#### Larysa Makaruk

Lesya Ukrainka Eastern European National University

# The range and the communicative importance of paralinguistic means employed in contemporary English written multimodal discourse

#### Abstract

This article deals with the broad spectrum of semiotic resources which are used in modern English texts, and thanks to which they can be classed as multimodal. On the basis of the analysis which was carried out, it was possible to identify a number of distinct groups of semiotic resources in terms of certain shared features, and then to further subdivide these groups into subgroups. The primary groups are the following: segmentation; supplementary graphic effects; font and colour; non-pictorial and non-photographic graphic elements; iconic elements (images); and infographics. Each group has been described in detail, giving attention to its structure and its semantic and pragmatic value. An explanation has also been provided to illustrate why paralinguistic means are important and valuable for the purposes of communication, and in some cases, examples have been given to demonstrate the features of the semiotic resources. It has been shown that these means open up new possibilities for research nowadays, at the same time as they provide new patterns for communication. It has been possible to show that in texts which are being generated now, there are no elements that can be regarded as unimportant: they all convey meaning, and sometimes in a more significant way than those which are only verbal.

**Keywords:** graphic means, non-verbal, classification, groups, paralinguistic, multimodal communication

#### $\mathbf{A}\mathbf{b}\mathbf{s}\mathbf{t}\mathbf{r}\mathbf{a}\mathbf{k}\mathbf{t}$

Artykuł dotyczy szerokiego spektrum zasobów semiotycznych, które są używane we współczesnych tekstach angielskich, w związku z czym można je zaklasyfikować jako multimodalne. Na podstawie przeprowadzonej analizy udało się zidentyfikować wiele odrębnych grup zasobów semiotycznych pod względem niektórych wspólnych cech, a następnie podzielić te grupy na podgrupy. Główne grupy to są segmentacji; dodatkowe efekty graficzne; czcionka i kolor; niepikowe i niefotograficzne elementy graficzne; elementy znaku (obrazy) i infografiki. Każda grupa została szczegółowo opisana, zwracając uwagę na jej strukturę oraz semantyczną i pragmatyczną wartość. Stwierdzono również, że środki paralingystyczne są ważne i cenne dla celów komunikacyjnych, a w niektórych przypadkach pokazano przykłady zasobów semiotycznych. Wykazano, że środki te otwierają nowe możliwości dla badań w dzisiejszych czasach, jednocześnie dostarczając nowe wzorce komunikacji. Pokazano, że w tekstach generowanych obecnie nie ma elementów, które można by uznać za nieważne: wszystkie przekazują znaczenie, a czasem w bardziej znaczący sposób niż te, które są tylko słowne.

Słowa kluczowe: środki graficzne, niewerbalne, klasyfikacja, grupy, komunikacja paralingwistyczna, komunikacja multimodalna

# Introduction

In the current period of time, most texts which are presented to the public could be referred to as multimodal in terms of the fact that they contain both verbal and non-verbal devices. As a matter of fact, this multimodality is becoming more prevalent with the passing of time. Linguistics scholars such as O'Halloran, Kress, and Van Leeuwen make the assertion that a 'printed text' no longer constitutes solely a sequence of letters and punctuation marks, as was assumed for a long time. They are of the opinion that all the segments and the individual elements of a text possess some significance, regardless of the proportions of letters, punctuation marks and images that make up the message. In addition, it is being perceived more and more that characteristics such as colour, size, font and character orientation or position also have linguistic significance. Creators and recipients of textual messages are thus involved in a movement away from traditional patterns of information presentation, with paralinguistic communicative elements expanding in their magnitude and their diversity. It is difficult to predict exactly what directions the use of multimodal devices will take in the future, but it is clear that the trend is for them to become increasingly important.

The powerful resources of modern communications media provide an ideal vehicle for producing a harmonious interaction between semiotic resources which belong to different sign systems. In this sense, it could even be said that the shift toward the use of multimodal devices is to some extent the product of the information revolution. One study which was conducted quantified the increase in the range of signs and symbols which can be utilized for communication. The overall phenomenon which revolves around the use of multimodal devices is the object of investigative interest within several interconnected disciplines such as cognitive semiotics, social semiotics, visual linguistics, visual communication, paralinguistics, graphic linguistics, multimodal linguistics and multimodal communication, but a comprehensive classification is not yet available.

