

Paragraphemic component of multimodal text analyzed in software product written in Python

Marta Karp^a, Natalia Kunanets^{a,b}, Tetiana Yaremchuk^a

^aLviv Polytechnic National University 12 Bandera street, Lviv, 79013, Ukraine

^bIvan Franko National University of Lviv, Universitetska Street 1, Lviv, 79000, Ukraine

Abstract

Scientific and technological progress towards the use of information technology has occupied all spheres of human activity. Involvement in linguistic research of information technologies is extremely relevant and popular today, as they provide scientists with a diverse set of functions for the study of language phenomena at the modern scientific level. Contemporary literature is evolving with society thus the relevance of the research is caused by the need in multimodal text analysis using modern technology. Since multimodal fictional prose text has been full of verbal and nonverbal components, programs of computer technology help to identify the appropriate component. By dint of the implementation of an IT project from the elaborating software program there is an opportunity to identify quickly the paragraphemic component of a multimodal fictional prose text. The main aim of the article is to explore the research method of multimodal fictional prose text which includes developed software product written in Python. In the article the explanation how to research different modes (bold, italics, underlining, strikethrough) of paragraphemic component in multimodal fictional prose text using developed software product written in Python has been given. The Jonathan Safran Foer's novel "Extremely loud and incredibly close" has been used as application base. Multimodal fictional prose text is a modern phenomenon that combines verbal and nonverbal components to interpret relevant content through a variety of semiotic channels of information. Moreover, the perception of the text occurs only with the correct interpretation of its component functions. It has been defined that the software product facilitates the identification of the verbal and nonverbal (paragraphemic) components in a multimodal fictional prose text.

Keywords 1

Multimodal fictional prose text, verbal component, paragraphemic component (bold, italics, underlining, strikethrough), software product written in Python.

1. Introduction

Scientific and technological progress and the trend towards the use of information technology have occupied all spheres of human activity. Life became easier. Involvement in linguistic research of information technologies is extremely relevant and popular today, as they provide scientists with a diverse set of functions for the study of language phenomena at the modern scientific level. Contemporary literature is evolving with society, thus a need in text analysis using modern technology has arisen. Adequate perception and interpretation of printed (electronic) text call for the addressee has the so-called "visual literacy" – i.e. the ability to read visual, graphic and typographic configurations and recognize the functions of signs and modes used in the text. Narrative competence performs the most important function – i.e. the introduction of new information into the stereotypical consciousness, which helps to break down old stereotypes, the birth of new ones, developing a creative and chaotic state of consciousness, which like any synergetic system looks for self-

Proceedings of the 2nd International Workshop IT Project Management (ITPM 2021), February 16-18, 2021, Slavsko, Lviv region, Ukraine

EMAIL: martakarp26@gmail.com (A. 1); nek.lviv@gmail.com (A. 2); taniayaremchuk@gmail.com (A. 3)

ORCID: 0000-0002-7332-7739 (A. 1); 0000-0003-3007-2462 (A. 2); 0000-0003-4178-1547 (A. 3)



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CEUR Workshop Proceedings (CEUR-WS.org)

organization and elimination of destructive tendencies which contributes to the strengthening of attractive mechanisms and processes, the formation of new semiotic narrative structures. Constant updating of narrative competence, its permanent balancing leads to the dynamization of the cultural semiotic universe, reformulation of semantic structures of already interpreted texts and, finally, ensures the reservation and transmission from generation to generation of culturally significant information. Yu. Lotman wrote: “in the general system of culture, texts perform two main functions: the adequate transmission of meanings and the creation of new meanings” [26, p. 81]. One of the factors in the implementation of these functions is narrative competence. The perception of the text is facilitated by its structural analysis.

2. Multimodal text vs Information technology

Since multimodal fiction prose text has been full of verbal and nonverbal components, programs of computer technology help researchers to identify the right component. By dint of the implementation of an IT project from the elaborating software program there is an opportunity to identify quickly the paragraphemic component of a multimodal fictional prose text.

2.1. Multimodal novel *Extremely loud and incredibly close* by J. S. Foer

Let's consider the functionality of the software product on the example of the text of Jonathan Safran Foyer's novel “Extremely loud and incredibly close”. The application of bold, italics, underlining and strikethrough to the text plays an essential role in the process of the analysis of the novel. By dint of them, the author emphasizes the important information and creates images in the novel. It has encouraged us to develop new software product written in Python language. The functionality of the software product provides the definition of the text selected by the paragraphemic components and helps to identify quickly the necessary information.

