

A Corpus-based Study on English Synonym Differentiation

LIU Meng-xian, LIN Ying

Wuhan University of Technology, Wuhan, China

The study of synonyms based on corpus has become a hot topic in recent years, and the task of differentiating synonyms has always been a complex issue. The current study made an attempt to investigate the differences among English noun synonyms “opposition”, “resistance” and “defiance” from the perspective of frequency distribution, collocation and semantic prosody based on COCA. This research shows that in terms of frequency distribution, “opposition” and “resistance” are more frequently used than “defiance”. Both of the two are most commonly used in academic journals while “defiance” is most frequently used in fiction. All of these three words rarely appear in TV and movie subtitles. Second, from the perspective of collocation, “opposition” often collocates with words about politics and personal state, “resistance” usually appears with words concerning politics and medicine, and “defiance” mainly shows up in the fields of military, medicine, personal state and others. Third, from the dimension of semantic prosody, “opposition” presents negative semantic prosody, “resistance” has neutral semantic prosody, and “defiance” indicates mixed semantic prosody. The present study is able to enrich the relevant study on synonym differentiation, and highlight the importance of understanding the subtle differences among synonyms.

Keywords: corpus, synonym, frequency distribution, collocation, semantic prosody

Introduction

The study of synonyms based on corpus has become a hot topic in recent years. Synonyms are abundant in English, and the task of differentiating them has always been a complex issue. Hornby (2014) defined the synonym as a word or expression that has the same or nearly the same meaning as another in the same language. Over the decades, a multitude of studies have concentrated on synonym differentiation (Divjak & Gries, 2009; Kaminski, 2017; Lv, 2020; Song, 2021; Wang & Jiang, 2016), contributing to the development of synonym research and providing paradigm and reference for later studies. However, most of the studies focus on verb synonyms and adjective synonyms while research concerning noun synonyms is relatively limited (Wang, 2023). Therefore, the current paper conducts a study on the distinctions among English noun synonyms “opposition”, “resistance” and “defiance” from the perspective of frequency distribution, collocation and semantic prosody, with the Corpus of Contemporary American English (COCA) serving as the foundation for this research. With the hope of extending and enriching relevant research, the current study also intends to promote the application of corpus in English synonym analysis, accelerate prosperity of synonym

discrimination based on corpus, and help English learners more accurately understand the differences among the synonyms, outputting more authentic English in proper contexts.

Literature Review

Review of Relative Studies Abroad

Over the last 50 years, the study of corpus linguistics has expanded significantly, with a particular focus on the study of English vocabulary. In this specialized area, numerous studies have employed corpora to investigate the differences among synonyms, leading to a variety of important insights.

At the beginning of corpus linguistic study, synonym differentiation on various parts of speech based on corpus can be found. Kennedy (1991) conducted research on the linguistic ecology of the prepositions “between” and “through” by the use of Lancaster-Oslo/Bergen Corpus. For adverbs, Liu and Tang (2024) made an attempt to investigate the differences among “actually”, “genuinely”, “really”, and “truly” from the perspective of collocation. In terms of verb synonyms, Atkins and Levin (1995) made a comparison among a set of synonymous verbs from the view of usage. Kaminski (2017) conducted discrimination on adjective synonyms “artificial”, “fake”, “false”, and “synthetic”.

In terms of noun synonyms, Hoey (2005) conducted an analysis of “consequence” and “result” based on corpus, which revealed that the “consequence” carried a negative prosody, while “result” was associated with a positive one. He suggested that the distinctions among synonyms were primarily determined by their collocations with other lexical items, grammatical structures, and semantic associations. In addition, Forchini (2013) made an attempt to find the potential of applying corpus linguistics methodologies to the translation of films and television shows with analyzing words in movie conversations including “guys”, “man” “buddy” and “dude” from the perspective of frequency, collocation, and colligation.

In summary, foreign scholars have investigated a variety of synonyms and used diverse corpora to investigate synonyms, which presents a prosperous and developing trend.

Review of Relative Studies in China

With the development of corpus linguistics, researchers in China also started to distinguish the synonyms by use of corpus-based method instead of traditional ones.

