Dimensions of the Body in the Production of Sounds¹

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1. Introduction

When referring to the production of sounds by human beings, the body is usually considered by researchers in terms of its biomechanical characteristics. Various studies on the acoustics of the human vocal tract and on the construction of artificial vocal organs (Honda, 2003; Rubin & Vatikiotis-Bateson, 1998; Saltzman & Munhall, 1989), for example, analyze not only language phonological aspects and the physical laws of acoustics, but also the human anatomy and physiology, aiming to get a complete understanding of the processes that enable us to produce speech. In such studies, the body is taken as a biomechanical structure² and the segments, syllables, words and tones it produces are considered as the results of the configuration of the speech articulators (e.g., the tongue, lips, jaw, velum, larynx) and the ways the air is released and resonates in the vocal tract. This paper, on the other hand, proposes a different form of analysis of the body. Within a discursive approach (Orlandi, 2005, 1996; Pêcheux, 1988), the objective is to interpret the body as a symbolic materiality whose speech production is the result of the interconstitution of its three dimensions: the structural, symbolic and imaginary ones, as considered for the matter of this work.

The discussion is based on subjective processes of the production of sounds in foreign languages³ and on the analysis of reports and interviews with students in learning processes. As they frequently mention, the production of new sounds and their understanding are considered very difficult tasks. Some qualify themselves as "incapable of reproducing the sounds of the foreign language", some actually believe they have "cognitive problems" and many of them suffer so much they end up dropping out of the courses. Some examples of their comments are:

"_ I just never get to understand what people say in the [American] movies and I know my pronunciation is not very good either. I've been studying [English] for 12 years I don't know if I will ever learn it properly. Unfortunately I need it for my work. I have to study it."

"_ In the [English] classroom I don't like to do oral exercises in pairs. It is really embarrassing."

¹ The research project upon which the theoretical aspects of this paper are based was carried out as an Applied Linguistics doctoral dissertation entitled: "Body of Memory" (Hashiguti, 2008). The data analyzed, though, was collected previously, for another study (Hashiguti, 2003).

² Honda's paragraph (2003:2) illustrates this kind of approach: "The mechanism of speech is composed of four processes: language processing, in which the content of an utterance is converted into phonemic symbols into the brain's language center; generation of motor commands to the vocal organs in the brain's motor center; articulatory movement for the production of speech by the vocal organs based on these motor commands; and the emission of air sent from the lungs in the form of speech."

³ For space reasons and because of the focus of the work, the difference between foreign, first and second languages will not be discussed. The terms that will be used are *mother tongue*, that can be roughly explained as referring to the language that founded the subject's psychic reality (Revuz, 1998), and *foreign language*, referring to the languages that are not learned in the country where they are spoken and that are taught in the context of the language classroom.

"_ I definitely have a problem to pronounce the "th" in English. It is really an annoying sound. The teachers always correct me but I've already given up. It's too difficult a sound for me to produce."⁴

Situating the study as an attempt to comprehend how the body discursively works to produce sounds and what the effects of the sound production may be within a symbolic inscription, my hypothesis is that what is generally seen as cognitive or biomechanical systematic difficulties in the pronunciation of new sounds may be understood as *unconscious resistance movements* of the subject to change his/her position in discourse. Some basic discursive concepts to support these considerations are the following: *subject, discursive memory, symbolic materiality*.

2. Discourse Analysis

The Discourse Analysis theory that was inaugurated by French philosopher Michel Pêcheux and that has been extensively developed in Brazil by various researchers dates back from the sixties of the 20th century, when the Marxist theory of ideology and the notions of *subject*, *interpretation* and *reading* were questioned and revisited by different scholars in different disciplines of the Human Sciences. With the reading of the works of Althusser, Saussure and Lacan, Pêcheux discussed the interrelationship between language and history, the ideological determination of meaning and the symbolic nature of the subject. His analyses (1990) focused on the inscription of what he called the language structure in history, pointing out that the notion of discourse would be the one to best represent it: the discourse, according to him, is structured in and by language and it signifies in and by history as an event. As Orlandi (1996) explains it, discourse is the material instance of ideology and the language is the material instance of the discourse.

