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SOME STYLISTIC TYPOLOGICAL DISTANCES BETWEEN THE PROSE OF SOME BRITISH WRITERS

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ABSTRACT

The article describes the frequencies of occurrence of gerund, participle 1 and verbal noun in the prose of some writers to establish the stylistic typological distances between them. The author chose 6 features for the gerund, 1 feature for the verbal noun and 5 features for the participle 1. All in all, there are 12 features to construct typological distances with the help of the "Chi-square" criterion. It is interesting to find out that American writers (Theodore Dreiser, F. Scott Fitzgerald and Ernest Hemingway) would not form one group, while the British writers (Joan K. Rowling, Agatha Christie and William Somerset Maugham) should form the other group (taxon). It looks that the use of the -ing forms does not depend on the nationality of the writer. Theodore Dreiser has a tendency to use the -ing forms (i.e. the gerund, participle 1 and verbal noun) in his prose in the same way as F. Scott Fitzgerald. This is why, the distance is minimal (24.01). Dreiser's prose is also close to the prose of Christie 1 (47.70). Dreiser's prose by these 12 features is far away from that of Maugham 1 (101.60). Our task is to find out the distances between the authors, but not to explain those distances. However, one can see that the prose of F. Scott Fitzgerald and Agatha Christie might have influenced the prose of Theodore Dreiser. Ernest Hemingway has a tendency to use the gerund in the same functions as Joan. K. Rowling (10.54), participle 1 - asWilliam Somerset Maugham in "Flotsam and Jetsam" (14.04) and verbal noun - as Maugham in "The force of circumstance" and "The creative impulse" or as Christie in "Curtain" (0.06). This is the first work of this sort in stylistics and thus, it gives some interesting results concerning the authors discussed in this paper.

The goal of this article is to establish some stylistic typological distances between the prose of J. K. Rowling, Agatha Christie and William Somerset Maugham on the basis of the frequency of the English -ing-forms: verbal noun, gerund, and participle 1 in different functions in the sentence.

The material of this study is described in detail at the end of this article. The main assumption in this work is that every text sample of an author is a separate object with certain values of the selected features to measure the distances. In

this case, the selected features are the values of the frequency of occurrence of some functions of the gerund, participle 1 and the verbal noun. We believe that certain frequencies of the -ing-forms show certain concrete manifestations of the tendencies of thinking of an author. We assume certain modes of grammar to be stable enough to produce underlying linguistic stability. In our study, we must distinguish between insignificant fluctuations of the selected features which do not affect the basic character of the author's style, on the one hand, and the significant fluctuations which indicate stylistic differences, on the other hand.

Our study uses the methods of mathematical linguistics. One cannot help agreeing with Dolezhel and Bailey (1969) who think that not only linguistics, but also many other fields in the humanities have survived and profited from the application of mathematical models and techniques. Stylistics has become the crossroads for the interests of linguists and mathematicians to yield some new models. The statistical investigation of texts can explain the intrinsic features inherent in the text (Dolezhel and Bailey 1969: vii). We agree with the definition of style given by Winter (1969: 3) who believes that style may be said to be characterized by a pattern of recurrent selections from the inventory of optional features of a language. As well as Dolezhel, we adhere to the foundations of the statistical theory of style, which considers style to be a probabilistic phenomenon. We can regard style as a preference for one or another mode of expression. The overall character of style is called forth by the degree of presence (or absence) of a certain mode of expression, rather than by its exclusive use or complete suppression (Dolezhel 1969: 10-11). In other words, a probabilistic approach takes into account the frequency with which this or that feature is used in the text (Tambovtsev 1997: 171-172).

Dolezhel is not right to assume that a numerical stylistic theory can only be said to account for stylistic differences between texts (Dolezhel 1969: 11). In fact, it can provide different measures which allow us to construct a taxonomy of styles. Nevertheless, we agree with Dolezhel that style-forming processes are to be considered a fundamental component of linguistic performance: style originates in the process of producing (encoding) a text by a certain author (Dolezhel 1969: 11). In our opinion, a probabilistic approach may reveal a substantial part of linguistic performance.

Speaking about style as a statistical concept, Herdan (1966) defines it as the general characteristics of a person's way of expressing himself in language. What is implied by Herdan's definition is that no matter what somebody (who is said to have a style of his own) is writing about, it will bear the imprint of the personality of the writer. Thus, for Herdan, "style" is used in the sense of a subconscious factor, which the writer must obey. It implies that the linguistic performance of a person is much a matter of the mental make-up of the individual (Herdan 1966: 70).