The multimodal text of Jonathan Safran Foyer's novel "Extremely Loud and Incredibly Close" is significant in volume and serves as a representative empirical basis that guarantees the reliability and objectivity of the study of the text, illustrates and confirms the main provisions of the study. It is difficult to analyze a large amount of material manually and it takes a lot of time that is why a software product has been developed. It hastens the process of analysis, classification, statistical calculations, especially on large amounts of information. Linguistic research can significantly advance due to the quality and structural use of the developed software product.

2.1.1. Analysing paragraphemic component of multimodal text by means of software product written in Python language

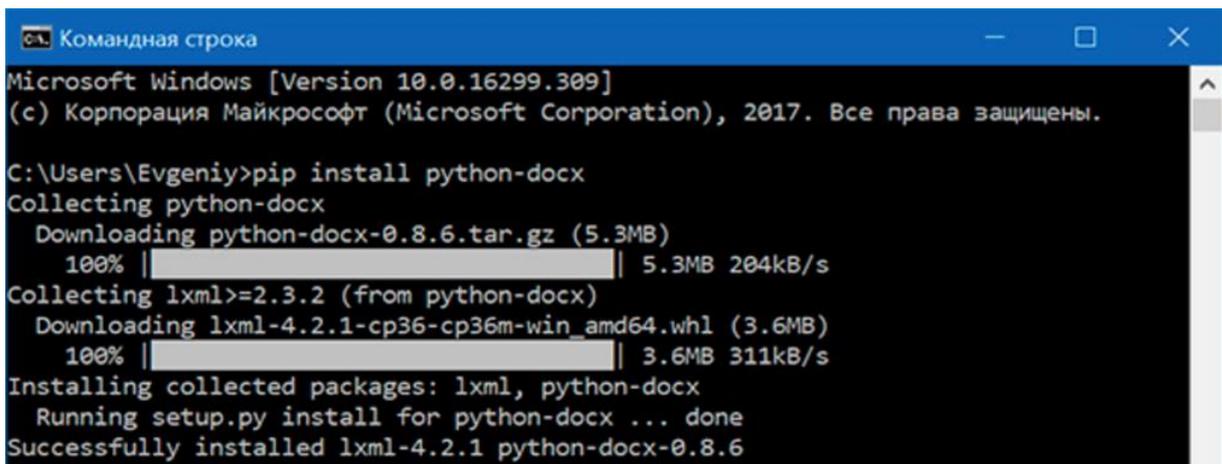
The research process is accelerated and optimized by using the functionality of the developed software product in Python. The name “Python” was borrowed by developer Guido van Rossum in 1989 from the Monty Python British show and is a powerful, full-fledged, object-oriented programming language with dynamic semantics. This programming language is attractive for rapid software development due to its high-level structures, dynamic type of processing and elegant syntax. It is an ideal tool for creating of applications.

Python can be applied to a wider range of software products, unlike Awk and Perl, but many Python commands are so easy to use. The advantage of Python is that it allows to break the program code into modules that can then be used in other software products. Python is associated with a large library of standard modules that can be used as a basis for new programs. Python assists with saving a significant amount of time that is usually spent on compilation. Moreover, it helps to experiment with the capabilities of the language, write code templates or test features in the development of “down-up”. This programming language allows to create compact and convenient program codes, which are usually much shorter than similar program codes written in C or C ++, due to: high-level data types

that expresses complex operations with a single instruction [22, p. 250]; grouping instructions are performed using spacing instead of curly braces; there is no need to declare variables.

The developed software product facilitates and accelerates the process of collecting linguistic material, which is separated by modes of paragraphemic component (italics, bold, underlining, strikethrough) in the studied texts. The software product was developed using Python version 3.5.2. The principle of operation of the software product is to select from the studied texts those fragments that are separated by modes of the paragraphemic component and displays them in a separate field to simplify work with them.

