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Sounds as spatial language

Alessandro Dozena*

Department of Geography, Federal University of Rio Grande do Norte, Natal/RN, Brazil

***Corresponding author:**

alessandro.dozena@ufrn.br

Abstract

Our spatial experience involves listening to musical and non-musical sound sources (natural or artificial), this experience being subjectively appropriate based on the ordering of sounds and noises within the scope of our standards of rationality. Noises, sounds and music have increasingly become part of geographic studies, and active listening becomes valuable in this process, in the same way as vision. The objective of this article is to highlight the fact that sounds constitute spatial languages, a means of communicating ideas or feelings through sound sources. This proposition infers that when listening to music an individual also "hears the territory", insofar as musical characteristics such as melody, harmony, scale and rhythm are related to specific spatial conditioning.

Keywords: sounds; geography; language; space.

1. Echoes in Geography

*By defining sight with the language of sound,
it makes it easier to tune.
To look with the ear, is to let the sound jump,
Humming geography
Knowing the sound, the tone changes
For higher or lower, in the right metric,
Music awakens, redefines what sight is.*

For decades, Brazilian Geography has been considering the works carried out on the musical and sound dimensions, especially those written in French and English, which were published mainly after the "cultural turn" in the 1980s, appearing

prominently in the international academic debate. In Brazil, this discussion has intensified in recent years, based on issues involving musical territories¹, spatial perceptions and representations of sounds and music, soundscapes, musical scenes, musical territorial identities, the spatial dimension of sounds and music; in addition to the use of song lyrics as a didactic tool in teaching of geography. Likewise, the approach to geographical imaginaries promoted by sounds and music is gaining prominence today (Lindón; Hiernaux, 2012) ^[1], proposing territorialities shaped by sound fluidity and musical processes.

Continuing the precursor works, such as those carried out by the French Georges de Gironcourt (1932) ^[2], Brazilian geographers have set their research in motion, inserting sounds and music at the heart of their geographical approaches and expanding dialogues with other disciplines and perspectives for understanding reality, such as anthropology, psychology, philosophy, musicology, history, ethnomusicology, sociology and pedagogy (Canova; Raibaud, 2017) ^[3].

We seek with this article to highlight the fact that sounds constitute spatial languages, a means capable of communicating ideas or feelings from sound sources. This proposition considers that when listening to music an individual also "hears the territory", insofar as musical characteristics such as melody, harmony, scales and rhythms are related to specific spatial conditioning (for example, the *frevo* from Recife has an intrinsic relationship with the places of its production), or when contact with the landscape is inspired by a song or musical rhythm, and incites geographical imaginaries (such as bossa nova or *funk*, and the immediate relationship we established with the city of Rio de Janeiro). As Raul Borges suggests, musicalities are associated with "spatialized" societies at specific moments:

Music can be perceived as a living language of a historical-geographical context, just as in the particular scalar articulations of each place there is a certain musicality implicit (Borges, 2008, p. 289). ^[4]

Our spatial experience also encompasses listening to non-musical sound sources (natural or artificial), this experience being subjectively appropriate from the ordering of sounds and noises at the heart of our rational thought patterns.

¹ For a theoretical approach on musical territories, see: *L'information géographique – Géomusique*. Armand Colin, vol. 4, 152 p., 2018.

This auditory experience of space includes listening to sound emissions and the possibility of locating and organizing them in terms of timbres and other sound aspects, such as the perception of emptiness or filling when we rattle a wooden container with coins inside, or a can with beans transformed into a *ganzá* (Brazilian percussion instrument). Of course, the acuity of hearing is not equivalent to that of sight, but it is equally necessary for spatial perception:

At the sensory and physiological level, despite the open visual field, sight is focused on a point of greater acuity called the fovea. But hearing seizes space without a center or without such a sharp focus. Hearing allows the ability to locate, but unlike central vision, there is no "central hearing." This is due to a physiological factor partly explained by the topography of the visual system prolonging the space information observed in the cortical tissue, as opposed to the absence of topography of the 'basilar membrane' where the sound sensors are located inside the ear. In this sense, and as with sight, it is important to have two ears to establish positions in space. The time difference in the reception of a sound makes it possible to locate its origin and create a three-dimensional representation of the sound sources (Matlin; Foley, 1996, p. 298 *apud* Almeida, 2018, p. 166). ^[5]

Therefore, the poem that opens the article suggests that by defining sight with the language of sound, we redefine the very act of looking. This premise dialogues with the definition of language found in the most important dictionary of the Portuguese language, the Houaiss Dictionary, by asserting that it is "any systematic means of communicating ideas or feelings through conventional, sound, graphic and gestural signs".

