LANGUAGE, CULTURE, COMMUNICATION

CORPUS-BASED AND CORPUS-DRIVEN RESEARCH ON THE PSYCHOLINGUISTIC FEATURES OF "UP" AND "DOWN" AS UNITS OF FUNCTIONAL TRANSPOSITION IN PRESENT DAY ENGLISH

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Summary

The paper gives attention to the role of psycholinguistic features in the process of functional transposition in Present Day English. This process is stipulated by grammatical and syntactic as well as psycholinguistic factors determining whether any transpositional shift is institutionalized in the language or rejected. The research focuses on the case study of "UP" and "DOWN" as these lexical units have undergone transpositional processes and function as prepositions, adverbs, and adverbial particles. In the course of the analysis two main types of factors have been identified, viz: linguistic – *the discourse type, text type, derived text type, text domain, context-governed text domain and type of interaction, level of difficulty;* and extra-linguistic – *age and gender of authors (for written discourse), age, gender and social class of interlocutors, i.e. speakers and respondents (for spoken discourse).* Two opposite groups *authors (for written discourse)* and *interlocutors (for spoken discourse)* have been distinguished as the former create discourse having time to think through phrases, constructions, etc., whereas the latter do it spontaneously and often under pressure.

Keywords: Linguistic and extra-linguistic factors, preposition, adverbial particle.

DOI https://doi.org/10.23856/4101

1. Introduction

The fact that speakers' lexical choice and the process of lexical activation are significantly influenced by various psycholinguistic characteristics has already been discussed and proved *(Francis & Kucera, 1982; Ellis & Beaton, 1993; Towell & Dewaele, 2005; Mätzig et al., 2009; Shabitha & Mekala, 2013; Soloukhina et al., 2016).* Nevertheless, all major research has dealt with either words that belong to the same word categories *(Christian, 1978; Hawkins & Cutler, 1988)* or lexical units representing the notional class of words *(Gentner, 1982)*, and it is possible to speak of intended polysemic senses *(Develaar & Besner, 1988; Klein, 2001)*. But, it is not the case of lexical units which belong to a functional class only or represent functional and notional classes at the same time, i.e. adverbs-prepositions-particles. To my mind, these relations showcase not polysemy, but the instances of functional transposition *(Kovbasko, 2016).*

Functional transposition is interpreted as a diachronic-synchronic functional process and its outcome, which presupposes the ability of lexical units, by means of grammaticalization and lexicalization, and without application of any morphological and/or syntactical markers, to acquire and realize functions inherent to other word classes and, in this way, remain within its original word category. From this perspective functional transposition is "fully motivated by extra-linguistic factors, above all by cognition" *(Heine et al., 1939: 27)* and by "the relation between language and the contexts in which it is used" *(Hopper & Traugott, 2003: 75).* The result of functional transposition is always a synchronic phenomenon institutionalized and conventionalized at a specific stage of language development. According to Gries *(2015: 2),* these are "repeated experience results in their becoming entrenched as language knowledge in the learner's mind". They are an inherent part of various interpersonal communicative and cognitive processes, which are psychologically and linguistically dependent. Therefore, functional transposition is a purely linguistic phenomenon, which enters the scope of psycholinguistics, correlating with productivity of constructions, language change, first/second language acquisition, etc. *(Gries, 2012: 49).*

The present paper ***aims*** at analysing linguistic and extra-linguistic characteristics of "UP" and "DOWN". This choice is conditioned by the grammatical nature of the units, which have developed in the language as a result of functional transposition; moreover, some of their lexical meanings are still being institutionalized in Present Day English. Therefore, the paper ***supports the hypothesis*** that actualization of functional transposition (finalized by the process of institutionalization) is contingent on various psycholinguistic features of discourse and interlocutors. The research comprises several ***practical stages*** necessary for a thorough analysis of the psycholinguistic features, which are actualized in the process of functional transposition: a) corpus-based and corpus-driven analyses of linguistic features of the lexical units "UP" and "DOWN"; b) corpus-based and corpus-driven analyses of extra-linguistic features of the lexical units "UP" and "DOWN". The research is exemplified by these lexical units, as they both represent overlapping classes of prepositions, adverbs, and/or adverbial particles, correlate with each other, and, at the same time, represent the opposite notions.

2. Methods and Techniques

To perform the analysis and implement the objectives of the present paper a general corpus approach has been applied. It is one of the most useful and productive methods in the sphere of psycholinguistics, because, from the very beginnings, psycholinguistic research has recognized three major experiential factors that affect cognition: frequency, recency, and context of usage *(Gries, 2015: 8),* which can be fully described by corpus-based and corpus-driven approaches.