A specialist in the studies of authorship attribution, David L. Mealand, remarks that anyone familiar with literature knows that there are differences that we sense almost instantly and instinctively when we move between texts by different authors. We just know that their style is different. Different authors write in different ways: they express themselves in different ways (Mealand 1999: 479). Thus, the authorship attribution method allows us to define the degree of affinity between the authors. So, the method of authorship attribution studies is close to our study method if we look on the problem of the distance between the authors from the following angle: the less the distance, the similar the texts under study, i.e. the more affinity between the authors. If the texts are similar enough, one can claim that the author is the same. For this reason, we took texts of different authors and texts of the same author. We tried to put forward another attribution method to the many other methods which already exist. The use of these methods may be found elsewhere (Holmes 1985: 328-329; Rudman 1998: 352-353). However, we cannot help agreeing with Rudman that for every paper announcing an authorship attribution method that "works", there is a counter paper that points out real or imagined crucial shortcomings (Rudman 1998: 352). It happens so, because it is possible to find some better features as the basis for analysis. Nevertheless, we believe that the use of the gerund, participle 1 and verbal noun may be reliable features to judge the thinking process of different authors. The result of this thinking process may be some special sort of the text which has different values of different features. The features, which we selected, do not seem to depend on this or that situation being described in the text, but they seem to show the peculiar way this or that author depicts reality. It needs deeper and further studies if there are some more stable grammar phenomena than those mentioned above in texts of an author.

Let us consider in detail the features taken for our study: gerund, participle 1 and verbal noun. Belyaeva (1971), Kaushanskaja et al. (1967) and others consider the gerund to be a form, which developed from the verbal noun. In course of time, the gerund became verbalized preserving, at the same time, its nominal character. The gerund is formed by adding the suffix -ing to the stem of the verb, and coincides in form with participle 1 (Belyaeva 1971: 165; Kaushanskaya et al. 1967: 170).

Let us consider the functions of the gerund in the sentence. The gerund may be a subject, a part of a compound verbal predicate, an object, an attribute and an adverbial modifier.

1. The gerund as a subject

Thinking about Ron was painful, too.

(Rowling 2000: 15)

2. The gerund as a part of a compound verbal predicate

She's used to flying around outside.

(Rowling 2000: 16)

- 3. The gerund as an object
- a) the gerund as a direct object

One must bear in mind that the gerund as a direct object is used after the following verbs:

to avoid избегать	to mind возражать
to fancy воображать	to mention упоминать
to deny отрицать	to put off откладывать
to delay откладывать	to postpone откладывать
to excuse извинть	to propose предлагать
to give up бросать	to require требовать
to leave off переставать	to need нуждатьс
to suggest предлагать	to enjoy наслаждатьс
to forget забывать	to hate ненавидеть
to like любить	to dislike не любить
to neglect пренебрегать	to omit пропускать
to detest ненавидеть	to prefer предпочитать
to prevent предотвращать	to refuse отказывать
to regret сожалеть	to remember помнить
to resist сопротивлтьс	

And some other verbs.

As always in the wizarding world, the photograph was morning; wizard, who Harry supposed was Gilderoy Lockhart kept winking cheekily at them all. (Rowling 2000: 36)

b) the gerund as an indirect object

It is important to remember that the gerund as the direct object is used after the following verbs:

to depend (on) зависеть (от)	to succeed (in) преуспевать (в)
to rely (on) полагатьс (на)	to be proud (of) гордитьс
to insist (on) настаивать (на)	to be fond (of) любить
to object (to) возражать (против)	to be sure (of) быть уверенным
to agree (to) соглашатьс (на)	to be pleased (at/with) быть
-	довольным
to hear (of) слышать (o)	to be surprised (at) удивлтьс
to thank (for) благодарить (за)	to be interested (in) интересоватьс
to prevent (from) прептствовать	to be connected (with/to) быть
to think (of) думать (o)	свзанным

Julian felt rather like a dog who has been congratulated on performing a clever trick.

(Christie 1979a: 20)

4. The gerund as an attribute

I wouldn't dream of doing such a thing till somebody official arrived.

(Christie 1979a: 20)

5. The gerund as an adverbial modifier

She hesitated before using the knocker for the third time.

