Tadeusz Ciecierski*

Indexicality, meaning, use

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Abstract: The article presents two concepts of indexicality. The first, more standard and narrow, identifies indexicality with systematic (meaning controlled) context-sensitivity. The second, broader (derived from the work of Jerzy Pelc), conceives indexicality in terms of the potential variability of the general semiotic characteristics expressions (with respect to the context of use). The text introduces the concept of a pragmatic matrix that serves for a schematic representation of contextual variation. I also recapitulate briefly the views of Jerzy Pelc on the meaning (manner of use) and use of expressions, and briefly indicate its relationship approaches with contemporary debates around contextualism and status of non-sentential speech acts. Finally, the relationship between the broader notion of indexicality and the directive theory of meaning is analyzed.

Keywords: indexicality, meaning, use, contextualism, non-sentential speech acts, Jerzy Pelc

In the past several decades, philosophical inquiries into indexicality have come a long way: from an issue discussed primarily in the narrow context of problems of ostensive definition and the empirical foundations of knowledge, indexicality has become one of the main objects of interest in the philosophy of language. The historical reasons for the change are rather complex, but the impact of works by authors such as David Kaplan (1989) and Robert Stalnaker (1999), as well as the intensity of debates between contextualism and minimalism and contextualism and relativism, are among the most important. In this paper, I would like to briefly discuss a certain idea that appeared in Jerzy Pelc's works at the turn of the sixties and seventies of the twentieth century which, I think, may be treated as one of the first versions (and perhaps even the first) of contextualism.

The paper consists of four parts. In the first two I describe and analyze the idea in question. In the third part I take a closer look at the concept of meaning used in Pelc's theory. In the last part I try to situate the concept against the background of current philosophical debates.

***Corresponding author: Tadeusz Ciecierski**, University of Warsaw, Warszawa, Poland, E-mail: taci@uw.edu.pl

1 Use and the manner of use (usage)

The idea in question comes from works published between the years 1967–1971. Its first explicit articulation can be found in the article *Funkcjonalne podejście do semiotyki logicznej języka naturalnego* ('Functional approach to the logical semiotics of natural language'; Pelc 1967: 109–134 and 1979: 342–375), its development in the book *Studies in Functional Semiotics of Natural Language* (Pelc 1971) and its most comprehensive formulation in *O użyciu wyrażeń* ('On the use of expressions'; Pelc 1971a). The two latter publications can be seen as improved versions of the 1967 article.

The guiding thread of the above-mentioned works is the methodological postulate of *semiotic functionalism* and the distinction by which the dyadic (in the 1967 article and the English edition from 1971) becomes triadic.¹ The methodological postulate demands that the logical semiotics of a natural language (and thus the analytic philosophy of a language) be pursued in a *functional manner* – that is, by taking into account *how expressions are used*. The triadic distinction comprises the *usage (or the manner of use) of an expression*, the *use of an expression* and the *sub-use of an expression*.

Let us start with the concept of the *manner of use (usage)*. As Pelc briefly puts it: "Thus, as we see, speaking of such-and-such a usage of an expression, I have in mind a *linguistic practice*, an established *linguistic custom*" (Pelc 1971: 23).

And, as he states in another book, the linguistic custom contains directives:

... connected with a given expression conceived as a type, i.e., as a class of all tokens of a given expression, not with one or another particular token of an expression or one or another particular use of it. This entails that a particular usage is a property of an expression also if we consider it outside of a particular context and situation, as a position in the lexicon, for instance. (Pelc 1971a: 20)

As Pelc adds, understood thus, manner of use (usage) corresponds to one of the senses of the concept of *meaning of an expression*. We can, therefore, say that ambiguous expressions are characterized by the fact that they have many different usages and, therefore, that they are associated with directives constitutive of linguistic practices and linguistic customs.² In this sense, when we use the expression "iron" in order to refer to a common, inexpensive metal, it has a different usage (manner of use, meaning) from when we use it to refer to a tool used to press

¹ Semiotic functionalism clearly shows the influence of authors such as Ryle and Strawson, quoted with approval in many places (cf. Jerzy Pelc 1971a: 13, 15, 63, 67).

² Alternatively, we might speak of classes of such directives if we do not want to identify classes of directives with long conjunctions of individual directives belonging to the classes in question.

out creases from clothing. It also has a different usage when used to describe a type of golf club, and yet another when used to refer to a dark shade of silver.

