# Comparing Collocational and Definitional Perspectives on <br> Word Meaning: Implications for English Teaching in Pakistan 

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#### Abstract

Functional linguist, Firth and his followers believe that meaning of a word is specified by its distribution in a number of uses through collocations. However, this distributed view of meaning challenges dictionary definitions based on sense relations. This small corpus based study of three adjacent synonym adjectives and nouns was designed to test these positions empirically. Sketch Engine was used for analysis of data taken from BNC. Collocations were sorted by MI ( $f>3$ ) and first 100 collocates from the MI lists were selected as random samples for each adjective node. The results of the focused analysis based on top 20 collocates from these samples were compared with the relevant entries in the Longman's Dictionary of Contemporary English for Advanced Learners. The findings partially supported the position of Firth and tended to be closer to Halliday's lexico-grammar, and cognitive linguistics. The study has important implications for lexicographers, Pakistani teachers of English, and material developers.


## Introduction

The review of past researches (e.g., Evert, 2007, 2009; Gries, 2013) for this small scale study shows that collocations occupy central position in corpus linguistics. However, there exists no consensus on the characteristics and extraction method of collocations. It seems imperative to properly define the notion of collocation, at the outset, besides the underlying stances on meaning. Then corresponding measures of quantifying the collocations,
determining the reliability of the extracted collocations, and exploring the types of collocation by evaluation method will be taken up.

Evert $(2007,2009)$, quoting different sources, suggests that collocations can be seen form three perspectives. Firth and Neo-Firthians have proposed empirical perspective and think that "Collocations ... can also be interpreted as empirical statements about the predictability of word combinations. They quantify 'mutual expectancy' between words and the statistical influence a word exerts on its neighborhood" (Firth, 1953,1968). This perspective sees collocation "a combination of two words that exhibit a tendency to ... cooccur " (Sinclair, 1991).

Theoretical collocation (phraseologism/phraseology/multiword expressions) is a parallel development that encompasses subtypes of collocation by including more co-selected word combinations. Broadly speaking, phraseologies consist of idioms, on one end, which are semantically opaque (Sinclair, I992) and compositional/semi-compositional expressions, which are lexicalized because of their semantic or pragmatic peculiarities, on the other end. Narrowly, phraseologies). include idioms, phrasal verbs jargons, fixed phrases (e.g., in order to, by the way), flexible phrases (e.g., on his way, on my way), collocates, n-grams (recurrent adjacent words), and non-adjacent expressions (e.g., "play...role" and " role...play") (Gries,2013; Cheng,2012, p.47). This style of differentiating subtypes of collocation matches with Sinclair's Idiom Principle and open choice and is also supported by Conrad, Biber, \& Leech (2002).

Some linguists believe that a middle view between empirical collocations and theoretical collocations will be more acceptable than any mutually exclusive view (Kubler \& Zinsmeister,2015, pp.225-226) because both perspectives overlap and complement each other. Multiword expressions help identify true collocations and they in turn provide candidate multiword expression (Evert,2007, 2009). In sum, what is narrowly a collocation is broadly a multiword expression. This view of phraseology was
also supported by cognitive linguists (e.g., Langacker 1988, 2000). The phraseological units develop a schema from the repeated and frequent patterns in which a lexical item appears. This cognitive dimension of collocations grounds collocations in our conceptual system and explicitly rejects the view that collocations are arbitrary combinations (Liu, 2010).

## Contextual/Collocational View of Meaning

Firth (1953/1968) seems to hold the same view when he traces roots of word meaning in the patterns of use. These patterns are construed as schemas by the cognitivists (Liu, 2010). Firth and Neo-Firthians strongly oppose one-toone link between words and their meaning as was proposed in the Referential Theory of Meaning (see Lyons, 1995) or socially shared meaning proposed by Saussure (1916/1959). Both theories suggested existence of a static and conventional meaning for words in a language. For Furthians, meaning of a lexical item is spread across different levels of language use, a view that was strengthened by Halliday in his Systemic Functional Grammar. Halliday (2003) opines that meaning of words is an interface between syntagmatic and paradigmatic levels and grammar and lexis are two ends of the same continuum (McEnery \& Hardie,2012; Leon,2007, pp.2-13).

