An Episode in the History of an Acoustic Mask

Philadelphia, 1908

Un épisode dans l'histoire d'un masque acoustique. Philadelphie, 1908

Un episodio en la historia de una máscara acústica. Filadelfia, 1908

Stephan Palmié

Electronic version

URL: <https://journals.openedition.org/assr/46061>

DOI: 10.4000/assr.46061

ISSN: 1777-5825

Publisher

Éditions de l'EHESS

Printed version

Date of publication: 31 October 2019

Number of pages: 127-147

ISBN: 9782713227844

ISSN: 0335-5985

Electronic reference

Stephan Palmié, "An Episode in the History of an Acoustic Mask", *Archives de sciences sociales des religions* [Online], 187 | juillet-septembre 2019, Online since 07 January 2022, connection on 07 January 2022. URL: <http://journals.openedition.org/assr/46061> ; DOI: <https://doi.org/10.4000/assr.46061>

Stephan Palmié

An Episode in the History of an Acoustic Mask

Philadelphia, 1908

“Step into the second floor front room of 21[32] Fairmount avenue and get initiated into the strangest form of worship in Philadelphia”. So begins an article featured on page 1 of the *Philadelphia North American* of May 1908. And indeed, its author describes what even by the standards of early 20th century Philadelphia’s exuberantly diversified religious landscape must have been quite a remarkable scenery:

a wonderful place filled with altars, war drums, speaking tubes and trumpets. Over in one corner hangs a figure dressed in white satin and crowned with a garish crown of glittering imitation gems. That’s the Queen of Ethiopia and she is worshipped with due solemnity. On the walls are robes of purple and yellow, masks of strange design, and brushes to sweep away the evil spirits.

Speaking in near accent-free English, the journalist’s interlocutor, a “powerfully built” black Cuban “of about 45 years” named Timothy Leay, amiably explains:

I am Ejamba, the leader. I show the true way; our symbol is the rooster, and we pray to him and dance in his honor. How we worship is a secret, and only the initiated dare to join in.

“I talk with the spirits” the Ejamba continues, “I talk with the spirits and they talk with me. See my echo?” This is something Timoteo Leal (which likely was his name) seems genuinely proud of. The journalist expresses amazement. “There’s something worth the while [*sic*] that echo”, he wrote,

It starts in the middle of the room in a sort of pagoda filled with water. Things that look like painted spools float around gaily. A tiny bell is suspended from the roof of the pagoda and when any spirits happen around [*sic*] they always notify Ejamba Leay by ringing this bell.

From under the water a speaking tube stretches across the room to a converter. It is filled with wheels, has a glass front, and a bit of stovepipe sticks out the top.

Leading into the converter, from the western end of the room, is another speaking tube. Still another tube finds its way into the converter from a kettle drum in the east. This kettle drum is made of a china washbowl covered with skin.

A final tube is carried out into Fairmount Avenue. This has a megaphone exit, and it is from this megaphone that the people in the neighborhood get notice that the spirits are busy [...].

The journalist further tells us that the masks are made from jute. What at first glance seem to be feather dusters turn out to be ceremonial staffs adorned with “the sacred feathers of the rooster which we sacrifice.” Leal assures him that they pray not only to the plumed staffs but also

to the echo. We pray to the big drum in the corner. That represents the seven constellations. We pray to the bow and arrows. We pray to the sun.

What I have excerpted here is likely the only record we have on the “Temple of the Ancient Grace” that the two Afro-Cuban brothers “Timothy and Edward Leal” were operating in Philadelphia at the beginning of the 20th century. I don’t know how contemporary Philadelphians reacted to the sounds the Leal brothers broadcasted onto the street. But I know what the pioneer of Afro-Cuban studies, Fernando Ortiz, made of a contemporary Cuban journalistic recension of this article: he filed it away in what eventually became the folder entitled “*Negros – ñánigos*”¹ in his sprawling archive – which is where I first encountered it in the late 1990s.

What likely drew Ortiz’s interest were a number of intriguing features of the report – most prominently perhaps Leal’s use of the term “*Ejamba*” to designate his ritual office. For it points to a connection between the Leal brothers’ temple and an Afro-Cuban male esoteric sodality known as *abakuá* that emerged in Cuba in the 1830s, and had, by the early 20th century, become a vital force in Havana’s dockside social worlds. To this day, the term *Illamba* (whose pronunciation is close to *Ejamba*) designates one of the four preeminent titles in *abakuá*, and, as we shall see, one of the major ritual functions of the incumbent of this office lies in the activation and transmission of a numinous voice. As Ortiz knew, the social dislocations effected by the Cuban wars of independence (1868-1878, 1895-98) had led to a truly Atlantic dispersal of the form of association and ritual characteristics of *abakuá*. By the time Ortiz clipped this article, not only had *abakuá*-inspired practices surfaced among Cuban deportees to Spanish presidios in North Africa and Fernando Poo; they also had taken hold among émigré tobacco workers in Key West, and it is not unreasonable to presume that the growing Cuban exile communities in the urban Northeast were harboring members of *abakuá* as well².

---

1. A once common heteronym for *abakuá*, nowadays uniformly rejected by its members.

2. For the transatlantic history of *abakuá* see Palmié (2008).

In this essay, I want to present a tantalizing detail from the reporter's account, and then proceed to a more theoretically focused discussion of the rather extraordinary technology that, in the Leals' Temple, might have come to mediate what, following Lifschitz (1988), I would like to call an "acoustic mask". Specifically, I want to foreground what appears to be a remarkable convergence between the phonic and auditory ideologies underwriting the mediation of the divine in abakuá and the technologies of acoustic transmission that had begun to reconfigure Western auditory worlds since the second half of the 19th century. What I will argue is this: just as abakuá's sacramental technologies of sonic transmission – activating the disembodied voice of the mystery – in real world space and historical time generates numinous sound-envelopes that defy precisely those time-space coordinates, so did the rational technologies of sound propagation and acoustic disembodiment of the mundane human voice, that began to flourish in the second half of the 19th century, engender their own numinous penumbra and sacramental logics. Such an argument demands a discussion of both the conceptions of phonation and audition in contemporary abakuá ritual praxis, and the mysteries of sound recording and reproduction in early 20th century America.

***Conceptio per aurum:* phonation and audition in contemporary Abakua**

Much has been written about abakuá's founding myth. But for my present purposes the barest account will suffice. A starting point may be to emphasize one more resonant parallel between contemporary ethnography and the 1908 *Philadelphia North American* report, and note the irony – for anyone familiar with contemporary abakuá lore and ritual praxis – present in the fact that in the journalist's account it is a *woman* who gives an approximation of the phonetic qualities of what she and Leal call "the echo". "Do the spirits really talk?" asks the journalist. "Why," answers she, "I have been in there alone and the drums have started beating on their own account, and the echo made a noise like this – Whoo-o-o! – and then I got away". Which is what the mythical woman *Sikan* failed to do when she first heard the voice of *Tance* – the piscine ancestral presence that she accidentally scooped up in her calabash when drawing water at the embankment of *Usagaré* from the river *Oldán* that bisects the territory of *Bekura Mendó* in the *Efó* region of abakuá's mythical homeland, *Enlennisón*.