The first step after processing text with Abbyy FineReader and before developing the software is to install the “python-docx” module, which allows to create and edit documents with the extension .docx in the MS Word. To install this module, run the command “pip install python-docx” in the computer console (Fig. 1).



```
Командная строка
Microsoft Windows [Version 10.0.16299.309]
(c) Корпорация Майкрософт (Microsoft Corporation), 2017. Все права защищены.

C:\Users\Evgeniy>pip install python-docx
Collecting python-docx
  Downloading python-docx-0.8.6.tar.gz (5.3MB)
    100% |#####| 5.3MB 204kB/s
Collecting lxml>=2.3.2 (from python-docx)
  Downloading lxml-4.2.1-cp36-cp36m-win_amd64.whl (3.6MB)
    100% |#####| 3.6MB 311kB/s
Installing collected packages: lxml, python-docx
  Running setup.py install for python-docx ... done
Successfully installed lxml-4.2.1 python-docx-0.8.6
```

Figure 1: Running the pip install python-docx command

It is of paramount importance to enter “python docx”, not “docx” when the module is installed. At the same time, import “docx” should be used directly when working with the program, and not “import python-docx” during installation the “python-docx” module. Files with the file extension .docx have a developed internal structure. In the python-docx module, this structure is represented by three different data types. At the top level, the object of Document processing is the entire document. The Document object involves a list of Paragraph objects, which are paragraphs of the document. Each paragraph contains a list consisting of one or more Run objects, which composes fragments of text with different formatting styles: `import docx doc = docx.Document('example.docx')` # the number of paragraphs in one document `print(len(doc.paragraphs))` # the text of the first paragraph in the document `print(doc.paragraphs[0].text)`. Besides, MS Word uses two types of styles for documents: paragraph styles that can be applied to Paragraph objects, and symbol styles that can be applied to Run objects. Styles can be assigned to both Paragraph and Run objects, taking them to the style attributes a string value. This line must be a style name. If value None is set for the style, the Paragraph or Run object will not have a style associated with it.

Paragraph styles: Normal Heading 4 List 2 List Number TOCHHeading Body Text Heading 5 List 3 List Number 2 Title Body Text 2 Heading 6 List Bullet List Number 3 Body Text 3 Heading 7 List Bullet 2 List Paragraph Caption Heading 8 List Bullet 3 Macro Text Heading 1 Heading 9 List Continue No Spacing Heading 2 Intense Quote List Continue 2 Quote Heading 3 List List Continue 3 Subtitle

Symbol styles: • Emphasis • Strong • Book Title • Default Paragraph Font • Intense Emphasis • Subtle Emphasis • Intense Reference • Subtle Reference For example: `paragraph.style = 'Quote'` `run.style = 'Book Title'`

Some fragments of text represented by Run objects can be further formatted by using attributes. One of three values can be specified for each of these attributes: True (attribute activated), False (attribute disabled) and None (the style set for this Run object is installed): bold – bold text, underline – underlined text, italics – italic text, strike – strikethrough text.

The import command loads all the necessary modules for working with text. Firstly, a glob library is imported, which allows to create lists of files using extension templates applied to directories. The sys module is a module built into the default interpreter program (shell) that provides access to operations. The sys.path variable is a list of strings that define the way of modules which are used by the interpreter program. Enter the initial position of FBPos for search, assign it a value of 0. The Run.italic attribute detects whether the text is formatted in italics, but it does not know if the text block has a style that is displayed in italics. However, if it is necessary, it can be found by checking Run.style.name (if it is known that the styles in the document that are under study are displayed in italics). Then, we access the file, which will be saved in .docx format with the help of ResultFile. Thus, this file is already open and ready to write new data.

After finishing with the basic steps, we run an outer FOR loop to read the files under study (if more than one file) and an internal similar FOR to scan the file itself and search for fragments in italics. When program finds the appropriate values, it writes them to a text file, separating them with tabs \ t, moves to the next new line for further work and writing. At the end of the inner and outer loops, the program closes the record file and ends its action (Fig. 2).

```

1 import glob
2 import sys
3 import docx
4
5 ModulePath = 'D:\\InstrumentumLingualis\\Python'
6 if not(ModulePath in sys.path):
7     sys.path.append(ModulePath)
8 import IIGlob
9
10 InFolder = IIGlob.SetInput()
11 OutFolder = IIGlob.SetOutput()
12 NamePrefix = IIGlob.SetNamePrefix()
13
14 FBPos=0
15
16 ResultFile = open(OutFolder + NamePrefix + 'Текст курсивом.docx')
17
18 WorkFileList = glob.glob(InFolder + '*.docx')
19
20 for FileName in WorkFileList:
21     ShortFileName = IIGlob.GetShortName(FileName)
22     print(ShortFileName)
23     FBPos = 0
24     DocumentFile = open(FileName)
25     DocumentString = DocumentFile.read()
26     for p in ShortFileName.paragraphs:
27         for run in p.runs:
28             if run.italic temp=run.italic ResultFile.write(ShortFileName + '\t' + temp + '\n')
29         FBPos = EPos + 1
30
31 ResultFile.close()

