

Review

Language and Verbal Behavior: dialogues between the Linguistics and the Behavior Analysis

Book Review "Bloomfield and Skinner: language and verbal behavior."
Maria de Lourdes Passos (2004). Rio de Janeiro: NAU 320p".

Rodrigo Lopes Miranda¹
Sérgio Dias Cirino²
Universidade Federal de Minas Gerais

Language phenomenon has established itself as object of interdisciplinary scientific study. When publishing his book "Verbal Behavior", in 1957, Skinner apparently was aware of this configuration as he points out that the treatment given to verbal behavior was already a study field filled by other extremely sophisticated language theories.

In this same work, he stresses that his intention was not to suppress other existing studies but to provide other analyses tools to the linguistic studies field.

It also seems to the author's objective when writing the work reviewed here. She probes into Linguistic study object, as to say, the language in itself or by itself. She does it based on Leonard Bloomfield and Burrhus Frederic Skinner, the first a Linguistic scholar and the second a Psychology scholar.

When choosing such object, she engages in what Bloomfield (1933) indicated as one of the intersections produced in language field, the dialogue among Linguistic and Psychology.

According to Terezinha Bittencourt, in the work presentation approached, interdisciplinary researches are mandatory, once they allow an every growing public to

get acquainted with diverse theoretical and methodological outlines. Further more, it allows the sophistication of fields and different views over the object of study.

In this way, one of the objectives of "Bloomfield and Skinner" book is to indicate the sources which Skinner fell back on to formulate the foundation of Verbal Behavior, a book that the author himself referred as his main work (Skinner, 1976). Besides that, it aims to bring for the reader one of the most important linguistics' thinking of the twentieth century, which unfortunately has not been translated into Brazilian Portuguese yet. Another objective of the book is to show some Linguistic elementary concepts and confront Bloomfield's language structuralism analyses and Skinner's verbal behavior functional analyses.

One may also appoint that this dialogue allows a better clarification of what is Linguistic structural analyses for the behavioral analytical public and finally may set conditions for a more sophisticated formulation of the relation among verbal behavior functional x topographic analyses. Hence it is setting conditions as they will not be seen as antagonists, but as complementary practices

¹ Psychologist. Education Graduate student: Knowledge and Social Inclusion at College of Education UFMG. Academic Psychology Department Professor at Philosophy and Human Science College at UFMG. UFMG. LAPED - Fae/UFMG Member. E-mail: dingoh@gmail.com

² PhD in Experimental Psychology from São Paulo University. Professor at the Department of Methods and Teaching Techniques at College of Education UFMG. UFMG. LAPED-FaE/UFMG coordinator. E-mail: sergiocirino99@yahoo.com

³ Todas as citações de Bloomfield presentes neste texto foram extraídas da obra aqui resenhada. Quando a data for de 1933, refere-se ao *Language* e quando o ano for o de 1930, *Linguistics as a Science*.

for language, lingual and verbal action relation understanding.

In order to establish a proximity axle between Skinner and Bloomfield approaches, the author defined eight analyses topics, to be known: (1) science and scientific study method; (2) the speech act; (3) conditioning and behavior; (4) meaning; (5) units of analyses; (6) object of study; (7) verbal community and (8) verbal behavior functions. From these topics Skinner's *Verbal Behavior* (1957) and *Science and Human Behavior* (1953) are analyzed, and as for Bloomfield's work, the ones selected were the ones referred by Skinner in his first book: *Linguistic as a Science* (1933) and *Language or Ideas?* (1936).

Taking into consideration the comprehensive topic of the book, as well as the complexity of the referred authors thinking, the author divides her work in two parts, adding introduction and conclusion. The first deals with Bloomfield and the second besides (comment) showing Skinner's thinking, establishes a parallel between the two authors.

This division of the text allows the reader to know a little about the language work of each theory used, in a more compact form, and then, be in contact with the forthcoming text. On the other hand, it gives a preview on how two distinctive knowledge areas see the linguistic phenomenon.