The corpus-based approach is a method used to extract appropriate material to support intuitive knowledge, verify expectations, allow linguistic phenomena to be quantified, and find proof for existing theories, or retrieve illustrative samples. The corpus is interrogated and data is used to confirm linguistic preset explanations and assumptions *(Storjohann, 2005: 9)* and to discover the systematic patterns of use that govern the linguistic features recognized by standard linguistic theory *(Biber, 2012: 5).* The corpus-driven approach is a methodology whereby the corpus serves as an empirical basis, from which data is extracted and linguistic phenomena are detected without prior assumptions and expectations, and any conclusions or claims are made exclusively on the basis of corpus observations *(Tognini-Bonelli, 2001: 65;*

Storjohann, 2005: 5). In the paper the corpus-based approach has been applied to retrieve illustrative samples of the lexical units "UP" and "DOWN" and, consequently, support the hypothesis. The corpus-driven approach allows us to obtain crucial distribution frequencies of the lexical units and make further conclusions based on the data.

As the paper focuses on universal relations between parts of speech, there is much sense in studying these phenomena on the basis of the British National Corpus (BNC), which is a synchronic and general 100 million word collection of samples of written and spoken language. The common denominator (per 1 million words) is used to balance the results of the corpus research. This makes the current analysis balanced and representative enough to speak of the tendencies observed.

Thus, having applied the BNC distribution function I identified basic linguistic and extra-linguistic categories which determinate formation, use and comprehension of speech, especially the choice of certain lexical units and combinations. The following linguistic categories with corresponding subcategories have been specified: *the discourse type, text type, derived text type, text domain (for written texts only), context-governed text domain and type of interaction (both for spoken discourse only), and level of difficulty*. The latter feature is interpreted as a so-called bridge between the linguistic and extra-linguistic factors. The extra-linguistic factors mentioned below form a psycholinguistic image of interlocutors. To the factors under analysis belong: the *age and gender of an author (for written discourse), age, gender and social class of a respondent and a speaker (for spoken discourse).* The social class is subdivided into: *AB (top or middle management, administrative or professional), C1 (junior management, supervisory or clerical), C2 (skilled manual), DE (semi-skilled or unskilled)*.

3. Results and Discussion

Grammatical structure and syntactic functions determine the choice of the construction and part of speech affiliation of the lexical units under study. This is also done by a specific context and semantic components that can play even a greater role in the process of interaction. Another important factor in solving ambiguity between adverbs/prepositions/particles is the common ground – "the set of mutually held beliefs and assumptions of interlocutors engaged in communication" *(Ferreira, 2010),* in combination with other psycholinguistic features, e.g. age, gender, social class, etc.

Therefore, to study the correlation between the lexical units "UP" and "DOWN" and peculiarities of their usage in the language, it is required to analyse psycholinguistic characteristics of interlocutors, who actualize functional transposition, and linguistic characteristics of discourse where they are actualized. It has been done by means of applying corpus approaches to obtain and interpret empirical data for various linguistic and extra-linguistic features, which may influence the process of functional transposition.

3.1. Corpus analysis of the lexical unit "UP" (linguistic factors)

The initial data retrieved from the BNC testify considerable inequality in the general frequency of the usage of "UP": as the adverbial particle the number of samples is 184,627 or 1,877.94 samples per 1 million words. The preposition "UP" is used 3,418 or 34.77 per 1 million words. The results of the corpus analysis are represented in Table 1.

