the stage, it was to listen intently to vocal performances of (often) well-known text or music. Marcel Proust recalls the importance that being able to fully experience the voice and analyse declamatory or musical techniques had in discourse at the time. In À l'ombre des jeunes filles en fleurs Proust's narrator imagines his ideal situation for experiencing the Berma's voice (based on Sarah Bernhardt's interpretation of Phèdre in 1893): He describes an acoustic space that permits uninterrupted attention on vocal reflections. The narrator wishes to suppress any external sound that could interfere with his sensorial immersion in pure voice; he is anxious to prevent the modification 'of the sound of one of her [the Berma's] declamations by the ruffling of a program' (Proust, 1976 [1919], p. 30). Further, the narrator defines the engaged, active spectator as an acoustic resonator at the service of a single voice. From the instant the Berma opens her mouth, he considers 'auditorium, audience, actors, play and my own body an acoustic milieu, the only importance of which was in the measure of it being favourable to the inflections of this voice' (Proust, 1976 [1919], p. 30).¹¹

In light of this description of perfect theatre acoustics and listening conditions, it is not surprising that Proust subscribed to the théâtrophone in 1911. Ideally, the théâtrophone would have let Proust avoid often crowded and noisy theatres to engage sonically in a work. Indeed, theatre architecture, which catered to the eye, and whose poor acoustics deformed voices, is noted with disdain at the end of the nineteenth century. The théâtrophone promised an alternative to such problems, at least conceptually, positioning the listener along the stage ramp. The primitive stereophonic system connected two earphones to two microphones placed in diametrically opposite positions along the stage; thus, the right ear's microphone was placed to the right of the prompter's box and the left ear's microphone to the left (du Moncel, 1887, p. 125). Movement across the stage was perceived through varying signal changes in separate earphones.

While Proust seemed to invite the idea of isolated listening from his wired apartment, Pierre Véron writing in *Le Monde illustré* (May 8, 1889) had a different opinion. Like Proust, Véron confirmed that the théâtrophone proposed a positive escape from the inconveniences of theatres. However, he stated that hearing a performance through the théâtrophone from a sombre room was the antithesis of theatre-going. Comparing himself to an invalid, Véron described listening to the far-off, lively theatre sounds as accentuating one's solitude and depression. The théâtrophone, for Véron, was like an 'object of torture'.¹²

This reference to listening in isolation resonates with contemporary shifts occurring in theatre practice. The birth of the mise-en-scène (modern scenography) at the end of the nineteenth century is characterised by the darkening of the auditorium, the silencing of the audience and directing the spectator's senses for longer periods of time towards the stage. The unification of the drama's compositional elements and the designation of stage milieu were also central concerns - André Antoine's construction of the 'fourth wall' with actors turning their backs to the audience or Wagner's Gesamtkunstwerk are well-known examples. In 1894 the Revue d'art dramatique published an article by Monsieur Carpentier d'Agneau entitled 'La Pantomime au conservatoire'. In light of the aforementioned changes in theatre aesthetics, the article addressed the need for conservatories to adapt their pedagogy. Notably, it proposed that the actor's vocal and declamatory training be supplemented with classes of gestural technique and movement. In contrast with Proust's desire to relegate everything but the artist's voice to the background, this article proposes to integrate the star performer within a larger concept of the work. The idea of on-stage listening between actors is evoked as a means for creating physical interaction and establishing scenic rhythm (D'Agneau, 1894, p. 137). For D'Agneau, the théâtrophone symbolises the conventional. He connects it to old practices of individual artists trying to vocally attract an audience's full attention. The théâtrophone is not suitable to modern spoken theatre in which vision should be more fully explored:

[...] Once one knows the scenic design well, an opera performance does not lose much if one listens to it with eyes closed or through the théâtrophone. For comedy, spoken drama or tragedy, it is another story, because each day we free ourselves more and more of accepted convention, the eyes would play as much a role as the ears. (D'Agneau, 1894, p. 136)¹³