The precise characterization of the remaining pair of concepts, i.e., the concepts of *use* and *sub-use*, is a bit more difficult because Jerzy Pelc explains them, first and foremost, by using examples. One can, however, deliberately depart from his terminology and propose the following characteristics. Suppose, first, that we are dealing with a sequence of sounds / phonemes, inscriptions (types) or some arrangement of complex structures of another type (only such a general description appears to suit sign languages that are full-fledged natural languages). Possible sequences or arrangements of this kind (we might dub them *pre-semantic objects*³) are candidates for becoming expressions (simple or complex) of one or another natural language. Let us assume that such a pre-semantic object either actually exists in the dictionary of a given language or corresponds to a complex phrase generated by the grammar of that language. If it has a definite manner of use in this language (i.e., if it has a meaning in this language), then we can say that we are dealing with an expression of that language. We might, therefore, represent expression as ordered pairs consisting of a pre-semantic object and a manner of use (meaning).⁴ *The categories of use and sub-use apply to such pairs, i.e., saying that an expression occurs in some use or sub-use means that a pre-semantic object (type) is used so-and-so in accordance with its manner of use.* Such a somewhat artificial procedure of starting not from expressions but from objects I have called *pre-semantic* is desirable because according to the *functional approach*, as pointed out by Jerzy Pelc, one should avoid assigning to expressions a predetermined grammatical or semantic category (like *being a name* or *being a sentence*). Such categorizations are primarily applicable to uses and sub-uses of expressions. Hence, instead of saying that an expression is a sentence, we say that it is used as a sentence; instead of saying that it is a name, we say that it is used as a name; and so on.⁵

Expressions (conceived in this manner) can be used as tools to perform – on particular *extra-linguistic occasions* – certain semiotic, i.e., syntactic, pragmatic or semantic acts (these acts should not be considered as disjointed). The expression

³ Below, I also speak about “pre-semiotic objects”. This term might appear even more appropriate, as the objects we are talking about have properties of another (non-semantic) type.

⁴ Relative to a given language *L* (in obvious cases I shall ignore the relativization).

⁵ Jerzy Pelc does not deny that categories such as *sentence*, *name* and *description* have an important role to play. As he states, such categories constitute “... ideal types of kinds of expressions” enabling the “arrangement of concrete acts of speech with regard to the degree of intensity of properties occurring in it” (Pelc 1971: 46).

“irons”⁶ might be used (in accordance with one of its manners of use) to *refer to some particular collections of tools used* to press out creases from clothing (as in, “The irons have arrived”) or when talking about a particular collection of irons having some special value or history (e.g., the irons used by Marilyn Monroe in 1950). One may use it in order to *refer to a kind of tool* (as in, “Irons might start a fire”) or to *predicate of something* the property of being an iron (as in, “Those are irons”). One might also use it to *assert something about an indefinite collection of irons* (as in, “Irons,” when one is replying to the question, “What have just arrived?”) or to *warn someone* who left two unplugged irons on the ironing board (as in, simply, “Irons!”). In all these cases the expression “irons” is used: to refer to one (use 1) or another (use 2) particular collection of irons; to refer to a kind of tool (use 3); in order to predicate of something the property of being an iron (use 4); to refer to an indefinite collection of irons (use 5); or to warn someone that she or he has left irons on the ironing board (use 6). In each of these cases, semiotic functionalism states that the meaning of the expression “irons” does not change or, alternatively, that the manner of use of the word “irons” allows all these (and other) uses.

When we are dealing with different uses of a given expression, we can group them into classes so that we take into account that *in certain types of contexts they perform a certain semiotic function* (e.g., they refer to something, they predicate something of something, they assert something, they warn someone, etc.⁷). In this way, we can arrive at a certain typology of uses and distinguish types of uses of expressions: e.g., nominal, predicative, assertoric, directive (in the sense in which one speaks of directive speech acts, i.e., those aimed at inducing someone to perform an action). The terms “typology” and “type” are used here deliberately: I do not assume that the distinguished types are discrete – they may differ only with respect to the degree in which a specific semiotic function is realized (e.g., a directive use is often accompanied by an assertoric use).

In *On the Use of Expressions*, Jerzy Pelc would treat some of the uses distinguished above rather as kinds or types of *sub-uses* (the concept of sub-use does not appear in the 1967 paper or the 1971 English book). For instance, I believe that he would not distinguish between assertoric and directive uses or referential and predicative uses. In both cases he would rather say that we are dealing, respectively, with two distinct sub-uses that represent a single type of use (nominal and sentential, respectively). For instance, we can establish that an expression (e.g., “The author of *The Tempest*”) is

⁶ I am using examples in the plural here, as English tolerates plurals without articles. In other languages (like Latin or Slavic languages) there are no definite/indefinite articles, so examples in the singular are sufficient and more straightforward.

