The Poly Code Character of the English Learners’ Dictionaries

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Abstract
The paper deals with one of the most relevant questions of semiosis in English lexicography. The article studies the mechanism of double encoding a message (verbally and pictographically) to optimize the perception, processing, and storage of information by the user of the dictionary. The aim of the given research is to determine the features of an English poly code dictionary entry as a communicative phenomenon of educational lexicography. The study is based on five lexicographic sources, traditionally called the big five. The research material includes 1640 poly code entries. The article suggests a new interpretation of a poly code entry as a threefold unity of a lemma (the headword), a verbal definition, and a picture. These three constituents jointly name, interpret, and visualize the meaning of a dictionary entry. The article also analyzes the configuration of a poly code entry informational potential in terms of increasing/decreasing of the information presented by the iconic constituent in comparison with the verbal one. The research proves that the whole set of poly code dictionary entries reflects a particular view of the world characterized by absolute anthropocentricity and specific Anglo-Saxon bias. The results of the performed research are significant for English language teaching and learning as they prove that pictographic illustrations that accompany verbal explanations are not purely ornamental. They optimize the readers’ activity of searching, understanding, and memorizing the necessary information.

Keywords: learners’ dictionary, lexicographical entry, poly code communicative phenomenon

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Introduction

The modern world is in a state of constant dynamic development raising the problem of successful communication among individuals, communities, and ethnic groups. The rapid process of globalization makes the world more connected and more dependent. Integration processes in the field of economy and politics caused the expansion of intercultural and interlingual contacts. The role of the language of cross-cultural communication is exceptionally high, and the English language is considered the lingua franca of today (Crystal, 2003).

Learning a foreign language is unthinkable without using various informational resources: textbooks, reference books, encyclopedias, and first of all, dictionaries. The communicative specificity of a dictionary of any type consists in its sporadic usage – it is not a book intended for reading from beginning to end. Instead, the user/reader is assumed to refer to this resource to obtain some specific information, and this activity requires individual communicative skills. Pictographic illustrations that accompany verbal definitions optimize the process of searching, understanding, and memorizing the necessary information obtained from learners’ dictionaries (Sanchez, 2010). Language teachers cannot afford to ignore such dictionaries because the teacher who finds the right illustration at the right moment owns a powerful tool. Of course, dictionaries are intended primarily for students' self-access, and it is up to the teacher to ensure that his students can use dictionary illustrations effectively. The full potential of using dictionary illustrations in the classroom has not been explored yet. Still, the latest dictionaries have come up with some novel ways of representing lexical meaning visually. More picture glosses exist now than ever before. It is up to teachers and learners to start using them and to spread the word about what to do with them (Sanchez, 2010).

Thus, the study of a poly code dictionary entry is of real scientific interest. The research has been performed in the context of communicative linguistics. It deals with one of the problems of semiosis in English lexicography. The article studies the mechanism of double encoding of the message (verbally and pictographically) to optimize the perception, processing, and storage of information by the user of the dictionary. The main aim of this study is to determine the features of the English poly code dictionary entry as a communicative phenomenon of educational lexicography. A poly code entry is a threefold unity of a lemma (the headword), a verbal definition, and an illustration. These three constituents jointly name, interpret, and visualize the meaning of a dictionary entry. The findings of the performed research are significant for English language teaching and learning as long as it proves that pictographic illustrations that accompany verbal explanations are not purely ornamental. They optimize the readers’ activity of searching, understanding, and memorizing the necessary information. The results of the study are used in the educational process at Odesa I.I. Mechnikov National University, in particular, courses on the theory of communication and lexicography.