#### Paralinguistic Graphic Devices in Multimodal Discourse

Among the significant areas in modern linguistics which have not received intensive investigation, multimodality is arguably one of the most important. This field cannot be mentioned without referring to the in-depth studies compiled by J. Carey (2016), J. Bezemer (2016), G. Kress (2001; 2006; 2010), T. Van Leeuwen (2001; 2006) and by K. O'Halloran (2011). Moreover, in 2014 John A. Bateman examined the relationships between images and text. The work of these scholars has been instrumental in attracting more attention to the discipline of multimodality, after many years during which verbal devices present in written discourse were the only ones considered to merit research and consideration.

Contemporary scholars have come to recognize the significance of verbal and non-verbal elements which appear both in oral and in written speech acts. The fact that non-verbal (paralinguistic) elements may accompany a text or be incorporated within a word, a word combination or a sentence has no doubt increased the interest of linguistic specialists in the phenomenon of multimodality (Makaruk, 2012).

Within the framework of modern linguistics it is necessary to subject all the significant aspects of non-verbal elements to in-depth examination, and to consider their linguistic value in the general context of multimodal discourse analysis (Kress, 2001). It is also important to investigate their functioning within the specific areas of visual grammar (Leborg, 2006), systemic functional-multimodal discourse analysis, multimodal metaphor, and social semiotics.

The study which was conducted in the most detailed manner is that of Kate O'Halloran (2011), in which she also deals with such areas of multimodality as context-text relations, paradigmatic meaning rank, metafunction, instantiation, and intersemiosis. It is possible to study the ways in which verbal elements interact with images (pictures or photographs) and non-image media which are nonetheless graphic in character (such as figures or punctuation marks used in an atypical way) by using systemic and functional analysis patterns in the investigation of multimodal texts. This can show how it is possible to convey meaning by the use of a combination of different semiotic resources.

In the study which Anisimova (2003) conducted, she proposed the concept of using systemic-functional analysis to indicate the level of modality, whether partial or full. Partial modality implies that the verbal component is relatively independent of the image, whereas with full multimodality, verbal and non-verbal elements cannot function independently.

Gunther Kress's work published in 2010 outlines his consideration of social and cultural aspects, and he drew attention toward the interplay of text and graphic imagery; he also presented some views about the interpretation of individual images. In our opinion, this approach could be a starting point for a study on a more extensive level which would employ the tools that exist within the fields of semantics, signatics, syntactics (syntax) and pragmatics, as referred to by Rayan Abdullah and Roger Hübner in the study they made in 2007.

It seems reasonable to advance the proposal that if these principles are utilized in undertaking an investigation, it will be possible to illustrate the communicative power and the meaning of multimodal texts in a more effective manner, as well as providing a comparison of verbal and non-verbal devices. Consideration will need to be given to the 'communicative space' constituting society and the individuals within it, to the extent that communication is a sociocultural phenomenon.

# The Classification of Graphic Elements Used in Modern English Multimodal Written Discourse

Paralinguistic written devices are the object of research in several related disciplines (Makaruk, 2013): cognitive semiotics, social semiotics, visual linguistics, visual communication, paralinguistics (non-verbal communication), text linguistics, graphic linguistics (Crossland, 1956) and multimodal linguistics. However, no generalized classification has been formulated as yet. Some of them are being studied more carefully than others. In general it depends upon the type of non-verbal devices on which certain scholars are concentrating. The approaches to the study of non-verbal devices are also different. In addition, a variety of different approaches to the study of non-verbal devices can be observed. In this paper the terms 'non-verbal', 'paralinguistic' or 'graphic' means or devices are used synonymously, along with 'semiotic resources'.