⁷ It is a brief way of saying that when someone uses them, they have (or play) a particular semiotic function or role.

used to refer to Shakespeare and ask about the manner in which the referential function is fulfilled (descriptive manner, demonstrative manner, etc.)

The precise character of the use/sub-use distinction depends on the list of primary and secondary semiotic functions one wants to distinguish and what one wants to treat as variations or modifiers of the distinguished functions. Below, I shall follow a simpler distinction between manner of use and use (remaining closer to the terminology of the earlier paper and 1971 English book) and multiply uses and kinds of uses beyond necessity. I assume, however, that if we have a precise theory of semiotic functions we might easily transform the account I sketch out below into a more subtle one that employs the category of sub-use.

Let us gather everything together and present the theory in a slightly schematic manner. Let the symbols $E_1, E_2 \dots E_n$ represent our pre-semantic objects (i.e., sequences of sounds, inscriptions or gestures, or sequences of gestures in a sign language) and the symbols $m_1, m_2 \dots m_n$ represent meanings (=manners of use).⁸ As we have stated earlier, an expression (or rather, *a possible expression*) in our sense is any pair:

$$\langle E_i, m_j \rangle$$

for $i, j = 1 \dots n$. Obviously, only some such pairs are actual expressions of an actual language. If this is indeed the case, let us put the language symbol above the pair:

$$\langle E_i, m_j \rangle^L$$

An arbitrary expression (in the introduced sense) belonging to some language and relativized to some *use* and *context*, that is:

$$\langle \langle E_i, m_j \rangle^J, u_l, k_t \rangle$$

we would call an *occurrence* (let symbols $u_1, u_2 \dots u_n$ represent uses, and symbols $k_1, k_2 \dots k_n$ [for $i, j, l, t = 1 \dots n$] contexts).⁹ Let me stress that the concept of context here also comprises the linguistic surroundings of an expression (the so-called *co-text*).¹⁰

⁸ It is a convenient way of capturing the matter. However, let me be clear: we are not reifying meanings here.

⁹ We might alternatively assume that uses embrace contexts (which fits some of Pelc's declarations better, cf. Pelc 1971a: 69). However (contrary to these declarations), we may assume that every use is associated with a constitutive semiotic intention and that contexts instead play a complementary role with respect to that intention. The notation introduced above follows this interpretation.

¹⁰ "... in semiotic analysis relativization is becoming so important with regards to the language context of the expression analyzed and to the extralinguistic situation in which it was used, hence relativization with regard to use" (Pelc 1971: 47).

The first important principle of semiotic functionalism is that *semiotic functions or roles, such as reference or having a truth-value, can be properly and primarily attributed to occurrences*. One should, of course, presuppose here some general theory of such functions or roles. One might refer, for example, to the well-known Bühler–Jakobson conception (although it should be viewed, I think, critically and carefully – see Levinson 1983: 41–42); another possibility would be to combine certain ideas that can be found in classical categorial grammar (cf. Tałasiewicz 2009) with the semantic and pragmatic ideas of authors such as Reichenbach (1947) and Carnap (1947). We could, thus, distinguish *functor roles* and contrast them with both *singular* and *propositional roles*. Within the first, the *predicate* role can be distinguished, within the second, *nominal*, *descriptive* and *demonstrative roles* and within the third, *assertoric*, *promotive* and *expressive roles*. There are probably many other possibilities.

Assume that we have a catalog of such roles or functions (which is part of the appropriately rich theory of such functions, not necessary involving the one sketched out in the previous paragraph). For instance, assume that the catalog contains: a singular role (i.e., that of using an expression as a referential device), a nominal role (i.e., that of using an expression as a referential and purely tagging device), a demonstrative role (i.e., that of using an expression as a referential and deictic device), a descriptive role (i.e., that of using an expression as a referential and attributive device), a propositional role (using an expression as a device for communicating something to someone), an assertoric role (using an expression as a device of assertion), a promotive role (using an expression as a motivating device) and an expressive role (using an expression as a device of expressing a speaker's internal state). We might schematically represent the total semiotic characteristic of an occurrence in the following manner:

$$\langle \mathbf{E}_i, \mathbf{m}_j \rangle^L, \mathbf{u}_i, \mathbf{k}_t \rangle = \left\{ \begin{array}{l} \text{Singular role : YES/NO} \\ \text{Predicate role : YES/NO} \\ \text{Propositional role : YES/NO} \end{array} \right\} \left\{ \begin{array}{l} \text{Nominal role : YES/NO} \\ \text{Demonstrative role : YES/NO} \\ \text{Descriptive role : YES/NO} \\ \text{Assertoric role : YES/NO} \\ \text{Promotive role : YES/NO} \\ \text{Expressive role : YES/NO} \end{array} \right.$$