Materials and Methods

The research bases on five lexicographic sources, traditionally called the big five (Svensen, 2009). They are Cambridge Advanced Learner’s Dictionary (C), Longman Dictionary of Contemporary English (L), Collins COBUILD Advanced Dictionary (CL), Oxford Advanced Learner’s Dictionary (O), and Macmillan English Dictionary for Advanced Learners (M). To achieve the above-stated goal, the researchers have used general scientific methods, such as the process of observation of empirical material,
its analysis, and inductive generalization. Simultaneously, the use of the deductive method, and the general theory of semiosis, enabled tracing the processes of specification and increase of information in a poly code message in the format of a dictionary entry. Specific linguistic methods were manifested in the definitional analysis to highlight semantic bundles of verbal definition and further search for their equivalents in the pictogram. The obtained quantitative data and their qualitative interpretation revealed absolute anthropocentricity of the picture of the world reflected in the poly code entries of the dictionary. The application of the process of consecutive selection enabled singling out poly code dictionary entries, which contain a verbal definition of the head word-lemma and a pictographic (in the form of a picture or drawing) presentation of a nominated and interpreted referent. The resulting sample is 1640 poly code entries (see Table one).

Table 1. The number of poly code entries in the English learners’ dictionaries

<table>
<thead>
<tr>
<th>dictionary</th>
<th>Number of entries</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>497</td>
<td>30.3</td>
</tr>
<tr>
<td>L</td>
<td>421</td>
<td>25.7</td>
</tr>
<tr>
<td>Cl</td>
<td>271</td>
<td>16.5</td>
</tr>
<tr>
<td>O</td>
<td>249</td>
<td>15.2</td>
</tr>
<tr>
<td>M</td>
<td>202</td>
<td>12.3</td>
</tr>
<tr>
<td>Total</td>
<td>1640</td>
<td>100.0</td>
</tr>
</tbody>
</table>

The most representative sources for poly code entries are the Cambridge Advanced Learner's Dictionary and Longman Dictionary of Contemporary English.

Literature Review

In English language learning, all learners need to obtain a wide range of linguistic knowledge, excellent communicative skills, and extensive knowledge of English vocabulary. First and foremost, a well-developed understanding of terminology assists learners to comprehend, communicate, and be successful in language acquisition. Among the wide variety of ways in vocabulary learning, either intentional or incidental, the use of dictionaries in the learning process is a useful strategy and an effective tool in the students' hands which provides quick and direct access to mastering unknown words in particular, and the English vocabulary in general. No doubt, dictionaries serve as the most reliable sources of information about terms crucial for language learning (Koca, Pojani, & Jashari-Cicko, 2014). Dictionaries provide learners with useful linguistic and cultural knowledge, especially when teachers are unavailable, and students have to learn by themselves (Walz, 1990). As students sometimes cannot ask their teachers about certain aspects of the language they wish to learn, and as they lack correct models to follow, the EMD (English Monolingual Dictionary) can help. The EMD can, therefore, allow them to assume some degree of independence in learning the English language (Manan & Al-Zubaidi, 2011).

In the first half of the 20th century, linguists tried to develop practical approaches to language instruction, moving away from literary and classical models toward models based on current usage. The era of English learners’ dictionaries, which are in the focus of our attention, began in the middle of the twentieth century. The communicative specificity of learners’ dictionaries addresses an exact segment of the readers’ audience. These are non-native English speakers, studying English as a foreign language, living outside the range of its distribution, and, therefore, beyond situational context. This fact determines the content and the form of presenting
lexicographic material, aimed at expanding the readers’ vocabulary and familiarizing him/her with the culture of the English-speaking society. Béjoint (2010) remarks, that in addition to a focus on more frequent words and their more ordinary meanings, on common collocations and syntactic patterns, the big five also feature: simplified definitions; accentuated information about both spoken and written usage patterns; pronunciation information, given in the International Phonetic Alphabet; generous use of examples; and the front section explaining how to use the dictionary, particularly its encoding schemes. The big five dictionaries were studied regarding prototype theory applied to definitions in the English learners’ dictionaries, focusing on analyzing the microstructures employed for sense differentiation and ordering (Jiang & Chen, 2017).