It is obvious that the non-verbal devices we are talking about possess many features which make them different from verbal elements. Within the scope of this paper it is not possible to describe and to analyze the peculiarities of all the groups and subgroups of paralinguistic graphic means. We would like to give attention to just a few of them. Some groups have been studied more, whereas others have received less attention. In addition, there are probably new aspects which will appear that will need to be studied more carefully. The following aspects are placed by Anisimova within the spectrum of semiotic resources:

the graphic segmentation of a text and its positioning on the page; the line spacing, font, colour, underlining, and italicization of textual material; the inclusion of typographical signs, graphic symbols, figures (numbers) and some subsidiary signs (§, N<sup>a</sup>, %, +, -); iconic language symbols (pictures, photos, pictograms, ideograms, tables, diagrams, and drawings); unusual patterns of writing words or punctuation marks; and other characteristics such as page orientation, margins, and text width. (Anisimova, 2003, p. 7)

Anokhina divides paralinguistic graphic means into two groups:

punctuation marks and paragraphemic means. In the first group she includes full stops (periods), commas, semicolons, exclamation marks, question marks, colons, dashes, points of ellipsis (a row of three periods/full stops), single and double quotation marks, round and the square brackets, double dashes, apostrophes, and hyphens. Paragraphemic means include capitalization, decapitalization, font, bold font, colour, text segmentation, iconic elements, unusual patterns of writing, paragraphs, and text location. (Anokhina 2008, p. 73)

In our opinion, a modern typology of graphic means could be structured in such a way as to include the following groups: segmentation; supplementary graphic effects; font and color; non-pictorial and non-photographic graphic elements; iconic elements (images); infographics.

#### Segmentation

In the first group, which can be called segmentation, we include the location of text on the page or text positioning/orientation, which can be vertical, horizontal, diagonal or situational. The last one was named situational. It can also be called arbitrary, since the location of the text depends upon the desire of the text-maker or producer, who furthermore is not limited in terms of space, as every piece of paper or web-page has a cost associated with it. Margins, text width, and page orientation are also a part of this group. Margins and text width are an integral part of typography. Margins can be of any size. Of course, there are some generally accepted and preferred requirements for official documents as to the margins. They can be of one size for the upper, bottom, left and right sides as well as of different sizes. The same is relevant for the text width. The most accepted one is 1.5 pt, the less accepted is 2 pt. But everything depends upon the producer of any text and in most cases it meets his/her desire and requiremets. To this group we also refer page orientation. On the one hand, among the rest of the constituent parts of this group it is the most irrelevant that is to say. On the other hand we are sure that this one is worth consideration and has the best relevance to this one. As it has already been mentioned there are two possibilities of a standard page orientation: vertical and horizontal. We've described in details the location of the text on a page. In this context it must to some extent correlate with the page orientation. But it doesn't mean that if a page orientation is vertical the text is placed vertical as well or horizontal corresponds to horizontal. It depends and there are no special rules concerning these criteria.

### Supplementary graphic effects

The second group may be termed supplementary graphic effects, and these are based on the existing text. They include corrections (of letters, words or sentences), underlining, insertions of different elements (both alphabetic and non-alphabetic symbols within a word), strikeout text, and non-standard juxtaposition of words without intermediate spacing.

#### Font and colour

The third group comprises variations in font and colour. Although it would be possible to include this in the previous group, we are of the opinion that it would be more appropriate to place them in a separate group. Font can be considered as an important linguistic element. Font and colour have been studied carefully in many research papers (Berger, 2008), (Barnes, 2011), (Bergstrom, 2008), (Lester, 2006), (Crystal, 2003). Paul Lester examined typography from six perspectives (personal, historical, technical, ethical, cultural and critical), and stated that "because words are so important in communicative messages, the way those words are presented form a vital link between what the words mean and how the words are seen" (Lester, 2006, p. 129).

Lester (2006) mentions as well that technologies are performing a role that is constantly increasing in importance. It is clear that contemporary communication – written as well as oral – is carried out to a large degree by means of computers, and communication is computer-mediated. Technology has come to play such an important role that many people nowadays cannot even imagine what their lives would be like without it. Lester stresses the point that "when individuals are linked around the world via a home computer and telephone line, electronic mail will reveal a person's character not only by the services selected and the messages sent but also by the way those written messages appear" (Lester, 2006, p. 149).