For instance, the scheme:

$$\langle \langle \mathbf{E}_i, \mathbf{m}_j \rangle^L, \mathbf{u}_i, \mathbf{k}_i \rangle = \begin{cases} \text{Singular role : YES} & \begin{cases} \text{Nominal role : NO} \\ \text{Demonstrative role : YES} \\ \text{Descriptive role : YES} \end{cases} \\ \text{Predicate role : NO} \\ \text{Propositional role : NO} & \begin{cases} \text{Assertoric role : NO} \\ \text{Promotive role : NO} \\ \text{Expressive role : NO} \end{cases} \end{cases}$$

fits well with the case in which “the author of *The Tempest*” is used as the equivalent of a demonstrating procedure but with explicit descriptive content (this may apply to *some* cases of referentially used descriptions). We assume here (obviously) that playing a certain semiotic role (nominal, for instance) is connected with playing another (usually more general) semiotic role (singular role, for instance).

The scheme:

$$\langle \langle \mathbf{E}_i, \mathbf{m}_i \rangle^L, \mathbf{u}_2, \mathbf{k}_2 \rangle = \begin{cases} \text{Singular role : NO} & \begin{cases} \text{Nominal role : NO} \\ \text{Demonstrative role : NO} \\ \text{Descriptive role : NO} \end{cases} \\ \text{Predicate role : NO} \\ \text{Propositional role : YES} & \begin{cases} \text{Assertoric role : NO} \\ \text{Promotive role : YES} \\ \text{Expressive role : YES} \end{cases} \end{cases}$$

corresponds to the use of “Passengers traveling to Indianapolis are requested to proceed to gate number six” as a request, while the assertoric use of the very same sentence (imagine that one is speaking about the action of the announcer requesting passengers to go to gate number six) corresponds to:

$$\langle \langle \mathbf{E}_i, \mathbf{m}_i \rangle^L, \mathbf{u}_3, \mathbf{k}_3 \rangle = \begin{cases} \text{Singular role : NO} & \begin{cases} \text{Nominal role : NO} \\ \text{Demonstrative role : NO} \\ \text{Descriptive role : NO} \end{cases} \\ \text{Predicate role : NO} \\ \text{Propositional role : YES} & \begin{cases} \text{Assertoric role : YES} \\ \text{Promotive role : NO} \\ \text{Expressive role : YES} \end{cases} \end{cases}$$

Because, in some cases at least, we can think of a given semiotic role in a functional or relational manner (e.g., the reference [characteristic of our singular role] is a reference to something, the assertion is an assertion of a proposition, etc.), in cases where the occurrence performs a given function there usually exists an object that is the value of this function, e.g., an object that is the referent or an object that is the proposition expressed. We assume that the concept of occurrence requires that such a value of the semiotic function be definite. Hence the complete scheme of the occurrence (for the phrase “the author of *The Tempest*” used in a demonstrative way) appears as follows:

$$\begin{aligned}
 & \langle \mathbf{E}_i, \mathbf{m}_j \rangle^L, \mathbf{u}_i, \mathbf{k}_t \rangle \\
 & = \left\{ \begin{array}{l} \text{Singular role : YES} \\ \text{Predicate role : NO} \\ \text{Propositional role : NO} \end{array} \right\} \left\{ \begin{array}{l} \text{Nominal role : NO} \\ \text{Demonstrative role : } \langle \text{YES, William Shakespeare} \rangle \\ \text{Descriptive role : } \langle \text{YES, William Shakespeare} \rangle \\ \text{Assertoric role : NO} \\ \text{Promotive role : NO} \\ \text{Expressive role : NO} \end{array} \right.
 \end{aligned}$$

Let us call such schematic representations of occurrences (of a given expression type having particular meaning) relativized to a use and situation, *pragmatic matrices*. Pragmatic matrices contain information about all the relevant semiotic properties of a particular use of an expression; we might also compare them and assess them as being identical, similar in one respect, dissimilar in another and similar/dissimilar up to a certain level. For instance, when I abstracted from the referent in some of the examples given above, I was interested in matrices that are identical up to the general distribution of semiotic functions. The schematic interpretation just introduced should, in order to completely realize the postulate of semiotic functionalism, also enable a matter-of-degree assessment of each semiotic function. For the sake of simplicity, I will ignore this aspect.