It is worth remembering that music is the harmonious and expressive combination of sounds, a set of vocal, instrumental or mechanical sounds with rhythm, harmony and melody. Music is an artistic manifestation that reveals itself through sounds, following variable rules according to the time, civilization, ways of life and the natural environment. Hence the importance of always referring to sounds and music, with the intention of encompassing the fullness of sound possibilities (from the *muzak*² heard in commercial stores, even the songs of religious character that are reverberated in different spaces).

² According to the Cambridge Dictionary, "a brand name for recorded music that is played quietly and continuously in public places, such as airports, hotels, and shops, to make people feel relaxed". Our translation. Available at: <https://dictionary.cambridge.org/pt/dicionario/ingles/muzak>

In other terms, songs can be defined as humanly organized sounds, related to patterns of human organization and sounds produced as a result of social interactions (Blacking, 1973).^[6]

Therefore, spatial materiality also plays an important role in musical experiences: whether in the architecture of the theater, allowing greater sound projection, in the position of musicians in an orchestra/musical band in relation to the audience, or with respect to the acoustic effects arising from natural reverberation from sound reflection.

2. Sounds, spatial conditioning and active listening

Since the beginning of the Twenty-First Century, many musical compositions treat the spatial dimension as a prominent element. This is the case of electronic music, in which space has been explored not only in relation to the position of the musicians, the audience and the use of reverberation, but also with regard to the effects caused by the movement of sound accompanied by an evident sound dispersion.

The body also brings the marks of culture in the spatial context in which it is inserted, pointing out ways to understand a performativity that starts from the body itself and involves the movements performed and influenced by the musicalities present in the places. In this way, there is a dialogue with the place, which is presented in the body, from elements of the spatial context. It is not for nothing that the different ways of appropriation create territorial subjectivations that are reproduced in music, melodies, rhythms, dances, lyrics and harmonies.

There is a relationship between the body and the spatial context in which it is inserted, and each society expresses itself differently according to the bodies and their different cultural constructions. Inserted in its particular spatial context, each society produces its culture and its result.

Debating with the thought of Merleau-Ponty (1964)^[7] we can consider that the body builds identification processes between the personal world and the public world and, in the interaction with the other, some aspects of one's own identity are reaffirmed or even discovered. Through the act of dancing or playing, the body articulates a language that places subjects in territorially locatable groups, groups that maintain ancestral relationships in which bodily experience fixes the territory in existence, to the extent that the body is the being in the territory.

We can expand this reflection if we consider that the issue of corporeality is directly associated with the issue of musicality, which in turn, is related to the richness of sounds from songs, religious rituals and dance. In this way, musicality can be seen as an alibi for reaching some geographical facts, especially when we find that the lyrics and sonorities bring with them a historicity that uses important metaphors for the deconstruction or construction of socially established concepts and preconceptions.

Another interesting fact is the perception, in geographical research, that sounds and music act as existential motivators and are intrinsically connected to the processes of territorialization, identity rooting and population migration. Such processes are accompanied by ambiguities in the constitution of spatial and musical identities (Croizat, 2016).^[8]

One of the main effects of globalization was the dissemination of the sounds and musical styles of different localities, contributing to the configuration of hybrid musical territories. There is even a significant tendency towards revivalism, with the predisposition and intention to revive musical styles and songs of the past, updating them in a cultural context demarcated by post modern characteristics (Bell; Johansson, 2009).^[9]

The worldwide phenomenon of "mass music" dialogues with our time, interacting with local and global narratives, integrating deterritorialized and at the same time territorialized musical tastes through locational identifications, which connect with community logics and individual and collective attachment to places. Therefore, musical territories are not characterized as musical conservatories, but reveal constant recreations and one of the most evident faces of globalization: cultural contact.

In this context, sounds and music generate spatialities, situated between mobility and fixity, between fluidity and territorial anchoring. In it, utopia is created by the sound sensations promoted at *raves* parties, festivals, musical performances or *batucadas* (Dozena, 2017)^[10]. Many geographical interpretations of musical facts seek to understand the recomposition of musical territories in the face of current narratives, and update the historical discourses present in song lyrics, replicating them especially in the new social networks and their digital media (De Nora, 2005)^[11]. It is worth noting that around sounds and music are structured worldviews that act as machine tools of social actions.