In Discourse Analysis, ideology is not a mask of a true and only meaning, but a form of subjective interpellation inherent to discursive processes: the discursive subject is not an individual with a social place, he is a discursive position among other possible positions and his/her positioning happens as movement within the discourse. The relationship between subjective positions is understood as discursive practices. Within a family discourse, for example, there are the discursive positions of the mother, the father, the son. People are ideologically recruited into these subjective positions and their sayings and meanings are determined by such positions in the interplay between the images each one has of the other and of what is said. This is what Pêcheux (1990b) calls the imaginary scheme related to the subjective positions and the anticipation of meaning. When we speak, images concerning our position, the position of the interlocutor and the topic of conversation are constantly producing effects to create the dynamics of the personal interrelations⁵. But that does not

⁴ These comments and all the Portuguese texts used in this paper have been translated by me. They were collected during classes or during informal conversations.

⁵ Pêcheux (1990b) created a series of questions concerning the imaginary formations between interlocutors: having a discursive position A and his interlocutor B, A has an image of himself/herself in relation to the image he/she has of B and to the image he/she thinks B has of him or her, of himself/herself and of the topic of conversation. That interplay can be represented as follows:

IA(A): Who am I (in what position am I) to talk to you like this?

IA(B): Who are you (in what position are you) so I can talk to you like this?

IA(R): What do I talk to you about?

IA(B(A)): Who do you think I am to talk to me like this?

IA(B(B)): Who do you think you are to talk to me like this?

IA(B(R)): What do you think we talk about to talk to me like this?

mean there is always a coincidence of images and a correspondence of meanings. Instead, it gives room to the opaqueness of the interrelations and the always possibility of contradiction.

The discursive subject is also a subject of body, of corporeality, that is, of a body that signifies in discursive practices and that is the material structure that enables him/her to exist and to speak, to be in touch with the world. As much as the body can be discursively read through the look of the others (Hashiguti, 2007), it is a materiality that is constantly being read by the subject himself/herself, as all the sensations come from it: the body sees, hears, smells, tastes and feels the world and the languages. It provides the subject with information that is symbolically signified at the very moment it is corporally experienced. From a discursive point of view, there is no literal meaning or direct correspondence between the materialities and the meanings imprinted by the subject at the moment of their apprehension. That is why the processes of signification vary from person to person. The world, as comprehended in Discourse Analysis, is not a logical reality. It is constituted of symbolic materialities, material forms (Orlandi, 2005:77)⁶, that get their meaning by the work of interpretation of the subject. So what can be felt as a pleasing experience in a body, as the pronunciation of new sounds, for instance, can be a very delicate situation when experienced by another body.

When a student says he or she does not like the oral exercises in pairs in the foreign language classroom because he/she feels embarrassed, as in the example above, a possible discursive interpretation of it is that one image he/she has of himself/herself is put at risk in such situations. He/she anticipates a judgment of his/her pronunciation by the other that will position him/her as fragile. He/she unconsciously feels the positions occupied in the different languages are different and that the subject who speaks a mother tongue is different from the one who speaks the foreign language. This sensation can also take place because of the body changes. To speak a foreign language means encountering the reality of non-correspondence between linguistic structure and meaning, the non-correspondence between body gestures⁷. The foreign language learning process re-introduces the subject to his/her own body as a materiality that is not totally controlled, not totally logical as it might have been felt like before. The sounds are different and the body has to be adapted, changed and re-signified.

3. The body of/in discourse: The non-coincidence of sounds and gestures

Speaking is such a common activity for human beings that no one ever thinks of the processes the body goes through to do so. We just and simply speak, without having to put effort to remember the biomechanical procedures to produce sounds or sequence of sounds. That happens because we are constituted by a certain kind of knowledge of the language. It is a linguistic, semantic, ideological and also corporeal (as pointed out in Hashiguti, 2008) knowledge that the discursive theory recognizes as the *discursive memory* or *interdiscourse*. The discursive memory constitutes the subject and is related to the language and the possible meanings attributed to symbolic materialities in history. It is a kind of knowledge that enables the meaning to historically exist and that is referred by Pêcheux (1988) as the "always already there".

The discursive memory constitutes the subject as he/she is constituted as a subject of language in the process of symbolic subjectivation. As Orlandi (2005b:106) argues, the human being is born an individual, a biological being, but as he/she is requested to participate

⁶ Orlandi refers to the concept of language as a regular form and a historical materiality. I extend this concept to the body.

⁷ The term "gesture" is replacing the term "movement" to refer to the non-verbal formulations of the body because it is understood as being able to capture the idea of symbolic event in opposition to a natural, mechanical move.

of a world that discursively already exists, he/she suffers the interpellation of language and is affected by the symbolic. The biological being thus becomes a subject of language and of ideology. When the subject speaks it is not a biological body that is producing speech, but a subject who is being inscribed in discursive processes. His/her body gestures are not biologically natural either but symbolically constituted and signified.