Pragmatic matrices provide a neat representation of the concept of *sameness of occurrence* (i.e., *sameness of the use of the same expression*). Jerzy Pelc, for instance, defends the view that: “The class of all tokens of the word *dog* . . . used in order to refer to Fido determines such and such use of this word” (Pelc 1971a: 15).

If one wants to pursue this idea, she/he must agree that two occurrences occur in the same use if they are identical with respect to their nominal role, i.e., they play a nominal role and refer to the same objects. A *different concept of the sameness of use* is one that presupposes that two occurrences occur in the same use if they are identical with respect to their *entire* singular characteristics. In this second sense, the description “the author of *the Tempest*” is used differently when it plays a purely descriptive role from when it plays a descriptively demonstrative role.

The method of pragmatic matrices enables the introduction of functional counterparts of concepts, such as *proper name*, *statement* (in the sense of a declarative sentence that has truth-value) or *predicate*. It is enough, first, to abstract from the expression used; then, secondly, to abstract from the particular context; and, thirdly, to abstract from the value of the particular expression in the context (e.g., reference, in the case of nominal function). We might say, then, that any expression that plays, in an arbitrary context, a *singular nominal role*, a

propositional assertoric role or a *predicate role* is, respectively, a proper name, a statement and a predicate.

2 Indexicality

What is indexicality as a property of linguistic expressions? Elsewhere (Ciercierski 2017) I have defended an account to the effect that the best first approximation is provided by something I have called a *Strawsonian picture* of indexicality. According to this picture, indexicality is a certain relational property that requires that two conditions be met in order for an expression to count as indexical. The first, which might be called *Variability Constraint*, requires that some relevant property of an expression changes and that this change corresponds somehow to changes in the context of use. The second, which might be called *Linguistic Control Constraint*, requires that the manner of contextual dependency be represented in the meaning of the indexical expression type. Both constraints are met by narrowly conceived indexical expressions.¹¹

It is important to note that *on the grounds of semiotic functionalism, indexicality is conceived differently*.¹² Let us use the method of pragmatic matrices to illustrate the point. In the Strawsonian model we assume that meaning regulates the character of the context-sensitivity of a *particular property* (our semiotic role of function) of an expression. Consider, as an example, the first-person pronoun. According to the Strawsonian picture, it counts as indexical because two possible occurrences of that expression type exist that differ with respect to their referential function, and the difference can be traced back (and predicted) when one considers the linguistic meaning of “I.” We have, therefore, one occurrence:

$$\langle \langle 'I', \mathbf{m}_j \rangle^L, \mathbf{u}_i, \mathbf{k}_t \rangle = \begin{cases} \text{Singular role : YES} \\ \text{Predicate role : NO} \\ \text{Propositional role : NO} \end{cases} \begin{cases} \text{Nominal role : NO} \\ \text{Demonstrative role : } \langle \text{YES}, \mathbf{a} \rangle \\ \text{Descriptive role : } \langle \text{NO} \rangle \\ \text{Assertoric role : NO} \\ \text{Promotive role : NO} \\ \text{Expressive role : NO} \end{cases}$$

And another:

¹¹ There are, of course, problematic cases (like the use of pronouns in games). I do not think, however, that they enforce a rejection of the *Linguistic Control Constraint*. Due to limitation of space, I leave the analysis of such cases for another occasion.

¹² Let me add that Jerzy Pelc applies his theory both to indexicality and ellipsis (omnipresent in natural languages). Below I am using the term indexicality (conceived in the second manner) in a broad sense that embraces ellipsis.

$$\langle \langle 'I', \mathbf{m}_i \rangle^L, \mathbf{u}_i, \mathbf{k}_i \rangle = \left\{ \begin{array}{l} \text{Singular role : YES} \left\{ \begin{array}{l} \text{Nominal role : NO} \\ \text{Demonstrative role : } \langle \text{YES}, \mathbf{b} \rangle \\ \text{Descriptive role : } \langle \text{NO} \rangle \end{array} \right. \\ \text{Predicate role : NO} \\ \text{Propositional role : NO} \left\{ \begin{array}{l} \text{Assertoric role : NO} \\ \text{Promotive role : NO} \\ \text{Expressive role : NO} \end{array} \right. \end{array} \right.$$

for distinct speakers **a** and **b**. Such occurrences are, of course, not merely possible but are omnipresent on particular occasions of the use of “I” in English. In the terminology introduced above, we might say that the “I” is indexical (in a given language and in a given meaning) if there are two possible pragmatic matrices that differ – when two distinct uses/contexts are considered – with respect to the reference, which, however, remain identical with respect to other aspects (roles) represented in the matrices.

