

# Dąbska's presentation of Ajdukiewicz's conception of language

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**Abstract** Izydora Dąbska was one of the most outstanding representatives of the Lvov-Warsaw School and a disciple of both the School's founder Kazimierz Twardowski and Kazimierz Ajdukiewicz. Interest in the School was the result of Twardowski's program of scientific philosophy, which was adopted by the vast majority of his students. This program assumed that the basic condition for practicing philosophy in a scientific manner is the precise use of language by a philosopher. One of the scholars who devoted most attention to language was Kazimierz Ajdukiewicz. Dąbska accepted that the philosophical program of the School was opposed to the trend shared by many contemporary schools at the time which belonged to the so called current of linguistic philosophy. According to this trend, language is the only object of philosophical investigation. The analysis of Ajdukiewicz's concept of language is one of her most interesting achievements in the domain of philosophy of language. This concept, called by Dąbska 'the immanent concept of language', is the basis of Ajdukiewicz's well-known radical conventionalism.

**Keywords** Dąbska · Ajdukiewicz · Language · Philosophy of language · The Lvov-Warsaw School · Semiotics

Linking philosophical considerations to those concerning language was the perspective that Izydora Dąbska adopted from her teacher Kazimierz Twardowski. According to the latter, a philosophy is able to meet the postulate of scientificity provided its problems are formulated in a clear and precise way. This is possible only if a philosopher uses language clearly, i.e. a language in which the meanings of the words used are precisely defined (Hanusek 2012: 160–161). This in turn requires

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reflection on language. Discussing Dąbska's achievements in the field of semiotics, the Polish logician Jerzy Perzanowski writes:

Izydora Dąbka applied in an exemplary way the basic working method of the representatives of the Lvov-Warsaw School: the method of semiotic-logical analysis. She is one of the School's masters of semiotic analysis with the auxiliary use of logic. The backbone of the method is its subtle and profound conceptual analysis of the description of the considered areas along with the study of truth relationships between the propositions from the contemplated or created theory" (Perzanowski 1998: 78).

Jerzy Pelc, in turn, states:

The interest in language in the Lvov-Warsaw School resulted from a program demanding a more scientific philosophy which was (according to Dąbska) the life-task of its founder—Kazimierz Twardowski. The basic elements of this program were clarity and precision in formulating philosophical issues and the postulate of a communicable philosophical language as well as attention to detail in order to ensure that it carefully maps the content of views under analysis. These views resulted in the adoption of the method of semiotic analysis as the basic method of the philosophy that Twardowski defined as a method of conceptual analysis or analysis of meanings (Dąbska 1969: 1–9). Dąbska accepts the program of philosophy outlined by her teacher and takes an interest in language, while stressing the need to avoid falling into the extremes that have become the focus of many currents of modern linguistic philosophy that treat language as the only object of investigation and the method of linguistic analysis as its only task' (Pelc 1986: 45).

Thus we can see clearly that Izydora Dąbska's interest in language resulted from her philosophical program. In this article I want to present the critical dimension of Dąbska's analysis.

### **Ajdukiwicz's philosophy in the context of the philosophy of language. The semiotic character of language**

Discussing Ajdukiwicz's concept of language Dąbska classifies her teacher's views as an analytic philosophy within the moderate stream of so-called 'linguistic philosophy'. Ajdukiwicz's concept of language can be described, Dąbska claims, as immanentist. According to this view, language is an autonomous system that can be subjected to analysis in a manner analogous to that of deductive systems; it is conceived as a set of signs and directives for their combination (Dąbska 1967: 156). The basic concept analyzed by linguistic philosophy in all its varieties is the concept of language and its functions. Thus the fundamental question that linguistic philosophy faces is the question: what is language? And here Dąbska notes the difficulty also shared by Ajdukiwicz:

But is it even possible to ask such a question? There is still no such thing as language. There are various specific languages: natural and artificial. Among natural languages, there are ethnic languages, dialects, literary languages that are more or less common to different people, or maybe always individual, but somehow associated to allow speakers to understand each other. And among artificial languages we distinguish formal and informal languages. Some of these are mutually translatable some are not.<sup>1</sup> Why are some vocal, kinetic or graphic systems called languages? Answers to this question have been sought by examining the semiotic functions of these lingual elements, starting from the assumption that, regardless of whether we understand language as a pragmatic type of human behavior, whether or not we consider it as a kind of static objectified, intersubjectively conceived structure we are always dealing with a domain of signs. The variety of language concepts is conditioned, I think, by the multiformity of sign functions that determines the language definition that is taken into account' (Dąbska 1965: 3–9).