(Christie 1979b: 53)

Let us define the participle. Belyaeva (1971), Kaushanskaja et al. (1967), and others consider the participle a non-finite form of the verb which has a verbal and an adjectival or an adverbial character. There are two participles in English: participle 1 and participle 2, traditionally called the present participle and the past participle. Participle 1 is formed by adding the suffix -ing to the stem of the verb (Belyaeva 1971: 177; Kaushanskaya et al. 1967: 155). We take for our study participle 1, which coincides in form with the gerund. Actually, it is rather hard to distinguish between them. Nevertheless, it is possible to distinguish between them if we consider their exact environment. We can see it from the following examples and discussion.

Participle 1 may have different syntactic functions in the sentence.

1. Participle 1 as a part of a compound verbal predicate

Harry wasn't listening.

(Rowling 2000: 18)

2. Participle 1 as a part of a complex object

"I've heard Dad talking about him", said George.

(Rowling 2000: 29)

3. Participle 1 as an attribute before a noun

The vicar came up to the sofa and looked down at the dying man. He made his way towards a waiting car.

(Christie 1979a: 15)

4. Participle 1 as an attribute after a noun

Her fingers went to his pulse – a pulse so feeble and fluttering that it told its own story, as did the almost greenish pallor of his face.

(Christie 1979a: 26)

5. Participle 1 as an adverbial modifier.

She hesitated before using, the knocker for the third time.

(Christie 1979b: 31)

The verbal noun should not be confused with the gerund. The verbal noun has the suffix -ing. Kaushanskaya and her co-authors (1967) warn that the verbal noun has only a nominal character while the gerund and participle 1 have a double character: nominal and verbal. The verbal noun may be used with an article. It has a plural form. It cannot take a direct object (Kaushanskaya et al. 1967: 185).

The method is to count the occurrence values of the -ing-forms in the prose of the British authors mentioned above. To measure how similar the frequency values are, we use the criterion of Chi-square. Actually, we may use the Chi-square test when we do not know or when we are unwilling to assume that the distribution of the feature values are normal. The Chi-square distribution is non-parametric. It means that we can use it when the distribution is not normal (Owen et al. 1990: 386). Let us explain how we use the Chi-square test here. The procedure is described in detail elsewhere (Tambovtsev 2003: 26-27). Let's take the second line of Table 1: the function of a gerund as a part of a predicate. We found nine occurrences in Harry Potter and the Chamber of Secrets by J. K. Rowling (2000) and two occurences in Agatha Christie's "Sactuary" (1979a). In order to calculate the value of the Chi-square test, we must find the expected value, i.e. the mean. Here the mean is 5.5. Then we must subtract it from every value, i.e. 9 - 5.5 = 3.5 and raise it to the square $3.5 \times 3.5 = 12.25$. Then we must divide it by 5.5, i.e. the mean. 12.25 / 5.5 = 2.23. The same procedure must be done with the second value: 2. Then we must add them: 2.23 + 2.23 = 4.46 or

4.5. We have chosen the level of significance 0.05 or 5%. The degrees of freedom are calculated by n-1, where n is the number of the features compared. Here we have two authors, thus n=2. This is why, we must look up the critical value in the table of critical values of the Chi-square test with 1 degree of freedom. It is 3.84 (Butler 1985: 176). If the received value of the Chi-square is less than 3.84, then there is no statistical difference between these two authors by this particular function. In this case (4.46), it is greater than 3.84. It means that J. K. Rowling and Agatha Christie are different by this function of gerund. We compare the pairs to obtain the Chi-square values in every line. It is possible to add all Chi-square values as the distances between the authors in question.

We placed the frequency of occurrence of a gerund from *Harry Potter and the Chamber of Secrets* (HP) by J. K. Rowling (2000) in the first column and Agatha Christie 1 (AC-1) (1979a, b) in the second column of Table 1. The third column shows the expected value, i.e. the mean (M). The 4th column shows the Chi-square values. The 5th column shows if the difference between the critical value (3.84) and the received value is statistically significant.