On the basis of these multiple perspectives on linguistic meaning, following levels of meaning were proposed by Neo-Fithian linguists (e.g., Sinclair, 1998; Stubbs, 2001): (1) Collocation---meaning, derived from relation between two frequently co-occurring words (2) Colligation--meaning develops because of relation between a word and a frequently cooccurring grammatical category (e.g., beautiful + noun) (3) Semantic preference---meaning develops because of frequent co-occurrence between items of a lexical field (e.g., wardrobe collection and dress items) (4) Semantic prosody---discourse meaning based on frequent co-occurrence of a word and its collocates such as COMMIT suicide, END UP crying, are obviously typically negative in their connotations (similar to prosodic
function of intonation). ) (Flowerdew, 2012; also McEnery, Xiao \& Tono, 2006, pp. 80-84)

## Collocation Analysis

The foregoing theoretical review provides conceptual grounding to explicitly define the central concept of co-occurrence repeated at every level of meaning including collocation. Corpus linguists mention three types of cooccurrence that have to be operationalized before any statistical analysis of collocations (Evert 2009; Bartsch, \& Evert, 2014. pp. 48-50): (1) Surface co-occurrence--if words come close to each other in a window span (2) Textual co-occurrence---if words co-occur in the same clause or sentence, even document (3) Syntactic co-occurrence--- if words tend to co-occur because of syntactic relation and are mostly adjacent (e.g., Adj. +N ). However, it should be clear that every adjacent occurrence between a lexical and functional word such as "keep up" is not colligation, rather co-occurrence between two lexical words (Adj. +N ) is a collocation. The use of the term lexical collocation is avoided here because it is used to refer to semicompositional phraseologies (Evert, 2007, p.4; Fontenelle, I 994, p.4).

Every recurrent co-occurrence of two words may not be a collocation attraction. To sort out true/strong collocations, "strength of word attraction/association" needs quantification and to calculate magnitude of this strength, association measures are required. They provide each word pair a score indicating size of the word attraction that in turn is used to isolate true collocations. The scores are compared with an arbitrary level of minimum co-occurrence frequency. Then the scores are ranked and ranking produces top strong collocation. Finally, first 100 or 500 ranked word pairs are selected as true collocates. These lists are taken as random samples to work with (Evert, 2009).

There are many accessible reviews of general mathematical procedures suitable for an empirical methodology like corpus linguistics (e.g., Kubler \& Zinsmeister, 2015; Cheng, 2012; Oakes, 1998; McEnery \&

Hardie, 2012; Pecina, 2010). Evert (2007) divides measures of association, broadly, into simple and statistically complex ones and further subdivides each into effect sizes and significance measures. Simple measures are good approximates of advanced measures and are relatively convenient to calculate. Then effect sizes measure strength of association and significance tests indicate the likelihood that what is observed in the sample is probably true of the population. Every measure gives a score that produces different lists of collocations. So, for better results more than one method should be used. While choosing the method, statistical assumptions should be taken care of and relative merits and demerits should be considered well. Generally, Simple- II, t-score, and MI (with threshold) are preferred (for more on corpus related statistics, see Oakes, 1998).

The purpose of this study was to explore probabilistic and distributed nature of word meaning as proposed by Firth and Neo-Furthian linguists. The study findings will be significant as a different but empirical view is taken to understand the nature of word meaning and meaning relations. Besides, the study will motivate linguists to rethink intuitively established perspectives about word meaning and their influence on underlying relations among lexicon, semantics, and grammar. The study, however, never aimed to set aside word meaning based on dictionary definitions and its learning in educational contexts, rather it intends to supplant the conventional with the empirical. This study of meaning perspectives was needed, particularly, to find out a research based method to replace the practice of memorization tradition for teaching of words and meaning in Pakistani classrooms.