In analyzing Kazimierz Ajdukiewicz's views on language Dąbska refers to three of his works that were published before the war in the journal *Erkenntnis*, subsequently published after the war in Polish translation in volume 1 of *Language and Cognition*. These are: "Language and Meaning," "The World-Picture and Conceptual Apparatus" (Ajdukiewicz 1978: 35–66, 67–89) and "Scientific Perspective on the World." In these works the author described his main philosophical view as radical conventionalism.<sup>2</sup> According to him, "Our proposed definition of "meaning" is a definition that entails far-reaching consequences. This is because it leads to the standpoint in the theory of knowledge, which we define as radical conventionalism' (Ajdukiewicz 2006a, b, c: 146). It is not our purpose in this text to present a detailed discussion of Ajdukiewicz's conception, instead we will focus on Dąbska's criticism directed against it in her: "On Linguistic Philosophy" and "The Concept of Language in Kazimierz Ajdukiewicz's Philosophy."<sup>3</sup>

<sup>1</sup> It should be noted that a similar approach to the existence of a language is presented by Ajdukiewicz, who states: "It follows that the colloquial term" language" is fluid in the same way as the concept of "quite substantial similarity." (...) We conceive language so that its unambiguous characterization is not sufficient by a more or less fixed arrangement between word and meaning, but requires quite a strict assignment of meanings. Standing by the strict notion of a language we cannot say that there is one Polish language, but we must say that there are many Polish languages, which may all be identical in sound, but differ in—although not very much—assignments of words and meanings. In fact, you can enumerate several Polish languages (ignoring different dialects and historical phases). There are several identical sounding Polish colloquial languages, including a Polish language of physics, Polish medical language, etc.-"., Ajdukiewicz 2006a, b, c. 173).

<sup>2</sup> Interesting comments on the similarity of Ajdukiewicz's radical conventionalism and the concept of Kuhn's scientific revolutions, including the evolution of their scientific languages, can be found in: Jedynak (2012).

<sup>3</sup> The first of these works entitled "On linguistic philosophy" is the second part of the book *On the tools and objects of knowledge*. The second is a slightly modified version published in the *Ruch filozoficzny*. See Dąbska 19659.

## Dąbska's critique of Ajdukiewicz's radical conventionalism

Dąbska begins her analysis by recalling the distinction Ajdukiewicz introduced in "On the Meaning of Expressions" between 'language' and 'the act of speaking' (Ajdukiewicz 1935). He writes about this in the following words: "Speaking is [I formulate the author's assertion as a certain generalization—ZO] either making sounds in accordance with the vocabulary and rules of syntax of language J (thus a recorded tape can speak), or producing sounds in a way provided by language J for a given sound." Ajdukiewicz eliminates these two forms by replacing the first one with 'using phrases belonging to J' and the second with 'using phrases belonging to J as J expressions', and proposes a third, according to which to speak language J is to use J phrases in accordance with language J and be open to respond to such J phrases in a manner which is appropriate for J' (Dąbska 1967: 144–145). Dąbska notes that even the above characteristics of language show that, in Ajdukiewicz's terms, language is determined not only by vocabulary and syntactic rules, but an important role here is also played by assigning meanings to the words of the language. Meaning determines the words used, or to put it more precisely the meaning of words defines directives concerning how to use them (Ajdukiewicz 1975: Chapter 1: Expressions and Their Meanings). For any language for which the meaning of words is clearly defined, it is possible to formulate meaning directives. This happens according to the following scheme:

Only he can combine expressions belonging to language L with meanings assigned to them who in situations of type L is ready to accept the sentence of type Z. Whereby 'X is ready in situation L to accept sentence Z' is the same as 'if X in situation L answers a question which places a question mark after the sentence Z, then X accepts sentence Z'. Meaning directives assign specific propositions to specific types of data such that the rejection of a sentence can only take place by violating its meaning' (Dąbska 1967: 145)."