The allusion to the period's discussion of sensory hierarchy in theatre is noteworthy, as is the reference to the act of listening without visual orientation. As musicologist Martin Kaltenecker (2010) recalls, theories, attitudes and performances of music and theatre experimented with 'blind' listening throughout the nineteenth century. Indeed, in the history of theatre hiding musicians or sound sources was hardly new. However, late nineteenth-century symbolist productions (around 1890) took research of acousmatic sound to a new level. I suggest that symbolist aesthetics were influenced by the auditory dispositives of early sound reproduction technologies and their new mediatised sound environments (Van Drie, 2010). Lugné-Poe's production of La Gardienne (by Henri de Régnier) in 1894 at the Théâtre de l'Oeuvre famously separated the senses. The auditorium and the stage were placed in semi-obscurity, speaking actors were hidden in the orchestra pit, and silent figures mimed on stage. Belgian playwright Maurice Maeterlinck places the act of attentive listening to faint, microscopic sounds at the centre of his new dramaturgy of silence – to hearing the inaudible. In plays such as L'intruse (1890) and Les Aveugles (1891) the audience's ear is invited to aurally scrutinise the theatre's acoustic environment for non-verbal sounds.

This section suggested how theatrophonic listening was defined as extending current theatre-going practices in which listening to and analysing a vocal performance was central. Yet, the théâtrophone's new conceptualisation of sound, space and attention also suggests a rupture with such practices. The multiplication of spaces and modes of attending, the definition of a new practice of acousmatic listening resonates with important reconfigurations of the performance event. Or, at least, reflecting on the théâtrophone allows for certain reflections on sound to emerge among practitioners at the time. One of the main indications of the nineteenth century's particular focus on the human ear was a disruption of sound categories. Jonathan Sterne notes, 'No longer themselves general categories of sound fit for theory construction, the mouth, the voice, music, and musical instruments would become specific contenders for audition in a whole world of sonic phenomena' (2003, p. 33). Maeterlinck's theatre of listening illustrates such a break in theatre hierarchies of sound, inviting the spectator to listen differently, not only to the voice, but to sonic phenomena. The next section explores the figuration of mediatised listening and the particularities of the théâtrophone's sonically constructed space.

Immobilised listening, resonating bodies, acoustic microscopes

Let us return to O'Monroy's sketch *Service de nuit* (1892) and its portrait of the public théâtrophone listening dispositive. It is not surprising that the act of concentrated listening attracted the *flâneur's* gaze:

The others, those who were not listening, watched the figure listening with interest, because it is always interesting to contemplate a wall behind which something happens. And from time to time, on lowering the instrument [earphones], the listener said: "Everyone has a voice of parrot ... why it's very peculiar, very peculiar ..." (O'Monroy, 1892, p. 95; emphasis added).¹⁴

What is striking in O'Monroy's story is the figuration of modern acousmatic media. The way in which listeners were arranged around the théâtrophone, separated from one another, was important for learning how to engage with the sonically constructed environment. Considering the date, for many, Ader's 1881 telephone auditions would have been an initiatory experience of transduced sound. Referring to Figure 1 above, listeners entered a dimmed room and were instructed to stand at individual listening posts mounted along the wall. Facing the wall, they raised transducteurs to their ears and listened in (E.H., 1881). Visual contact was broken through turned backs, and gazes were directed at the machine. With Marinovitch



Figure 4. Portable theatrophone installed in a public space allowing for different listening configurations. Source: G. Mareschal, Le Théâtrophone, La Nature, June 25, 1892, p. 56.

and Szarvady's portable théâtrophone model bodily proximity and frontality were reintroduced among users (Figure 4). However, eye contact between listeners was not re-established. This coincides with visual representation of listening to media at the time, including phonographs, telephones, radios, stethoscopes, telegraphs. Diverted eyes stressed the need to disconnect from external stimuli to focus on the sound coming through the earphones (Van Drie, 2014b; Sterne, 2003, pp. 160-177).