In the functional model, the possibility of both occurrences will also be treated (quite rightly!) as sufficient reason to regard the expression as indexical. However, the concept of *indexicality* is interpreted here in a broader and more general sense. It also embraces cases where *any fragment* of a pragmatic matrix of an expression changes (while the meaning remains constant).

Consider two examples. First, the sentence “Passengers traveling to Indianapolis are requested to proceed to gate number six” (the reader is kindly asked to ignore for a moment the tense and other indexical aspects). One of the possible pragmatic matrices for this sentence appears as follows:

$$\langle \langle \mathbf{E}_1, \mathbf{m}_1 \rangle^L, \mathbf{u}_{10}, \mathbf{k}_{10} \rangle = \left\{ \begin{array}{l} \text{Singular role : NO} \left\{ \begin{array}{l} \text{Nominal role : NO} \\ \text{Demonstrative role : NO} \\ \text{Descriptive role : NO} \end{array} \right. \\ \text{Predicate role : NO} \\ \text{Propositional role : YES} \left\{ \begin{array}{l} \text{Assertoric role : } \langle \text{YES}, \text{the proposition that} \\ \text{passenger travelling to Indianapolis are} \\ \text{requested to proceed to gate number six} \rangle \\ \text{Promotive role : NO} \\ \text{Expressive role : } \langle \text{YES}, \text{the belief that passengers} \\ \text{travelling Indianapolis are requested to} \\ \text{proceed to gate number six} \rangle \end{array} \right. \end{array} \right.$$

Another, as follows:

$$\ll \mathbf{E}_1, \mathbf{m}_1 \rangle^L, \mathbf{u}_{33}, \mathbf{k}_{33} =$$

Singular role : NO	{	Demonstrative role : NO
		Descriptive role : NO
Predicate role : NO		
Propositional role : YES	{	Assertoric role : NO
		Promotive role : <YES, motivating the addressed person to proceed to the gate .
		Expressive role : <YES, <i>the wish of the speaker that the addressed persons are proceeding to the gate, etc.</i> >

The matrices differ in the following respects: the first occurrence plays the assertoric role, while the second does not; the latter plays a promotive role that is absent in the former. This suffices to treat the sentence as indexical (in the second, broader, sense). Indexical in this sense shall be an arbitrary noun (like the plural, “dogs”) that has two possible matrices that might change (while the meaning remains constant) from one in which the expression plays a predicate role, to one in which the expression plays a nominal or even propositional role (as a sub-sentential speech act).

This notion of indexicality enables us to state that (Jerzy Pelc uses the term “occasionality” as a synonym of “indexicality”):

... occasionality is a property of a vast majority of expressions of natural language. Together with the ellipticity of expressions it constitutes a characteristic property. Contrary to accepted opinion, not only are words like “I,” “here” and “now” occasional, allegedly in contrast to other non-occasional words, but also occasional are words like “table” the phrase “eligible to vote” and what is called a pure proper name such as “John,” as well as the verb “stand” and others. One may at best note the difference in the degree of occasionality and the difference in the degree of the dependence of the referential function upon context and situation (Pelc 1971: 43).

The concept of pragmatic matrices described here is also well suited to the representation of interesting cases (rare, but undoubtedly possible) in which the speaker *deliberately* performs two different speech acts in one utterance. Imagine, for instance, that the speaker intentionally utters “Passengers traveling to Indianapolis are requested to proceed to gate number six” in a situation where he/she wants to motivate certain group of passengers G to go to the gate, and (at the same time!) to describe what he is doing at the present moment. We could assign the following pragmatic matrix to this situation:

$$\langle\langle E_1, m_1 \rangle^L, u_4, k_4 \rangle =$$

Singular role : NO	{	Demonstrative role : NO
		Descriptive role : NO
Predicate role : NO	{	Assertoric role : <YES, <i>the proposition that the person is requesting a certain group to the gate</i> >
Propositional role : YES		Promotive role : <YES, <i>motivating the addressed persons to proceed to the gate</i> >
		Expressive role : <YES, <i>the wish of the speaker that the addressed persons proceed to the gate and her/his belief that she/he is requesting a certain group to go to the gate</i> >

The fact that the difference resulting from the change in the pragmatic matrix (corresponding to the change in the context) is sufficient to regard the expression as indexical is the reason why the main postulates of semiotic functionalism are sometimes presented as constituting a theory of the *indexicality of expressions* in contrast to the theory of *indexical expressions*. This is, I think, a very handy formulation. It is important, however, to use this distinction cautiously: the point here is not that one cannot substitute speaking about the property of being indexical with speaking about indexical expressions (that would be a betrayal of *reism*, a theory always close to Jerzy Pelc). The point is rather that semiotic functionalism enables the comparison of expressions with respect to the character and degree of their indexicality. The schematic interpretation presented above is aimed primarily at explicitly outlining this idea. Nevertheless, we are still talking here about indexical expressions conceived as ordered pairs composed of some pre-semantic object and its manner of use (meaning).