The discursive body can be understood is a material form whose structure works according to a specific corporal (physiological and biomechanical) order, and according to symbolic and imaginary associations. This first aspect is what can be considered the *structural or biophysical dimension of the body*. It is a dimension that refers to the regularity of characteristics of the human body as a human living body (e.g., to speak, we need to have the vocal organs, the vocal tract, and it is a biophysical characteristic of the human body). The second dimension refers to the constitution of the body by and in language and by/in discursive memory, so that, as language subjects, we can produce meaning. It can be considered as its *symbolic dimension*. The third dimension refers to the imaginary existence of the body in the interplay of images that over determine the subject and his identifications in discourse. It is the *imaginary dimension*.

When the subject speaks his/her mother tongue, he/she produces vocal gestures that are felt like natural for the way they were inscribed in his/her body. As the subject was constituted by a language (or languages) that built up his/her psychic self as he/she grew up, the gestures that have to be performed to orally produce it are felt like automatic daily gestures comparable to other body gestures. But when it comes for him or her to speak a new language, this natural sense may give place to an odd sensation as the production of new sounds demands the body in a different way. The vocal articulators have to move differently, the breathing rhythm has to change, and what was once a logical, natural body becomes a strange, unknown materiality for the subject. It is the structural dimension of the body that is requested to change and it produces effects on the symbolic and imaginary dimensions. The illusion of a controlled biomechanical body may be replaced by a hard conflict⁸. The changes in a foreign language learning process belong to the order of the meaning and the linguistic structures involved and to the order of the bodily (structural, symbolic, imaginary) changes. As the sounds and the way to produce them do not coincide with the ones of the mother tongue and neither do the syntax and the meanings, the learning process may reveal itself as a shock for the student. The new language brings out a different reality.

4. Blushing, laughing, silencing...

According to Revuz (1998), the body is erogenous and when it is demanded to free itself from the phonological articulatory automatisms of the production of sounds in the mother tongue, it is awakened to experience parts that were once forgotten, gestures that were unknown but possible. The mouth is one very erogenous zone as the Freudian and Lacanian psychoanalytical studies have proven and to speak a new language the subject has to work it out, experimenting with it. As a kind of practice that can be a taboo, this experimentation may be the cause of the so many laughs, the usual blushing and silencing of some students:

"_ You know what? I love my French classes. The pronunciation of some sounds, like the "r", it tickles. It's a funny thing."

⁸ However, as Revuz (1998) mentions, the language learning process can also be signified as a pleasing experience, when the student sees the foreign language as a space of freedom to experiment with his/her body and with meanings that are forbidden in/by the mother tongue.

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"_ There was a moment I got paralyzed when the teacher asked me to keep on trying and repeating that one big, unpronounceable word ["uncomfortable"] I never got to pronounce right. I blushed immediately and felt like running away from there."

The moments when some students try to produce sounds for the written "th" or the "r" of the English words can be taken as other examples. At these moments it is not uncommon to see them blushing or even sweating in the classroom. The production of new inexperienced gestures and sounds, its symbolic inscription in the body and the imaginary dynamic that involves it all may produce these kinds of effects in the subject. Some students actually laugh during the whole class when they have to speak or hear other students speak.

Sounds are symbolic materialities themselves. For the adult learner, the attempt to produce new ones in front of other people works as an intimidation. The classroom practices that exploit body gestures, demanding to expose the tongue, the teeth or to open or close the mouth in different levels, releasing or retrieving the air can be experienced as painful and embarrassing. Differently from the ideological and corporal freedom most children experiment when learning to speak, the adult is caught into the interplay of images and judgments and is demanded to focus at his/her own body.

The case of the businessman who always prefers individual classes with the same teacher works as an example. It was not the unavailability of time to attend group classes that made him prefer individual ones, but the subjective unavailability to share the learning experience with his employees and co-workers:

"_I work a lot and at different times so I'd rather just have private classes. (...)

_ I feel more comfortable and productive if I don't have to be watched by my colleagues while I play myself dumb [laughs] trying to pronounce these weird sounds or just trying to make any sense with this grammar. "

The effect of occupying the position of a language learner for the businessman was the sensation of putting his business position at risk. In the learner position he would expose his body and his productions were imagined by him as a possibility to show others what he considered his lack of control of a process.