Table 1. Functions of gerund in the sentence on the material of *Harry Potter and the Chamber of Secrets* by J. K. Rowling (HP) and Agatha Christie 1 (AC-1) – stories: "Sanctuary" (1979a) and "Strange Jest" (1979b) from Agatha Christie's *Miss Marples's final cases* (1979)

Functions of gerund	HP	AC-1	Mean	Chi- square	Signific- ance
Subject	8.0	0	4.0	8.0	yes
Predicate	9.0	2	5.5	4.5	yes
Attribute in preposition to noun	17.0	2	9.5	11.8	yes
Attribute	4.0	6	5.0	0.4	no
Adverb	10.0	7	8.5	0.5	no
Object	9.0	6	7.5	0.6	no
Total				25.8	

Table 2. Functions of participle 1 in the sentence on the material of *Harry Potter* and the Chamber of Secrets (HP) by J. K. Rowling and Agatha Christie 1 (AC-1) – stories: "Sanctuary" (1979a) and "Strange Jest" (1979b) from Agatha Christie's Miss Marples's final cases (1979)

Functions of participle 1	HP	AC-1	Mean	Chi- square	Signific- ance
Complex object	11	0	5.5	11.0	yes
Predicate	92	50	71.0	12.4	yes
Attribute in preposition to noun	20	19	19.5	0.03	no
Attribute in postposition to noun	14	15	14.5	0.03	no
Adverb	100	57	78.5	11.8	yes
Total				35.26	-

Table 3. Verbal noun in the texts of *Harry Potter and the Chamber of Secrets* (HP) by J. K. Rowling and Agatha Christie 1 (AC-1) – stories: "Sanctuary" (1979a) and "Strange Jest" (1987b) from Agatha Christie's *Miss Marples's final cases* (1979)

	НР	AC-1	Mean	Chi- square	Signific- ance
Verbal noun	12	22	17	2.9	no

Table 4. Functions of gerund in the sentence on the material of *Harry Potter and the Chamber of Secrets* (HP) by J. K. Rowling and Agatha Christie 2 (AC-2) – story: "Curtain" (1979c) from Agatha Christie's *Miss Marples's final cases* (1979)

Functions of gerund	НР	AC-1	Mean	Chi- square	Signific- ance
Subject	8	1	4.5	5.4	yes
Predicate	9	4	6.5	1.9	no
Attribute	4	12	8	4	yes

Adverb	10	15	12.5	1	no
Object	9	7	8	0.25	no
Total				12.55	

Table 5. Functions of participle 1 in the sentence on the material of *Harry Potter* and the Chamber of Secrets (HP) by J. K. Rowling and Agatha Christie 2 (AC-2) – story: "Curtain" (1979c) from Agatha Christie's *Miss Marples's final* cases (1979)

Functions of participle 1	HP	AC-1	Mean	Chi- square	Signific- ance
Complex object	11	4	7.5	3.3	no
Predicate	92	63	77.5	5.4	yes
Attribute in preposition to noun	20	18	19	0.1	no
Attribute in postposition to noun	14	27	20.5	4.1	yes
Adverb	100	27	63.5	41.9	yes
Total				54.8	

Table 6. Verbal noun in the texts of *Harry Potter and the Chamber of Secrets* (HP) by J. K. Rowling and Agatha Christie 2 (AC-2) – story: "Curtain" (1979c) from Agatha Christie's *Miss Marples's final cases* (1979)

	HP	AC-1	Mean	Chi- square	Signific- ance
Verbal noun	12	8	10	0.8	no

Table 7. Functions of gerund in the sentence on the material of Agatha Christie 1 – stories: "Sanctuary" (1979a) and "Strange Jest" (1979b) – and Christie 2 (AC-2) – story: "Curtain" (1979c) from Agatha Christie's *Miss Marples's final cases* (1979)

Functions of gerund	AC-1	AC-2	Mean	Chi- square	Signific- ance
Subject	0	1	0.5	1	no
Predicate	2	4	3	0.7	no
Attribute	8	12	10	0.8	no
Adverb	7	15	11	2.9	no
Object	2	7	4.5	2.8	no
Total				9.5	

Table 8. Functions of participle 1 in the sentence on the material of Christie 1 – stories: "Sanctuary" (1979a) and "Strange Jest" (1979b) – and Christie 2 (AC-2) – story: "Curtain" (1979c) from Agatha Christie's *Miss Marples's final cases* (1979)

Functions of participle 1	Ac-1	AC-2	Mean	Chi- square	Signific- ance
Complex object	0	4	2	4	yes
Predicate	50	63	56.5	1.5	no
Attribute in preposition to noun	19	18	18.5	0.3	no
Attribute in postposition to noun	15	27	21	3.4	no
Adverb	57	27	42	10.7	yes
Total				19.63	-