```

Figure 2: Running the inner and outer FOR loops

```

import glob import sys import docx ModulePath = 'D:\\InstrumentumLingualis\\Python' if
not(ModulePath in sys.path): sys.path.append(ModulePath) import IIGlob 79 InFolder =
IIGlob.SetInput() OutFolder = IIGlob.SetOutput() NamePrefix = IIGlob.SetNamePrefix() FBPos=0
ResultFile = open(OutFolder + NamePrefix + 'Текст курсивом.docx'), WorkFileList =
glob.glob(InFolder + '*.docx') for FileName in WorkFileList: ShortFileName =

```

```
IIGlob.GetShortName(FileName) print(ShortFileName) FBPos = 0 DocumentFile = open(FileName)
DocumentString = DocumentFile.read() for p in ShortFileName.paragraphs: for run in p.runs: if
run.italic temp=run.italic ResultFile.write(ShortFileName + '\t' + temp + '\n') FBPos = EPos +1
ResultFile.close()
```

Thus, the software product contributes to the study of texts multimodality. In the study of multimodality, the channel of communication plays a vital role, because it determines the strength of materiality to comprehend the information provided. There are two definitions of this term in linguistics: the first one refers to the physical materials used in the transmission of communication (medium), and the second one can also be defined as a communication channel. However, modes and communication channels cannot be unambiguously compared. According to linguists G. Kress and T. van Leuven, a certain semiotic regime can appear in various media [28, p. 40]. For example, language can be spoken or written. Different modes can be implemented in the same environment, as it is demonstrated by the use of images and words in comics or stories. Because materiality can function as a source of difference and also as a meaning, multimodal narrative analysis views the media as one element that proceeds in a wider range of semiotic regimes and is used in the text. It is less interested in addressing specific media issues separately. Thus, multimodal narrative analysis can focus on a single medium (printed literature) or can distinguish between narratives from different media (audiovisual and written). However, regardless of the number of media types, the focus remains on the integration of semiotic resources, not only on the comparison of the media [23 p. 203]. The interrelation between materiality and multimodality draws attention as to the physical work which is involved in narrative processing, both through the use of modes and technologies, as to the human body and its senses.

Narrative is not only mode of fictional expression; it is also mode of human talent. Therefore, the role of sensory modes is of paramount importance in multimodal analysis, because fictional worlds are created by the use of verbal or visual resources. Addressors and addressees interact with the essence of the stories in different ways, whether through gestures and the tone of voice in oral stories, or through sensorimotor manipulations with a page, keyboard, screen or other material [28, p. 45].

The active interaction of semiotic resources affects the content of the story, and also requires a certain form of transcription as the first step in the process of analysis and interpretation. Multimodal theory requires to rethink the benefits of any particular mode. Transcription can reveal not only the verbal content of the story, but also involved range of semiotic resources [20, p.109]. Thus, it is possible to reveal more clearly the regularities of their integration on various examples of the story and help to identify points of commonality and contrast in the narrative spectrum. Transcription must be both not only systematic and repetitive, but flexible enough to cover the rich variety of multimodality. Although multimodality explains language as only one of many semiotic resources working in the acquisition of meaning, the use of verbal components still prevails in the practice of the transcription process [27, p. 140].

However, people not only perceive the information but also interact with text, the physical work that is done during the interaction with printed pages, digital screens, or computer technology comes to the fore. Linguists N. Norgaard and A. Gibbons give examples of specific cases where a mysterious game with printed pages can be used to create additional meaning in modern novels [30, p. 53]. But the influence of tactile modality is most strongly felt in the context of a text about new media, where the reader must physically manipulate an element of the digital apparatus (mouse, keyboard, headset) to understand the story being told. The impact on the reader's reaction can be various. Scientist M. Toolan acknowledges the well-documented problems that arise when the digital interface prohibits readers from immersing themselves in text. The process-oriented nature of multimodal theory is not limited to the physicality of the text, narrator or audience, but is complemented by cognitive approaches [18, p. 123].