Table 1

Distribution of "UP" in Present Day English: linguistic factors

#	Category	Subcategory	Preposition	Adv. Part.
			per million words	
1	***Discourse type***	Written	32.09	1,777.29
		Spoken	**57.35**	**2,727.9**
2	***Text type***	Written miscellaneous	13.04	1,318.11
		Written books and periodicals	34.02	1,804.41
		Written-to-be-spoken	23.46	**2,768.61**
		Context governed	**39.51**	2,159.69
		Demographically sampled	**83.37**	**3,556.72**
3	***Derived text type***	Academic prose	3.23	795.41
		Non-academic prose and biography	14.97	1,414.18
		Newspapers	19.34	1990.4
		Unpublished written material	15.9	1,913.06
		Other published written material	31.24	1,832.39
		Other spoken material	39.51	2,156.69
		Fiction and verse	**98.8**	**3,057.75**
		Spoken conversation	**83.37**	**3,556.72**
4	***Text domain (written only)***	Natural and pure science	8.12	1,176.28
		World affairs	13.57	1,305.98
		Social science	9.13	1,122.02
		Commerce and finance	7.36	1,449.8
		Belief and thought	17.12	1,237.52
		Arts	18.25	1,592.43
		Applied science	8.92	1,652.17
		Leisure	**41.75**	**2,150.77**
		Imaginative prose	**98.75**	**3,063.39**
5	***Type of interaction (spoken only)***	Monologue	39.69	2,089.61
		Dialogue	**60.47**	**2,840.58**
6	***Context governed texts domain (spoken only)***	Public/institutional	**27.5**	1,641.1
		Educational/informative	24.9	2,156.85
		Leisure	**85.11**	**2,655.54**
		Business	17.93	**2,230.95**
7	***Perceived level of difficulty***	High	10.55	1,210.56
		Medium	36.07	1,867.17
		Low	**52.7**	**2,359.75**

Corpus distribution analysis of the linguistic factors shows the following outcomes:

– Both the preposition and adverbial particle "UP" are predominantly used in the "*spoken discourse"* – 57.35 and 2,727.9, respectively;

– Taking into account the data concerning the discourse type, it is natural that in both cases "UP" most frequently functions in the "*demographically sampled*" (which, in fact, is a type of spoken discourse) – 89.37 and 3,556.72, resp. However, the difference is seen in other subcategories: the preposition "UP" is more used in the "*context-governed*" (another type of spoken discourse) –

39.51 and the "*written books/periodicals*" – 34.02. The adverbial particle "UP" is frequent in the "*written-to-be-spoken*" type – 2,768.61 and in the "*context-governed*" type – 2,159.69. I argue that it testifies the wish of the authors of the "*written-to-be-spoken*" materials to make their speech more spontaneous and similar to "*demographically sampled*" conversations, to convert artificial discourse into natural;

– Both the preposition and adverbial particle "UP" chiefly function in the "*fiction and verse*" and the "*spoken conversation*". The lowest frequency is in the "*academic prose*" and the "*non-academic prose and biography*" (3.23 / 14.97 and 795.41 / 1,414.18, resp.);

– Absolute unanimity is observed among the "*text domains*", where the "*imaginative prose*" and the "*leisure*" occupy two first positions – 98.75 / 41.75 and 3,063.39 / 2,150.77, resp. The least frequently used domains for the preposition "UP" are: the "*commerce and finance*" and the "*natural and pure science*" with 7.36 and 8.12, resp. For the adverbial particle "UP" they are: the "*social science*" and the "*natural and pure science*" with 1,122.02 and 1,176.28, resp. Despite different names of the domains, the common denominator is their non-literary nature, specific grammatical structures of the sentences, presence of notional words, and semantic completeness;

– In both cases "UP" is more used in dialogical than in monological speech, 60.47 / 2,840.58 and 39.69 / 2,089.61 resp. This generally correlates with a more "highly demanded" spoken type of discourse;

– Speaking of the "*context-governed text*" a commonly used domain is the "*leisure*" – 85.11 and 2,655.54 resp., whereas the correlations between other domains differ considerably. For instance, the preposition "UP" is used in the "*public/institutional*", the "*educational/informative*" and only then in the "*business*" domains. For an adverbial particle the disposition is the following: the "*business*", the "*educational/informative*", the "*public/institutional*".

– As to the level of difficulty, the preposition and adverbial particle "UP" are predominantly used in texts of *low and medium level of difficulty*, which testifies that "UP" is inherent to less literary texts.

3.2. Corpus analysis of the lexical unit "UP" (extra-linguistic factors)

The aforesaid linguistic factors, by all means, create a general picture of the discourse types, where the preposition and adverbial particle "UP" are most or least frequently used. The results of the distribution corpus analysis are represented in Table 2.