As for the study of pictographic elements in English learners’ dictionaries, Stein (1991) remarks that dictionary illustrations and their relationship to the definition are fascinating topics that, for a long time, had been ignored in lexicographic studies. There have appeared several studies dedicated to this problem (see, for example, Hartmann, 1992). Klosa (2015) defines the lexicographic illustration as “A particular kind of image which is used in conjunction with a text and which decorates, illustrates, or explains the text” (p. 516). Lew, Kaźmierczak, Tomczak, & Leszkowicz (2018) comment on this definition and remark that of the three verbs featuring in this definition, decorating – an aesthetic function – is of secondary importance in a dictionary viewed as a chiefly utilitarian object (though decoration may be of value insofar as it contributes to the symbolic role of some dictionaries). Saying that an illustration illustrates is uselessly tautological. Thus, it is the third verb, explaining the text, which seems to express the central function of lexicographic image (Lew et al., 2018). However, these studies are focused either on the general correlation between the definition and the picture, as seen from the following quotation: “At best, there is a complementary relationship between the definition of a headword and the illustration, so that the whole meaning can be ascertained from the definition and the illustration, with the illustration completing the text and vice versa” (Klosa, 2015, p. 516), or they are focused on how verbal and pictorial elements within an entry compete for dictionary users’ attention, and how this competition affects meaning-extraction and retention (Lew et al., 2018). The present research analyzes the configuration of a poly code entry informational potential, the reasons for increasing/decreasing of the information presented by the iconic constituent in comparison with the verbal one.

Results and Discussion
Non-verbal Communication Means in the English Learners’ Dictionaries
Lexicographers note that every dictionary user faces three problems: how to find the right information, how to understand it (comprehend), and how to apply it (Tarp, 2010). Nonverbal means of communication help in solving the first two problems. Two semiotically different types of paragraphic standards are used in the learners’ dictionaries. These are printed and depictive non-verbal means. Printed non-verbal communication means are a compulsory component of an entry in any explanatory dictionary. These means include font, background and font color, icons, and symbols (arrows, triangles, rulers, frames, boxes). They mark different quanta of information in the entry, such as allocating the title word, individual semes of polysemic terms, their interpretations and linguistic examples, the zone of cultural information referents, etc. Printed non-verbal means help the user find the required package of information in the proposed lexicographic entry. Depictive non-verbal means of communication are an optional component of a dictionary.
entry. They include *abstract-logical* and *pictographic ones*. The first group contains charts, tables, histograms, formulas, drawings. They present information on some abstract relationships and logical relations among nominated objects. Thus they are mainly recorded in specialized and terminological dictionaries. Pictographic means offer images of a designated object or situation. Pictographic non-verbal elements include various types: a figure, a photograph, a diagram. *Figures* are the most popular non-verbal elements used in dictionaries. Besides the fact that they quickly interpret the meanings of the defined words, they contextualize the lemma, i.e., present a sketch in which the definition of the word becomes understandable. The user effortlessly recognizes the situation implied. *Photos* are not used in dictionaries as often as pictures. The problem is that photography is always individual. Landau comments on this tendency: “Whatever a photograph depicts, a zebra, a goose or a medieval church, it is always an image of a particular referent. While a drawing can combine the features of many individual referents, creating a distillation of *typical* elements” (Landau, 2001, p. 145). This is necessary for explaining the meaning of a word in a lexicographic entry which is always based on *generalization*. The word meaning is a reflection of general, constant, and stable hidden in various phenomena. The picture is more informative than the photo because it depicts details more clearly, while the background – in a more generalized way, without unnecessary information. An illustrative component of a poly code entry in the form of a *diagram* is relatively widespread in dictionaries. It can clarify verbally presented information and make it much more understandable.

The iconic nature of such communicative means helps to present: (a) the appearance of the referent, (b) its functional purpose, (c) its location in space, and (d) its position among other objects of the class. In other words, *pictographic* illustration helps comprehend the information encoded *verbally* in the lexicographic entry. Thus, the picture is often a more straightforward and time-saving way of explaining to a non-speaker an unknown word than its purely verbal definition. In the given work, the primary attention focuses on combining verbal explanation and pictographic presentation of the referent in the lexicographic entry. The latter is a *poly code text*. In a poly code lexicographic entry, a bunch of semantic components (semes) is explained semiotically twofold: through a verbal definition (through language signs), and through pictorial presentation (through iconic symbols). The two codes work in unison.