The software product facilitates the identification of the verbal component in a multimodal fictional prose text. Up until recently, the verbal component has been considered as the main source of information in the fictional text. The verbal components of a multimodal fictional prose text include language code tools: words, phrases, sentences and texts used to convey information [14, p. 80]. Verbal components are the most important modes of communication, because in "typical everyday communication, they are seen as the keys to the values presented in the messages". Sounds of

language are considered as one-sided units that have a material physical and acoustic form, but lack their own semantic content.

Developing the theory of the phoneme, N. S. Trubetsky has emphasized its active role in distinguishing, but not in creating meanings. Indeed, not having their own meaning, such as phonemes as “s” and “t” distinguish the words “yes” and “yet”, acoustically formalizing their meaning [19, p. 72]. Such a minimal unit as a phoneme, which has no semantic meaning of its own, being used in a fictional prose text, has an additional aesthetic and semantic load of expression, because it performs a visual and expressive function.

Stress also plays an important role [19, p. 73]. After all, it is known that changing the stress on different syllables of one word can completely make the meaning of the phrase different in which the word has been used. By dint of it, the reader can determine the social status of the hero, as well as his cultural and educational level. Stress also serves as an economical and effective tool of natural self-characterization of the protagonist, which assists with creating the effect of reliability and authenticity of the narrative [24, p. 130].

A graphon has the same effect as stress does. The term “graphon” was introduced into the scientific terminological corpus by V. A. Kukharenko to denote intentional distortion of the spelling norm in order to reflect the violation of the phonetic norm, which reflects the individual or dialectal peculiarities of pronunciation [24, p. 135]. In modern linguistic studies, the graphon is also determined as a phonographic stylistic device, graphic or graphostylistic tool. The synonymous functioning of the mentioned definitions makes it difficult to identify that linguistic phenomenon due to the fact that the graphon is considered as a unit of different language levels [14, p. 85]. Graphons do not only characterize the hero, but also reflect the ironic and author’s attitude to him. They may not even violate the sound norm, but when they are written, they make the reader’s impression on the character. F. de Saussure explained that the written word displaces spoken one in our minds [17, p. 150]. That is why all the graphons, in which the normativity of sound prevails over the normativity of writing, depict a hero with a low culture of speech in the addressees’ minds [17, p. 155].

There is also a graphical representation of graphemes. There are a variation of text types and ways of graphically presenting a word, such as hyphenation or doubling (tripling) of individual graphemes in fictional prose text. Well-known linguist B. de Courtenay has noted that visual alternations of graphemes can be used due to the difference in morphological and semasiological representations of imagination because of connection with form and meaning. The change of the text type and line narrowness of the graphemes influences the intonation and logical emphasis and performs the functions of transmitting the emotional state of the speaker at the time of speech. Hyphenation, as a rule, serves to depict the strong arousal of the character, italics indicate the intensification and / or transfer of phrasal stress in the word [13, p. 221].

Since a phoneme under special conditions of its operation has been updated and becomes a carrier of additional information of the fictional prose text, we can assume that the morpheme, a unit of the next level, which has not only form but also its own content, makes an even more significant contribution to the text content [24, p. 135]. Morpheme is the main component in word formation, and for inflectional languages and word change. It is known that the enrichment of the dictionary is carried out primarily by creating new words from the fund of existing morphemes. Lexical innovations of a literary text are an important component of the author’s point of view, so they are a source of language enrichment. The emergence of individual author neologisms (occasionalisms) indicates not only the development of language, but a change in point of view and ways of reflecting reality [24, p. 319].