It is the end of a starry night. *Enquico*, the rooster, sings on the hill top where *Ecueñón* the hunter, waits for his prey, bow and arrow poised for the kill. A caiman initially blocks *Sikan*'s path to the river, but the man soon to experience transformation into the *íreme Eribangandó* clears her way with a ritual brush. She bows down, scoops up a calabash of water, but when she hoists it on her head, a tremendous roar issues forth from the container. It is *Obon Tance* – a numinous presence in the shape of a fish – who speaks to her

in his otherworldly voice. Having been the first to hear Tance's awesome *logos*, Sikan confides her terror to her father *Mocongo* or her husband *Isunécue*. Either or both betrays her to the supreme chief *Illamba* and the sorcerer *Nasacó* who had been tracing Tance's movement and vocalizations in the lagoon for days. *Ecueñón*, whose name means "slave to *écue*" is ordered to kill her. However, even before Sikan meets her violent end, Tance is dead as well. His voice has fallen silent.

Horried, *Nasacó*, *Illamba* and the other *obones* (founding figures, soon to become titles) try to revive and recuperate its awesome, lawgiving sonic capacities. What ensues is a strangely phonocentric version of the search for a male social contract: Sikan is seated on three stones awaiting her immolation when she begins to menstruate, thus foreshadowing the feeding of the three-footed friction drum around which the ritual technos enabling men to cause other men to be "born over the drum skin" (*ecória ñene abakuá*) will soon congeal. Following Sikan's execution, *Nasacó* fuses her skin to that of Tance. To no avail. Much blood is shed in vain in their frantic experiments. It is only when they resort to sacrificing *embori* – the goat – that "*el parche*" (the drum skin) eventually takes shape and, once fused to *ocanco* – the ceiba tree – becomes operative as *nambe erí*, the "flesh of the voice". What results is a technology capable of transmitting "*la voz*" across time, materializing its awesome sound. This is the moment from whence an unbroken chain of "*transmisiones*" of the voice links the *cuarto fambá* (interior sanctum) of their temples and the ritual exterior spaces (*isaroco*) to the primal "*embarcadero*" of Usagaré where the sound approximated by the onomatopoeitic phrase "*el uyó*" was first materialized in, and mediated by, an esoteric biotechnological phonic device: *el écue*.

But reviving the voice is only the first step in its reproduction. It now begins to spread in space and time. Here we can switch to the sequence informing contemporary *barocos* in all their multi-mediated splendor. Hours of pre-dawn work go into the "*fabricación*" – production or better perhaps: assembly – of the conditions under which *écue*'s voice can be transferred to a medium that will carry it forward in time and social space by enabling men "born over the drum skin" to perform assisted reproduction in bringing into being other such of men. Even before midnight, the titleholders of a *potencia* will concoct "*la wemba*" and the basic ingredients of "*la mocuba*", the former a cleansing fluid, the latter a liquid conductor of *écue*'s extrasonic powers; they will begin to write authorizing glyphs ("*firmas*" or *anaforuana*) with yellow chalk on all major ritual implements as well as on the ground leading from the innermost sanctum towards the door of the temple, charting the path the voice will travel hours from then.

In all of this, as Brown (2003: 58) notes, "the physical temple" is only a space through which *écue* "maintains its relationship to the world." The voice itself "lives" in the waters from where it has to be summoned, and to which it eventually returns. To this end, a *potencia* activates a ritual infrastructure composed of an elaborate network of human, man-made, and natural agents:

a sacramental machinery designed to conduct or, better perhaps, *transduce*, a numinous energy into a variety of worldly forms, available to the human sensorium. The altars, drums, staffs, and insignia, the hieroglyphic writing, even its ritual personnel are mediators that need to be brought to a vanishing point of im-mediation that is reached when the “*plazas*” (titleholders) have once more become the ancestral presences who bring about the sounding of *écue*’s voice (Peters, 1999; Sterne, 2003). Once the “*fabricación*” nears its completion after hours of esoteric ritual “work” (“*obras*”), Nasacó will trace a line of gunpowder along the elaborate diagrammatic “*firma*” that will mark the path for *écue* to once more emerge and sonically transform the world within its acoustic range – for those capable of heeding its call.

What emerges from the Temple’s door is the first stage of “*la procesión*”, the major “*plazas*” followed a drum orchestra: guided by the *íreme* Eribangadó who once more clears the path, they go in search of the voice. Only when they return will Illamba begin to apply his fingers on the resonant surface of a small, three-footed friction drum that is the source of *écue*’s vocalizations. The transductive mediation from one form of energy into another suffuses the entire event. Strictly speaking, the *baroco* is no “reproduction” of an originary moment of revelation. It is an instantiation of presence beyond time. Illamba’s fingers merely carry *écue*’s numinous energy over into the phenomenal, i.e. auditory world, where it will pass through and bring into being further chains of transduction.

What ensues is a synesthetic riot that involves elaborate “*conversaciones*” between *écue* and “*la música*” (i.e. a five piece drum orchestra), the *íremes* who, though mute themselves, will react to modulation in *écue*’s volume and timbre in a gestural language, and the officiating “*plazas*” who will judge from the sound whether or not the ritual steps they just executed were pleasing to “*la voz*” or badly executed. Transmitted to *nambe erí* – the drum skin – by the motions of Illamba’s hand, *écue*’s power shifts from numinous to auditory to kinetic and – as Ortiz (1952-55: 234) recognized – not just aesthetic, but ethical modalities.

Écue jubilates when the *indísime* (candidates for initiation) are lead into the *fambá*. The head of the new initiate is placed on top of the *sese eribó* – the mute drum which only moments before supported the severed head of the sacrificial victim *embori* – and is “crowned” with the powerfully vibrating presence of *écue* herself. Conversely, during the type of funerary rite known as *enlloro* or *llanto* after the death of one of a *potencia*’s members, *écue*’s initial joyous vocalizations turn into lamentations. Just as the powerful sound of *écue*’s voice was necessary to transform his body into a medium of her propagation – a *conceptio per aurum*, as it were – so can that body not be expedited to the grave without *écue*’s taking leave. *Écue*, in other words, has intentionality, sensory powers, and is capable of expressing affect – all the while affecting ritual actors within its phonic reach, sacralizing and directing their actions. It is, in sum, a mask – just not a visual one that subsumes the body of its wearer under its power, but an acoustic one whose sacralizing capacities

extend to all who know how to experience and heed its call (Lifschitz, 1988; Napier, 1988; Brown, 2003: 37).