The verbal definition bears specific relationships with the pictographic presentation in the framework of a poly code text. The pictogram can: (a) duplicate a set of definitions, (b) transform them, (c) add new features, (d) establish paradigmatic relationships with other entries in the dictionary. Within the framework of the dictionary macrostructure a poly code entry is almost always an *asymmetric phenomenon*. It does not refer to the *whole* entry as a structural unit of the dictionary but to *one* sememe (out of several) and the icon whose meaning it illustrates. On the other hand, *asymmetry* also indicates that the image often represents a more significant number of referents than mentioned in the verbal definition of the corresponding sememe, adding the so-called *information expanders*.

*The Informational Potential of a Poly Code Dictionary Entry*

One of the tasks of the given research is to determine the amount of information potential of a poly code dictionary entry in a learners’ dictionary. In other words, the research answers the question: *what happens to the information contained in the verbal part of the entry with a*
pictographic component? In such cases, the pictorial aspect of the entry focuses exclusively on the lexical semantics of the word. Information on its grammatical semantics, phonetic form, and style attribution remains the prerogative of the verbal component of a poly code entry and is not subject to visualization.

Having studied the amount of information potential of a poly code entry, we conclude that in some cases, there is an information balance between the definition and the icon (each definitional feature is pictographic). Still, in the vast majority of cases, such compensation is violated at the expense of loss or, conversely, an increase of quanta of information in the icon.

In terms of lexical semantics, several options are possible for altering the relevant information in the pictographic accompaniment of the verbal component: duplication of data using another (iconic) sign code; inconsistency of pictographic information with its source; reduction of information potential in the pictogram in comparison with the explanation; specification of verbally stated information of an abstract nature; increase in information potential.

Duplication of verbally expressed information using a different (namely pictographic) code is not very frequent. In this case, all the definitional features are reflected in the figure or diagram. The reflection may be realistic or schematic. The first option is observed, for example, in the poly code entry viaduct [a long high bridge, usually held up by many arches, which carries a railway or a road over a valley]. The single-object pictogram offers a drawing of just the same structure - a high and long bridge with numerous arches, thrown from one slope of the valley to another, a train travels across the bridge. The visual medium reflects quite a few cultural stereotypes. For example, an entry in the dictionary (M) interprets the meaning of the lemma answer somebody back [to reply too rudely somebody who has more authority]. The sense of snapping in a conversation with a more authoritative interlocutor is outlined in the form of a drawing in which a little boy with a furious expression on his face shouts to a frowning adult. The child’s violation of norms of behavior is reflected by the boy’s facial expression and his cry (the word NO is given in caps in a cloud). This is a pictographic presentation of one of the definitional features: reply rudely. The other definitional feature: to somebody who has more authority is embodied in the figure of an adult, i.e., a more authoritative interlocutor. English-speaking, mainly British, culture disapproves of such children’s behavior. The definition of the lemma contains no information about the age of the participants in the reference situation. The picture presents this quantum of information, which activates a specific behavioral pattern in the readers’ memory (children should not be bold to adults). Violation of this behavior stereotype makes the meaning of the expression to answer somebody back visual and memorable.

Sometimes the informational potential of two components of a poly code entry – a verbal and a pictographic one – is not entirely adequate to each other. One of such cases is the inconsistency of pictographic information with its correlate. In this case, the image of the referent is inaccurate, sometimes even erroneous. It can lack certain definitional features mentioned in the explanation. For example, in the dictionary (L), the lemma bundle has the following set of attributes [(a) a group of (b) things such as papers, clothes, or sticks that (c)
are fastened/tied together]. Of the three features: (a) group, (b) things, and (c) fastened/tied together, the pictogram offers only the first two, depicting in the pictogram the washed laundry dumped in the laundry basket, the tag under this figure reads: a bundle of washing. The information expanders on the icon are a bunch of letters (a heap of letters), stacks of CDs and books, a bouquet, and a bundle of banknotes (a wad of money). Thus, the associated attribute, (c) fastened or tied together in the illustration to the heading word (the lemma) bundle has no explication.