On the first part of the book, we can note that for Bloomfield, human sciences in a general manner, had not reached scientific understanding of his objects of study (human actions) as other sciences had already done with their respective objects. This is due to the fact that they had not let go their pseudo teleological explanations which go along any science development. For him human sciences were still searching for explanations of studied phenomena in 'causal' elements that are part of the objects themselves. In Bloomfield's words (1930, p.228): "(...) [is] only when we deal with man that we are satisfied with teleological formulas: men do things because they 'want' or 'choose to' or have a tendency to do them'.

To modify such picture, he notes that Linguistic should base itself on a monist view of the world, conceiving human actions and among them speech, as part of cause and effect sequences. Therefore, instead of using mentalists' terms as clarifying sources, Linguistic should comprehend that they refer to linguistic phenomena.

Even with this conception, Bloomfield notes that Linguistic could not be subordinate to Psychology. First, because verbal actions explanations through mental phenomena offers little help in the process, overshadowing instead of clarifying the analyses.

In second, by withdrawing from such explanations, Linguistic would make possible the development of a science whose object is typically and inherently a characteristic of human activity dependent of culture. In this sense, the linguist studies a part of human performing, verbal actions, and being so he should be bind to observations of several people linguistic performance.

When defining such study method, Bloomfield points out that speech is a linguist's work primary fact. Similarly he establishes that even though writing is of great importance for culture development, it is placed in second place in relation to speech. Then, spoken language study is prioritized, being mandatory to notice that it occurs in relation to preceding and succeeding verbal and non-verbal situations.

Bloomfield defines that both the speakers and listeners actions can be practical (direct actions upon physical world) or substitutes (verbal actions), and as for the second type, terminology aims to indicate that a verbal action replaces practical action upon the world.

In order to endeavor such analyses, a prior conjecture is assumed that "language enables a person to perform a reaction (...) when another person has the stimulus" (Bloomfield, 1933, p.24). As the say, for Bloomfield, verbal actions are subject to the same causality that rule over natural phenomena. Therefore, the speaker provides practical or substitute stim-

uli for the listener's reaction which in his turn may act practically or in a substitutive way. For the occurrence of these actions, there are several prone factors that were established along each person's life history which are involved in verbal relation.

It is the connection between stimuli and responses that is stressed by the author, how the primordial element upon which the linguist look should lay in Bloomfield's conception. The meaning of words in this concept, is not coupled up to the word itself or even to a non physical process existence, such as a tough or a will act, but is placed in practical events which precede or succeed when giving a verbal response.

In this sense, the treatment given to meanings attributed to words and sentences in a certain speech community becomes relevant. A speech community is important to the language, and on the other hand, language is of great importance to culture and to each individual.

Firstly Bloomfield notes that this importance can be attributed to language's power to build up cooperation potential among people, it coordinates their strength and abilities. Secondly, because through language the person can: (1) enunciate physical state that only him has access; (2) 'rehearse' in abstract form his actions prior to their performing, lessening mistakes occurrences in daily life and; (3) Think, which for Bloomfield is talking to yourself.

On the second part of the book, the author presents a discussion over Skinner's verbal behavior, placing it in parallel to Bloomfield's thinking. The first approached point is verbal behavior definition as operant, or as to say, an individual response emission which implies in environment changes and is subject to produced consequences. However verbal responses have a peculiarity: they are characterized as acting that prior to causing changes upon the physical environment, it implies in social environment consequences.

From this definition, it is verified that verbal behavior has as mandatory for its

studying, a speaker and listener relational analyzes. First because the one who listens is the environment in which the speaker will behave verbally and who provides consequences to verbal responses. Moreover, verbal behavior is learnt and held in culture, it is to say by means of inter individuals relations.

It is noticed that Skinner's object of study differs from the one appointed by Bloomfield's structural linguistics.