In this sense, the acoustic mask that is *écue* is a complex assemblage of human and non-human agencies. And I think I am cleaving rather close to the views of contemporary *ecória ñene abakuá* when I qualify it as a biotechnology that, while capable of exerting powerful agency on its own, needs to enlist human actors not only to compose its material instrumentalities, but to transduce its mystical energy from the numinous to the phenomenal realms, *thereby reproducing* its agency across secular space and time as well. This is even more obvious in some of the activities entailed in a *baroco ninllao* – that is, the type of ritual in the course of which not only individual members, but new chapters of *abakuá* are “born”.

Here is the barest account of what *abakuá* have been calling “*la mecánica (de la transmisión)*” since at least the 1950s when Cabrera (1969: 157) recorded that term in a comparable instance. Different from the “*juramento*” (swearing in) of individual new *obonécues*, the coming into being of a new *potencia* demands a different type of “*fabricación*”: one that involves recreating the “*mecánica*” originally deployed by the African slaves who found themselves “swaying back and forth like the waves” (*quende máriba quende*) upon disembarkation at the dockside of the town of Regla in the first decades of the 19th century. Few will venture to speculate on how this event actually occurred. But there is wide agreement that the original group of Cuban founders could not have been in possession of a consecrated *écue* brought with them from Africa. How then to reactivate the voice? The solution was found in substituting the interior shell of a coconut now known as “*el coco de efique botón*” (named after the first *potencia* of *abakuá*, founded in Regla in 1836), and to this day, a coconut shell figures as the primary transmitter of “*el uyó*” to any new *écue*-drum and the “*piezas*” or “*atributos*” (staves, drums, *afóíreme*, etc.) of a *potencia in statu nascendi*. Such transmission is a complex and protracted process during which seven different voices have to be brought into successive mystical resonance to prepare every single ritual implement for activation. In order to effect this, the “*coco*” is sounded as if it were *écue*, while the functioning *écue* drum of the *potencia* sponsoring the “birth” of a new one is suspended in a tub (“*batea*” or “*palangana*”) of water from where the transfer is being effected by the phonic emissions of certain objects and animals. Lengthy *encames* (orations) accompany the process, but even though its detail remains highly esoteric, it is once more clear that its goal consists in a form of mediation that results in “pure presence” or immediacy.

Ghosts in the machine: making things talk, c.1908

Was the “echo” at 2132 North Fairmount Street el “*écue*”? Chances are that the journalist simply misheard what Leal and the unnamed woman said. Clearly, under such a description even more details of the report seem to fall into place: the drum in the corner, the washbasin, perhaps even the pagoda-like

structure. Leal's remark "I talk with the spirits and they talk with me," would make perfect sense.

Yet what about all the tubes, the aquatic "converter", the painted spools, the speaking trumpets, the megaphone? Hard as it is to tell from the journalist's account what exactly the Leals had set up at their Temple of the Ancient Grace, and to what degree the "echo" was propagated by electroacoustic means, there clearly were forms of mediation involved in the Leals' temple that contemporary Cuban *obonecues* would regard as inappropriate, unacceptable, even potentially sacrilegious. Any attempt to assimilate these to contemporary Cuban ethnography will likely go nowhere. And that is as it should be. In fact, it might be as ostensibly preposterous to suggest that the contraptions at 2132 North Fairmount Avenue were a precursor to Caribbean sound systems technology as to book them as an off-shoot of abakuá. Ostensibly preposterous: for both contemporary Cuban abakuá and Jamaican sound systems, in fact, share the use of interfaces between humans and technologies to effect what Henriques (2003) calls "sonic dominance," that is the creation of social contexts in which the sheer physical volume or the semiotic weight of sound begins to privilege audition as the pre-eminent sensory modality over and above other aspects of the sensorium.

What interests me instead is the kind of cultural threshold the Leals and the unnamed journalist jointly inhabited at the beginning of the 20th century. I want to ask how this juncture – the dawn of electroacoustic analog media – may have brought what one might call abakuá's sonic and auditory ideologies³ into a momentary alignment with regimes of sonic semiosis that were then still far from becoming fully rationalized, let alone naturalized in the way contemporary Western hearers routinely consume mechanically reproduced sound. As Sterne (2003: 2) so well puts it, just as "there was an Enlightenment, so too was there an 'Ensoniment'" that paralleled the rise of visualism in the "West" to a degree that has, until recently, largely remained unappreciated.

Though understandings of sound as oscillatory pulsations transmitted through media such as air can be traced back as far Aristotle, the primary focus of post-enlightenment acoustic and phonetic research had been on the production, rather than reception of audible phonation – on the mouth, rather than the ear, on the origins of sound, rather than on its effect in the world. The re-orientation of thought about sound and practices of its manipulation that made possible electro-acoustic technologies, as they started to proliferate in the second half of the 19th century, was based on multiple transfers of knowledge between domains that had barely begun to differentiate institutionally – physics, physiology, and phonetics. The gradual secularization of electricity, indeed, the diffusion of practical knowledge about electromagnetism, paved the way for what – following Sterne (2003) – we might call a largely unheralded

---

3. In Webb Keane's (2003) sense of a metapragmatics regimenting socially routinized practices of attaching relatively specific sign values to the materiality of semiotic forms, in this case sonic vibrations registered as auditory apperceptions.

transductive revolution. That is, a protracted, if principled revaluation of sonation *and* audition as a *joint* phenomenon – and one that revolved around the transduction of one source of energy, sonic vibrations, into electromagnetic impulses, and back into auditory frequencies. The key, as it turned out, were not the physiological mechanics of vocalization, but those of audition.

While Morse had managed to reduce linguistic signage to a code of binary electrical impulses enabled by mechanical circuit-breakers, telegraphy remained, despite its amazing impact on global information flows, just what its name suggested: writing at or across a distance. To be sure, telegraphy represented a dramatic departure from older communication technologies aiming to supersede the limited capacities of speech and handwriting to bind time and space (such as the printing press and publishing networks) (Peters, 1999: 138-143), and it may come as no surprise that the spirit rappings of Hydesville, N.Y. commenced a mere four years after Morse had successfully demonstrated that his system of transducing mechanical into electrical impulses could carry coherent semantic weight in nearby Rochester (Connor, 1999; Stolow, 2009). Yet while the birth of Spiritualism from electromechanic telegraphy nicely exemplifies the convergence of a much older “electrical sublime” with a novel technological interface allowing for disembodied communication in (almost) real time, the birth of telephony already brings us closer to some of the mysteries that may have animated the voices emanating from the Temple of the Ancient Grace at 2132 North Fairmount Avenue.