Corpus analysis of extra-linguistic factors provides the following conclusions:

– Both the preposition and adverbial particle "UP" are predominantly used by authors up to 14 y.o. and those from 25 to 34. Senior authors and those of 15-24 y.o. use the least number of "UP" in both cases. I may suppose that authors up to 14 prefer using adverbial particles to reconstruct their own informal language, and see no sense in applying more grammatically sophisticated structures. Authors between 25-34 use the preposition "UP" more often than other age groups, as they try to specify their own style;

– Female authors use "UP" more frequently. In case of the adverbial particle, it testifies their wish to make speech more informal and immature, metaphorical and not overt, cf. Lakoff (1975), Coates (2013), and others. At the same time, women tend to express things carefully and particularize them by using the preposition "UP";

– As to the age of respondents, people over 60 and those of 25-34 most frequently use the preposition "UP", whereas the adverbial particle "UP" is mostly used by children under 14 and those of 25-34. To my mind, such difference in age could be explained by the desire of respondents to be more precise in the first case, and inartificial ways of speaking and spontaneity of a child;

– On the contrary to authors, male respondents predominate in using "UP" in both cases, trying to be precise and natural while answering;

– Speaking of the social class of respondents, "UP" is chiefly used by skilled manual and semi-skilled/unskilled respondents, which generally may be interpreted by the domain and types of texts/conversations where "UP" is frequently found;

– Concerning the age of speakers, seniors and children most frequently use the preposition "UP", while children and youth prefer the adverbial particle. In my view, it showcases the former's desire/necessity to particularize their speech, and the wish of the latter to be more informal;

– As to the social class of speakers, the correlation is the same, i.e. skilled manual and semi-skilled/unskilled speakers ultimately use the preposition and adverbial particle "UP".

Table 2

Distribution of "UP" in Present Day English: extra-linguistic factors

#	Category	Subcategory	Preposition	Adv. Part.
			per million words	
1	***Age of author (written)***	0-14 (children)	**67.16**	**2,871.1**
		15-24 (youth)	40.55	1,905.72
		25-34 (adults)	**71.9**	**2,604.74**
		35-44 (adults)	52.18	2,117.16
		45-59 (adults)	55.04	2,020.17
		60+ (seniors)	49.16	1,865.67
2	***Gender of author (written)***	Male	35.65	1,682.57
		Female	**66.42**	**2,410.43**
3	***Age of respondent (spoken)***	0-14 (children)	67.41	**3,962.47**
		15-24 (youth)	73.64	3,590.55
		25-34 (adults)	**95.52**	**3,651.74**
		35-44 (adults)	69.81	3,646.68
		45-59 (adults)	87.18	3,527.83
		60+ (seniors)	**100.14**	3,149.62
4	***Gender of respondent (spoken)***	Male	**89.54**	**3,588.51**
		Female	78.37	3,524.96
5	***Social class of respondent (spoken)***	AB	71.38	3,314.8
		C1	74.26	3,514.49
		C2	**105.72**	**3,828.8**
		DE	**91.87**	**3,687.55**
6	***Age of speaker (spoken)***	0-14 (children)	**98.64**	**3,416.11**
		15-24 (youth)	63.93	**3,413.53**
		25-34 (adults)	53.55	3,147.66
		35-44 (adults)	54.85	3,124.33
		45-59 (adults)	58.6	2,837.59
		60+ (seniors)	**124.84**	3,380.42
7	***Gender of speaker (spoken)***	Male	53.33	2,623.27
		Female	**72.02**	**3,224.67**
8	***Social class of speaker (spoken)***	AB	78.32	3,045.75
		C1	81.82	3,470.83
		C2	**101.41**	**4,024.26**
		DE	**101.89**	**3,718.84**

3.3. Corpus analysis of the lexical unit "DOWN" (linguistic factors)

The initial analysis of the statistics shows that the adverbial particle "DOWN" is registered 72,941 or 741.92 samples per 1 million words. On the contrary, the preposition "DOWN" is observed 5,169, i.e. 52.58 per 1 million words. The adverbial particle "DOWN", in fact, is used half as much as "UP", and is a bit more frequent than the preposition. Taking into account that the number of semantic components is almost equal and the meanings define either the same or directly opposite notions, this correlation may be explained by a general tendency to use lexical items with "positive/exalted" connotation/emotional association more frequently**.** In fact, etymologically, the lexical unit "UP" specifies relations connected with the sky, heaven, angels, God, etc. So, let us review the linguistic factors characterizing the use of "DOWN", see Table 3.