For verb synonym differentiation based on corpus, Song (2021) conducted a study concerning synonymous verbs “answer”, “reply”, “respond” and “explain” from the perspective of colligation, collocation, semantic preference and semantic prosody based on CLEC and COCA, providing implications for English teaching and learning. In terms of adjective synonyms, Ren (2008) conducted a comparative analysis on words “common” and “ordinary” based on two corpora: CLEC and The Louvain Corpus of Native English Essays (LOCNESS), analyzing reasons of misusing these two words and providing several suggestions for English teaching and learning. For adverbs, based on COCA, Liu (2018) conducted a study on the synonym differentiation of “terribly” and “awfully” from the perspective of semantic prosody.

For noun synonyms, Zhang (2007) investigated “outcome” and “consequence” from lexical frequency, collocation, and semantic prosody of the synonyms based on FLOB, then compared the results with data from CLEC, finding that Chinese learners rarely used the “outcome” and “consequence”, with using “result” as a substitute, but they had a generally accurate grasp of the semantic prosody of “consequence”. Similarly, Wang

(2023) took “issue”, “question” and “problem” as target words, trying to find out similarities and differences of them on colligation and semantic prosody. The results showed that there were some misuse on three words and possible reasons were proposed such as the influence of L1 transfer.

In short, it's obvious that the studies on synonym differentiation in China develop rapidly and prosperously. However, the studies on differentiation among noun synonyms is not rich enough, whose depth and width can be promoted.

Methodology

Research Questions

Based on COCA, this paper intends to make an analysis on the differentiation among English noun synonyms “opposition”, “resistance” and “defiance”, which are generally regarded as uncountable nouns, from the perspective of frequency distribution, collocation and semantic prosody. The following are research questions addressed.

1. What are the differences of frequency distribution among “opposition”, “resistance” and “defiance”?
2. What are the features of collocation among “opposition”, “resistance” and “defiance”?
3. Are there any differences of synonyms “opposition”, “resistance” and “defiance” in terms of semantic prosody?

Research Corpus

The corpus selected in this study is the Corpus of Contemporary American English (COCA). It was established by Professor Mark Davies from Brigham Young University. Each year, as well as the overall composition, is balanced across these genres: blogs, web pages, TV and Movie subtitles, spoken language, fiction, popular magazines, newspapers, and academic journals. Till now, the corpus is continuously being updated and expanding.

Research Procedures

The research procedures in this paper are listed as follows: First, COCA online tool is used to retrieve “opposition”, “resistance” and “defiance” separately, then the register distributions of each node word are obtained. Second, with the help of the Collocates function of COCA, all the collocates of each node word will be searched out. After listing the significant collocates of each node word, the collocation and semantic prosody of these words will be analyzed and concluded. Third, a thorough and holistic analysis and discussion on the basis of obtained data will be given. Additionally, at the end of the study, the major findings, limitations of the present study and further suggestions of the research will be concluded for others' reference.

Results and Discussion

Frequency Distribution of “Opposition”, “Resistance” and “Defiance”

The concept “frequency” plays a vital role in corpus-based research. “Opposition”, “resistance” and “defiance” are retrieved separately in COCA to obtain their frequency distributions accordingly, which are demonstrated as below.

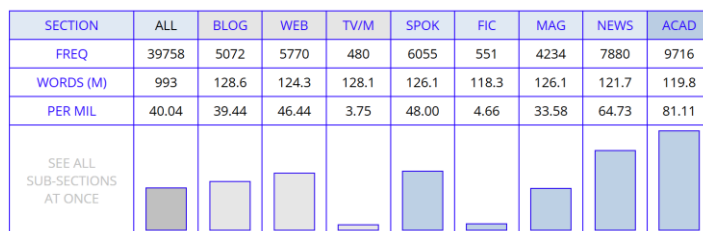


Figure 1. Register Distributions of “Opposition” in COCA.