As Alexander Graham Bell himself told the story in the massive transcript of the 1892 Massachusetts Circuit Court law suit threatening annulment of his patents, in the spring and summer of 1874, he was experimenting with the phonautograph (an apparatus for translating sound waves into graphic traces invented in 1857 by Leon Scott). “I was struck,” says Bell (Bell Telephone Company, 1908: 29).

by the likeness between the mechanism of the phonautograph and the mechanism of the human ear, the membrane of the one being loaded by a lever of wood, and the membrane of the other by levers of bone. It appeared to me that a phonautograph modeled after the pattern of the human ear would probably produce more accurate tracings of speech-vibrations than the imperfect instrument with which I was operating.

“For this purpose,” Bell continues, “I consulted a distinguished aurist,” his friend Dr. Clarence J. Blake, a pioneer in American Otology, then affiliated with the Massachusetts Charitable Eye and Ear Infirmary and Harvard Medical School.

He seemed much interested in my experiments, and suggested that, instead of trying to make a phonautograph modeled after the pattern of the human ear, I should attempt to use a human ear itself, taken from a dead subject, as a phonautograph (*ibid.*).

And so they did. Well connected to the source of corpses at Harvard Medical School, made possible by the 1832 *Massachusetts Anatomical Act*, Blake supplied two middle ears – whose extraction and resection he describes in lovingly detail in his own publications on the matter (Blake, 1878) – one for his own experiments, one for Bell to take to his summer home in Nova Scotia. The results were eminently satisfying. Much as in the case of Nasacó's experiments with various membranes cut from sacrificial victims in his attempts to revive Tance's voice, the tympani of middle ears cut from the bodies of Harvard's dead paupers or criminals proved a breakthrough: once mounted on a microscope stand, moistened with glycerin and water, and outfitted with a stylus that transferred to a plate of smoked glass the vibrations registered by an ear drum no longer connected to a living human being, but recruited into auditory science as an agent of what Sterne (2003) calls "tympanic transduction", Bell and Blake's so-called ear-phonograph graphically rendered sound like no other device had ever before.

For Bell the disproportion between the ear drum's diaphragm and the bones moved by it suggested that "a larger and stouter membrane be capable to move a piece of steel" (Bell Telephone Company, 1908: 39) – in other words, a conduit for electromagnetic "undulations": "At once the conception of a membrane speaking telephone became complete in my mind; for I saw that a similar instrument to that used as a transmitter could also be employed as a receiver" (*ibid.*). Sound became an effect registered by the human sensorium, rather than an independent cause in the world. It has remained so ever since.

Thomas Alva Edison's discovery of phonography has been described as involving a similar logic of human sacrifice, this time not that of the ears of cadaveric organ donors, but his own blood. The count de Monceil (1879: 237), himself a pioneer of electrified communication, recounts the episode as follows:

In the course of some experiments Mr. Edison was making with the telephone, a stylus attached to the diaphragm pierced his finger at the moment when the diaphragm began to vibrate under the influence of the voice, and the prick was enough to draw blood. It then occurred to him that if the vibrations of the diaphragm enabled the stylus to pierce his skin, they might produce on a flexible surface such distinct outlines as to represent all the undulations produced by the voice, and even that the same outlines might mechanically reproduce the vibrations which had caused them, by reacting on a plate capable of vibrating in the same way as that which he had already used for the reproduction of the Morse signals.

De Monceil expressed skepticism about this myth of origin (and there, indeed, are other versions). Yet the blood-sacrifice occasioned by the transduction of sound to Edison's own flesh has its equivalent in Edison's physical engagement with the sonic technologies he was bringing into being. One reason for why Edison applied the stylus to his finger in the first place was that a childhood bout with scarlet fever had left him partially deaf. As he recounted on several occasions, it was his deafness which had led him to telegraphy, his fateful

experiment with Bell's telephone, and the subsequent "perfection of the phonograph". This was because his auditory disability forced him to analogize between different sensory modalities and their receptivity to sound waves as a form of energy (Edison, 1948: 47-48, 53-54). A 1913 advertisement thus quotes him as saying "I hear through my teeth ...and through my skull. Ordinarily I merely place my head against the phonograph. But if there is some faint sound that I don't quite catch this way, I bite my teeth into the wood, and then I get it good and strong" (cited in Peters, 2004: 191). The uncanny nature of such merging of body and machine into the conduit of an absent presence – previously recorded sound – was not lost on Edison's contemporaries.

Given its capacity to arrest time by capturing acoustic data flows in a series of mechanical traces – analog indices of past sonic events – the phonograph's necromantic potential was immediately obvious. What particularly astonished the reviewer of Edison's first phonograph in *Scientific American* (1878: 385) was "the startling possibility of the voices of the dead being reheard through this device", thus producing "the illusion of real presence" – the dream of transcendence and immediation come true in the human voice permanently separated from the speaking body.

In Edison's (1878: 530) own words, the "captivity of all manner of sound-waves hitherto designated as 'fugitive'" – including human vocalizations – "their permanent retention", and their "reproduction with all their original characteristics at will, without the presence or consent of the original source, and after any length of time" could now be considered as "*faits accomplis*". While much of this was hyperbole, given the miserable sound-quality of early tinfoil recordings, and their rapid deterioration in the course of very few replays, Peters (1999: 160) is correct when he argues that the phonograph was "a more shocking emblem of modernity than the photograph" which, after all, recurred to conventions of iconic representation reaching back at least to Renaissance perspectivism. If the telephone had seemed to cut distance out of communicative processes, as the *Scientific American* reviewer's evocation of Eucharistic language suggests, phonographic recording not only appeared to undermine time's status as an *a priori* dimension of human life, but to relativize mortality itself.

Though not – at least not then – given to explicit statements about the spirit world, Edison more than hinted at this when he outlined a series of uses of the phonograph that included, significantly, "preserving the sayings, the voices, and the last words of the dying member of the family – as of great men" (Edison, 1878: 533). Ten years later, venturing into what, at the time, was becoming known as psychophysics, he made an even more ominous comment about the subsumption of the original into the copy. While in his earlier essay he had hinted at future forensic uses of the phonograph, he now (Edison, 1888: 649-650) argued that

The phonograph, in one sense, knows more than we do ourselves. For it will retain a perfect mechanical memory many things which we may forget, even though we have said them.

Edison's initial prosthetic device designed to overcome the temporally evanescent nature of the human voice had turned into a Derridean supplement to the kind of personhood that had hinged on the continuity of memory since Aristotle and had been hitched to forensic notions of individual accountability by Locke. The new regime of hearing his invention inaugurated spread across the globe as quickly as it began to reverberate through a whole variety of cultural domains. Some of them were highly receptive to the enchanted potentialities the phonograph helped usher in.