For some, such auditory dispositives did not create a state of attention, but one of controlled distraction or hypnosis. Crary examines the definition of modern spectacular culture through this dualism of attention and distraction (2000). Alfred Jarry (creator of *Ubu Roi*, founder of pataphysics, theatre artist) personified an early phonograph model (which included earphones) as a vampiric siren. In the poem the siren's screeching metallic voice paralyses the listener, while seductive arms (hearing tubes) immobilise the victim's head. Next the listener's eardrums are punctured by the vampire's fingers (earphones), and the brain is drained (Jarry, 2004 [1894], pp. 24-25; Van Drie, 2010). The theatrophonic listening dispositive is portrayed similarly, if less grotesquely, by Portuguese author and Parisian chronicler Eça de Queiroz. In his novel *A cidade e as serras* (1991 [1901]) the théâtrophone is described as prosthetic implantation, the hearing tubes becoming intestines:

And from each ear, which a hand protected, hung a black wire, resembling a coil of intestine. Dornan [one of the listeners], slumped at the table, had closed his eyes and meditated like an obese monk. (de Queiroz, 1991 [1901], p. 88)¹⁵

For de Queiroz, the théâtrophone also 'emptied' its listeners: The corporal positions at the machine created an immobility, a 'pensive mutism' and ultimately a loss of interesting conversation in the salon (de Queiroz, 1991 [1901], p. 88). The newly imposed darkness in the theatre auditorium created an immobilisation and anonymity, which according to theatre scholar Elie Konigson (1998) announced the 'death of the spectator' (Van Drie, 2014a). In contrast, as Proust attested through his resonating body, this shift to hearing in isolation, to listening intently, also indicated recourse to subjectivity and led to developing a sensitive ear (Johnson, 1995; Kaltenecker, 2011). Throughout the nineteenth century hearing had been redefined as a 'physical and physiological activity, a form of receptivity' (Sterne, 2003, p. 96).

For the théâtrophone, knowledge and experience were defined through hearing; new orientations of listening and determining spatial limits were facilitated through the use of earphones. Like other examples of the 'audile technique' (Sterne, 2003), such as a doctor listening to the patient's body through a binaural stethoscope, the above accounts of de Queiroz's theatrophonic and Jarry's phonographic listening could also be read as symptomatic of initial immersion, the first step in becoming acquainted with a sonically constructed environment. Medical anthropologist Tom Rice has labelled first experiences of mediate auscultation 'narrowcast

listening': One feels as if the patient's body sounds penetrate the doctor's ears (Rice, 2012, p. 303). It takes time to become competent in the skill: detecting, isolating and interpreting the subtle variations of the sonic world (Sterne, 2003, p. 97). Indeed, like the stethoscope, the théâtrophone proposed unprecedented observation of the theatre's interior as well as confusion for the novice. De Queiroz's fictional account of theatrophonic listening represents the process of searching for one's acoustic bearings:

One of the women whispered:

—But it isn't Gilberte [singer] ...!

And one of the men:

— Sounds like a trumpet ... and there ... why it's applause! – Ah! It's Paulin [singer]!

It was the Grand Duke, who stood up and angrily shrugged his shoulders: "One does not hear anything! Only quacks! and buzzing! What a bore! It was such a beauty, this little song". (1999 [1901], p. 62)¹⁶

In their search to discover a new song 'Les Casquettes' performed by Gilberte in the *Revue électrique* at the Alcazar Theatre, de Queiroz' characters illustrate attempts to recognise where they are in space and time. The account coincides with other descriptions (like O'Monroy's above) of the inadequate quality of transmissions. If descriptions concerning fidelity vary, what remains constant throughout its history is that the théâtrophone sonically represented the entire theatre space: a mixture of sounds from the stage and audience, including the actor's voice, footsteps on stage, musical instruments, the prompter's voice, the audience's laughter and talking etc. Writing in 1925, French critic Émile Vuillermoz suggested that the quality of the théâtrophone's technology was decent: 'The illusion of a theatre audition is perfect and a thousand small details, awaking in you images and memories, make it all the more striking'. One has to consider that from 1923 onwards the binaural system was replaced by a single microphone on stage, rendering a very different monophonic presence (Testavin, 1930).

While Proust would have certainly found Vuillermoz' experience of awakening memories interesting, his description of theatrophonic listening around 1911 is very different. Proust relates his difficulties in distinguishing different layers of sound and locating himself spatially and temporally in the performance, like de Queiroz's portrait above. Discovering Debussy's *Pélléas et Mélisande* by théâtrophone (*Opéra Comique*, February 21, 1911), Proust admitted to Reynaldo Hahn that he mistook sounds of the intermission for Debussy's new musical palette (Proust, 1956, p. 200). Indeed, Proust would define his own limitations for using the théâtrophone, proposing that 'theatre at a distance' should be used to rediscover, to rehear, to reconstitute in one's inner mind an *oeuvre* with which one is already familiar:

I have subscribed to the théâtrophone, which I rarely use and through which one hears very badly. However, for the operas of Wagner that I know almost by heart, I compensate for the acoustic insufficiencies. (Proust, 1948, p. 234)¹⁸

Alluding to principles of telephonic signal transmission or psychoacoustics, Proust suggests that this new acoustic performance draws on the listener's embodied experience, physiological processes of hearing and memory. The théâtrophone was useful for a person possessing particular listening techniques and artistic knowledge. Jules Clarétie, director of the Comédie-Française (1885-1913), apparently used the théâtrophone to monitor performances, noting actors' missed lines or mistakes (Grappe, 1906, p. 54). Writing in the early twentieth century, Sacha Guitry (an artist who bridged old and new generations of theatre, and who was interested in new media) summarises multiple views on the subject: The théâtrophone is best employed to listen to works that one knows by heart. In contrast to critiques that the théâtrophone does injustice to a performance (Véron, 1889; D'Agneau, 1894), Guitry suggests that the théâtrophone can be used as an acoustic microscope, offering a rich and differing perspective: 'How one becomes aware of a multitude of things, of qualities and mistakes that the eye, distracted by the scenography, prevents one from perceiving! ... It [the théâtrophone] is an effective informer' (Fonds Sacha Guitry, BNF).19

Conclusion

To hear through the théâtrophone means adopting a methodology mirroring the artefact itself: moving between social, professional, artistic, sensory registers. In doing so, the ways in which the théâtrophone was attuned to discourse and practice emerge, as do more subtle processes involved in the nineteenth century's turning focus to hearing. Studies of this particular cultural moment, of Paris' sociéte de spectacle and its theatre culture, have often addressed practices and performances of looking and emerging visual technologies. Indeed, this article has underlined the importance of visual representations to histories of sound: Iconography of early theatrophonic listening aids in understanding its applications, social meaning and imaginary. The théâtrophone's framing of the body and the listener's postures of 'absence' was ripe material for the flâneur's gaze. Adopting a hearing perspective of this technological artefact illustrates how a different story materialises. From an archaeological position, the théâtrophone proposes new historical elements for considering how early sound media were immediately entangled in practices of listening in the education of aural, artistic sensibilities in the nineteenth century. In addition to extending the reach of the theatrical event, the théâtrophone was a means of reflecting on sonic practices and, as Proust and Guitry attested, on the possibilities of using the ear as a tool. From Maeterlinck's incitement to listen to sonic nuance to Proust's deciphering the théâtrophone's sound mix to 'locate' *Pélleas*, the théâtrophone announced a new era of aural creation that actively engaged the spectator-listener's physiological capacities, embodied knowledge and imagination.

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Notes

- Often referred to in English as the theatrophone, this article will use the French spelling *théâ-trophone* as it relates specifically to the history of the French media.
- An earlier draft of this article was presented at the European Sound Studies Association's Functional Sounds Conference in October 2013 in Berlin. This research was conducted during a postdoc in the LabEx Création, Arts, Patrimoine Project at the Paris I-Panthéon Sorbonne University and at the Centre Georg Simmel (EHESS). I would like to thank the reviewers for their insightful comments.
- 3 'C'est au coin du feu que l'on peut aujourd'hui percevoir les nuances les plus délicates des œuvres musicales exécutées dans les principaux théâtres' (Montillot, 1893, p. 441). I have translated all of the French citations.
- In 1893 a private subscription cost 180 francs per year, with a 15-franc tax per use and no limits on the number of listeners or changes between theatres (Montillot, 1893, p. 461).
- The last correspondence I found between the Paris Opera and the Théâtrophone Co. dates from February 19, 1935, concerning an overdue payment (Fonds Rouché 140, docs 67 and 57, BNF).
- 6 Other French cities, such as Lyon, also had a théâtrophone (Altier, 1983). In the 1890s telephone broadcast systems were set up across Europe and the United States, broadcasting sporting

