REVIEW

What is prosody? Definitions, functions and applications

Thales Nascimento BUZAN[ID]
Federal University of Juiz de Fora (UFJF)

ABSTRACT

The aim of this review is to present the round table *Prosódia: voz, estrutura e expressão*, broadcasted on May 31st/2020 and organized by the event Abralin Ao Vivo. It also highlights interesting points discussed in the chat simultaneously with the presentation. Professors Luciana Lucente and Pablo Arantes introduced the table by approaching the definition of prosody, elucidating its functions of prominence, segmentation and discursive function. Next, the invited researchers, Albert Rilliard and Alexsandro Meireles, advance to more specific issues related to prosody, such as its multimodality and the four biological codes, and the quality of voice in speech and singing.

RESUMO

O objetivo desta resenha é apresentar a mesa redonda *Prosódia: voz, estrutura e expressão*, transmitida no dia 31/05/2020 e organizada pelo evento Abralin Ao Vivo. Destacam-se também pontos interessantes discutidos no chat simultâneo à apresentação. A pesquisadora Luciana Lucente e o pesquisador Pablo Arantes introduzem a mesa abordando a definição de prosódia, elucidando suas funções de proeminência, segmentação e função discursiva. Em seguida os pesquisadores convidados da mesa, Albert Rilliard e Alexsandro Meireles, abordam questões mais específicas que dizem respeito à prosódia, como sua multimodalidade e os quatro códigos biológicos e a qualidade de voz na fala e no canto.

The round table was presented in two parts. The first part was presented by professors Luciana Lucente and Pablo Arantes, who also moderated the table.

Professor Pablo Arantes began his speech by bringing definitions of prosody, contrasting, in a very clear and didactic way, negative definitions with positive ones. In this way, he presented the first definitions in which prosody would be what it is not, as being everything that is not from the segmental level or being what the conventions of writing do not represent. It is pointed out, however, that these definitions are not that precise, since the matter of duration is part of the segments, but it is also manipulated by prosody, so the distinction between what is segmental and what is suprasegmental would not be clear. With regard to writing, some diacritical signs, such as the question mark and exclamation mark and the comma, partially represent some prosodic information, so the segmental and suprasegmental levels may overlap.

Besides the negative definitions, there are also the positive ones, which define prosody as melody, rhythm and voice quality, but they do not cease to have problems because they define prosody from phenomena that, in a certain way, as well as the negative definitions, also dialogue with the segmental level.

A more interesting and pertinent definition is to draw attention to the functions displayed by prosody, which are listed by the professor as (a) prominence, (b) segmentation or demarcation and (c) discursive function. The teacher explained that the functions are performed in four main ways: (i) duration, encompassing rhythm and timing; (ii) F0, or fundamental frequency, linked to the melodic aspects of speech production, such as pitch, which gives us bass and tremble information; (iii) loudness, which gives us the information high and low; finally, the teacher presents the (iv) timbre, which he explains is a more qualitative field and works with voice quality, fairly related to music.

Professor Luciana Lucente took the speech shift to continue with the introduction and, in a succinct and didactic way, she presented the prosodic constituents and their hierarchy as an introduction to function (b). To this end, the professor organized her speech by starting with the syllable, phonological and phonetic, with the classic image of its hierarchy with onset and rhyme - with its nucleus and coda - and with examples of Brazilian Portuguese. The constituent trees' images fomented the chat and some people reported that they have not studied this for a very long time, showing that professor Luciana was right to approach the subject in this way.

Having done this introduction, she moved to the function of segmentation (b) itself, which consists in recognizing the constitutive units of speech, that is, there is the delimitation of prosodic constituents, a perception of terminal and non-terminal borders in the speech chain and a negotiation with general principles, such as eurythmy. Before bringing speech data in the praat audio analysis software to exemplify her presentation, the professor finished her theoretical explanation by synthesizing the phenomena of segmentation, being them the pauses, the phrase accents and the pitch accents. The examples in praat were elucidative and vital to the listeners as they make it clear that research in prosody is practical and its real object of study is human speech.

Professor Pablo takes the turn to talk about function (a), which concerns the relative salience of one prosodic element in relation to another, that is, the ability to draw more attention to one item in relation to the others. He explained, with great speech examples in praat, that this can happen at different levels of the hierarchy, in the syllable, in the metric foot, in the word or in the phonological phrases, and, as phenomena of the salience, there is the lexical, secondary and phrasal accents, as well as the focus phenomenon.

The introductory block is finished by Professor Lucente, who presented the last function, (c), divided into two planes: linguistic and expressive. While the first one marks the speaking turn and speech modality, the latter signals attitude, affection and indexicality, and voice quality.

With the first part finished, guest professor Albert Rilliard began his speech by arguing that speech production is multimodal and remarkably defends his point of view by talking about face-to-face performances, which use the whole body to give meaning with respiration, gestures, facial expressions, among others. While the professor presented the McGurk effect, the physiological effects of the speaker and the human face as context for the interpretation of prosody to argue that speech perception is also multimodal, in the chat a very interesting question arose and the listeners conversed about the famous textbooks that do not address prosodic issues and some listeners provided suggestions for projects that are being developed.

His presentation continued to touch on very important points, such as the speaker's performance as a meaning generator and how the matter of sound symbolism can affect the tradition of arbitrary lexical meaning. He then presented four biological codes that help us in meaning: the frequency code, the effort code, the respiratory code and, finally, the sirenic code. Another valuable factor is the emotional experience, exemplified and explained by professor Rilliard, and how it involves our corporal expression.

He finished his speech by receiving compliments from master's degree students in the chat and by warning that even if the codes explain most prosodic variations in several languages, therefore being potentially universal, there are still cultural variations, as in the elucidative example of a Japanese speaker only with audio and then with audio and video, and the difference in perception of both for a French native, since Rilliard is a native French speaker.

The last block of the round table is presented by guest professor Alexsandro Meireles, in which he addresses voice quality. To show how sounds are produced physiologically, he makes an extensive presentation of the vocal tract, the larynx and its muscles with their respective movements. He

exemplified with bands and singers, he even performed a little, to reproduce some musical notes and their relationship with muscle movements in the larynx. It is explained that no matter how many anatomical differences there are between men and women, it is possible that women sing very low notes and men sing very high notes.

In a second moment he brought up the definition of voice quality in speech and singing by using the Voice Profile Analysis Scheme, together with the basic and compound phonation types, and finished his turn by arguing that singing can be studied within prosody due to being present at the 10th International Conference on Speech Prosody 2020, in which he published an article on voice quality.

The round table came to an end and some questions were answered. The chat vibrates with applause and praise to this round table of remarkable importance that, not only synthesized what is prosody with great examples, but also put it in dialogue with multimodality and singing.

REFERENCES

PROSÓDIA voz, estrutura e expressão. Conference presented by Luciana Lucente, Pablo Arantes, Albert Rilliard e Alexsandro Meireles [S.I., s.n], 2020. 1 video (2h 24min 05s). Published by the Associação Brasileira de Linguística channel. Available on: https://www.youtube.com/watch?v=zR6QWKBM3Oc . Retrieved on: Jul. 14th, 2020.