Phonurgia pathetica: Mr. Edison's transductive cosmology

Ever since Edison's announcement of the "perfection" of the phonograph, much advertisement and newspaper copy were expended on extolling the magic worked by the transductive agency of the phonographic diaphragm, or the similarly magical hold the recorded trace seemed to exert in conjuring the original. Not infrequently, early writers on the wonders of phonography speculated that had Edison's invention occurred in less enlightened times, its simulacral work would have been perceived as witchcraft (Read, Welch, 1959: 18-24). An equally popular *topos* was the displacement of self-consciously "modern" ambivalences towards electroacoustic technology not onto one's own unenlightened ancestors, but on the primitive Other elsewhere. Yet, as Taussig (1993) and Brady (1999) have noted, Western attempts to imbue the phonograph with mystical attributes played on acoustic sensibilities and semiotic ideologies characteristic of the Victorian world that tended to quickly break down when projected elsewhere. As Brady (1999: 46) puts it, that the voice of the phonograph would have initially been invested with "quasi-supernatural authority" was by no means an effect that exposure to this technology would have "naturally" produced among human listeners. It had everything to do with Western notions of the semiotics of sound and audition. Thus while the phonograph may not have made much of an impression on people accustomed to communicating with disembodied others – in vision quests, oracles, shamanistic trances or spirit possession – it amply worked its magic upon the Western imagination. Not the least this was so because the phonograph raised "the problem of presence" (Engelke, 2007) in a fashion that had hitherto been largely unthinkable, but immediately seemed to resonate with longstanding metaphysical questions in western religious and secular thought.

Foremost among these was the question of life after death. Perhaps not ironically, the time-transcendent epistemic superiority of the mechanical copy over the biotic original that Edison's 1888 remarks had aimed to convey, was to take its recursive toll on the creator himself. Evidence for Edison's own curious electrobiotic monadology goes back to his brief collaboration with George Miller Beard, a physician, founding editor of the short-lived *Archives of Electrology and Neurology*, and author of massive tomes dedicated to *American Nervousness* and *Sexual Neurasthenia* who came to Edison's rescue

in the course of the controversy over Edison's premature announcement of his discovery of an "etheric force" in 1875 (Wills, 2009). By 1878 Edison had taken up correspondence with Madame Blavatsky and became a member of the Theosophical Society.

In 1910, Edison offered his own bio-mechanistic vision of the universe. Like cities such as New York (Edison's favorite example), human individuals were really aggregates of myriads of life-units, their bodies shedding cells just as social aggregates were shedding members upon the death of individuals. And just like memory in the individual brain that was "like the phonograph cylinder" in preserving "things which have been impressed upon it by the mysterious power that actuates it", the brain, like any machine, could not be conceived of as "immortal". Machines, after all, break down.

From such a perspective, death seemed to lose its sting. Just like the individual "meat machine" endowed with a mental phonograph that ensured the coherence of its mortal identity was a replaceable part in the New York City-like cosmos, so were its individual cell-borne "life units" part and parcel of a larger cosmic drama conceived of as unraveling under the impact of new technology impinging upon the human body and sensorium, challenging its "life units" to re-aggregate in novel adaptations. The inventions produced by mortal "meat machines" like Edison himself, in other words, drove onward the perfection of the human race.

Along such lines, late in his life, Edison finally outed himself as a proponent of a rather more than casually spiritualized materialism. "I am working on the theory that our personality exists after what we call life leaves our present material bodies," he told Bertie C. Forbes (Forbes, 1920: 11). Though "reluctant to discuss the machine he was reported to be building for the apprehension of messages from the dead", as the New York Times' A. D. Rothman (1921: 1) reported a few months later, Edison "did admit that he was engaged – had been engaged for a number of years – in the construction of such an apparatus". When a man dies, Edison told Rothman

the life units which have formed that man do not die. They merely pass out of the unimportant mechanism which they have been inhabiting, which has been called a man and has been mistaken for an individual, and select some other habitat or habitats. [...] These little entities of personality which I hope to detect with my apparatus are still animal entities. (*ibid.*: 1, 6)

"If my theory is correct," he writes (*ibid.*: 215-16) "then I think it is possible to devise apparatus [*sic*] to receive communications, if they desire to make them". Such an apparatus "would rid the world of harmful superstitions such as spiritualism" (*ibid.*: 224).

Did Edison ever build such an apparatus? As Wainwright Evans (1963) claims, he did. Writing for *Fate Magazine*, Evans recalled an interview he had with Edison's private secretary William Meadowcroft in 1921. He told him that "according to Edison's theory, what survived death would be an electronic replica, so to speak, of the body as it was in life – a sort of electronic ghost,

made up of an aggregate of the ‘entities’ or ‘electrons’.” “This collective entity”, Edison reasoned, “would be able to put forth physical energy, and could presumably manifest its presence through a mechanism if one sufficiently sensitive were available” (*ibid.*).

In the article’s remainder, Evans unravels an intricate story about how, in 1941 (i.e. ten years after Edison’s death), J. Gilbert Wright, a General Electric researcher and inventor of silicone rubber, and his associate Harry C. Gardner received communications from Edison through a spirit medium, set about locating the blue-prints for Edison’s apparatus, and then tried to reconstruct it. It eventually took the form of an aluminum trumpet mounted on top of a microphone enclosed in a sound box and filled with a potassium permanganate solution, that acted as an electrolyte once connected to an antenna the base of which was submerged in the solution at one pole and connected to the microphone at the other. Alas, the contraption did not seem to successfully transmit any life units. And so, and in a beautiful exemplification of the dialectics of ensoniment, Wright and Gardner eventually resorted to the, by then rather old-fashioned (see below), solution of having a human medium project an ectoplasmic larynx into the sound box through which spirits would speak into the microphone. Edison apparently “came through” and recommended the use of Wright’s silicone putty as a lining for the sound box. But while one would doubt that Edison approved of such hybridization of what psychic researchers would nowadays call a “transcommunicative” device, his spirit remains active to this day in furthering the electromechanics of future telephonic communication between the living and the dead.

The phonograph unmasked: high fidelity

Edison’s enchanted musings appear to have come too late to give us a handle on how to judge the impact of late 19th and early 20th century sonic technologies on the world the tenants at 2132 N Fairmount Avenue might have inhabited. But Edison’s increasingly mystical pronouncements on the technologies he had helped bring into being were only symptomatic of a larger dialectic that enchanted technology in the service of rationalizing the numinous. Ironically it was precisely this moment that had already characterized, even driven, much of 19th century spiritualism. If Comte had suggested sociology as the religion to end all religions, his countryman Allan Kardec had thrown the afterlife open to positivistic investigation (Porter, 2005; Vasconcelos, 2008). Indeed, it should come as no surprise that the member lists of British and American Spiritualist societies soon featured the names of some of the most prominent scientists of the second half of the 19th century dedicating themselves to the rational pursuit of the irrational. In turn, spiritualism itself became a veritable vortex, sucking up new communication technologies almost as soon as their invention became public knowledge.