Table 9. Verbal noun in the texts of Christie 1 – stories: "Sanctuary" (1979a) and "Strange Jest" (1979b) – and Christie 2 (AC-2) – story: "Curtain" (1979c) from Agatha Christie's *Miss Marples's final cases* (1979)

	AC-1	AC-2	Mean	Chi- square	Signific- ance
Verbal noun	22	8	15	6.5	yes

Table 10. Functions of gerund in the sentence on the material of William Somerset Maugham:

Maugham 1 - "The force of circumstance" (TF) (2000a)

Maugham 2 - "Flotsam and Jetsam" (FA) (2000b)

from William Somerset Maugham's Selected stories (2000).

Functions of gerund	TF	FA	Mean	Chi- square	Signific- ance
Subject	0	0	0	0	no
Predicate	0	3	1.5	3	no
Attribute	19	17	18	0.1	no
Adverb	3	13	8	6.25	yes
Object	8	3	5.5	2.3	no
Total				11.85	

Table 11. Functions of participle 1 in the sentence on the material of W. S. Maugham:

Maugham 1 - "The force of circumstance" (TF) (2000a)

Maugham 2 - "Flotsam and Jetsam" (FA) (2000b)

from William Somerset Maugham's Selected stories (2000).

Functions of participle 1	TF	FA	Mean	Chi- square	Signific- ance
Complex object	7	2	4.5	2.8	no
Predicate	76	73	74.5	0.06	no
Attribute in preposition to noun	19	14	16.5	0.8	no
Attribute in postposition to noun	2	15	8.5	9.94	yes
Adverb	21	18	19.5	0.23	no
Total				13.79	

Table 12. Verbal noun in the text of W. S. Maugham:

Maugham 1 - "The force of circumstance" (TF) (2000a)

Maugham 2 - "Flotsam and Jetsam" (FA) (2000b)

from William Somerset Maugham's Selected stories (2000).

	TF	FA	Mean	Chi- square	Signific- ance
Verbal noun	10	15	12.5	1	no

Table 13. Functions of gerund in the sentence on the material of W. S. Maugham:

Maugham 1 – "The force of circumstance" (TF) (2000a)

Maugham 3 – "The creative impulse" (CI) (2000c)

from William Somerset Maugham's Selected stories (2000).

Functions of gerund	TF	FA	Mean	Chi- square	Signific- ance
Subject	0	0	0	0	no
Predicate	0	0	0	0	no
Attribute	19	23	21	0.4	no
Adverb	3	11	7	4.6	yes
Object	8	4	6	1.3	no
Total				7.6	

Table 14. Functions of participle 1 in the sentence on the material of W. S. Maugham:

Maugham 1 - "The force of circumstance" (TF) (2000a)

Maugham 3 - "The creative impulse" (CI) (2000c)

from William Somerset Maugham's Selected stories (2000).

Functions of participle 1	TF	CI	Mean	Chi- square	Signific- ance
Complex object	7	0	3.5	7	yes
Predicate	76	40	58	11.2	yes
Attribute in preposition to noun	19	20	19.5	0.03	no
Attribute in postposition to noun	2	10	6	5.3	yes
Adverb	21	20	20.5	0.02	no

23.55

Table 15. Verbal noun in the text of W. S. Maugham:

Maugham 1 - "The force of circumstance" (TF) (2000a)

Maugham 3 – "The creative impulse" (CI) (2000c)

from William Somerset Maugham's Selected stories (2000).

•	TF	CI	Mean	Chi- square	Signific- ance
Verbal noun	10	8	15	0.2	no

Table 16. The total distances between the British authors based on the Chi-square values of the gerund, participle 1 and verbal noun

Authors	Gerund	Participle 1	Verbal noun	Chi-square Total
Rowling - Christie (1)	25.80	35.26	2.9	63.96
Rowling – Christie (2)	12.55	54.80	0.8	68.15
Christie (1) – Christie (2)	9.50	19.63	6.5	35.63
Maugham (1) – Maugham (2)	11.85	13.79	1.0	26.64
Maugham (1) – Maugham (3)	7.60	23.55	0.2	31.35

In conclusion we can state that the texts of one and the same author by the occurrence of gerund, participle 1 and verbal noun are closer to each other than the texts of different authors. The difference is nearly 2 times greater.

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