Table 3

Distribution of "DOWN" in Present Day English: linguistic factors

#	Category	Subcategory	Preposition	Adv. Part.
			per million words	
1	Discourse type	Written	48.58	682.2
		Spoken	**86.36**	**1,246.22**
2	Text type	Written miscellaneous	26.22	341.39
		Written books and periodicals	50.61	707.24
		Written-to-be-spoken	52.4	**1,113.7**
		Context governed	**65.9**	973.95
		Demographically sampled	**116.2**	**1,643.38**
3	Derived text type	Academic prose	6.4	211.24
		Non-academic prose and biography	25.02	451.55
		Newspapers	36.34	665.73
		Unpublished written material	38.28	623.73
		Other published written material	39.78	629.88
		Other spoken material	65.9	973.95
		Fiction and verse	**144.82**	**1,571.8**
		Spoken conversation	**116.2**	**1,643.38**
4	Text domain (written only)	Natural and pure science	11	338.33
		World affairs	28.12	446.11
		Social science	17.11	339.1
		Commerce and finance	10.49	395.72
		Belief and thought	25.68	427.32
		Arts	33.31	507.54
		Applied science	16.87	382.27
		Leisure	**50.44**	**827.84**
		Imaginative prose	**145.06**	**1,567.13**
5	Type of interaction (spoken only)	Monologue	74.26	948.77
		Dialogue	**88.5**	**1,298.73**
6	Context governed texts domain (spoken only)	Public/institutional	**57.99**	650.46
		Educational/informative	30.98	897.12
		Leisure	**118.14**	**1,339.52**
		Business	56.92	**1,045.68**
7	Perceived level of difficulty	High	19.64	390.29
		Medium	52.26	711.99
		Low	**79.96**	**1,027.25**

On the basis of the data, retrieved from the BNC, the following conclusions are drawn:

– Both the preposition and adverbial particle "DOWN" overwhelmingly function in "*spoken*" discourse – 86.36 and 1,246.22, respectively;

– As to the "*text type*", the preposition "DOWN" predominates in purely spoken types, viz: the "*demographically sampled*" (116.2) and the "*context governed*" (65.9). The adverbial particle "DOWN" is prevalent in the "*demographically sampled*" (1,643.38), i.e. unprepared, fluent, everyday speech, and the "*written-to-be-spoken*" (1,113.7) text type, which aims at imitating the "*demographically sampled/context governed*" discourse;

– Speaking of the "*derived text type*", the preposition and adverbial particle "DOWN" are more frequently used in the "*fiction and verse*" (144.82 and 1,571.8, resp.) and the "*spoken conversation*" (116.2 and 1,643.38, resp.). The least "popular" text types for both are the "*academic prose*" and the "*non-academic prose and biography*". This tendency demonstrates that "DOWN" remains a marker of spoken, informal and emotive speech, finding almost no place in academic literature;

– Analysing the "*text domain*", at the top there is the "*imaginative prose*" (145.06 and 1,567.13, resp.) and the "*leisure*" (50.44 and 827.84, resp.). This, in general, correlates with the "*derived text type*", when the "*text domain (in written form only)*" strives for representing spoken discourse, everyday conversations;

– Among the type of interaction the "*dialogical*" speech predominates – 88.5 and 1,298.73, respectively. It is more natural to use adverbial particles and prepositions in a simple conversation to emphasize or particularize objects;

– Speaking of the "*context governed text domain*", almost an imperceptible difference is observed, as the "*leisure*" dominates in both cases – 118.14 for the preposition and 1,339.52 for the adverbial particle. The second position is occupied by the "*public/institutional domain*" (57.99), closely followed by the "*business domain*" (56.92) for a preposition. For an adverbial particle, it is the "*business*" (1,045.68) and the "*educational/informative domain*" (897.12);

– As to the "*perceived level of difficulty*" one can note that the more difficult the text is, the less frequently "DOWN" is used, and, vice versa. It shows that in both cases "DOWN" is peculiar of plain and ordinary texts.

3.4. Corpus analysis of the lexical unit "DOWN" (extra-linguistic factors)

Having analysed the extra-linguistic factors which characterize the use of the lexical unit "UP", it is reasonable to presuppose that the same key figures would be observed in the case of "DOWN". To compare the results, let us address the data perceived from the BNC which describe the psycholinguistic factors of the lexical unit "DOWN" in discourse, see Table 4.

Giving consideration to the corpus distribution analysis of the extra-linguistic factors, characterizing the use of the lexical unit "DOWN", the conclusion is the following:

– The data concerning the age of the authors show that children and adults (25-34 y.o.) most frequently use the preposition and adverbial particle "DOWN" – 134.32 / 93.07 and 1,057.77 / 1,168.49, respectively. These figures may be explained by children's informal way of speaking and need to specify the objects in the course of communication, as well as adults' ability either to imitate or to apply spoken patterns in discourse;

– "DOWN" is predominantly used by female authors – 93.57 and 1,116.17;