Such incidents in the presentation of information using a pictographic code happen because of the difficulties in preparing and editing lexicographic publications. However, there are systemic reasons for violating the informational correspondence of the two components in poly code entries. They lead to a decrease in the information potential in the pictogram compared to the verbal part of the entry. The main systemic reason for such a reduction is the limitations of the pictographic code as such. They lead to the loss of quanta of information included in the definition of sound, color (there are frequently no polychrome colors, only black and white), dynamics, cognitive activity, and others.

For example, in the Cambridge dictionary, the sound imitating lemma smash is defined: [to cause smth to break noisily into many small pieces]. The single-object pictogram depicts a plate breaking into many small fragments. The reader learns about the loud noise accompanying the action solely from the definition. The Longman dictionary in the rose entry verbally mentions the smell that the rose is famous for [a flower that often has a pleasant smell, and is usually red, pink, or yellow]. There are no pictographic ways to convey the definitional attribute of a pleasant aroma. Besides, there are limitations in representing the qualities red, pink, or yellow in a monochrome picture.

Sensory information about the taste characteristics of objects can be verbally transmitted using adjectives sweet, bitter, sour, etc. However, even in entries about food, i.e., different dishes, pastries, etc. dictionaries do not include such information in the definition, despite its crucial importance for grasping the essence of the nominated referent. Dictionary definitions list more or less detailed sets of ingredients that make up a dish, indicate how to cook it (cooked, baked, raw), and sometimes mention the origin of the meal (Japanese, Mexican). But the reader can only guess about the dish taste grounding his guess exclusively on his/her knowledge of the taste of the ingredients. For example, jam, cream, fruit, mentioned as the filling of Swiss roll, a layer cake, and sometimes a pie hint that the pastry should be sweet. At the same time, quiche, nachos, etc., should taste like cheese, vegetables, and meat (as long as their ingredients are cheese, vegetables, beans, meat). The pictographic component of such entries does not help the dictionary user to master this sensory information about the referents. The organoleptic characteristics of objects remain opaque for symbolic designation, either through verbal or pictographic codes.

Still, another example of pictorial encoding limitations is the definition of lemma dream: [an imaginary series of events that you experience in your mind while you are asleep]. The dictionary (CL) makes the corresponding entry a poly code one, supplying the verbal part with a pictographic part – a photograph of a person sleeping in bed. The only feature of the definition,
which undergoes pictographic illustration, is you are asleep. In contrast, the main definitional feature imaginary events experienced in the mind (during sleep) remains exclusively in a verbal presentation. The photo of a sleeping person in the entry dream does not differ from the picture in the entry of sleep; they could be interchanged easily. The limitations of the pictographic code in presenting mental referents are very significant.

The correlation between the informational potential of the verbal and pictographic parts of a poly code entry interpreting a lemma with generalized or abstract semantics is rather peculiar. An icon inevitably transforms such an information package into something concrete, into a particular embodiment of a widespread situation. Such transformations present the specification of information. This transformation takes place with the lemmas, which verbalize the concepts of a superordinate level of categorization. For example, the poly code entry predator in (L) explains the meaning of the word predator and refers to the thematically related word prey [an animal that kills and eats other animals > prey]. However, in nature, there simply does not exist a predator as such or just prey. Therefore, the pictogram of this entry steps down to the ordinate level and shows an eagle overtaking a fleeing hare. Visualization of the idea of a predator and a victim using prototypical examples (without naming them, mind you) contributes to a holistic perception of the whole situation with a specific set of typical participants.

The imbalance of information potential in a poly code entry most often manifests in an increase in the amount of information in its pictographic part. Icon adds information: a) to the referent, nominated by the lemma, b) about other referents associated with it by various relationships, and included in the icon as the informational expanders.