The situation is such that if someone does not comply with the rules of meaning of the language designated by the meaning of its words, we have to conclude that he does not speak the language (Woleński 1985: 192).

Dąbska, who defined Ajdukiewicz's concept of language as immanentist, i.e. one that does not refer in its semiotic characteristics to the operations of the subject who uses it to express thoughts or emotions to others, is aware that such an approach seems to be in contradiction with what has been said above (viz. that language is not understood in relation to the subject's operations). However Dąbska notes that the contradiction is only apparent. This is because 'The behavior of the subject, or rather the willingness to engage in certain cognitive behavior, to recognize in certain situations certain sentences, is indeed a sign that someone speaks the language or is guided by the language directives, but these directives are a priori, they are the explication of the basic logical conventions obligatory in a given language' (Dąbska 1967: 146). Dąbska notes that the origin of these conventions is no longer a matter of the concept of language, but rather of their origins. Dąbska claims that the immanentist concept of language brings to the fore syntactic issues,

i.e., “a description of the formal structure of what might be called the ideal language. This is a certain conceptual construction, which finds an adequate interpretation in the languages of formal systems and an inadequate, approximate interpretation in natural languages.” (Dąbska 1967: 143).<sup>4</sup>

According to Dąbska, the aforementioned concept of language is guided by the methodological postulate that language should not be described either from a transcendent point of view or from the position of some model, which language would imitate, or from the point of view of the person who uses the language to express her own experiences or exercise an impact on others. An important notion of Ajdukiewicz's concept of language is the concept of meaning directives.

## Meaning directives

Ajdukiewicz lists three types of directives: (1) deductive directives; (2) axiomatic directives, and (3) empirical directives (Ajdukiewicz 1934: 113 ff). Let us quote the relevant passages: “A meaning directive cited previously according to the formula of directive detachment is an example of a deductive meaning directive. It can be formulated as follows: that only he combines with the words of the Polish language the meanings assigned to them in the language who is ready to accept the sentence ‘B’ in case he accepts the sentence ‘if A then B’ and its predecessor ‘A’ (Ajdukiewicz 2006a, b, c:155).” In other words, deductive directives are directives that require acceptance of a given sentence when others have been accepted earlier. The second group is made up of axiomatic directives. Ajdukiewicz writes:

“In the languages of axiomatic systems there certainly are examples of what we call axiomatic meaning directives. Namely, for anyone who wants to use the words of such a system in the sense assigned to them by the language of the system, it is required to unconditionally accept propositions established as the axioms of the system. I think, however, that such axiomatic meaning rules also apply in ordinary colloquial languages. It seems, for example, that for anyone who by means the words ‘any’ and ‘is’ connects the meaning allocated to them in Polish, it is required that he is ready to unreservedly recognize any sentence of the form ‘every A is A’ (Ajdukiewicz 2006a, b, c: 155).”

Axiomatic rules require unconditional acceptance of certain sentences, and so acceptance without reference to reasons. The third group is made up of empirical meaning directives. These are rules of behavior by which we conduct ourselves when accepting a given sentence as a result of certain perceptions. “It seems, one is progressing according to the directive, recognizing the phrase ‘it hurts’ when experiencing a toothache’ (Ajdukiewicz 2006a, b, c: 156).”

Dąbska does not put forward serious critical remarks against Ajdukiewicz's concept of meaning directives, accepting the author's view that these types of meaning directives do not cover all their kinds. She adds that “... the right

<sup>4</sup> Dąbska adds that beyond Ajdukiewicz, the immanentist concept of language is also developed by Carnap in *Der logische Syntax der Sprache*.

assignment of meanings in a given language does not specify each meaning, but rather all of them taken together, more precisely, the sum of the ranges of all the meanings, since each directive is assigned clearly to its scope. Thus, the range of the empirical directive is always a set of two elements, these being the data of experience and the proposition in which the relation indicated in the directive exists between members of the pair” (Dąbmska 1967: 147). The author emphasizes that in this concept the meaning directives are, in addition to vocabulary and the rules of syntax, one of three elements that constitute language.