3 Meaning

Let us now turn to this concept. Let us keep in mind that by manner of use we mean, “. . . a *linguistic practice*, an established *linguistic custom*.” This broad description allows for several interpretations. One possible interpretation that can be considered here revolves around the contrast between *localistic* and *holistic* theories of meaning.¹³ Localistic theories stress the importance of using on specific

¹³ I owe this distinction to Paweł Grabarczyk (cf. Grabarczyk 2019). However, his terminology is different: he uses the term *prohibitory* instead of *localistic*. My impression is also that his characterization of prohibitory theories is a bit narrower: he intends primarily to distinguish between

occasions (let us call such occasions *test situations*): they require that expressions be used (or not used) in a particular way in test situations. If an expression is not used in accordance with such a requirement, localistic theories claim that it is used in a different meaning (or with a different manner of use). Beyond test situations, localistic theories impose no constraints on the use of an expression: whatever is not prohibited in such situations is allowed in and outside of test situations. Hypothetical holistic theories, on the other hand, do not treat rules, conventions or linguistic customs that are constitutive of a manner of use of an expression, as relativized to some situations but not others. Rather, they assume their applicability to each occasion (I doubt that any philosopher or linguistic would be ready to defend radical holism here; rather, I treat the tag *holistic* as indicating a certain hallmark in respect of which one might locate various theories of meaning). A good example of a localistic theory is the directival theory of meaning,¹⁴ while some versions of inferentialism are definitely more holistic in this respect. The reader is kindly asked to keep in mind that the difference outlined here is a matter of degree.¹⁵

Let us now consider one of the examples used in semiotic functionalism:

... on some occasions the noun *fire* functions as a proposition. Per analogiam, when a teacher uses the word *silence* in the classroom she/he uses it as an imperative sentence, hence as a sentence in the grammatical sense, which is not, however, a proposition. However, the manners of use of *fire* and *silence*, I believe, have not changed. Linguistic rules associated with the word *fire* enable using it in order to refer to a burning thing, to an event, process or state of affairs that consist in the fact that something is on fire. By the same token, when *fire* functions as a name, or as an onomatoid, or as a non-declarative sentence, or as a declarative sentence or as a question, it functions in accordance with its use directives and, hence, within a single manner of use. (Pelc 1971a: 53–54)

theories of meaning that stress not using expressions on particular occasions and those that stress using expressions on particular occasions. Depending on the character of linguistic actions, the difference may be relevant or not. For instance, if the action in question is assertion, there is a clear difference between a hypothetical theory that might require non-dissenting (to certain sentences) and a hypothetical theory that requires assenting to certain other sentences. Within the holistic-localistic contrast, the degree of freedom in the use of an expression is not the result of the (possible) gap between what is prohibited and what is commanded.

14 Ajdukiewicz (1978) and Grabarczyk (2017). Some reasons for taking a directival theory of meaning as the best available version of inferentialism are discussed in Poślajko and Grabarczyk (2018).

15 Krzysztof Poślajko (2017) suggested recently that standards of the correctness of use (our manner of use) might also vary with respect to circumstances. Semiotic functionalism, I believe, might easily incorporate this relativistic account.

In the examples quoted, the accordance of uses with meanings of words such as *fire* or *silence* is stressed. At the same time, both the nominal and propositional uses of both expressions are described as being compatible with their meanings. This indicates a very liberal attitude towards meaning and corresponding linguistic customs. This fits very well with localistic accounts of meaning.