## Statement of the Research Problem

The study intended to investigate which theory of meaning would provide guidelines for teaching of vocabulary and word meaning to Pakistani learners.

## Research Questions

To explore the research problem, the following main and subsidiary questions were addressed:

1. How far meaning of adjacent word pairs based on collocational theory of meaning is comparable with dictionary definitions?
1a. What are the frequencies of occurrence of each adjective node in the BNC corpus?
1b. What are the true collocations among the potential word pairs of each adjective node?
1c. How do collocate nouns of each adjective node indicate meaning differences in terms of context of use?

1d. Which of the collocations of each adjective node can be classified as empirical collocation, multi-word expression, or as both?

## Method

The study used empirical analysis proposed by Oakes (1998) and Evert (2009). As a first step, collocation analysis was conducted to provide basis for comparison of meaning theories. BNC (British National Corpus) was selected as it was accessible through the library of the authors' university. Sketch Engine software (https:// sketchengine.co.uk) was employed for extraction of the required patterns from BNC. The motivation behind selection of BNC was the practical considerations of annotations as it was lemmatized and POS (Parts of Speech) tagged. Three synonymous adjectives "FANTASTIC", "EXTRAORDINARY", and "UNUSUAL" were selected for the collocation analysis.

As the study involved adjacent word pairs (Adj. +N ), cooccurrence was operationalized by the asymmetric span. A random sample of the size 100 was selected from the potential word pairs following the standard practice discussed in the section on Review in this study.

Following Oakes (1998), MI (mutual information score at $f>3$ ), t score, and LL (Log-Likelihood) scores were applied as measures of significance to determine that the occurrences were not result of chance. The following semi-automatic procedure (adopted from Evert, 2007, p.35) was applied to decide whether the word pair is a collocate or multi-word expression or both. True collocates were identified by the MI ranked lists served as candidate multi-word expressions. For each adjective, only 15 candidate expressions ( 5 from each of Tables 2,3 , \& 4 below) were selected randomly. These expressions were annotated manually as a subtype of multiword expressions.

## Results and Discussion

Following Tables present results of statistical and semi-automatic procedures.

Table I
Frequency Distribution of the Synonym Adjectives in BNC

| Adjective | $N$ |
| :--- | :--- |
| Fantastic | 1134 |
| Extraordinary | 4867 |
| Unusual | 4024 |

Table 1 shows that "unusual" has the highest frequency as a node word in adjective and noun word pairs. The possible explanation may be that " unusual" is less stiff than "extraordinary" and less casual than "fantastic". Besides, it has greater shades of meaning than the other two synonym adjectives. This variation is also an evidence for lack of perfect synonymy in human languages. The result is consistent with views of Saeed (2009). The sample lists of the collocates sorted by $M I(f>3)$ are presented in Tables 2,3 , and 4 . The tables show only top 20 collocates of each adjective node. Table 2

| Comparison of Collocational and Definitional Perspective on Word Meaning |  |  |  | 30 |
| :---: | :---: | :---: | :---: | :---: |
| The Top 20 MI Ranked Noun Collocates of "FANTASTIC" |  |  |  |  |
| Collocates | $N$ | T-Score | MI | LL |
| Facts | 4 | 1.999 | 11.135 | 53.853 |
| Scenery | 4 | 1.996 | 9.07 | 42.348 |
| Prizes | 4 | 1.995 | 8.57 | 39.574 |
| Shapes | 5 | 2.227 | 8.017 | 45.64 |
| Dreams | 5 | 2.226 | 7.821 | 44.29 |
| Achievement | 5 | 2.223 | 7.401 | 41.391 |
| Views | 12 | 3.443 | 7.34 | 98.398 |
| Facts | 4 | 1.975 | 6.348 | 27.317 |
| Characters | 3 | 1.71 | 6.321 | 20.372 |
| Job | 16 | 3.945 | 6.193 | 106.03 |
| Display | 4 | 1.971 | 6.119 | 26.06 |
| Trip | 3 | 1.706 | 6.083 | 19.397 |
| Walking | 3 | 1.698 | 5.672 | 17.716 |
| Character | 4 | 1.958 | 5.568 | 23.061 |
| News | 5 | 2.189 | 5.559 | 28.767 |
| Holiday | 3 | 1.693 | 5.468 | 16.887 |
| Story | 5 | 2.179 | 5.294 | 26.976 |
| ! | 53 | 7.083 | 5.209 | 281.977 |
| Competition | 3 | 1.682 | 5.117 | 15.464 |
| Ability | 3 | 1.68 | 5.045 | 15.173 |