This debate has as a direct consequence the amplification of theoretical and methodological horizons on the geographical dimensions of sound and musical

phenomena. Although geography is still a primarily visual science, active listening has, in the Twenty-First Century, come to play an essential role in geographical research (Canova; Raibaud, 2017) ^[12]. In this sense, many researches have sought the importance of this active listening in the geographical interpretation of musical territories in their meaning and social sense, touching themes related to globalization and musical territories, noises and sounds of and in cities, music and public spaces, urban musical events and sound phenomena, individual and collective musical perceptions, soundscapes, orality and musical discourses.

Our spatial experience also involves listening to non-musical sound sources (natural or artificial), and this experience is subjectively appropriate, based on the ordering of sounds and noises within the scope of our rationality standards. Noises, sounds and music can be connected in geographical studies, and active listening becomes valuable in this process, complementing vision.

This musicality can be brought ancestrally by the collectives, attending not only to the desires for material reproduction and the needs for survival, but also expressing many cultural specificities that effectively mobilize and animate social groups; at the same time revealing unofficial stories that begin to be told by the streets and diverse areas of Brazilian cities.

Likewise, the songs contribute to the creation and strengthening of emotional and human ties with the places, in addition to demarcating corporeality, territorialities and socio-spatial relationships; being produced from stimuli placed by the places and, therefore, evidencing the meaning of these places.

Some characteristics of specific places offer preconditions to new musical ideas. Even some musical instruments are created according to the conditions provided by the places, conditions taken up and reverberated from the cultural repertoire of each social group. In other words, there is a spatial condition that influences musical creation in the different places of the world.

3. Final considerations: musical identities, place identities and new geographical-sound horizons

The notion of territoriality considers the appropriation and control exercised in the territory by humans, from spatial mediations of power that can be symbolic

and/or concrete. This notion was greatly developed by contact with anthropologists, exchanging issues related to symbolism, heritages and genres of life. Territorialities are, thus, the strategic actions of demarcation, practice of power, control and territorial experience exercised by humans, in a context of creating rules for access, uses, behaviors and territorial circulation.

Territorialities forged by sound aspects can foster territorially based identities, bringing connections to past and present patterns of settlement, migration, ethnicities, musical heritages, lifestyles, and socioeconomic conditions. It becomes relevant to pay attention to the fact that in addition to a physiological body there is a social body, creator of a musicality that is ratified in individual and collective existence.

There is much evidence that some sensorimotor skills of the subjects are activated in this construction of territorial-based identities. A clear example, in the musical sphere, is the rhythmic and melodic structure itself that emerges as a construction of the process of social representation, a representation established culturally, ideologically and technically. As we have already pointed out, there are characteristics of specific places that offer preconditions to new musical ideas.

Not only music, but everything that is artistic is transversal to human life in its multiple dimensions, it exerts fascination and influence on humans. They are dimensions that involve creations and that fascinate humans: music, literature, dance, theater, sound creations, cartoons, architecture, sculpture, painting, cinema, design, gastronomy, photography, videos, cartography among other manifestations. All this delights humans for presenting possibilities of possible dialogues between practices that entangle our daily experiences with experiences lived spatially-artistically; demonstrating the best that human beings can produce.

As we have made clear in the preceding lines, music expands the possibility of harmonization with ourselves and with the people around us. It activates our imaginations, our perceptions, sensations, motivates us, promotes the appreciation of local identities and amplifies the feelings of belonging.

In addition to hegemonic rationality there are other rationalities, configured in symbolic and material musical territories. It becomes increasingly indispensable to reflect on the mechanisms and everyday tactics that enhance the sound experiences existing within these territories.

We are currently witnessing an ethnogeographic movement that has been thickening in recent years, turning to the description and explanation of the spatial

meanings of sound and musical experiences. This movement shows that musical territories are capable of strengthening social interactions, strengthening community bonds and sociability practices, invigorating feelings of belonging to them.

From the reading of the article, it is found that it is worth the effort to interpret the discourses and spatial codes of our time, from geographical reflections used in multiple perspectives. The article highlighted the need for thematic, methodological and conceptual diversity as a foundation for the dialogue necessary to understand the complexity of the contemporary world and the new processes that accompany it. Considering all this, the landscape becomes what the eye embraces, the mind conceives and the ears capture. And geography opens up to a universe of research topics to explore.