If spirits somewhat belatedly appropriated photography as a medium for manifestation⁴, they began using Morse code shortly after the initial 1848 rappings at Hydesville. Thomas Watson (1926: 42-43), Bell's assistant, spelled out the logic in his autobiography: "mediums are endowed with the power to transform subtle, bodily radiation into a mechanical force that produces the raps, movements, and slate writings as a steam engine changes heat into mechanical motion or a telegraph transforms pulsations of electricity into the taps of the Morse code". Small wonder then that the spirits were poised to make themselves heard in what came to be known as "direct voice manifestations" once telephony and phonography made hearing disembodied speech a matter of increasingly common experience.

As Connor (1999: 212) describes the practice that appears to have attained its heyday just after the turn of the 20th century, "direct voice" manifestations involved "a voice which speaks independently of the medium's vocal organs".

Often in "direct voice" manifestations, the spirits would employ a trumpet (resembling a speaking trumpet or megaphone rather than the musical instrument), or even a series of trumpets, which might be placed in the room at a distance from the medium. (*ibid.*: 212)

Electromagnetic transduction seems to have been a widespread model for direct voice mediumship. The spiritualist W. W. Aber's instructions for producing trumpet manifestations thus recommend: "Place a trumpet in a basin of water in the center of the floor; form a circle around it, and connect the battery by touching feet all around the circle" (Aber, 1909, cited in Enns, 2005: 14). Trumpet Medium Mrs. Cecil M. Cook likewise favored the use of electrolytes: "Somehow, the voices seem to come clearer when the trumpets are moist. There is something about the forces that resembles electrical energy" (Cook, 1919, cited in Enns, 2005: 14).

His frequent diatribes against Spiritualism notwithstanding, Edison could not but have agreed on matters of principle. After all, both he and Bell had experimented with placing induction coils over their heads to effect sound transference. In 1876, Bell invented the Centennial Liquid Transmitter, a transductive device curiously akin to a speaking trumpet mounted on top of a liquid filled vessel (Bell Telephone Company, 1908: 99) – or, for that matter, to the central element of the Leal brothers' contraption: a speaking tube sticking out from a container of liquid, stretching across to a converter, complete with a bit of stovepipe on the top, and another tube leading into the converter from a kettle drum made of a skin-covered china washbowl!

Different from earlier, more agitated mediumistic performances such as those pioneered by the Fox sisters, trumpet mediums were characteristically passive,

---

4. It took 22 years between the invention of Daguerreotype and William H. Mummler's 1861 announcement that he had successfully photographed a spirit.

their mouths closed, their bodies mere conduits (tympanic membranes?) for the transmission of spiritual emanations that would take on audible form through the trumpet. While spirit trumpets were manufactured in a variety of forms and designs, many of them bore more than incidental resemblance to the Victrola horn, or, for that matter, the horns sticking out of the window of 2132 N. Fairmount Ave. in 1908. Had *écue*'s voice and its material instrumentalities – *nambe erí*, “the flesh of the drum” – found a new medium for its sonic propagation? Might the Leal's contraption perhaps even have provided a worldly storage for its numinous energies?

If so, such convergences alone would tell us little. Surely ideas about the electroacoustic transduction of numinous energies into the sublunar phenomenal sphere were swirling around in the social worlds that the Leals, to some degree, shared with Edison. Perceptions of audio technologies as conduits for the numinous were contingent upon the increasing social pervasiveness of semiotic ideologies that metapragmatically regimented how specific types of mediated sonic data output could be indexically construed as iterable forms of collectively salient semiotic input. No matter the extent to which analog recordings do carry the material traces of an original event, indexical recognition, as we might say with Keane (2003: 419), comes at a price: it needs to be furnished with socially routinized instructions so as to occur at all.

Such rules of recognition for technologically mediated indices of the numinous were proliferating in luxurious heterogeneity in late 19th century urban America. But while one cannot guess from the journalist's account how exactly the Leal brothers' sound system functioned, and to what degree it was electrified, it is not unimaginable that they may have been engaging in their own brand of enchanted engineering. At least, they seem to have managed to convince a social collectivity (of what size we do not know) that their contraption activated “the echo”/el *écue* in a way some of its hearers found convincing. In doing so, they might have fought to overcome the same barriers to the “willing suspension of disbelief” that early pioneers of electro-acoustic media struggled with.

This issue pertains to contemporary abakuá rituals just as it would have pertained to the Leal's contraption in 1908, and precisely because it has its bearing on any socially meaningful form mediation. Could you or I, with a bit of practice, apply a piece of bamboo to a friction-drum, and make it emit sounds closely approximating *écue*'s awesome *uyó*? You bet we could. But would such exercises yield more than fairly meaningless, perhaps even debased replications of an “original” sound? Just as my singing of a Verdi aria, however well-executed, will not substitute for the scratchy excess of the best turn of the 20th century analog recordings of Caruso's voice, the copy will remain haunted by the original – or, and this is the crucial point, an *idea* of it. But this idea is one that only became thinkable as the basis for an ontology of mediation once Western listeners became accustomed to the notion that there *could* be an “original sound” in the absence of the potential for its artificially mediated reproduction

across space and time⁵. The very notion of sonic “fidelity” betrays a social absence of faith in the medium. The challenge the Leals might have faced was thus not whether or not their technology *faithfully rendered* the sound of *écue*’s voice. It was to insure that their sacramental actions believably collapsed into each other what Charles Sanders Peirce might have called the “interpretant” with its “representamen”: the idea of *écue*’s voice and the sonic vibrations emerging from the tubes, trumpets, etc., as they affect the human sensorium.

Just like the sonic impact of *écue*’s voice will register as a mere drone among uninitiated bystanders at contemporary abakuá rituals, so can early audio technologies in no way be said to have capitalized on *mere* technologically achievable mimesis. What people heard on Edison’s tinfoil recordings, or, for that matter, over Bell’s first telephones was largely noise. That they actively forged a culture of hearing in which copy and original could become habitually understandable as “naturally” commensurate, even equivalent in the strong sense, has now been duly forgotten as history, as Bourdieu’s might have put it. But such forgetting was not a process of fading or attrition, nor was it a mere response to improved technological means. It was “cultural work”. What stands at the threshold of such forgetting are icons such as RCA’s Nipper – the faithful dog not just listening for, but being hailed by, his (dead) Master’s Voice. Nipper’s quizzical look notwithstanding, the image reminds us just how much investment of belief was necessary to cross the threshold beyond which Edison’s phonograph really *did* come to convey the recorded copy’s permanent fidelity to the hitherto evanescent “original”. What a triumph for a correspondence theory of representational truth! But what a hollow victory, at one and the same time.