– As to the age of respondents, it appears that adults 45-59 and seniors mostly use the preposition "DOWN", while the adverbial particle is chiefly used by adults 25-34 and 45-59. These figures are explained by the necessity to make their answers stricter and clearer. The adverbial particle "DOWN" is used by adults of 25-34 y.o. as an inseparable part of their everyday speech, while adults 45-59 try to imitate the speech of their interlocutors or seem to be more up-to-date;

Table 4

Distribution of "DOWN" in Present Day English: extra-linguistic factors

#	Category	Subcategory	Preposition	Adv. Part.
			per million words	
1	Age of author (written)	0-14 (children)	**134.32**	**1057.77**
		15-24 (youth)	51.61	790.67
		25-34 (adults)	**93.07**	**1,168.49**
		35-44 (adults)	84.73	929.7
		45-59 (adults)	74.27	880.29
		60+ (seniors)	78.03	864.95
2	Gender of author (written)	Male	56.62	718.35
		Female	**93.57**	**1,116.17**
3	Age of respondent (spoken)	0-14 (children)	108.61	1,505.59
		15-24 (youth)	102.2	1,502.95
		25-34 (adults)	101.89	**1,783.71**
		35-44 (adults)	104.12	1,570.13
		45-59 (adults)	**143.23**	**1,747.83**
		60+ (seniors)	**128.3**	1,599.06
4	Gender of respondent (spoken)	Male	**124.55**	**1,700.12**
		Female	110.69	1,600.9
5	Social class of respondent (spoken)	AB	**120.91**	**1,450.18**
		C1	100.52	1,653.56
		C2	**127.78**	**1,761.34**
		DE	117.22	**1,842.19**
6	Age of speaker (spoken)	0-14 (children)	98.64	**1,526.35**
		15-24 (youth)	97.58	1,490.58
		25-34 (adults)	90.14	1,433.27
		35-44 (adults)	78.09	1,346.04
		45-59 (adults)	**100.1**	1,253.69
		60+ (seniors)	**140.67**	**1,754.83**
7	Gender of speaker (spoken)	Male	86.47	1,214.96
		Female	**96.64**	**1,460.23**
8	***Social class of speaker (spoken)***	AB	**119.92**	1,490.45
		C1	102.27	1,587.76
		C2	**138.91**	**1,803.07**
		DE	101.89	**1,636.82**

– Among the respondents, males mainly use "DOWN" in both cases – 124.55 and 1,700.12, respectively;

– Discussing the social class of respondents, the adverbial particle "DOWN" is preferred by the "*semi-skilled or unskilled*" (1,842.19) and the "*skilled manual*" (1,761.34) respondents, whereas the preposition "DOWN" is peculiar of the "*skilled manual*" (127.78) and the "*top or middle management, etc.*" (120.91);

– Drawing attention to the speakers' age, I would note that the correlation for the preposition "DOWN" is the same in the case of respondents, i.e. seniors (140.67) and adults

45-59 (100.1) are at the top. For an adverbial particle, the age of speakers is different and represented by seniors (1,784.53) and children (1,526.35). To my mind, it is possible to correlate speakers' and respondents' age (in case of seniors), who are trying to conform to the speech of their interlocutors;

– Another observation is that female speakers use "DOWN" more frequently than males, 96.64 / 1,460.23 and 86.47 / 1,214.96, respectively;

– The data on the social class of speakers generally corresponds to that of respondents, when the "*skilled manual*" (138.91) and the "*top or middle management, etc.*" (119.92) prefer the preposition "DOWN". The "*skilled manual*" (1,803.07) and the "*semi-skilled or unskilled*" speakers (1,636.82) use the adverbial particle "DOWN".

4. Conclusion

The performed analysis of the lexical units "UP" and "DOWN" and the statistical data represented in Tables 1-4 let us compare linguistic and extra-linguistic factors which characterize "UP" and "DOWN". It helps to create a prototypical psychological image of a language user and a possible language situation where these lexical items as representatives of the whole classes predominate, see Appendix 1.

First of all, in Present Day English "UP" and "DOWN" predominantly function as adverbial particles, and statistically "UP" is used more frequently than "DOWN". To my mind, this is explained by its "spiritual" associations and positive semantic prosody formed in Old English.