Occasionalism is an unusual, expressively colored lexical word that renames familiar objects and phenomena. The unusual combination of morphemes in occasionalism attracts the reader’s attention, because it is a deep fresh thought embodied in a new form. Its occurrence is due to two reasons: 1) incompleteness of the word-forming paradigm of the word, in which there is no unit with the necessary morphological and syntactic characteristics and 2) incompleteness of the word-changing paradigm [16, p. 91]. The functions of proposing an occasional combination of morphemes in a new word are not limited to the economy of language means and expressiveness. As a bilateral unit, the morpheme participates in the “morphemes game”, which, like the play on words, is based on polysemy and homonymy of the units used. Morpheme play is functionally similar to word play, because it also has a pronounced authorial modality, usually humorously ironic or grotesque-satirical,

and structural reception is carried out, mainly by repeating the actualized unit in it [3, p. 55]. There is nothing unusual, individual, one-time, temporary in the very structure of occasionalism, in the models based on which they are built. Their peculiarity is in the unusualness of the lexical compatibility of morphemes, in its individual character. Every new word comes out of never incompatible morphemes. Regardless of whether the morpheme will eventually enter national use or remain a one-time, situationally fixed word, it always occurs for the first time in someone's individual language, and the role of literature masters in this process is difficult to overestimate [16, p. 92]. Thus, the actualization of a language unit can be considered as a fictionally significant fact only in connection with the performance of its informational-aesthetic function, included in the general artistic perspective of the work. Morpheme is involved in saturating the text with additional content and modality. Thus, despite the fact that the morpheme is a bound form and deprived of independent functioning in the language, it is able to create additional content in the text, performing the functions of nomination (occasional combination of morphemes) and logical-emotional intensification (morpheme repetition) [4, p. 335].

The lexical level is the next difficult level of the language hierarchy after the phonographic and morphological ones. The importance of the word for all life and human activity cannot be overestimated. The word denotes all objects, processes, phenomena that are around us, without the word communicative activity does not make any sense [8, p. 142].

It is known that data about the frequency of use of lexical units in speech are necessary for various areas of theoretical and applied linguistics. Frequency dictionaries of all languages, all texts, samples of various lengths show the same statistics: they are all headed by synsemantic words. Articles, prepositions, local-temporal adverbs, pronouns fill the first hundred positions of frequency dictionaries of different languages. They consist of only about 1% of the lexemes, but they cover almost half of all word usages in the text [15, p. 391]. Words of relative semantics (synsemantic) are semantically and grammatically insufficient, so they cannot independently fill this or that position in the sentence structure, but require independent words in the appropriate grammatical form. Such words, though full-fledged, but with open semantics, need to fill the content of the sentence with words that depend on them. Thus, synsemantic words together with independent words form analytical forms of expression of sentence members. Words of different parts of speech can have semantic incompleteness (synsemantics), but often transitive verbs have this feature [25, p. 114].

A person's ability to perceive and interpret connections and relationships relates to the cognitive sphere of activity and requires complex mental operations. Thus, to identify the cognitive basis of the syntax of the literary text, it is more logical to refer not only to the systematization of syntactic units, but to identify patterns of syntactic connections and relationships [5, p. 170]. The author's concept of the organization of the text space introduces long, complex sentences with various types of lexical and syntactic connection into the text and encourages the author to choose additional punctuation tools.

Punctuation is an important way of conveying whole sets of authorial meanings and intentions (stylistic, pragmatic, expressive, etc.), and not just markers of boundaries between segments of utterances, which in turn are "elements which arise from the division of the text", the syntactic organization of which is reflected at the prosodic level [7, p. 97]. However, the text interpretation is no limited to the identification of actualized elements of the linguistic matter of the works. It provides only the first stage of the process of high-quality processing of fictional information. Among the many identified specific cases of actualization, it is necessary to establish their hierarchy, identify the leading functions, determine the dominant. To do this, we have interpreted a fictional text as a communicative unit of the highest level of complexity [1, p. 40].

Content-conceptual data informs the reader about individual-author's understanding of the relations between the phenomena described by means of content-factual information, understanding of their causal relations, their significance in the social, economic, political, cultural life of the people [31–43], including relations between individuals, their complex psychological and aesthetic-cognitive interaction. Such information is extracted from the whole work and is a creative rethinking of these relations, facts, events, processes occurring in society and represented by the writer in the imaginary world created by him. This world closely reflects the objective reality in its actual embodiment [10].

It can be stated that informativeness, which is a textual category, applied to a fictional text should be marked as a category of heterogeneous multi-channel informativeness, which, despite its heterogeneity, has a single focus on the disclosure of the concept of the work. This subordination of local and global, micro- and macro modes and functions of a single task provides their close

relationship and interaction – their system, which is also a categorical feature of the fictional text [9, p. 139].