In this group the following font-related processes can also be referred to: italicization, capitalization, unusual patterns of writing words by manipulating fonts, boldface accentuation (partial or full) and highlighting. It is a rather disputable question whether 'highlighting' should be connected with both groups – supplementary graphic effects, and font and colour – or with only one of those groups. The problem lies in the fact that highlighting is one of the most eye-catching graphic effects, involving the use of a variety of colours. In this sense the key component is colour, the usage of which provides the manipulation. With regard to colour, its possibilities and its limitations have been demonstrated and described in detail by many scholars, but we would like to mention the point that font itself is closely connected with colour. When it appears on the screen as we type, for example, its initial colour attribute is its blackness, if no change has been from the default settings. Of course, text colour choice is not limited, and can be easily changed. Thus, the general pattern can be the same for part of a word or sentence, even a single letter can be changed to a different colour to add meaning of some kind, or to produce a special effect when desired. It is evident that colour is also an integral part of pictures and images; in this sense it can also be considered an integral part of communication which influences the meaning of a message. The language of colour is meaningful and powerful.

#### Non-pictorial and non-photographic graphic elements

We propose that the fourth group be termed non-pictorial and nonphotographic graphic elements; this category does not include any pictures or photographs, but takes in elements which can be marked with colour. This group can be subdivided into several subgroups. They are uniform in terms of some principles which are common to all semiotic resources of a definite sign system. Within this group we differentiate the following subgroups: punctuation marks (full stops/periods, commas, semicolons, exclamation marks, question marks, colons, dashes, single and double quotation marks, round brackets (parentheses) and square brackets, double dashes, apostrophes, hyphens), diacritical marks (acute accents, grave accents, circumflexes, diaereses, tittles, macrons, breves, cedillas, tildes), typographic and subsidiary signs which include other elements even of an alphabetical nature; figures (numbers) (which can be interspersed with letters), mathematical symbols and various formulas (which may also be based on letters in the English alphabet). The combination of the semiotic resources which are part of the various groups enumerated above can form mixed abbreviations (of a verbal and non-verbal nature at the same time). It should be noted that the components of the groups described can function autonomously, such as figures or mathematical symbols whose designation is quite clear, but they may also be combined to transmit a particular meaning. The number of means which can be combined is unlimited.

When we refer to specific punctuation marks, we are not expressing any link with the grammatical function which they normally perform within the context of a sentence, such as the full stop at the end of a sentence. Instead, we are referring to patterns of usage that are totally different from those which are generally associated with those symbols. This leads to a discussion of the polysemantic character of various graphic means. In addition, these graphic devices may be successfully combined with any other semiotic resources which belong to a number of different sign systems. There is no limit to the number of times particular paralinguistic signs may be used in one speech act. They are often used alone, such as in the case of the common modern representation of a smiling face ) or with any other means which are found within the subgroup of punctuation marks :-).

The analysis of material found in various media sources has provided us with an opportunity to identify many different graphic variations by which information may be encoded, and they are continuing to increase in number. Some of them have already been included in special dictionaries. Some combinations are in such frequent use that they have become commonplace and are easily perceived and understood, such as the following: 2morrow, 4u, I @ u. As can be seen, non-verbal means are very often intermixed not only with various signs from different semiotic systems, but also with separate letters where only a part of a word may remain; its root may be retained, but sometimes a prefix or any other affix is apt to be omitted. It differs from one case to another. Some of them are used more often, whereas others are rather rare. This evidently has some bearing on their usage.

As we have mentioned above, those which are often used are familiar to the majority of people and it's easy to grasp the idea of a message within a few seconds. It would be misleading to imply that those which occur only occasionally will not be easily recognized. Everything depends upon the person who reads the information, involving background knowledge, age, ideology, gender, personal preferences, cultural values and attitudes to the object which is being perceived. In modern communication, it is possible to observe a whole range of punctuation marks which are not being used to fulfil their traditional primary functions.

The examples given above provide proof that their usage has changed over the course of time, even though the physical form of the signs has remained unchanged, as in the case of the full stop (period), comma, semicolon, exclamation mark, question mark, colon, dash, single and double quotation marks, round brackets (parentheses) and square brackets, double dashes, apostrophes, and hyphens. With all of these elements the unusual patterns of writing words or punctuation marks are also common. Likewise, their location is not fixed.