Table 3
The Top 20 MI Ranked Noun Collocates of "EXTRAORDINARY"

| Collocates | $N$ | T-Score | $M I$ | $L L$ |
| :--- | :---: | :---: | :---: | :---: |
| Dancers | 5 | 2.236 | 12.086 | 74.362 |
| Congress | 36 | 2.994 | 9.985 | 427.779 |
| Items | 4 | 1.998 | 9.898 | 47 |


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| :--- | :---: | :---: | :---: | :---: |
| Assemblage | 3 | 1.729 | 9.127 | 32.013 |
| Credits | 9 | 2.994 | 8.912 | 93.37 |
| Length | 12 | 3.455 | 8.538 | 118.267 |
| Saga | 3 | 1.727 | 8.483 | 29.328 |
| Items | 57 | 7.528 | 8.429 | 554.001 |
| Feat | 3 | 1.727 | 8.298 | 28.556 |
| Session | 4 | 5.55 | 8.261 | 293.813 |
| Precaution | 5 | 1.993 | 8.161 | 37.14 |
| Coincidence | 5 | 2.227 | 7.877 | 44.683 |
| Talents | 3 | 1.724 | 7.813 | 26.54 |
| Vigour | 3 | 3.147 | 7.688 | $8 / 6.767$ |
| Scenes | 4 | 1.723 | 7.639 | 25.817 |
| Generosity | 3 | 1.987 | 7.26 | 32.332 |
| Clarity | 4 | 10 | 7.241 | 24.169 |
| Surge | 6 | 2.432 | 7.101 | 47.186 |
| Patience |  |  |  |  |
| Tale |  |  |  |  |

Table 4
The Top 20 MI Ranked Noun Collocates of "UNUSUAL"

| Collocates | $N$ | $T$-Score | $M I$ | $L L$ |
| :--- | :---: | :---: | :---: | :---: |
| Happenings | 4 | 1.996 | 9.059 | 42.332 |
| Souvenirs | 3 | 1.728 | 18.701 | 30.247 |
| Duo | 3 | 1.726 | 8.071 | 27.62 |
| Hobby | 4 | 1.99 | 7.615 | 34.297 |
| Feature | 37 | 6.047 | 7.405 | 306.821 |
| Stylistic | 3 | 1.722 | 7.392 | 24.797 |
| Occurrence | 6 | 2.434 | 7.303 | 48.866 |
| Varieties | 8 | 2.81 | 7.289 | 65.001 |


| Comparison of Collocational and Definitional Perspective on Word Meaning | 32 |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
|  |  |  |  |  |
|  | 3 | 1.721 | 7.259 | 24.247 |
| Combinations | 5 | 2.221 | 7.246 | 40.27 |
| Step | 41 | 6.359 | 7.181 | 327.362 |
| Smells | 3 | 1.718 | 6.896 | 22.747 |
| Combination | 15 | 2.221 | 6.602 | 107.691 |
| Circumstances | 33 | 1.712 | 5.501 | 232.52 |
| Gifts | 5 | 2.418 | 6.471 | 34.99 |
| Tastes | 3 | 1.712 | 6.457 | 20.934 |
| Phenomenon | 6 | 2.418 | 6.284 | 40.445 |
| Angles | 3 | 1.709 | 16.245 | 20.06 |
| Venue | 3 | 1.709 | 6.22 | 19.959 |
| Shapes | 5 | 2.205 | 6.189 | 33.058 |

As the $M I$ values are significant at the given threshold, the collocates in Table 2,3 and 4 contain true collocations which are not result of chance cooccurrences. (The same results with a different order may be indicated by significant values of $t$-scores and $L L$ scores for these collocates).

