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DIACHRONIC CHANGE OF VERB + NOUN COLLOCATIONS IN ENGLISH: A CORPUS-BASED STUDY (1850–2019)

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Abstract: Using the Google Books Ngram Corpus, the article analyses frequency changes in fifteen English verb–noun collocations in 1850–2019. It reveals the rapid rise of play a role and raise awareness, the obsolescence of make haste and take heed, and the replacement of British take a decision by make a decision.
Key words: collocation, verb + noun combination, diachronic analysis, light verb, Google Books Ngram, lexical change, Americanization.

Annotatsiya: Maqolada 1850–2019-yillarda ingliz tilidagi fe’l + ot kollokatsiyalarining chastotaviy o‘zgarishi Google Books Ngram korpusi asosida tahlil qilinadi. 15 ta birikma o‘rganilib, play a role, raise awareness kabilarning keskin faollashgani, make haste, take heed kabilarning eskirgani hamda Britaniya ingliz tilida take a decision o‘rnini make a decision egallagani aniqlandi.
Kalit so‘zlar: kollokatsiya, fe’l + ot birikmasi, diaxron tahlil, yengil fe’l, Google Books Ngram, leksik o‘zgarish, amerikanlashuv.

Аннотация: На материале корпуса Google Books Ngram анализируется частотная динамика английских коллокаций «глагол + существительное» в 1850–2019 гг. На примере 15 сочетаний показаны резкий рост play a role и raise awareness, устаревание make haste и take heed, вытеснение take a decision вариантом make a decision в британском английском.
Ключевые слова: коллокация, глагольно-именное сочетание, диахронический анализ, лёгкий глагол, Google Books Ngram, лексическое изменение, американизация.

Introduction. Words in any language rarely live alone. A speaker of English makes a mistake but does a favour, pays attention but gives a talk, and the choice of verb in such pairs cannot be predicted from the meaning of the noun. These habitual partnerships, known as collocations, form a large part of what native speakers know about their language, and they are notoriously hard for learners. What is noticed less often is that collocations are not fixed once and for all. A combination that sounded natural to a Victorian reader may now look archaic, while phrases that dominate present-day academic and political prose were scarcely used a hundred years ago.

Verb + noun collocations built on make, take, have, give and do are particularly sensitive to such change, because the verb in them carries little meaning of its own and can be replaced by a competitor without changing the sense of the whole (make / take a decision, have / take a look). The last two

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centuries, for which very large digitized collections of printed texts now exist, offer a unique opportunity to observe these shifts year by year and to measure them precisely.

The topic is also of practical relevance for Uzbekistan, where the reform of foreign language teaching launched by Presidential Resolution No. PQ-1875 of 10 December 2012 made communicative competence in English a central aim of instruction [1]. Learner-corpus research shows that verb + noun collocations are the area in which even advanced learners make most errors [20], and teaching materials that rely on outdated combinations only make this problem worse.

The **aim** of the study is to trace the frequency development of a sample of English verb + noun collocations from 1850 to 2019 and to identify the main types of diachronic change. Three research questions were set: (1) which collocations expanded and which declined during the period; (2) how did competing light-verb variants (make / take / have) redistribute their shares; (3) do British and American English follow the same path?

Literature review and methodology. The idea that a word is known "by the company it keeps" was formulated by J.R. Firth [10; p. 11], and it was turned into an empirical programme by J. Sinclair, whose "idiom principle" placed recurrent word combinations at the centre of corpus linguistics [22; p. 110]. In the Russian tradition, the same phenomenon was described through the apparatus of lexical functions: in the "Meaning ⇔ Text" model, the verb in make a decision or pay attention is treated as a value of the function $Oper_1$, which supplies a semantically weak verb for a given noun [3; 18; p. 23–53]. Ju.D. Apresjan stressed that the choice of such verbs is lexically conditioned and therefore has to be recorded in the dictionary [2]. M. Hoey's theory of lexical priming explains why these preferences are stable within a speech community [13], while usage-based linguistics argues that frequency of use is itself a force of language change [8; p. 711–733].