Special attention should be devoted to diacritics, which, like punctuation marks, may have taken on some new functions, but are still in use nowadays. It is recognized that they are not typical in English and do not belong to its graphic inventory, but some diacritical marks function within certain borrowings. The most common ones are the acute accent, the grave accent, the circumflex, the diaeresis, the tittle, the macron, the breve, the cedilla, and the tilde. These are only a few of the semiotic resources which are relatively common in English. They convey the peculiarities of the pronunciation of the language they come from, as well as some graphic peculiarities of the language they were taken from. There are some words in which the diacritics have been preserved. The number of diacritics in a single word may also vary, such as in the words café, résumé (resumé), animé, exposé, lamé, maté, öre, øre, pâté, piqué, rosé, and soufflé. They have also enlarged their spheres of application and may be used for totally different functions, combining with the semiotic resources of other sign systems. It must be noted that special terms are needed to designate the semiotic resources which are used. If the semiotic resources which are employed belong to the same sign system, they can be termed homogeneous; if they are a part of different sign systems we would consider it appropriate to term them 'heterogeneous'. It doesn't matter how many means are used or whether they are homogeneous (only non-verbal) or heterogeneous (verbal and non-verbal): their communicative effect is obvious. Their involvement in communication makes the latter more intriguing, and makes it more creative and unique in comparison to those which are normal or typical.

## Iconic elements (images)

In the next group, which we term iconic elements (images), it is possible to include pictures of different types (still lifes, landscapes, paintings, any drawings which are drawn with a pencil or paints or which are produced using computer software) cartoons, comics and any other non-photographic illustrations; a separate subgroup is composed of pictograms (Makaruk, 2012) which, when subjected to a comprehensive analysis, can be divided into three separate groups: iconic, abstract, and logotypic; logotypes or emblems, maps, and smileys; in addition to these, reference can be made to actual photos. A fundamental point to bear in mind is that even though modern textual pictograms and ideograms are non-verbal in character, they can be incorporated into words or sentences, where they can perform a variety of functions and are able to possess paradigmatic relations. Iconic language elements (images) are also being studied quite carefully. Arthur A. Berger states that

Seeing is a complicated phenomenon. When we see an image, our brain breaks the image down into various components and processes them separately, before reconstituting these parts as an image. For example, the brain processes properties such as colors, textures, the edges of objects, light and shadow, and motion separately and then brings them together into an image (*how* it does this still is something of a mystery). (Berger, 2008, p. 19)

The approach suggested by this scholar confirms that the typology of elements provided above is a necessary one, since the processing of elements which make up paralinguistic means is performed separately. All elements are important and can be meaningful, and the meaning of the text itself depends upon the peculiar features of elements whose meaning may initially appear to be of no importance.

#### Infographics

The last group may be referred to as infographics which are made up of other graphic elements that do not belong to any of the groups enumerated or illustrated above. They can also be called visual aids. They include graphs (bar graphs, line graphs, pie graphs and scatter plots), and tables. The first subgroup in this group is also called diagrams. The aim of these means is to present some statistical data in a more effective way, in order to make the subject matter more understandable.

The most complicated group for research is iconic language elements (images). This is due to the fact that the meaning of the elements which in our research are connected with other groups (segmentation and other graphic effects; font and colour; non-pictorial and non-photographic graphic textual elements; other non-verbal means) can be fixed more easily, and do not evoke as many associations as other illustrations may do. In addition, to identify the relationship of any painting or text may be rather difficult if there is no reference to a text, although the image/text correlation is carefully studied in most research papers devoted to the investigation of non-verbal means (Anisimova, 2003; Barnes, 2011; Berger, 2008; Bateman, 2014; Kress and Leeuwen, 2006). See Table 1 for an enumeration of all the groups which have been referred to.

Types and characte-	Names of elements
ristics of non-verbal	
elements	
Segmentation	Location of text on the page, line spacing, pa-
	ge orientation, margins, text width, text positio-
	ning/orientation (vertical, horizontal, diagonal,
	situational (arbitrary)).
Supplementary gra-	Corrections (of letters, words or sentences), un-
phic effects	derlining, insertions of different elements (both
	alphabetic and non-alphabetic symbols within
	a word), strikeout text, and non-standard juxta-
	position of words without intermediate spacing.