Table 5
Difference in Uses of Synonym Adjective Nodes with Reference to CoSelected Nouns

| Adjective node word | Type of noun collocates |
| :--- | :--- |
| Fantastic | parrot, word, brain, job, house, worth, ideas, |
|  | guy,? |
| Extraordinary | extraordinary events, achievements, desire, |
|  | claims, theory, faces, person, amounts, |
|  | measures!, expenses |
| Unusual | shape, jobs, spread, position, types, reaction |

Table 5 shows the results based on the sample $(N=100)$ for "fantastic" show that it has a strong tendency to co-select both mass and count nouns and adds descriptive meanings to the referents of these nouns. The interesting result is its co-occurrence with "!" that indicates its use in conversational contexts. This is also the tendency it shares with "extraordinary". The significant difference in the meaning of "extraordinary" is its preference for co-selection of abstract nouns that indicates that it is a modifier of cognitive entities. The contexts for "unusual" reveal that besides pre-modifying the adjacent nouns, it also has a tendency to be a predicative modifier of subject extra-posed clauses. For example, "It is unusual to provide expressly for this contingency".

The results indicate a clear difference in use and meaning of this adjective when seen out -side the adjacent framework. This is also one possible explanation for the highest frequency of "unusual". The overall result is that adjacent synonyms indicate variation in co-selection, that is because of difference in syntagmatic or structural relations with associated words. These structural relations are "direct reflex of cognition" (Lee, 2001, cited in Liu, 2010, p. 20).

Applying the semi-automatic procedure (as suggested by Evert, 2007) to extract multi-word expressions, following expressions were identified.

Table 6
Classification of Collocations into Subtypes of Multi-Word Expressions

| Adjective | Collocations | Type |
| :---: | :---: | :---: |
| Fantastic | Fantastic facts; fantastic <br> Story; fantastic prices; fantastic scenery | Empirical, semicompositional, empirical/semicompositional, empirical/fixed |
| Extraordinary | Extraordinary dancer; extraordinary precaution; extraordinary talent; extraordinary USSR | Semi-compositional empirical, compositional, empirical, compositional, empirical, compositional, |
| Unusual | Unusual smells; unusual phenomenon; unusual weapon; unusual visitor; unusual bulb | Semi-compositional, empirical, compositional, empirical, compositional, empirical, compositional. |

Table 6 shows that in case of "fantastic" and "extraordinary" have collocates in the Firthian way. But cases like"!" and "?" are difficult to classify. Such expressions may be a case of dialectal usage. In case of "unusual", most combinations are semi-compositional that is an evidence of meaning subjectivity that supports cognitive schemas working behind collocation patterns (Langacker, 2008).

Table 7 displays comparison of just three out of 15 manually annotated collocation types with the relevant entries in the Dictionary of Contemporary English for Advanced Learners (2009).

Table 7
Comparison of Meanings by Collocation and by Dictionary

| Annotated collocations | Meaning by <br> collocation | Meaning by dictiona |
| :---: | :---: | :---: |
| Fantastic facts | Fantastic may refer to semi-compositional meaning | Dictionary has five meanings but does not provide information about compositionality that depends closely on the use of word pairs involving fantastic. In collocation analysis, the collocates can be seen in their own contexts that is not fully captured by the dictionary definitions. |
| Extraordinary USSR | Collocation analysis may lead sometimes to quite unexpected or uninteresting word pairs. But as it is based on corpus data, it represents idiosyncrasies relating to idiolects or dialects | The dictionary also provides information about the use of extraordinary in spoken and written modes that is not covered by the analysis in the present study. However, it has no examples of cases |


| 2 |
| :--- |


| Annotated collocations | Meaning by Meaning by dictionary |
| :--- | :--- |
|  | collocation |