The nonverbal component as well as the verbal one is an obligatory component of a multimodal fictional prose text. Nonverbal components of communication can also act as an independent mode of information and convey the content of the text in full (iconic components), or as ancillary to verbal components and add additional semantic nuances to its content (paragraphemic components) [6, p. 574]. Paragraphemic and iconic components are nonverbal modes of a multimodal fictional prose text [29, p. 37].

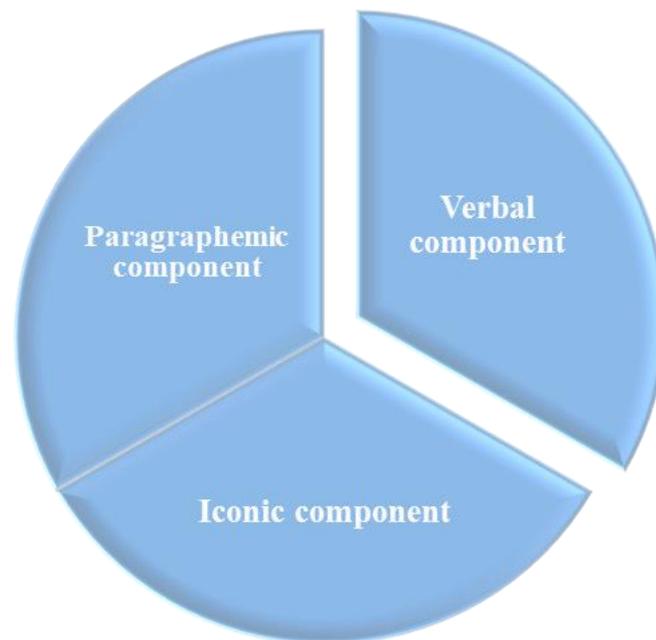


Figure 3: Multimodal components of modern fictional prose text

The increase in the number of nonverbal components in the text and the expansion of their functions in the organization of the information continuum of the text is due to the author's creative search for new modes of solving communicative and pragmatic problems. Under the influence of the oral analogue, the written text becomes a unit of nonlinear perception and understanding of information. Printed (electronic) text becomes the main in the communicative activity of the addresser and the addressee. The authors of multimodal fictional prose text use a variety of technical modes to create an original text, which affects significantly the process of generating text at the internal and external levels. Changes in value, cognitive and technical factors affect speech and mental processes, social and speech behavior of native and non-native speakers [2, p. 16].

The Python software product identifies text highlighted by italics, bold, underlining and strikethrough, which hastens the process of collecting linguistic material in multimodal fiction. Multimodal fictional prose text uses in its texture a variety of semiotic modes of presenting information simultaneously. After all, multimodality is closely related to semiotics and interacts with discourse analysis, functional linguistics and sociolinguistics. Nonverbal components of communication can act as independent modes and convey the content of the text in full (iconic components), or as ancillary to verbal components and make additional semantic nuances in its content (paragraphemic components) [11, 12]. Punctuation dividing a sentence into constituent parts plays an important role among graphic components in a multimodal fictional prose text. Since the perception of the text occurs through the visual channel, graphic design is an essential condition for its adequate perception and understanding. In the multimodal fictional prose text of the postmodern period, paragraphemic components, on the one hand, appear as markers of intonation, and on the other – i.e. as modes of simplifying its visual perception.

Conclusions

The modern multimodal novel is characterized by inclusive content, large-scale epic narration and graceful characters. It consists of symbolic images and extended metaphors which enrich the content and give special expression to the problems that arise. The synthesis of real and conditional forms allows modern writers to develop a colorful multilayered content. Postmodern prose is also characterized by its polyphony, which is a specific feature of the composition, the space-time novels continuum. The most important role is played by the social and cultural life of the characters. The multi-genre nature enriches the structure and content of modern multimodal novels. Analyzing the multimodal understanding of modern novels, it is vital not only to interpret the meaning made up by different semiotic channels of information, but also to consider what values are created due to the specific interaction of different channels of information in a particular fragment of text. The modes of verbal and nonverbal components function not only as separate ways of creating meaning, but combine and integrate, forming a complex whole that cannot be explained primitively. Thus, multimodal fictional prose text is a modern phenomenon that combines verbal and nonverbal components to transmit relevant content through a variety of semiotic channels of information. Furthermore, the perception of the text occurs only with the correct interpretation of its component functions.

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