Another notion of Ajdukiewicz’s concept considered by Dąbmska is that of open and closed languages. According to Ajdukiewicz,

“We distinguished furthermore open and closed languages. We call a language open if there is another language containing all the expressions of the first one which confers in them the same meaning they possess in the first, and in which there are also expressions which are not present in the first language, neither as to form nor as to meaning, and among these expressions at least one is directly semantically related to some expression also occurring in the first language. A language that is not open, is called a closed language” (Ajdukiewicz 2006a, b, c: 177).

The terms ‘open’ and ‘closed’ come from the fact that in the case of the former, you can increase the number of its expressions without changing the meaning of those expressions that are already in it. This is not always possible in the case of closed languages.

“Open languages can have new expressions (not synonymous with any of those already present) added to them which are immediately meaning-related to expressions already present, without thereby altering the meaning of expressions already present. Closed languages, on the contrary, become disconnected, when a new non-synonymous expression is added to any of those already present” (Ajdukiewicz 2006a, b, c: 161).

In other words, in an open language certain meaning directives are hidden to some extent in the meaning of expressions. The concept of open or closed language is related to the notion of coherent or non-coherent languages.

The relation between expressions may be direct or indirect. If expression W is semantically related to V and V is related to U, then W is semantically related to U, however not necessarily directly. We have to admit that the meaning of the expression W is constituted not only by the directives in which W appears, but also by the directives in which the expressions V and U appear which are semantically related to W. All such expressions and directives related to them form a certain well demarcated part of the language called by Ajdukiewicz an isolated part (fragment). A language is coherent if none of its proper parts is an isolated fragment. Ajdukiewicz concentrates on coherent languages as non-coherent languages are always a collection of various languages.

As far as open languages are concerned, we can ask, what happens when we add new expressions to such languages? We conclude from the concept of an open language, that if we add to it a new expression, then previous expressions may retain their initial meaning, and a language remains coherent if, after adding new

expressions, a language will change into the one in relation to which it was open. After adding new expressions language becomes richer. It turns out that the total change of the meaning directives by adding new expressions always results in a change of the assignment of meanings characteristic for the language. The change in the assignment of meanings by adding new expressions will not take place only in case: (1) a new language is non-coherent, (2) the added expression has a translation in one of the previous expressions; (3) the former language is open to a new language.

Ajdukiewicz also deals with a problem of the mutual translatability of languages. It is believed that if the two languages  $S$  and  $S'$  are coherent and closed and an expression of one of these languages is translatable into an expression in the other, then these languages are isomorphic and all expressions of language  $S$  have a translation in  $S'$ . Ajdukiewicz believes that languages in the proper sense of the word are languages which are closed and coherent. Examples of such languages are the languages of deductive systems, such as the language of the logical calculus. Natural languages are always made up of a multiplicity of languages in the strict sense. They do not have a completely clear assignment of meanings to expressions. Natural languages lack specific meaning directives. According to Dąbska, with few exceptions, even languages of deductive systems fall under the definition of language proposed by Ajdukiewicz. Therefore, they are mostly open languages.

Dąbska indicates a certain essential difficulty with Ajdukiewicz's semiotic concept of language. She writes:

“The meaning of expressions is defined on the basis of language directives, which determine the structure of the language and the translatability of two languages. At the same time, some of the directives, the so-called meaning directives, are determined by the meaning of words. I fear that a certain ambiguity lurks in the term ‘meaning’” (Dąbska 1967: 150).

Dąbska explains further that Ajdukiewicz's theory leads to the problem of what determines what: do the meanings determine the meaning directives of a certain language, or vice versa, do the meaning directives determine meanings? The answer to this question depends on whether we treat the process of creating meaning directives as a procedure whose aim is to reconstruct a property that already exists in the language, or as a procedure which is but one element in the creation of the language. If the latter happens, by formulating directives we determine the meaning of those expressions to which the directives apply.

Ajdukiewicz introduces the concept of conceptual apparatus, by which he means the class of all the meanings of expressions belonging to a closed and coherent language.<sup>5</sup> According to Dąbska the notion of conceptual apparatus is a key to bridging Ajdukiewicz's semiotic and epistemological considerations. As we know, the notion of conceptual apparatus is the foundation on which his concept of radical conventionalism is based, according to which an image of the world, being composed of all the theses of the language, i.e. the sentences which are accepted on the basis of the language directives, is not uniquely determined by the experience, but depends on the choice of conceptual apparatus which is used to model experiential data.