Information quanta, which are essential for the defined concept, are sometimes moved exclusively to the pictographic part of the poly code entry, unloading the verbal definition. They make it concise, yet preserving the informational potential of the whole entry. Considerable increases in the information potential of a poly code entry can be found in the learners’ dictionaries. The orchestra lemma is defined as follows: [a large group of musicians using many different instruments to play mostly classical music. The person in charge of an orchestra is its conductor]. The pictographic component of this entry encodes additional quanta of information by iconic means: 1) the layout of the musicians in the orchestra; 2) grouping of instruments on the wind, string, percussion, etc.; 3) an image of the instruments included in these groups, and their place within the group; 4) the position of the conductor in front of the orchestra. Each quantum of pictographically transmitted information has a signature-tag (brass, string, percussion, etc., first violin, second violin, violas, cellos, etc.). Of all the features indicated in the definition, two are lost: musicians (there are no images of musicians in the diagram) and play mostly classical music (the musical style of the works performed cannot be pictographically expressed). Simultaneously, the pictogram expands and specifies the feature of many musical instruments (17 images of instruments and their names) and adds completely missing features mentioned above as information quanta 1-4. The poly code entry orchestra as a single communicative entity has a vibrant informational potential, transmitted to the reader through various channels optimizing its consumption. Considerable increases in the information volume of a poly code entry are often due to the associative relations among words. For example,
Macmillan dictionary includes the poly code entry *organ*, explaining the meaning of the lemma *[a part of your body that does a specific job, such as your heart or brain]*, and illustrating it in the anatomic diagram of the internal organs. The pictogram has 18 information expanders: *brain, heart, lung, stomach, kidney,* etc.

So far as the learners’ dictionaries address the youth readership primarily, their educational orientation is also reflected in the analyzed entries. Dictionary (L) offers the entry *bedroom [a room for sleeping in]* and an illustration of it in the form of a picture, which, undoubtedly, depicts a youth, most likely a student bedroom. We register about two dozen information expanders there: these are interior items and computer, audio, and video equipment that directly characterizes the age and social status of the owner of the room (*bookshelf, poster, stereo, computer, video recorder, scanner, printer, games console,* etc.).

To control the cognitive activity of the readers’ decoding the iconic message, the illustrator uses arrows, which focus his/her visual perception, indicating that something in the picture deserves especial attention. As it is, for example, in the icon to the *trunk* lemma depicting an elephant, the arrow specifies where one can see the trunk. This phenomenon is widespread in educational dictionaries and is absent from the encyclopedias (which also manifest iconic components to some lemmas).

**Conclusion**

The main aim of this study was to determine the features of the English poly code dictionary entry as a communicative phenomenon of educational lexicography. A *poly code entry* is a unity of a lemma, a verbal definition, and an illustration. These three constituents name, interpret and visualize the meaning of a dictionary entry. The results of the research are significant for English language teaching and learning. Using pictographic illustrations in the learning process optimizes the readers’ activity of searching, understanding, and memorizing the necessary information.

Two semiotically different types of paragraphic means are used in the *explanatory* dictionaries. These are *printed* and *depictive* non-verbal means. As for the informational potential of a poly code entry, in some cases, there is an information balance between the definition and the icon (each definitional feature is pictographic). Still, in the vast majority of cases, such compensation violates at the expense of loss or, conversely, an increase of quanta of information in the icon. Pictographic illustrations that accompany a verbal explanation optimize the process of searching, understanding, and memorizing the necessary information.

Learners’ dictionaries reproduce the specific picture of the world as universal phenomena are illustrated with the realia of the Anglo-Saxon civilization. The depicted reality appeals to the youth audience. For example, the definition of the concert is accompanied by a picture of the rock concert, the entry of the bedroom is illustrated by the image of the room, whose inhabitant is obviously young and probably studies at a college or university. Summarizing the results of the study, we conclude that the poly code dictionary is a useful information resource for learning English as a foreign language and for familiarizing with the cultural context of the English-speaking society.
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References