|  | of English. | like extraordinary USSR |
| :---: | :---: | :---: |
| Unusual bulbs | The analysis marks it | The dictionary entry |
|  | semi compositional to | also talks about the use |
|  | cover subjective | of unusual in speech and |
|  | meanings of "bulbs" | writing and shows its |
|  | like size, quality, price, | greater use in speech |
|  | design etc. Again, it | that matches with the |
|  | also captures | results of collocation |
|  | idiosyncrasy in | analysis (see the |
|  | meaning. | frequency in table 1 and |
|  |  | top collocates in table It | also refers to eccentricity attached with the meaning of unusual. So, in this case both sources are closer to each other and it's not surprising because

Longman Dictionary is also corpus based.

The differences in meaning by collocational analysis and corpus based dictionary entries may be an explanation that lexicographers are not totally corpus dependent. And another reason for this difference may be the purpose of the dictionary (how much information is required for the intended user). The finding is supported by discussion of lexicographers' issues in Jackson and Ze Amvela (2005).

## Conclusions and Relevance to Pakistan

The discussion on the results leads to some important conclusions. It is concluded that a considerable difference exists in frequencies of occurrences of the synonym adjectives. The MI based true collocations do not extract only lexical combinations but also include cases of most frequent but quite unimportant collocations. The concordance lines used for extraction of noun collocates with statistics plays important role in differentiating uses and meaning of even similar words as those selected for this study. It means the teaching of collocations, in Pakistani classrooms, as chunks without understanding cognitive associations between the word meanings is useless and should be discouraged (see Walker, 2011).

Collocation analysis shows that collocations may fall in different sub-types. Meaning based only on collocations or only on dictionary definitions is not adequate. The overall conclusion is that both collocations and definitions are inevitable. The static definitions of words are supplemented by the dynamic but cognitively supported collocations. able for comprehensive dictionary entries. The dictionary used for comparison in this study has already started publishing corpus based and sense relations based dictionaries. Our teachers of English can enhance their language resources by using such dictionaries.

This conclusion also implies that Pakistani learners should be taught collocations and other multiword expressions like idioms through exposure to multiple word co-occurrences. This is practicable now because of prints of concordance lines. The concordance prints will replace the substandard materials being used for teaching of word meaning and vocabulary through cramming in schools, colleges, and preparatory institutes. The study ends with important implications for Pakistani learners, albeit with a very limited data. Therefore, we emphasize that more studies in Pakistani contexts including more domains of usage with more dimensions of the issue should be conducted.

## References

Adrian-Vallance, E., et al. (Eds.) (2009). Longman dictionary of contemporary English for advanced learners. Harlow, Essex: Pearson-Longman
Bartsch, S. \& Evert, S. (2014). Towards a Firthian notion of collocation. OPAL. Retrieved from www.stefenevert.de/PUB/BartschEvert2014.pdf

Cheng, W. (2012). Exploring corpus linguistics: Language in action. London: Routledge
Conrad, S., Biber, D., \& Leech, G. (2002). Longman student grammar of spoken and workbook written English. Harlow, Essex: Pearson Education

Evert, S. (2007). Corpora and collocations. Retrieved from www.stefanevert.de/PUB/Evert2007HSK extended manuscript.pdf

Evert, S. (2009). Corpora and collocations. In A. Ludeling, \& M. Kyto (Eds.), Corpus linguistics: An international handbook (Vol. II), pp. 1212-1248. Berlin: de Gruyter

Firth, J. R. (1953). Linguistic analysis as a study of meaning [Incomplete]. Nice colloquium on semantics sponsored by the Societe Linguistique de Paris, organized and presided over by professor Benveniste. Retrieved 28 June 2022 from annabellelukin.edublog.org/files/2013/08/firth_Linguistic-analysis-as-a-study-of-meaning-22pxf55

Firth, J.R. (1968). Linguistic analysis as a study of meaning. In F. R. Palmer (Ed.), Selected papers of J. R. Firth, pp. 1952-1959. London: Longman