If my conjectures are right, it is this very threshold at which the technology the Leal brothers installed at 2132 North Fairmount Avenue must be situated. The emerging American social faith in technological “fidelity”, and the Leals’ experiments with technologically enhancing what members of abakuá nowadays call “*la fabricación*”, and potentially electrifying “*la mecánica*” of sounding *écue*’s voice would have been part and parcel of one and the same “structure of the conjuncture” (Sahlins, 1981) between two different historical streams and semiotic systems. That early phonograph companies would have adorned their logos with recording angels (the Christian dream figure of communicative im-mediacy, cf. Peters, 1999: 74-80) or faithful dogs listening to dead masters was part and parcel of a “dialectics of ensoniment”. The phonographic machinery pressed the voices of the dead into the service of the living not by concealing a reality beyond appearances, but by enveloping both in a cloud of paradoxical undecidability.

---

5. Benjamin (1969: 217-251) famously caught on to this cultural moment: is not the very notion of “auratic loss” product of an ideology of mediation that could not have been developed in the absence of technical reproducibility? As he puts it (*ibid.*: 243 n. 2) “at the time of its origin, a medieval picture of the Madonna could not have been said to be ‘authentic’. It became ‘authentic’ only during the succeeding centuries and perhaps most strikingly so during the last one.”

In this sense, the technology itself took on the ambiguities usually ascribed to ritual masks. Ever since Lévy-Bruhl, the anthropology of masking has uneasily (and often quite illogically) vacillated between suppositions that the wearer of a mask is either believed to undergo an actual transformation into the numinous presence the mask is supposed to bring into world, or that maskers and/or their audiences are well aware that masquerades are based in histrionics and the kind of pious suspension of disbelief they maintain in the course of masked performances (Napier, 1988). If so, might not the necromantic frisson cultivated in the writings of early commentators on, and promoters of, phonography bespeak exactly the same dilemma? Did American and European hearers of the phonograph really believe that they were hearing the dead, we might ask – or did they willingly collude in crafting a set of collective representations suggesting the equivalence of the audible copy to the absent original? Was hearing believing? Was, to spell it out, early phonography a modernistic acoustic mask?

By the same token: might not Ejamba Leal have perfectly understood what was at stake in phonographic re-presentation? Different from their American contemporaries, the Leals might have seen nothing intrinsically mysterious or surprising in “tympanic transduction” or analog recording. This would have been so because abakuá ritual had revolved around this principle ever since the members of the “*cabildo de los carabalí á papa efi*” managed to swear in the first Cuban chapter of abakuá in 1836. The Leals might have perceived analog sound technology as a fairly rational enhancement of the means to the end of sacred immediation.

If so, this would have been because the multiple human and material media activated, harnessed to, and fused with each other in the course of a *baroco* constitute what I have called a complex biotechnology that does not *represent* but facilitate the emanation of pure presence. Transducing *écue*’s voice from one ontological sphere (the waters where it “lives”) to another – the *cuarto fambá* from which it emerges, and the *isaroco* which it sonically envelops – so curiously parallels the telephonic and phonographic transduction of the human voice by electroacoustic means that the Leals may have immediately grasped these technologies’ “poietic” potential. If the physical space of the temple and its ritual personnel is merely a conduit through which the voice “maintains its relationship to the world” (Brown, 2003: 58), then we arrive at a point where harnessing a “found” (but already amply enchanted) technology to the propagation of the acoustic mask that is *écue* could have made eminent sense.

Assuming that the Leals did employ electro-acoustic technology to transduce *écue*’s voice, would they have shared in their American contemporaries’ ambivalently reverent investments in Edisonian media? This, of course, is anyone’s guess. Still, spinning my conjectures to a conclusion, it remains to be asked why they might have taken over elements of the sonic ideologies of their immediate social environment. In the case in the Leal brothers’ Temple of the Ancient Grace, *techné* and *poiesis* collapse into each other. Means and ends have become coextensive. The mediator that refurnishes the world has vanished into the furniture. The medium would have been the message – and *vice versa*.

But this is as far as my conjectures can take us. In the end, the Leal brothers' techno-religious experiments remained fruitless – at least as far as I can tell. Nothing socially enduring ever came of their efforts. As everywhere else – excepting the three Cuban port cities of Havana, Matanzas and Cárdenas – attempts at transplanting abakuá's organizational format, and mode of reproduction failed. The Leals' Philadelphia *potencia* (if it was that) apparently faded away, never achieving the stage where holding a *baroco ninllao*, and so birthing and authorizing independent daughter cells became possible. But if I am right in surmising that their elaborate contraption fused abakuá ritualism with state-of-the-art electroacoustic technology, this may tell us quite a bit about the rationality, indeed modernity, of abakuá, and the irrationality, indeed multiply enchanted nature, of the auditory regimes Bell, Edison, and others helped to usher in at the turn of the 20th century.

If *écue*'s voice did, in fact, ring out from the Leals' trumpets onto N. Fairmount Avenue, perhaps we could do better than treat this as a curious episode in the history of the public reception of electroacoustic technology, or, for that matter, in the history of the acoustic mask that is *écue*. More could be said about the way in which audio-electric technologies have changed the world since 1908. But the lasting irony, perhaps, is that while sonic analog media have virtually vanished from the Western world at the beginning of the 21st century, the Leals' attempts at techno-ritual innovation never made a lasting impact on the "*fabricación*" and "*mecánica*" by which contemporary members of abakuá continue to transmit *écue*'s voice across space and time.