The term "light verb" goes back to O. Jespersen [14; p. 117]. Historical work on light-verb (composite) predicates has concentrated mainly on Old, Middle and Early Modern English [7], while the most recent two centuries have received less systematic attention. J. Algeo showed that British and American English differ in their preferences for have a look versus take a look and take a decision versus make a decision [4; p. 203–217; 5], and G. Leech, M. Hundt, C. Mair and N. Smith documented a broader drift of British usage towards American norms in the twentieth century [15; 17]. The rise of nominal, information-dense style in academic and journalistic registers, described in the Longman grammar [6], provides a further background for changes in collocations with abstract nouns. Construction grammar offers a framework in which such changes can be classified as constructional changes or as the emergence of new form–meaning pairings [11; 23].

Since the publication of the Google Books Ngram Corpus [19], diachronic frequency data have become available on an unprecedented scale. At the same time, E.A. Pechenick, C.M. Danforth and P.S. Dodds warned that the corpus is a "library" rather than a balanced sample: its composition changes over time, and the share of scientific literature grows in the twentieth century [21]. N. Younes and U.-D. Reips proposed a set of rules for reliable Ngram studies, including the use of several indicators and the avoidance of conclusions drawn from single years [24]. Balanced historical corpora such as COHA [9] are a natural point of comparison.

Material. The data come from the Google Books Ngram Corpus, English version 2019 (en-2019), and its two regional sub-corpora, British English (en-GB-2019) and American English (en-US-2019) [16; 25]. For every year the corpus reports how often a given sequence of words occurs relative to the total number of sequences of the same length published that year. The data were retrieved on 5

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October 2026 through the public JSON interface of the Ngram Viewer with smoothing switched off and converted into instances per million words (ipm).

The sample consists of 15 collocations representing three expected scenarios: (a) expansion — play a role, make a difference, pay attention, take action, address the issue, raise awareness; (b) decline — make haste, take heed, give offence; (c) variant competition — make a decision vs take a decision, have a look vs take a look, have a shower vs take a shower. For the decision pair the British and American sub-corpora were examined separately.

Methods. The period 1850–2019 was divided into five sub-periods (1850–1899, 1900–1949, 1950–1979, 1980–1999, 2000–2019), and decade means were calculated for the graphs. Monotonic trends were measured with Spearman's rank correlation coefficient (ρ) between year and frequency, which does not assume a linear relationship and is robust to single-year outliers [12]. For competing variants a share index was calculated as the proportion of the take variant in the combined frequency of both variants, e.g. take a decision / (take a decision + make a decision) × 100%. The computations were carried out in Python (NumPy, SciPy).

Two restrictions follow from the design. Only the exact base form was searched, so inflected forms (made a decision, taking a look) and modified variants (make an important decision) are not counted, and the figures show relative trends rather than the full frequency of a collocation. In addition, following [21; 24], conclusions are drawn from period averages and from the agreement of several indicators rather than from single years.

Discussion. Overall picture. Table 1 summarizes the mean frequencies for the five sub-periods, the ratio between the last and the first period, and the Spearman coefficient for the whole 1850–2019 series.

Ratio of the 2000–2019 mean to the 1850–1899 mean; "—" marks collocations practically absent in 1850–1899. All ρ values are significant at $p < 0.001$

Twelve of the fifteen collocations show a significant positive trend and three a significant negative one. The averages, however, hide very different trajectories.

Expanding collocations. The most dramatic growth is shown by play a role. In 1850–1899 it occurred only 0.009 times per million words; by 2000–2019 the mean had risen to 3.612 ipm, a four-hundred-fold increase, with $\rho = 0.99$ — the strongest monotonic trend in the sample. The rise was gradual rather than sudden: the decade mean reached 0.1 ipm in the 1920s, 1 ipm in the 1950s and 3 ipm in the 1990s (Figure 1). The combination thus moved from a theatrical metaphor to a general-purpose expression of causal participation, typical of academic writing (X plays a role in Y).