 

 Table 1: A Classification of Graphic Elements Used in Modern English Multimodal Written Discourse

Font and colour	Italicization, capitalization, boldface accentu-
	ation (partial or full), highlighting, unusual pat-
	terns of writing words by manipulating fonts.
Non-pictorial and	Punctuation marks (full stops/periods, com-
non-photographic	mas, semicolons, exclamation marks, question
graphic elements	marks, colons, dashes, single and double quota-
	tion marks, round brackets (parentheses) and
	square brackets, double dashes, apostrophes, hy-
	phens), diacritical marks (acute accents, gra-
	ve accents, circum-flexes, diaereses, tittles, ma-
	crons, breves, cedillas, tildes), typographic and
	subsidiary signs which include other elements
	even of an alphabetical nature; figures (numbers)
	(which can be interspersed with letters), ma-
	thematical symbols and various formulas (which
	may also be based on letters in the English alpha-
	bet). The combination of the semiotic resources
	which are part of the various groups enumerated
	above can form mixed abbreviations (of a verbal
	and non-verbal nature at the same time).
Iconic elements	Pictures of varying natures (still lifes, landsca-
(images)	pes, paintings, any drawings created with a pen-
	cil or paints or produced using computer so-
	ftware); cartoons, comics and any other non-
	photographic illustrations; pictograms (iconic,
	abstract, logotypic) logotypes or emblems, maps,
	photos, smileys.
Infographics	Graphs (bar graphs, line graphs, pie graphs and
	scatter plots), tables.

It is certain that all of these paralinguistic devices have linguistic value and importance. Obviously, this list is not comprehensive, and can be (and I believe will be) expanded as this field is studied in greater depth. In addition to this the number of possible variations of different semiotic resources is unlimited. Some pictures the meaning of which remains unclear makes it more complicated. The multiplicity of semiotic resources which are a part of different semiotic systems sometimes contribute to confusion as well. On the other hand, there are some facts which offer a counterbalance to this reference to the difficulties. Paralinguistic devices may be used in a variety of ways, and the signifier does not always correspond exactly to that which is signified, such as in certain images. However, even in such cases, graphic signs can be used very successfully for presenting information; in this way, graphic signs can be multifunctional and polysemantic.

The corpus of the material we are dealing with enables us to identify three types of texts: homogeneous (monomodal) texts, which consist of ordinary alphabet letter symbols and regular punctuation marks functioning in the normal manner; multimodal texts, which comprise different characters of a verbal and non-verbal nature as well as multimodal, but those which are created only using non-verbal elements that belong to different sign systems. The main criterion which facilitates successful multimodal perception is the absence of graphic redundancy, which can make the semantics of a text unclear and can impede the process of perception.

# Conclusions

Multimodal discourse presents a new field for analysis which involves a change in traditional research paradigms and which places certain issues before scholars for additional consideration. In this sense it becomes possible to form a species of harmony with modern society, within which certain preferences are clearly demonstrated, and in which multimodal techniques are used for presenting conceptions and realities. It is impossible to deny the powerful potential possessed by non-verbal elements. Some of them may accompany a text or else they may be incorporated within a word, a word combination or a sentence; they may perform a variety of functions, sometimes possessing even more linguistic significance than verbal ones.

The use of non-traditional visual elements makes communication more challenging in the sense that decoding them requires additional literacy skills. In the absence of these skills, recipients will experience difficulty in recognizing or perceiving the message that is being presented to them. If a message is not comprehended or else is misinterpreted, the communicative process is hindered and a breakdown in communication may occur. In order for a text to be perceived accurately, it is evidently essential for each of its elements, both verbal and non-verbal, to be read and understood correctly. The process of reading may be simplified once a a typology of non-verbal devices has been formulated, due to the fact that different groups of non-verbal devices have a variety of structures, resulting in a corresponding variety in terms of functions. If paralinguistic means can be organized within a systematic classification, it will be possible to focus attention on their distinction characteristics which are either common or distinctive, leading to an acceleration of the process of perception.