Stephan PALMIÉ
 University of Chicago
 palmie@uchicago.edu

Bibliography

- BELL TELEPHONE COMPANY, 1908, *The Deposition of Alexander Graham Bell in the Suit Brought by the United States to Annul the Bell Patents*, Boston, American Bell Company.
- BENJAMIN Walter, 1969, *Illuminations*, New York, Schocken.
- BLAKE Clarence J., 1878, "The Use of the Membrana Tympani as a Phonautograph and Logograph", *Annals of Ophthalmology and Otology*, 5, p. 108-113.
- BRADY Erika, 1999, *A Spiral Way: How the Phonograph Changed Ethnography*, Jackson, University of Mississippi Press.
- BROWN David H., 2003, *The Light Inside: Abakuá Society Arts and Cuban Cultural History*, Washington, D.C, Smithsonian Institution Press.
- CABRERA Lydia, 1969, *La sociedad secreta abakuá: narrada por viejos adeptos*, Miami, Ediciones C and R.
- CONNOR Steven, 1999, "The Machine in the Ghost: Spiritualism, Technology and the 'Direct Voice'", in P. Buse, A. Stott (eds.), *Ghosts: Deconstruction, Psychoanalysis, History*, New York, Macmillan, p. 203-225.
- EDISON Thomas A., 1878, "The Phonograph and Its Future", *The North American Review*, 126, 262, May-June, p. 527-536.
- , 1888, "The Perfected Phonograph", *The North American Review*, 146, 379, June, p. 641-650.
- , 1948, *The Diary and Sundry Observations of Thomas Alva Edison*, New York, Philosophical Library.
- ENGELKE Matthew, 2007, *The Problem of Presence: Beyond Scripture in an African Church*, Berkeley, University of California Press.
- ENNS Anthony, 2005, "Voices of the Dead: Transmission/Translation/Transgression", *Culture, Theory, and Critique*, 46, p. 11-27.
- EVANS Wainwright, 1963, "Scientists Research Machine to Contact the Dead", *Fate*, 16, 4, p. 38-43.
- FORBES Bertie C, 1920, "Edison Working on How to Communicate With the Next World", *American Magazine*, 90, p. 10-11 et 85.
- HENRIQUES Julian, 2003, "Sonic Dominance and the Reggae Sound System Session", in M. Bull, L. Back (eds.), *The Auditory Culture Reader*, Oxford, Berg, p. 451-480.
- KEANE Webb, 2003, "Semiotics and the Social Analysis of Material Things", *Language and Communication*, 23, p. 409-425.
- LIFSCHITZ Edward, 1988, "Hearing is Believing: Acoustic Aspects of Masking in Africa", in S. L. KASIR (ed.), *West African Masks and Cultural Systems*, Tervueren, Koninklijke Museum voor Midden-Afrika, p. 221-29.
- MONCEIL Theodore Count de, 1879, *The Telephone, the Microphone, and the Phonograph*, New York, Harper and Brothers.
- NAPIER A. David, 1988, "Masks and Metaphysics: An Empirical Dilemma", in S. L. Kasfir (ed.), *West African Masks and Cultural Systems*, Tervueren, Koninklijke Museum voor Midden-Afrika, p. 231-40.
- ORTIZ Fernando, 1952-1955, *Los instrumentos de la música afrocubana*, La Habana, Cárdenas y Cía.

- PALMIÉ Stephan, 2008, “Ecué’s Atlantic: An Essay in Method”, in S. Palmié (ed.), *Africas of the Americas: Beyond the Search for Origins in the Study of Afro-Atlantic Religions*, Leiden, Brill, p. 179-222.
- PEIRCE Charles S, 1940, *The Philosophy of Peirce: Selected Writings*, (J. Buchler ed.), London, Routledge and P. Kegan.
- PETERS John Durham, 1999, *Speaking into the Air: A History of the Idea of Communication*, Chicago, University of Chicago Press.
- , 2004, “Helmholtz, Edison, and Sound History”, in L. Rabinovitz, A. Geil (eds.), *Memory Bytes: History, Technology, and Digital Culture*, Durham, Duke University Press, p. 177-198.
- PORTER Jennifer E., 2005, “The Spirit(s) of Science: Paradoxical Positivism as Religious Discourse among Spiritualists”, *Science as Culture*, 14, p. 1-21.
- READ Oliver, WELCH Walter L., 1959, *From Tin Foil to Stereo: Evolution of the Phonograph*, Indianapolis, H. W. Sams.
- ROTHMAN A. D., 1921, “Mr. Edison’s ‘Life Units’: Hundred Trillion in Human Body May Scatter After Death – Machine to Register Them”, *New York Times*, January 23, p. 1, 6.
- SAHLINS Marshall, 1981, *Historical Metaphors and Mythical Realities*, Ann Arbor, University of Michigan Press.
- STERNE Jonathan, 2003, *The Audible Past: Cultural Origins of Sound Reproduction*, Durham, Duke University Press.
- STOLOW Jeremy, 2009, “Wired Religion: Spiritualism and Telegraphic Globalization in the 19th Century”, in S. M. Streeter, J. C. Weaver, W. D. Coleman (eds.), *Empires and Autonomy: Moments in the History of Globalization*, Vancouver, UBC Press, p. 79-92.
- TAUSSIG Michael, 1993, *Mimesis and Alterity: A Particular History of the Senses*, New York, Routledge.
- VASCONCELOS João, 2008, “Homeless Spirits: Modern Spiritualism, Psychical Research, and the Anthropology of Religion in the Late Nineteenth and Early Twentieth Centuries”, in F. Pine, J. de Pina Cabral (eds.), *On the Margins of Religion*, Oxford, Berghahn, p. 13-37.
- WATSON Thomas A, 1926, *Exploring Life: An Autobiography*, New York, D. Appleton and Co.
- WILLS Ian, 2009, “Edison and Science: A Curious Result”, *Studies in the History and Philosophy of Science*, 40, p. 157-166.

An Episode in the History of an Acoustic Mask. Philadelphia, 1908

In 1908, two black Cuban brothers, held a temple on Philadelphia's North Fairmount Avenue, which appears to have combined Edisonian sound technology with elements from the ritual repertoire of the Abakuá male esoteric brotherhood. I suggest that the technologically enriched "echo" of the Leal brothers can be analysed heuristically as the locus of a remarkable convergence between phonic and auditory ideologies underlying the mediation of the divine in the Abakuá, and acoustic transmission technologies through time and space – particularly telephony and phonography – that had begun to reconfigure the Western auditory worlds by the second half of the 19th century.

Keywords: ritual, technology, sound, Afro-Cuban religions.

Un épisode dans l'histoire d'un masque acoustique. Philadelphie, 1908

En 1908, deux frères noirs cubains, tenaient un temple sur l'avenue North Fairmount de Philadelphia, qui paraît avoir combiné la technologie édisonienne du son avec des éléments du répertoire rituel de la fraternité ésotérique masculine Abakuá. Je suggère ici que l'« écho » technologiquement enrichi des frères Leal peut être analysé heuristiquement comme le site d'une convergence remarquable entre les idéologies phoniques et auditives sous-tendant la médiation du divin dans l'Abakuá, et les technologies de transmission acoustique à travers le temps et l'espace – en particulier la téléphonie et la phonographie – qui avaient commencé à reconfigurer les mondes auditifs occidentaux dès la seconde moitié du XIX^e siècle.

Mots-clés: rituel, technologie, son, religions afro-cubaines.

Un episodio en la historia de una máscara acústica. Filadelfia, 1908

En 1908, dos hermanos negros cubanos sostenían un templo en la avenida North Fairmount de Philadelphia, que parece haber combinado la tecnología del sonido de edisonia con elementos del repertorio ritual de la fraternidad esotérica masculina Abakuá. Sugiero aquí que el «eco» tecnológicamente enriquecido de los hermanos Leal pueda ser analizado felizmente como el lugar de una notable convergencia entre las ideologías fónicas y auditivas que subyace a la mediación de lo divino en la abakuá, y las tecnologías de transmisión acústica a través del tiempo y el espacio – en particular la telefonía y la Fonografía – que habían comenzado a reconfigurar los mundos auditivos occidentales desde la segunda mitad del siglo XIX.

Palabras clave: ritual, tecnología, sonido, religiones afrocubanas.