Make a difference behaves differently. For a whole century its frequency stayed almost flat, between 0.31 and 0.37 ipm per decade. Growth started only in the 1960s, and between 1950–1979 and 2000–2019 the mean rose from 0.546 to 3.045 ipm. The late take-off suggests a semantic shift: alongside the older meaning "to distinguish, discriminate", the evaluative sense "to have a positive effect" (volunteers make a difference) spread in public discourse in the last third of the century.

Raise awareness and address the issue are true newcomers. Before 1950 both were sporadic, with decade means never exceeding 0.03 ipm. Raise awareness entered regular use in the 1980s and reached 0.629 ipm in the 2010s. Address the issue rose even more steeply, from 0.065 ipm in 1950–1979 to 0.914 in 1980–1999, with a peak in 1999. After 2000, however, it declined to 0.683 ipm in the 2010s: rapid expansion can be followed by saturation and partial retreat, which is typical of fashionable bureaucratic phrases.

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Table 1. Mean frequency of verb + noun collocations, ipm (Google Books, en-2019)**Collocation**	**1850–1899**	**1900–1949**	**1950–1979**	**1980–1999**	**2000–2019**	**Ratio ***	**ρ**
a) Expansion							
play a role	0.009	0.142	1.090	2.880	3.612	>100	0.99
make a difference	0.338	0.353	0.546	1.635	3.045	9.0	0.82
pay attention	0.455	0.527	0.967	1.906	3.973	8.7	0.92
take action	0.572	1.599	2.413	2.520	2.659	4.7	0.96
address the issue	0.000	0.005	0.065	0.914	0.872	—	0.91
raise awareness	0.000	0.002	0.004	0.146	0.602	—	0.87
b) Decline							
make haste	1.000	0.385	0.193	0.110	0.327	0.3	-0.84
take heed	1.090	0.320	0.236	0.163	0.335	0.3	-0.77
give offence	0.380	0.099	0.067	0.035	0.057	0.1	-0.89
c) Variant competition							
make a decision	0.049	0.228	0.866	1.276	1.666	34.0	0.98
take a decision	0.006	0.065	0.200	0.195	0.119	18.5	0.81
have a look	0.334	0.535	0.701	0.629	1.665	5.0	0.88
take a look	0.277	0.472	1.479	1.926	3.647	13.2	0.96
have a shower	0.008	0.009	0.011	0.024	0.129	15.9	0.74
take a shower	0.003	0.021	0.044	0.122	0.586	>100	0.96

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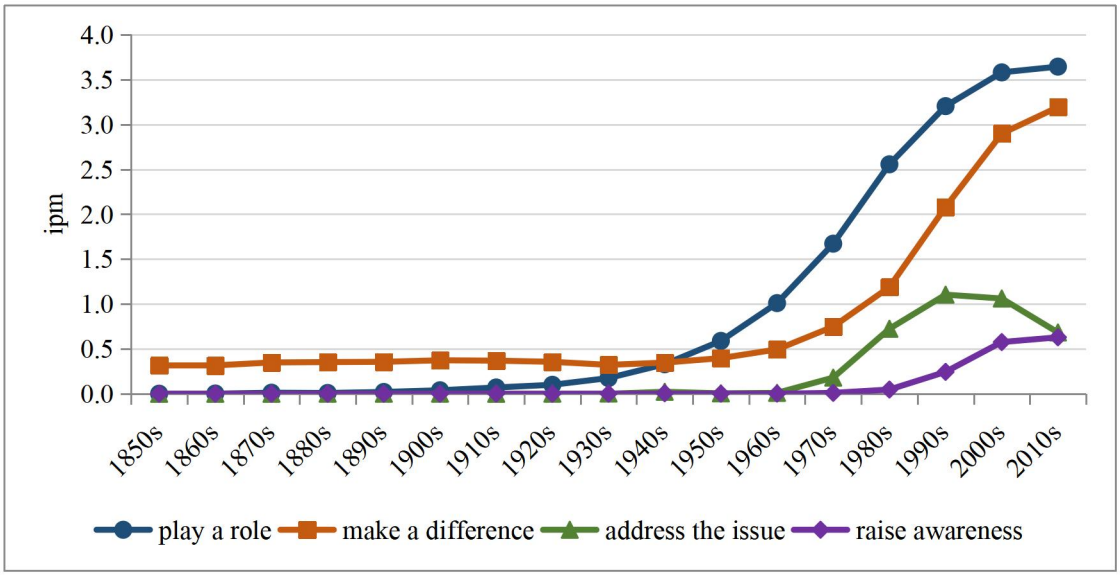