- events, news, church sermons in addition to theatre and musical performances. These include the *Telephon Hirmondó* in Budapest (1893-1944), the *Electrophone* in London (1892-1925) and the Italian *Araldo* telephone (1910-1943). (Balbi, 2010; Marvin, 1988, pp. 209-231).
- ⁷ 'Le soir nous allons avec Jean au cinématographe. Un petit voyage à Shanghai, la vue d'un torpilleur sur une mer démontée. On voit ces choses assis dans un fauteuil. Puis traversant le boulevard, à l'aide du phonographe, on entend Mlle Pacini, cantatrice admirable et inconnue des Parisiens. Le progrès a du bon'. (Saint-Marceau, 2007 [December 28, 1907]).
- 8 '[...] Après le dîner, on était passé dans le petit salon pour prendre le café, puis quelques mélomanes s'étaient adonnés aux douceurs du théâtrophone. On les voyait, après avoir glissé leur pièce de cinquante centimes dans l'ouverture, écouter avec béatitude, qui un morceau de *Miss Helyett*, qui un duo de *La Famille Venus*, qui un chœur de *Sigurd*' (O'Monroy, 1892, p. 95).
- 9 '[...] l'abonné au théâtrophone, au contraire, ne voit que le côté musical ; il demande à n'avoir rien à régler et être déchargé de tout souci d'entretien' (Testavin, 1930, p. 6).
- '[...] qu'on altérât le son d'une de ses paroles en froissant un programme [...]' (Proust, 1976, p. 30).
- '[...] de ne considérer, dès cet instant, salle, public, acteurs, pièce, et mon propre corps que comme un milieu acoustique n'ayant d'importance que dans la mesure où il était favorable aux inflexions de cette voix [...]' (Proust, 1976, p. 30).
- 'Etre dans la chambre à demi obscure, délaissé, invalide et percevoir l'écho des joies lointaines! Mais ce serait un affreux supplément de torture, à ce qu'il me semble, rendant l'isolement plus seul, la vieillesse plus vieille' (Véron, 1889).
- 13 '[...] une fois que l'on en connaît bien la décoration, un opéra ne perd pas grand chose à être entendu les yeux fermés ou dans le théâtrophone. Pour la comédie, le drame ou la tragédie, il en va tout autrement, puisque de jour en jour on recule les bornes des conventions admises, les yeux veulent servir autant que les oreilles' (D'Agneau, 1894, p. 136).
- '[...] Les autres, ceux qui n'écoutaient pas, regardaient avec intérêt la figure de ceux qui écoutaient, car il est toujours intéressant de contempler un mur derrière lequel il se passe quelque chose, et de temps en temps, en reposant l'instrument, l'auditeur disait : "Tout le monde a une voix de perroquet ... Mais c'est très curieux, très curieux [...]" (O'Monroy, 1892, p. 95).
- 15 'Et de chaque oreille, que la main protégeait, pendait un fil noir, pareil à un méandre d'intestin. Dornan, affalé sur la table, avait fermé les yeux et méditait, tel un moine obèse' (de Queiroz, 1999 [1901], p. 88).
- 16 'L'une de ces dames chuchota:
 - Mais, ce n'est pas Gilberte ...!
 - Et l'un des messieurs:
 - On dirait un cornet à pistons ...
 - Et là ... Mais ... ce sont des applaudissements ! Ah ! C'est Paulin ! [...]
 C'était le grand-duc, qui s'était dressé et haussait rageusement les épaules : On n'entend rien ! Que des nasillements ! Et un bourdonnement ! Quelle barbe ! Parce que c'est une

rien! Que des nasillements! Et un bourdonnement! Quelle barbe! Parce que c'es beauté, cette petite chanson [...]' (De Queiroz, 1999 [1901], p. 62).

- 17 'L'illusion de l'audition théâtrale est parfaite et mille petits détails, éveillant en vous des images et des souvenirs, la rendent plus saisissante encore' (Vuillermoz, 1925, p. 93).
- 18 'Je me suis abonné au théâtrophone dont j'use rarement, où on entend très mal. Mais enfin pour les opéras de Wagner que je connais presque par cœur je supplée aux insuffisances de l'acoustique' (Proust, 1948 [1912], p. 234).
- '[...] Comme on se rend bien compte d'un tas de choses, de qualité et des défauts que l'oeil distrait par la mise en scène vous empêche souvent de percevoir ! [...] C'est un dénonciateur terrible [...]. MS letter, no date, folder "Théâtrophone" in "Écrits" (Fonds Sacha Guitry, BNF).