One possible hypothesis is that the theory of meaning particularly well suited to semiotic functionalism is the directival theory of meaning. Let us remember that it is on its grounds that we identify the meaning of an expression (our pre-semantic object) with its place in the matrix of the meaning directives of a given language. These directives comprise: first, the sentential uses of expressions; secondly, acts of assenting and dissenting to these expressions in certain situations (arbitrary situations, situations in which other sentences are accepted, empirical situations, etc.); and thirdly, actions resulting from the proper understanding of some particular expression. When pursuing this idea we would have to assume that in the pair:

$$\langle E_i, m_j \rangle^L$$

m_j represents the appropriate place in the matrix of language L . Combining semiotic functionalism with the directival theory of meaning would require certain modifications to one of the theories. The most important challenge is connected with the syntactic constraints of the latter theory and the definition of synonymy in terms of the inter-substitution of expressions (the application of this concept presupposes the sameness of the semantic category of expressions that are subject to this operation). It is definitely a non-trivial task to combine these constraints with an expression-type, independent notion of use. In particular, it appears impossible to reconcile the broad notion of indexicality with the basic idea of the directival account. The reason for this is pretty straightforward: from the point of view of the directival account, m_i is the place in the matrix of language L . The place in question is determined by the syntactic decomposition of *sentences* that figure in the meaning directives of the language. By the same token, the sentential category of the directival sentences (our propositional role in the pragmatic matrix) must remain insensitive to changes in use and situation (and this is anti-functionalistic in spirit). It seems, therefore, that the only way to reconcile the directival theory of meaning and semiotic functionalism is to restrict the applicability of the latter to expressions that are not sentences figuring in the meaning directives.

4 Concluding remarks: Contemporary debates

There are, I believe, at least two contemporary debates in which ideas very similar to those of semiotic functionalism are discussed.

4.1 Non-sentential speech acts

As we pointed out above, we can easily call to mind examples of propositional uses of expressions that are not sentences (in the grammatical sense). This observation fits well with the idea of non-sentential speech acts discussed extensively in recent decades in pragmatics and the philosophy of language. Robert Stainton describes this idea in the following manner:

... speakers utter ordinary words and phrases, with the syntax and semantics of ordinary words and phrases, and thereby perform speech acts. More formally put, they produce projections of lexical items – which, seen semantically, are not of semantic type $\langle t \rangle$ and contain no force indicator – and yet they thereby make assertions, ask questions, etc. Since there is an assertion of something of semantic type $\langle t \rangle$, what the speaker means in these cases extends beyond what her words mean. And yet, this mismatch is not strikingly similar to metaphor, or conversational implicature, or speaker's reference, or other clearly non-literal speech acts. Rather, one seems to have perfectly literal communication in these cases. (Stainton 2004: 270)

In the dispute over the status of non-sentential utterances, various problems are currently being discussed. These include, for example, the existence of criteria enabling a demarcation line to be drawn between apparent and authentic non-sentential utterances. Even the claim that the latter class is non-empty is a matter of theoretical controversy (cf. Odrowąż-Sypniewska 2017). Undoubtedly, semiotic functionalism is close to the views of authors such as Stainton, for whom the existence of authentic, non-sentential speech acts is uncontroversial. It is worth noting, however, that a proponent of semiotic functionalism would not treat the phenomenon in a special way. For such a person there is essentially no important difference between the fact of the existence of non-sentential speech acts and, for example, the fact of the existence of referential uses of predicates.

4.2 Contextualism

The term “contextualism” is a tag that could be applied to a large class of theories (cf. Jaszczolt 2016) that share a critical attitude towards the claim that context-sensitivity can be restricted to a small class of expressions (those meeting the

Linguistic Control Constraint described above, for instance). As I pointed out above, Jerzy Pelc's theory is definitely a contextualistic one, as the concept of indexicality introduced within this theory is a broad one. At the same time, it should be borne in mind that the concept of indexicality used in semiotic functionalism requires variability of the pragmatic matrix while the meaning of a specific pre-semantic object remains constant. The key question one has to ask here is: what is the connection between the meaning and the truth-conditional content of an expression (within semiotic functionalism)? Because of the localistic understating of the notion of meaning, the answer to this question should proceed along the following lines: on the one hand, meaning does not determine the semiotic roles and admissible arrangements of the pragmatic matrix (and hence does not determine the truth-conditional contribution of expressions) independently of use and context; on the other, it might determine such roles on *some particular occasions*. If I am right here, semiotic functionalism occupies the middle ground between radical and moderate versions of contextualism. What is interesting is that it indicates a possible source of misunderstanding that could arise from the ambiguity of the saying "meaning determines truth-conditions." On the one hand it does not agree that determination has a functional character, while on the other it enables meaning to regulate the class of admissible uses (without appealing to any common properties of admissible uses).

Both described connections deserve further study. However, I believe that they undoubtedly indicate the pioneering character of semiotic functionalism as well as its theoretical potential. May others come forward to inquire into its numerous aspects!

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