When studying verbal behavior, Skinner is interested in the acting, necessarily in mediation, of who operates verbally. Bloomfield's analyses in its turn, is interested in language structural units. For Skinner, the analyses to be carried out is functional, in other words, it looks for variable from which verbal response is function. But it does not mean that a more sophisticated language study sets aside formal analyses, it indeed points out by dissonance that the two analyses are complementary.

From reinforcement contingence similarity which maintain and create conditions for verbal response emission they can be grouped as responses classes. The author describes in detail and with proximity to linguistic analyses categories (morphemes, sememes, etc) verbal operant classes such as tact, mand, and intraverbal, etc.

Over viewing this verbal response modality group, it is verified that verbal behavior study is very important for understanding behavioral processes which encompass operant conditioning. These are the same for non verbal operant, in other words, operant conditioning, imitative behavior, establishing relations, emotion, punishment and extinguishment. While observing such processes, the focus is on the speaker's action and on part of the listener's acting which involves part of reinforcement contingences to which the speaker's response is contingent. So it is bound that verbal responses are learnt through operant conditioning, pointing out that relations between acting and its consequences are kept due to interactions established by verbal community.

The verbal community, which is mandatory for verbal behavior existence, can be defined as a group of speakers and listeners that act verbally due to relatively homogeneous reinforcement contingences. As verbal behavior study gets deeper into speaker and listener relation, it should attain not only to what the speaker does but also to what the listener as establishing occasion to the speaker's verbal responses. In other words, verbal behavior explanation depends on verbal community practices which creates and keeps the listener's responses. Here lies another complementary point among the two authors thinking: while Bloomfield's structural analyses deals with the treatment given to language x lingual relation; Skinner would focus on what the subject does verbally, inserted in this relation.

In order to achieve such goals, both Skinner and Bloomfield notify the need of a scientific method development by human sciences that deal with the treatment given to "lingual", "language" and "verbal action" relation. The author of the present reviewed work points out that for Skinner, psychology as a behavioral science would need to adopt determinism notion, in other words, understand that psychological phenomena establish relations with other elements and therefore their occurrence explanation would be placed in these very relations. Adopting this perspective leads to relation establishment between dependent variables (responses) and independent variables (preceding and succeeding). It is important to call attention to the fact that independent variables are not the ones that are found outside the organism, but are situated outside the dependent variable in other words, the response emitted by the subject. From this configuration verbal behavior study will seek in independent variables for the elements that provide explanations on verbal responses components. A short gen-

eral statement on this aspect, it is possible to note another agreement point among the authors: both are supporters of human science development that would have strong influence from natural science model and methods.

In this sense there is meaning studying, one main point of linguistic activity and maybe the point indicated by Bloomfield as the one to which psychology should hold on to.

For Skinner it is highlighted the fact that meaning results from unique experiences lived by the listener and the speaker, in detriment of relatively homogenous verbal community, in other words, meaning is placed in verbal responses use by the members of a group. Although it is possible to notice a similarity between the authors in relation to the treatment given to enunciation meaning, the difference of the object of study can be pointed out. While Bloomfield studies the relatively homogeneity of a speaking community verbal practices, Skinner constitutes the study of each community member verbal behavior idiosyncrasies.

From the work reading, it is verified that there are dissonances in Bloomfield and Skinner work, and some of them are related to the fact they have different objects of study. However, their thinking does not exclude each other but they are complementary, as: (1) Skinner's analyses on verbal behavior assume comprehension of active verbal behavior reinforcement contingencies in a verbal community and this is by far one of the Linguistic objectives according to Bloomfield's definition; (2) language while a cultural practice is affected by the consequences of individualized appropriation of each member of the verbal community.

Thus, as complementary form to the linguistic work, the explanation of each community component verbal doing is found, that is Psychology's object of study.

Bibliographical References

Skinner, B.F.(1957) *Verbal Behavior*. New York: Appleton Century Crofts.
Skinner, B.F. (1976). *Particulars of my Life*. New York: Knopf.

Received in: 12/05/2007

First editorial decision in: 12/10/2008

Final version in: 05/03/2008

Accepted for publication in: 05/03/2008