Figure 1. Expanding collocations: decade means, 1850s–2010s (ipm)

Pay attention and take action illustrate two other types of growth. Pay attention grew slowly until the 1940s and then accelerated: its mean frequency more than quadrupled between 1950–1979 (0.967 ipm) and 2000–2019 (3.973 ipm). Take action, by contrast, expanded mainly in the first half of the twentieth century (from 0.572 to 1.599 ipm) and has stayed at a plateau of about 2.4–2.7 ipm since the 1950s. Although the overall ρ for take action is high (0.96), the coefficient for 1950–2019 alone is markedly weaker (ρ = 0.61), which confirms the saturation effect.

Declining collocations. The three collocations of group (b) lost most of their frequency during the period (Figure 2). Take heed fell from 1.738 ipm in the 1850s to 0.157 ipm in the 1990s, make haste from 1.183 to 0.104 ipm, and give offence from 0.607 to 0.034 ipm in the 2000s. The decline was steepest before the Second World War; after the 1950s the curves flatten out at a low level. All three combinations have a formal, often biblical or literary flavour and have plain competitors: hurry for make haste, pay attention or be careful for take heed, offend for give offence.

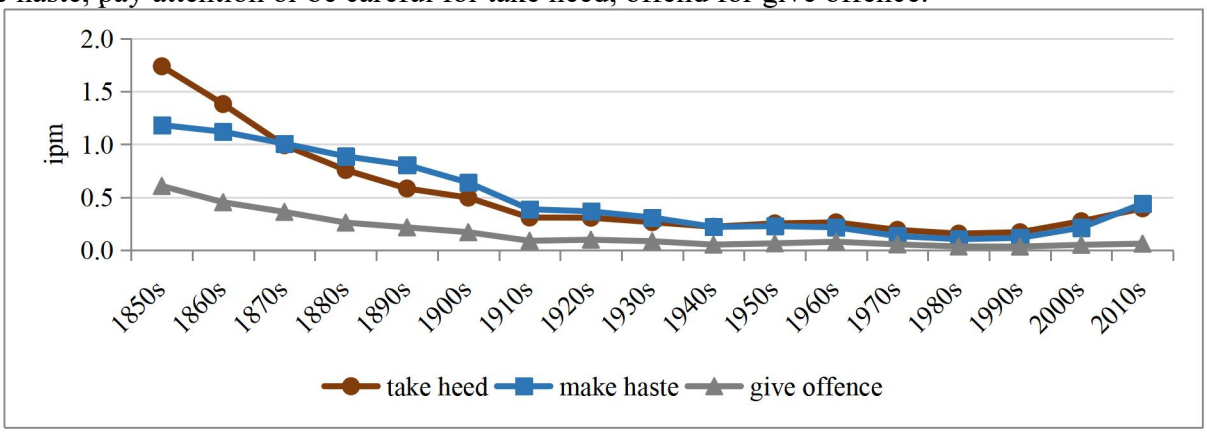


Figure 2. Declining collocations: decade means, 1850s–2010s (ipm)

A slight rebound of make haste and take heed in the 2010s (0.440 and 0.396 ipm) should be treated with caution. It coincides with the last years of the corpus, which are known to be less

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balanced, and most probably reflects the composition of recently digitized fiction and reprints rather than a real revival [21; 24].