<sup>5</sup> On this subject see (Zmyslony 2009).

## The development of Ajdukiewicz's conception of language

Dąbska believed that Ajdukiewicz's effort to create the so-called immanentist concept of language, i.e. an asemantic conception in which language is not understood as a representation of an objective model, was dictated by his conviction that semantic concepts exhibit an antinomial character (in terms of the antinomy of heterosemantic words or the liar paradox). Dąbska notes that such antinomies appeared to render impossible the correct correspondence theory of language. According to Dąbska, the development of science enabling the elimination of the antinomies from semantics inclined Ajdukiewicz to set out on fresh attempts in the theory of language. These attempts primarily take into account the semantic function of language. Dąbska considers the paper "Three concepts of definition" as a characteristic attempt in this regard.

In this study language is treated by the author as a collection of expressions and the rules appropriate for that language (McCall 1967: 207–231). The concept of directives is replaced by the notion of deductive inference rules specific to a particular language. Ajdukiewicz states that the introduction by postulates of a new phrase in language *S* is not enough if we want to guarantee the truth of the postulate, and that the terminological convention itself—the proof of existence of an object that fulfills the condition imposed by the convention on the denotation of the term—is also needed. Regarding these attempts by Ajdukiewicz, Dąbska states:

"He develops this idea further in the study entitled "Le problème du fondement des propositions analytiques" (*Language and Cognition*, Vol 2), where he shows that the analytical notion of analyticity involves a term relative to the language to which this proposition belongs and can be defined by means of semantic or syntactic conventions. The concept of language which I called immanentist treats language only in terms of syntax. A broader account of the semantic aspect of words leads to a modification of this concept; or perhaps it only shows that the relational (semantic and pragmatic) concepts of language are more fundamental" (Dąbska 1967: 151).

In the foregoing quotes Dąbska also takes issue with the connection between the accepted concept of language and the problem of truth. According to her, the meaning of the terms 'true' and 'false' depends on the general concept of language we adopt. This shows how important it is for epistemological considerations to adopt this or some other concept of language; and even more broadly, the choice determines how representatives of linguistic philosophy develop philosophical issues. Dąbska states that "...only on the basis of such a correspondence theory of language one can meaningfully use the classical concept of truth, which for formalized languages paraphrases Tarski's semantic conception of truth that W. Stegmüller (Stegmüller 1977: 15 ff) attempted to apply to natural language" (Dąbska 1967: 152).<sup>6</sup>

According to Dąbska, "The immanentist concept of language thus leads to the coherence theory of truth in the syntactic version" (Dąbska 1967: 156). But, the author asks, does this syntactic notion of truth (this being what she calls the semiotic

<sup>6</sup> Interesting comments on the correspondence conception of truth include Bunge 2012.



equivalent of a traditional coherence theory of truth) not assume a semantic point of departure? Dąbska comes to the conclusion that this is not necessary. She concludes “Only language analysis which takes into account its pragmatic functions, i.e. a language understood as a sign system used by people to communicate and to acquire, objectivize, and record the results of cognitive operations, makes a semantic point of view logically prior” (Dąbska 1967: 157). However, Dąbska warns that when it comes to the definition of truth, semantic definition seems to be derivative .

(...) if the considerations set out in this chapter are correct, then we should agree that any semiotic concepts of truth, relativizing the predicates ‘true’ or ‘false’ to the language to which the sentence belongs, are derivatives with respect to the epistemological or, in the broad sense of the concept, logical truth, on the basis of which the predicates ‘true’ and ‘false’ refer primarily to propositions, i.e., the logical contents of sentences, and secondarily to sentences themselves in terms of expressions of the language. Further analysis of these predicates has to appeal on the one hand to certain ontological categories, especially the concept of existence, and on the other hand to the concept of man as the subject of cognitive operations (Dąbska 1967: 158).

Linguistic philosophy, claims Dąbska, seems to reach the limits of the effective application of its methods.

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