Considering that geography and music are complementary scientific and/or artistic fields, we believe that both express the possibility of constituting experiments that transcend the limits of formally established academic disciplines; becoming fields that can dialogue with each other, in a plural and motivating way.

Thus, when realizing that disciplinary boundaries can be momentarily broken with non-hierarchical articulations, the common themes between the two fields emerge vigorous and devoid of intolerances and arguments about the lack of scientific rigor; arguments that, in fact, contribute to the consolidation of scientific disciplines as institutions of power.

We believe that the geographical view on the sound and musical fact should be directly related to the concern to activate the classical principles of geography, such as the principles of causality, location, extension, differentiation of areas, connection, unity and activity. By activating them, the spatial dimension of the sound and musical facts will become evident.

The inexhaustible Brazilian musical spring asks not only researchers, but also teachers for their constant geographical-musical understanding. In other words, the "living" sonorities present in Brazilian musical territories require their "musical reading" and the understanding of the musical heritages present in the national melodic and rhythmic universe. For example, *samba*, *afoxé*, rock, or funk and *maracatu* act as foundations of Brazilian popular music, added from the pleiades of rhythms, sonorities and styles found in Brazil, and from those that reach our students through the internet and they invite us to an openness to New didactic-pedagogical procedures.

Teachers need to go beyond the use of song lyrics in their classes as a didactic tool in the teaching of geography, although we know that this use continues to have its

validity and relevance. As teachers we are invited to listen to the songs with a playful and vivid character, setting in motion the exercise of deconstructing the scientific fields most affected by the rules and normative standards that imprison their sonorities.

Today there is an invitation for a creative approach to artistic manifestations by teachers, highlighting the potential of these approaches. In the case of music, exploring rhythms and musical instruments, for example, and associating them with their context of emergence and reproduction. Or even still, building musical instruments with scraps; performing improvisational games from local cultural elements (*emboladas*, rap, *repente*, *catira*, drums, round dances, use of *mamulengos*, *cordel* literature, among others).

And to build this new way of listening to the world, we also need to use regional folk songs, local rhythms and dances, in order to advance other proposals related to the teaching and learning process. In a previous experience with the Organic Performative Orchestra (in São Paulo capital), we experienced the potential of body percussion and the production of multiple sounds (such as the attempt to reproduce the sounds of nature) involving the body and musical instruments built with recyclable materials. This is a type of practice that can motivate teachers to try new didactic procedures, being interested in more than one area of knowledge, and exploring their scientific and artistic creativity.

Obviously, it is very important that this type of knowledge is put in the university training of teachers, so that for example, even without having had any type of musical training, teachers can have basic knowledge of the types of musical instruments, improvisation games and other didactic strategies that amplify learning through music and sounds.

Some teachers have inserted music into their classes and have been expanding discussions with other disciplines and perspectives on understanding reality, such as the interactions that take place between geography, philosophy, history, portuguese, mathematics and art education. This is very salutary, in that it broadens the horizons of thinking. Interactive materials, such as what is used in the distance learning of the undergraduate course in Geography at UFRN³, evidence the attempt to explore artistic resources such as music, documentaries and photographs; through dialogue with other fields of knowledge.

³ Material available at: <https://bibliotecadigital.sedis.ufrn.br/interativos/geografia-cultural/index.html>

In the workshops held with geography pedagogues and teachers in the state of Rio Grande do Norte, I receive many testimonials about what they already do in the schools where they work. I notice an initial strangeness with respect to this geographical approach to sounds and music, with subsequent enchantment, because they realize that the contents of a geographical and historical nature enhance the expansion of these capacities for mapping, inventories of imagined landscapes, mental maps, body percussion as something that contributes to the rhythmicity of children and young people, in addition to songs and ditties rescued from local culture and that deeply touch the students.

There is now a better articulation and expansion of theoretical reflections that involve the relationships between geography and music teaching. In the academic environment, some authors are involved in a vigorous debate, both nationally and internationally, which has reverberated in the production of books and articles, in addition to having influenced the insertion of cultural themes in the referrals present in textbooks and paradidactic. This renewed interest in research on the interfaces between geography, sounds and music in Brazil reflects in a certain way the creativity of researchers, teachers and the potential arising from Brazilian music.

It is worth remembering that this thematic path has not started now, but has been built in recent years by dozens of contributions, and that tend to gain more propulsion. It is the invitation to enter these new geographical-sound horizons that are announced.

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