Competing light-verb variants. Table 2 shows the share of the take variant in three pairs of competing collocations.

Table 2. Share of the take variant in competing pairs, % (Google Books, en-2019)

Pair (take vs make / have)	1850–1899	1900–1949	1950–1979	1980–1999	2000–2019
take / make a decision — all English	11.6	22.2	18.8	13.2	6.7
take / make a decision — British English	33.2	41.2	35.7	23.9	10.7
take / make a decision — American English	4.3	6.7	5.0	3.3	2.2
take / have a look — all English	45.3	46.9	67.9	75.4	68.7
take / have a shower — all English	26.5	70.8	79.8	83.3	82.0

The take / make a decision pair reveals a clear regional split. In American English take a decision never exceeded 7% of the combined frequency, and by 2000–2019 its share had fallen to 2.2%. In British English the take variant was a strong competitor: it held one third of the uses in 1850–1899 and 41.2% in 1900–1949, with its absolute frequency peaking in 1974. After that the British share fell steadily, to 23.9% in 1980–1999 and 10.7% in 2000–2019 (Figure 3). This happened not because take a decision disappeared — its British frequency in 2000–2019 (0.193 ipm) is still higher than in 1900–1949 (0.116 ipm) — but because make a decision grew much faster, from 0.165 to 1.614 ipm.

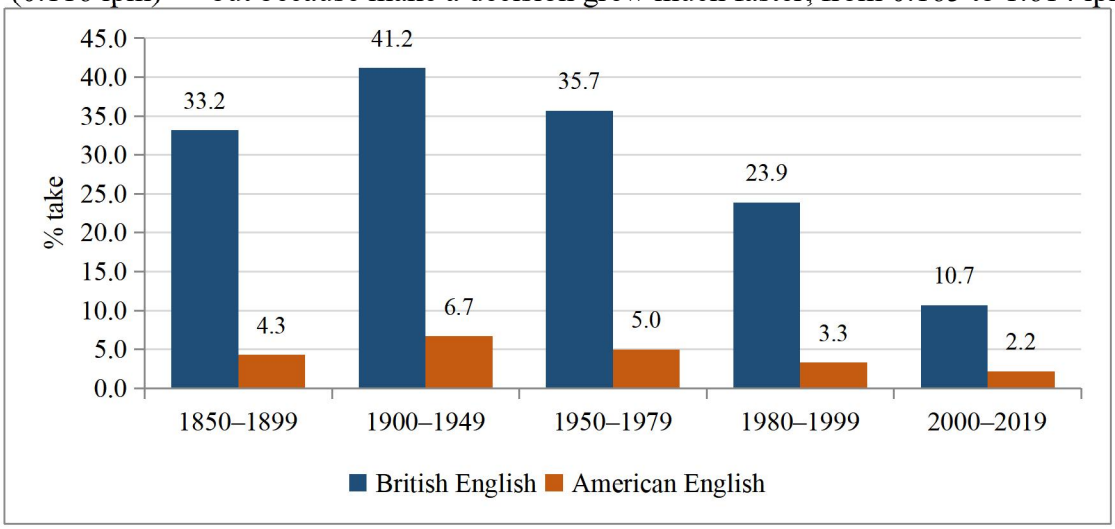


Figure 3. Share of take a decision in the pair take / make a decision, British vs American English (%)

The other two pairs moved in the opposite direction, towards take. Take a look accounted for 45.3% of the look pair in 1850–1899 and for 75.4% in 1980–1999. In the 2000s have a look also grew sharply (from 0.629 to 1.665 ipm), so the share of take fell back to 68.7%. Take a shower was a

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marginal form in the nineteenth century (26.5%), but since the 1950s about four out of five uses of the pair have contained take.