In Present Day English both lexical units despite their part of speech affiliation usually function in the *spoken, dialogical discourse of low level of difficulty*, chiefly in two "*derived text types*" – the "*fiction and verse*" and the "*spoken conversion*", and two "*text domains*" – the "*imaginative prose*" and the "*leisure*". Both units are mainly found in the "*demographically sampled text type*". There is, however, a slight divergence as to the "*text type*", as prepositions predominate in the "*context governed*" discourse, whereas adverbial particles exceed in the "*written-to-be-spoken*" discourse. It is explained by the wish of authors to make their written discourse more natural, spoken, and informal. In the spoken spheres or the "*context governed text domains*" prepositions and adverbial particles prevail in the "*leisure*" domain. The "*public/institutional*" domain is common for prepositions, while adverbs are more frequently found in the "*business*" domain. In my view, this divergence is connected with various business approaches, when speakers try to establish contacts and "break the ice" with interlocutors.

As to the psychological characteristics, I argue the necessity to distinguish between two major groups, in particular the "*authors*" and the "*interlocutors*". The former create discourse having time to think through phrases, constructions, etc. The latter do it spontaneously and often under some pressure, which makes their speech natural and true-to-life. Therefore, authors are usually either children (0-14) or adults (25-34), whose texts are characterized by small difference in the priority of preposition/adverbial particles usage. I explain it by the need of authors to particularize the objects of denomination, probably doubting their ability to be clear or wishing to clarify themselves (for prepositions) and the use of their natural language style (for adverbial particles). In case of interlocutors, who are divided into *speakers and respondents*, the former are usually females and the latter are males. I may assume that in real-life communication women-speakers follow the general tendencies of the 'female speech', while men-respondents try to conform to their speech. They usually belong to the identical social classes (in case of each lexical unit), i.e. skilled manual or semi-skilled/unskilled. Great differences are observed as to the age of speakers and respondents, the majority of whom are adults over 45 and seniors

over 60. The use of prepositions is more popular among adults 45+ and seniors 60+, whereas children and adults of 25-34 y.o. prefer adverbial particles in their speech. High frequency of these lexical units in the speech of respondents 45+ and 60+ is justified by a psychological desire to correspond to the style used by speakers.

Further research in the field is of critical importance, as a detailed psycholinguistic analysis of other prepositions, adverbs, adverbial particles, provides conditions for creating a psychological image of language users and possible language situations, which will contribute to first and second language acquisition research. It may also aim at gender studies and the role of minor parts of speech in them. Future research will help to predict the development of functional transposition of the aforementioned units on the basis of linguistic and extra-linguistic characteristics of discourse and determine their role in the process of institutionalization of the lexical units.

References

Biber, D. (2012). Corpus-based and corpus-driven analyses of language variation and use. In Heine Bernd and Narrog Heiko (eds.) The Oxford Handbook of Linguistic Analysis, 1–34. Oxford: Oxford University Press. DOI: 10.1093/oxfordhb/9780199544004.013.0008.

British National Corpus. http://www.natcorp.ox.ac.uk/ (Last accessed 08 August 2020)

Christian, J., Bickley, W., Tarka, M., and Clayton, K. (1978). Measures of free recall of 900 English nouns: Correlations with imagery, concreteness, meaningfulness, and frequency. Memory & Cognition 6(4): 379–390.

Coates, J. (2015). Women, Men and Language. 3rd ed. London: Routledge.

Davelaar, E., Besner, D. (1988). Word identification: Imageability, semantics, and the content-functor distinction. Quarterly Journal of Experimental Psychology: Human Experimental Psychology 40(4): 789–799.

Ellis, N., Beaton, A. (1993). Psycholinguistic determinants of foreign language vocabulary learning. Language learning 43(4): 559–617.

Ferreira, L. C. (2010). Applying corpus linguistics methodology to psycholinguistics research. DELTA 26. DOI: 10.1590/S0102-44502010000300008.

Francis, N., Kucera, H. (1982). Frequency Analysis of English Usage: Lexicon and Grammar. Boston: Houghton Mifflin.

Gentner, D. (1982). Why nouns are learned before verbs: Linguistic relativity versus natural partitioning. In Stan Kuczaj (ed.), Language development, Vol.2: Language, thought, and culture, 301–334. New Jersey: Lawrence Erlbaum.

Gries, S. (2012). Corpus linguistics, theoretical linguistics, and cognitive/psycholinguistics: Towards more and more fruitful exchanges. In Joybrato Mukherjee and Magnus Huber (eds.) Language and Computers, 41–63. Amsterdam: Rodopi. DOI: 10.1163/9789401207713_006.

Gries, S., Ellis, N. (2015). Statistical Measures for Usage-Based Linguistics. Language Learning 65: 1–28. DOI: 10.1111/lang.12119.