It must be understood then, that occupying the position of language learner may be a different, delicate situation for the subject. It is a position that relates both to the combination teacher-knowledge-student (and the power relations within it) and to the subjugation of the foreign language and its demands. Although being only one person, in one only body, the subject that may blush to produce the "th" in English words is not the same subject who runs a company. These distinct positions ((1) "I work a lot", "I feel more productive"; (2) "I feel more comfortable", "I play myself dumb") are distinct positions in history, being constituted in different conditions of production and producing different effects. This example shows us the subjective heterogeneity that constitutes every language subject.

5. Structurally reorganizing the foreign language: A way out

What some students consider mistakes of pronunciation and that they think provokes their laughter in the classroom can actually be considered subjective marks of the inscription of the subject by and in his/her mother tongue. Besides the sexual signification of speaking and using the mouth for it, speaking a foreign language is also an exercise of psychic/corporeal flexibility and ideological availability (Hashiguti, 2003). At a moment of the learning process,

speaking another language may mean to become someone else – if the subject is able to be detached from his position as a speaker of a mother tongue and to be incorporated in and by the discursive memory of the foreign language as well. That is not a very common situation⁹ in the foreign language classroom.

From a discursive perspective, we can assume there is language as structure -a phonetic, morphological and syntactic system that is partially autonomous, and a speaker who is a subject of language and of corporeality who has to produce gestures do speak. It is their encounter that can be conflictive. To solve this conflict, some students try to ignore the differences, reproducing the structural aspects of their mother tongues in the structure of the foreign language. They maintain the same sounds and syntax in the organization of the elements and sentences in the foreign language. Their productions result as being material forms that identify them as national individuals or members of some other group.

Orlandi (1996) situates the relation between linguistic structure and discursive memory through the concepts of "formulation" and "constitution" in language. According to her, the elements of a language are organized by its syntax and morphological and phonological rules but they follow a symbolic order. When the subject speaks he/she produces verbal formulations that are preceded by an unconscious, symbolic inscription in the discursive memory. The discursive memory thus constitutes the formulations.

In many productions of foreign language students, it is possible to recognize formulations that are organized with the language elements of the foreign language but that are constituted by the order of the discursive memory of another language (Hashiguti, 2007b). That kind of event shows us the non-inscription of the subject in the discursive possibilities of the foreign language. It can be interpreted as a movement of resistance. The subject unconsciously refuses to be positioned differently, to have a new identification in the foreign language. The accent and the organization of the language elements as in the mother tongue promote the continuity of a precious identification for him/her, one that seems to keep him/her in a safe position. The accent is one of its marks, the main one, which mostly often tends to remain.

Seen as a form of resistance, the non-production of determined sounds of a foreign language by a subject slides from the inscription in a discourse of error and/or of cognitive, physical incapacity to be inscribed into a discourse of identification. Being able to produce sounds of a foreign language is not only a matter of producing more or less difficult body gestures. It is a matter of being discursively positioned. It is an effect of the modality of the encounter between the foreign language and the subject.

6. Conclusion

The subject who speaks a foreign language is a different subject when speaking the mother tongue, not only because the body has to respond differently for the understanding and repetition of new sounds, but also because what is said in one language is never the same in the other language, even though that remains as one of the illusions of the process. To speak a language other than the mother tongue can be a very disturbing experience as the imaginary references are all changed and the body is demanded to change too. The illusions of a controllable body and of languages that work as transparent codes fall apart.

⁹ A passage in Todorov's "L'homme depaysé" (1999) illustrates what is being discussed here as the different subjective positions one subject may occupy in different languages: "The difficulties appeared as I started to translate my communication, originally written in the second language, French, to Bulgarian, my mother tongue. It was not a problem of vocabulary or of syntax; but when I changed the language I changed my imaginary interlocutor. It became obvious to me, at that moment, that the Bulgarian intellectuals to whom I had addressed my speech would not be able to understand it the way I would like it."

The experience of learning to speak another language can actually be conceived as a process of becoming someone else. Most of the students are not ready for such experience, though. Learning to speak a new language is a discursive practice that moves the subjective positions and creates identification issues. At this context, the production of sounds can be seen as a very significant practice, a practice that is constituted at the boundary of the relationship between body and language. It is not a simple function of the body, but a complex symbolic event. That means the sounds produced are more then waves that reach our ears, they are identification marks that reveal the history of the subject and the foreign language.

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