Results.

The analysis makes it possible to distinguish four types of diachronic change in verb + noun collocations. The first is steady expansion, in which a collocation gains frequency over the whole period (play a role, pay attention). The second is late take-off, when a long-established combination suddenly becomes popular after a semantic or stylistic shift (make a difference). The third is emergence followed by saturation, typical of new formulas of public discourse (address the issue, raise awareness, and earlier take action). The fourth is obsolescence, in which a collocation yields to a single verb or a more neutral synonym (make haste, take heed, give offence).

The expanding group is dominated by collocations with abstract nouns (role, difference, issue, awareness, attention). Their rise matches the growth of academic, administrative and journalistic registers in the twentieth century [6; 17]: such collocations allow a writer to name a process as a noun and to attach evaluations to it (play a key role, raise public awareness). The declining group, by contrast, consists of collocations associated with older literary and religious language. In both cases the fate of a collocation depends less on the verb than on the register in which it is used.

The take / make a decision data agree with J. Algeo's description of take a decision as a typically British variant [5], but they add a time dimension: the British preference reached its highest level in the middle of the twentieth century and has been eroding since the 1970s. This fits the model of Americanization proposed in [15; 17]. At the same time, the look and shower pairs show that there is no general trend from take to make or vice versa: each pair has its own history, which supports the view that light-verb collocations are stored as individual lexical units rather than produced by a general rule [3; 18].

For English teaching at Uzbek universities, two practical implications follow. Collocation lists in textbooks should be checked against current frequency data, since forms such as make haste or give offence are now marginal. For pairs with regional variation, learners should be told which variant dominates in which variety: make a decision is the safe international choice, while take a decision remains acceptable in British English. Corpus-based classroom activities with the Ngram Viewer or COHA [9] can show these differences to students directly.

Conclusion. The frequency of English verb + noun collocations changed considerably between 1850 and 2019. Of the 15 collocations analysed, twelve show a significant upward trend and three a significant downward one. Play a role increased roughly four hundred times, raise awareness and address the issue emerged practically from zero in the second half of the twentieth century, and make a difference took off only after 1960, whereas make haste, take heed and give offence lost 85–91% of their frequency, mostly before 1950.

Competition between light verbs did not follow a single direction. In the decision pair make displaced take, and British English moved towards the American pattern: the British share of take a decision fell from 41.2% in 1900–1949 to 10.7% in 2000–2019. In the look and shower pairs, on the contrary, the take variant strengthened its position.

Diachronic change in verb + noun collocations is therefore governed mainly by register shifts, the semantic re-orientation of the noun and contact between national varieties of English. The findings can be used in lexicography and in teaching English as a foreign language; checking them against balanced historical corpora with lemmatized searches remains a task for further research.

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http://houghtonstreetreview.com/index.php/hsr

References:

1. Resolution of the President of the Republic of Uzbekistan No. PQ-1875 of 10 December 2012 "On measures to further improve the system of learning foreign languages". https://lex.uz/docs/2126030
2. Апресян Ю.Д. Лексическая семантика: Синонимические средства языка. – М.: Наука, 1974.
3. Мельчук И.А. Опыт теории лингвистических моделей «Смысл ⇔ Текст». – М.: Наука, 1974.
4. Algeo J. Having a look at the expanded predicate // Aarts B., Meyer Ch.F. (eds.) The Verb in Contemporary English: Theory and Description. – Cambridge: Cambridge University Press, 1995. – P. 203–217.
5. Algeo J. British or American English? A Handbook of Word and Grammar Patterns. – Cambridge: Cambridge University Press, 2006. https://www.cambridge.org/core/books/british-or-american-english/
6. Biber D., Johansson S., Leech G., Conrad S., Finegan E. Longman Grammar of Spoken and Written English. – Harlow: Longman, 1999.
7. Brinton L.J., Akimoto M. (eds.) Collocational and Idiomatic Aspects of Composite Predicates in the History of English. – Amsterdam; Philadelphia: John Benjamins, 1999.
8. Bybee J. From usage to grammar: The mind's response to repetition // Language. – 2006. – Vol. 82, No. 4. – P. 711–733. https://muse.jhu.edu/article/208049
9. Davies M. Expanding horizons in historical linguistics with the 400-million word Corpus of Historical American English // Corpora. – 2012. – Vol. 7, No. 2. – P. 121–157. https://www.english-corpora.org/coha/
10. Firth J.R. A synopsis of linguistic theory, 1930–1955 // Studies in Linguistic Analysis. – Oxford: Blackwell, 1957. – P. 1–32.
11. Hilpert M. Constructional Change in English: Developments in Allomorphy, Word Formation, and Syntax. – Cambridge: Cambridge University Press, 2013. https://www.cambridge.org/core/books/constructional-change-in-english/
12. Hilpert M., Gries S.Th. Assessing frequency changes in multistage diachronic corpora: Applications for historical corpus linguistics and the study of language acquisition // Literary and Linguistic Computing. – 2009. – Vol. 24, No. 4. – P. 385–401. https://doi.org/10.1093/llc/fqn012
13. Hoey M. Lexical Priming: A New Theory of Words and Language. – London: Routledge, 2005.
14. Jespersen O. A Modern English Grammar on Historical Principles. Part VI: Morphology. – Copenhagen: Munksgaard, 1942.
15. Leech G., Hundt M., Mair C., Smith N. Change in Contemporary English: A Grammatical Study. – Cambridge: Cambridge University Press, 2009. https://www.cambridge.org/core/books/change-in-contemporary-english/
16. Lin Y., Michel J.-B., Aiden E.L., Orwant J., Brockman W., Petrov S. Syntactic annotations for the Google Books Ngram Corpus // Proceedings of the ACL 2012 System Demonstrations. – Jeju, 2012. – P. 169–174. https://aclanthology.org/P12-3029
17. Mair C. Twentieth-Century English: History, Variation and Standardization. – Cambridge: Cambridge University Press, 2006. https://doi.org/10.1017/CBO9780511486951
18. Mel'čuk I. Collocations and lexical functions // Cowie A.P. (ed.) Phraseology: Theory, Analysis, and Applications. – Oxford: Oxford University Press, 1998. – P. 23–53.

HSR (LONDON),
HOUGHTON STREET REVIEW JOURNAL
ISSN: 2058-5519|Impact factor-15.9
http://houghtonstreetreview.com/index.php/hsr

19. Michel J.-B., Shen Y.K., Aiden A.P. et al. Quantitative analysis of culture using millions of digitized books // Science. – 2011. – Vol. 331, No. 6014. – P. 176–182. https://doi.org/10.1126/science.1199644
20. Nesselhauf N. Collocations in a Learner Corpus. – Amsterdam: John Benjamins, 2005.
21. Pechenick E.A., Danforth C.M., Dodds P.S. Characterizing the Google Books corpus: Strong limits to inferences of socio-cultural and linguistic evolution // PLoS ONE. – 2015. – Vol. 10, No. 10. – e0137041. https://doi.org/10.1371/journal.pone.0137041
22. Sinclair J. Corpus, Concordance, Collocation. – Oxford: Oxford University Press, 1991.
23. Traugott E.C., Trousdale G. Constructionalization and Constructional Changes. – Oxford: Oxford University Press, 2013.
24. Younes N., Reips U.-D. Guideline for improving the reliability of Google Ngram studies: Evidence from religious terms // PLoS ONE. – 2019. – Vol. 14, No. 3. – e0213554. https://doi.org/10.1371/journal.pone.0213554
25. Google Books Ngram Viewer. https://books.google.com/ngrams (accessed: 05.10.2026).