Hawkins, J., Cutler, A. (1988). Psycholinguistic factors in morphological asymmetry. In John Hawkins (ed.), Explaining Language Universals, 280–317. Oxford: Blackwell.

Heine, B., Claudi, U., and Hunnemeyer F. (1939). Grammaticalization. A Conceptual Framework. Chicago and London: The University of Chicago Press.

Hopper, P. J., Traugott, E. C. (2003). Grammaticalization. 2nd ed. Cambridge: Cambridge University Press.

Klein, D., Murphy, G. (2001). The representation of polysemous words. Journal of Memory and Language 45: 259–282. DOI: 10.1006/jmla.2001.2779.

Kovbasko, Yu. (2016). Temporal and locative prepositions versus adverbs: lexical and grammatical overlapping (corpus-based study). Advanced Education 6: 69–75. DOI: 10.20535/2410-8286.77941.

Lakoff, R., Bucholtz, M. (2004). Language and Woman's Place. Oxford: Oxford University Press.

Mätzig, S., Druks, J. (2009). Noun and verb differences in picture naming: past studies and new evidence. Cortex 45(6): 738–758. DOI: 10.1016/j.cortex.2008.10.003.

Shabitha, M., Mekala, S. (2013). The impact of psycholinguistic factors on second language acquisition. The IUP Journal of English Studies 8(1): 7–14.

Soloukhina, O. (2016). Psikholingvisticheskie parametry vliiaiushchie na nazyvanie obiektov i deistvii [Psycholinguistic parameters influencing denomination of objects and actions]. Proceedings of the 7th International Conference on Cognitive Science: 557–558. [In Russian].

Storjohann, P. (2005). Corpus-driven vs. corpus-based approach to the study of relational patterns. Proceedings of the Corpus Linguistics Conference 2005: 1–20.

Tognini-Bonelli, E. (2001). Corpus Linguistics at Work. Amsterdam and Philadelphia: John Benjamins Publishing Company.

Towell, R., Dewaele, J.-M. (2005). The role of psycholinguistic factors in the development of fluency amongst advance learners of French. In: Jean-Marc Dewaele (ed.) Focus on French as a Foreign Language, 210–239. Clevedon: Multilingual Matters. DOI: 10.21832/9781853597688-011.

Appendix 1

Distribution of "UP" and "DOWN" in Present Day English: linguistic and extra-linguistic factors

#	Category	Preposition	Adv. Part.	Preposition	Adv. Part.
		UP	**UP**	**DOWN**	**DOWN**
1	Discourse type	Spoken	Spoken	Spoken	Spoken
2	Derived text type	Fiction and verse	Spoken conversation	Fiction and verse	Fiction and verse
		Spoken conversation	Fiction and verse	Spoken conversation	Spoken conversation
3	Text type	Demographically sampled	Demographically sampled	Demographically sampled	Demographically sampled
		Context governed	Written-to-be-spoken	Context governed	Written-to-be-spoken
4	Text domain	Imaginative prose	Imaginative prose	Imaginative prose	Imaginative prose
		Leisure	Leisure	Leisure	Leisure
5	Type of interaction	Dialogue	Dialogue	Dialogue	Dialogue
6	Context governed texts domain	Leisure	Leisure	Leisure	Leisure
		Public/institutional	Business	Public/institutional	Business
7	Perceived level of difficulty	Low	Low	Low	Low
		Medium	Medium	Medium	Medium
8	Age of author	25-34 (adults)	0-14 (children)	0-14 (children)	25-34 (adults)
		0-14 (children)	25-34 (adults)	25-34 (adults)	0-14 (children)
9	Gender of author	Female	Female	Female	Female
10	Age of speaker	60+ (seniors)	0-14 (children)	60+ (seniors)	60+ (seniors)
		0-14 (children)	15-24 (youth)	45-59 (adults)	0-14 (children)
11	Gender of speaker	Female	Female	Female	Female
12	Social class of speaker	semi-skilled/ unskilled	skilled manual	skilled manual	skilled manual
		skilled manual	semi-skilled/ unskilled	Top/middle management	semi-skilled/ unskilled
13	Age of respondent	60+ (seniors)	0-14 (children)	45-59 (adults)	25-34 (adults)
		25-34 (adults)	25-34 (adults)	60+ (seniors)	45-59 (adults)
14	Gender of respondent	Male	Male	Male	Male
15	Social class of respondent	skilled manual	skilled manual	skilled manual	semi-skilled/ unskilled
		semi-skilled/ unskilled	semi-skilled/ unskilled	Top/middle management	skilled manual