Fontenelle, T (1994). What on earth are collocations? An assessment of the ways in which certain words co-occur and others do not. English Today, 0(4).1-10. Retrieved from
www.ugr.eslinped/.../collocations/what-on-earth-are
collocations.pdf
Gries, S.T (2013). 50-something years of work on collocations: What is or should be next. International Journal of Corpus Linguistics, 75(1), 137-165. http://doi:10.1075/ijc/18.1.09gri

Halliday, M. A.K. (2003). On language and linguistics [edited by J. Webster]. London: Continuum

Jackson, H., \& Ze Amvela, E. (2007). Words, meaning and vocabulary: An introduction to Modern English Lexicology. London: Continuum.
Kubler, S. \& Zinmeister, H. (2015). Corpus linguistics and linguistically annotated corpora. London: Bloomsbury

Langacker, R., W. (2008). Cognitive grammar as basis for language instruction. In P. Robinson \& N. Ellis (Eds.), Handbook of cognitive linguistics and second language acquisition (pp.66-88). New York, NY: Routledge

Leon, J (2007). Meaning by collocation: The Firthian filiation of corpus linguistics. Proceedings of CHOLSXO International Conference on the History of Language Sciences.404-415. Retrieved from html://linguist.uni-paris-diderofdleon/firth2007pdf.pdf

Lindquist, H (2009). Corpus linguistics and the description of English. Edinburgh: Edinburgh UP

Liu, D. (2010). Going beyond patterns: Involving cognitive analysis in the leaning of collocations. TESOL Quarterly, 44 (1). 4-30. Retrieved from https://www.jstor.org/stable/27785068

Lyon, J. (1995). Linguistic Semantics: An introduction. Cambridge: CUP
Manca, E. (2012). Collocation and units of meaning. Context and Language, 39-57. Retrieved from unisalemo.it/index.php/contextandlanguage/article/view/12453/111 092

McEnery, T. \& Wilson, A. (2001). Corpus linguistics: An introduction. Edinburgh: Edinburgh UP

McEnery, T. Xiao, R. \& Tono, Y. (2006). Corpus based language studies: An advanced resource book. London: Routledge

McEnery, T. \& Hardie, A. (2012). Corpus linguistics: Method, theory and practice. Cambridge: CUP

Oakes, M.P (1998). Statistics for corpus linguistics. Edinburg: Edinburgh UP

Penica, P. (2010). Lexical association measures and collocation extraction. Language Resources and Evaluation, 44 (1). 137-158. Retrieved from https://www.jstor.org/stable/40666353

Saeed, J., I. (2009). Semantics (3 ${ }^{\text {rd }}$ ed.). Chichester, West Sussex: WileyBlackwell.

Saussure, F., de. (1959). Course in general linguistics [English translation]. New York, NY: McGraw (Original work in French published 1916).

Sinclair, J., McH. (1991). Corpus concordance collocation. Oxford: OUP
Sinclair, J., McH (1992). The automatic analysis of corpora. In J, Svartvik (Ed.), Directions in corpus linguistics, pp. 379-397. Berlin: Mouton de Gruyter

Sinclair, J., McH. (1998). The lexical item. In E. Weigand (Ed.), Contrastive lexical semantics, pp. 1-24. Amsterdam: Benjamins

Smadja, F. (1993). Retrieving collocations from text: Xtract. Computational Linguistics Journal, 143-177. Retrieved from www.aclweb.or/anthoiogv/A3-1 007

Stubbs, M. (2001). Technology and phraseology: With notes on the history of corpus linguistics. In U. Romer, \& R. Schulze (Eds.), Exploring the lexis-grammar interface, pp. 15-31. Amsterdam: Benjamins.
Walker, C., P. (2011). A corpus-Based study of the linguistic features and processes which influence the way collocations are formed: Some
implications for the learning of collocations. TESOL Quarterly, 45(2). 291-312. Retrieved from
https://www.jstor.org/stable/41307632.


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