However, there are still some areas which are open to further study, and once the pertinent research has been conducted there will no doubt be improved prospects for obtaining meaningful results. The relationships between textual and image-related elements need to be studied in greater depth, using systemic and functional analysis patterns in the approach to multimodal texts. Examples of areas which are still 'open' include the devising of grammar rules to be applied to multimodal texts; the perception and recognition of multimodal texts and metaphors; and the issue of multimodal literacy (Elkins, 2008; Kress, 2004; Leborg, 2008) as a whole. When these types of research have been conducted, it will be possible to identify the ways in which individuals are influenced by these texts, and which approaches are suitable for accurately deriving the meaning contained in such texts. A number of interesting and important aspects involved with multimodal texts can be studied within the context of cognitive and social semiotics. Approaching the field in this manner will facilitate the definition of the communicative power and the meaning of multimodal texts; it will also be possible to compare verbal and non-verbal devices in terms of the amount of information they convey, which could be described as the dimensions of their communicative potential.

# Bibliography

- Abdullah, R., Hübner R. (2007). Pictograms, Icons and Signs: A Guide to Information Graphics. Translated by David H. Wilson. London, New York: Thames and Hudson Ltd.
- Anisimova, Y. (2003). Lingvistika Teksta i Mezhkulturnaya Kommunikatsiya (na Materiale Kreolizovannykh Tekstov). Moskva: Akademiya.
- Anokhina, T. (2008). Semantyzatsia Kategorii Movchannia v Anglomovnomu Khudozhnyomu Dyskursi. Monographia. Vinnytsia: Nova Knyga.
- Barnes, B. (2011). An Introduction to Visual Communication: from Cave Art to Second Life. New York: Peter Lang Publishing Inc.
- Bateman, J. (2014). Text and Image: a Critical Introduction to the Visual/Verbal Divine. London and New York: Routledge.
- Berger, A. (2008). Seeing is Believing. An Introduction to Visual Communication. USA: McGrawHill. Learning Solutions.
- Bergstrom, B. (2008). Essentials of Visual Communication. London: Laurence King Publishing Ltd.
- Dondis A. Dondis. 1998. A Primer of Visual Literacy. Cambridge & London: The MIT Press.
- Carey J., Bezemer J., O'Halloran K. (2016) Introducing Multimodality. London and New York: Routledge.

- Crossland, Ronald A. (1956). "Graphic Linguistics and its Terminology". In: Mechanical Translation, 3(1): 8-11.
- Crystal, D. (2003). The Cambridge Encyclopedia of the English Language. Cambridge: Cambridge University Press.
- Elkins, J. (2008). Visual literacy. London and New York: Routledge.
- Kress, G., T. van Leeuwen. (2001). Multimodal Discourse: The Modes and Media of Contemporary Communication. London: Arnold.
- Kress, G. (2004). *Literacy in the New Media Age*. London and New York: Routledge.
- Kress, G., Leeuwen, T. van. (2006). Reading Images: The Grammar of Visual Design. London and New York: Routledge.
- Kress, G. (2010). Multimodality: a Social Semiotic Approach to Contemporary Communication. London and New York: Routledge.
- Leborg, C. (2006). Visual Grammar. New York: Princeton Architectural Press.
- Lester, P. (2006). Visual Communication: Images with Messages. Canada: Wadsworth Cengage Learning.
- Makaruk, L. (2013). "Multidimensional Approaches to the Study of Written Communication". In: SCIENCE and EDUCATION a NEW DIMEN-SION (Philology), Vol I ((2) 11).
- Makaruk, L. (2012). "The Role and Functions of Pictograms and Ideograms in Mass Media Texts." In: A. Glaz, H. Kowalewski A. Weremczuk (ed.). What's in a Text? Inquiries into the Textual Cornucopia. Cambridge: Cambridge Scholars Publishing.
- O'Halloran, K. (2011). *Multimodal Discourse Analysis*. London & New York: Continuum.

Correspondence concerning this paper should be addressed to Larysa Makaruk, Ph.D. in Philology and Associate Professor at the Department of Applied Linguistics at The Lesya Ukrainka Eastern European National University in Lutsk (Ukraine). E-mail: laryssa\_makaruk@ukr.net