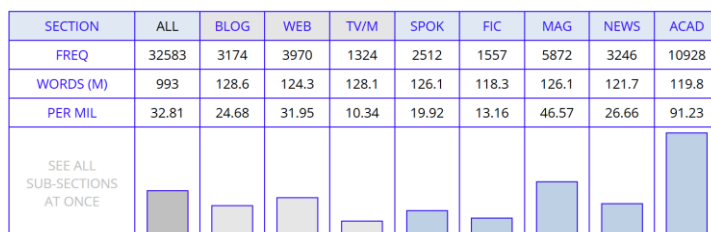


Figure 2. Register Distributions of “Resistance” in COCA.

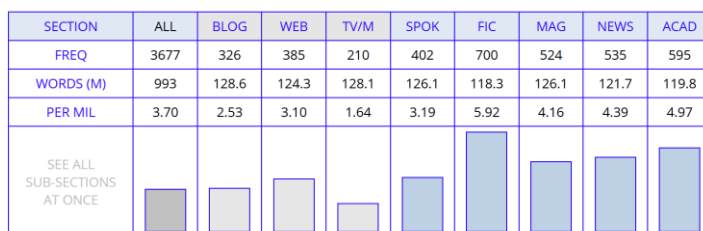


Figure 3. Register Distributions of “Defiance” in COCA.

Based on these three figures, frequency distributions on three words across different registers are clearly shown.

It’s obvious that “opposition” (total frequency is 39758) and “resistance” (total frequency is 32583) are more frequently used than “defiance” (total frequency is 3677) in COCA. Both “opposition” and “resistance” are most commonly used in academic journals, accounting for about a quarter and a third of the total use respectively. But for the second most frequent part, it’s the newspapers for “opposition” while the magazines for “resistance”. As for “defiance”, it is most frequently used in fiction with the frequency of 700. The frequency of “defiance” in magazine (frequency is 524) and newspapers (frequency is 535) is almost the same in COCA. One thing in common for these three words “opposition”, “resistance” and “defiance” is that they all rarely appear in TV and movie subtitles, with the frequency of 480, 1324 and 210 respectively.

From what has been discussed above, the differences and similarities of frequency distributions on three words across different registers are clearly explained. Collocation and semantic prosody will be discussed later.

Collocation of “Opposition”, “Resistance” and “Defiance”

With the help of the Collocates function of COCA, different parts of speech of the collocates of “opposition”, “resistance” and “defiance” are shown as below. Only the significant collocates (Mutual Information value > 3.0) are taken into consideration. Due to space limitation, only the first 20 significant collocates for different parts of speech are listed.

First is about “opposition”, shown in Figure 4, which has four parts. In the left noun part, from left to right, the first line indicates frequency, the second line shows Mutual Information, listed in descending order, and the rest is about the specific collocates. The same goes for adjective part, verb part and adverb part.

According to Figure 4, it’s clear that significant collocates for nouns, adjectives and verbs are more than 20 respectively while there are only 10 significant collocates for adverbs, less than significant collocates for other parts of speech. It can be seen that the highest MI value (8.98) belongs to adjective “diametric” in COCA. These significant collocates of “opposition” can be roughly divided into two categories: political field such as “parliamentarian”, “disfranchisement”, and “binary”, and personal state such as “staunch” and “emboldened”.

| + NOUN | NEW WORD | + ADJ | NEW WORD | + VERB | NEW WORD | + ADV | NEW WORD | | | | |
|--------|----------|------------------|----------|--------|-------------------|-------|----------|--------------|----|------|-----------------|
| 6 | 7.46 | disfranchisement | 9 | 8.98 | diametric | 15 | 6.64 | brook | 4 | 5.15 | roughshod |
| 3 | 6.91 | opposition | 95 | 7.92 | vetement | 253 | 6.09 | voice | 4 | 4.39 | thereto |
| 18 | 6.62 | groundswell | 4 | 7.44 | anti-tyran | 24 | 5.93 | outscore | 6 | 4.31 | ruthlessly |
| 3 | 6.23 | actuation | 3 | 7.24 | re-energized | 7 | 5.93 | delegitimize | 17 | 4.23 | eg |
| 3 | 6.16 | splintering | 3 | 7.11 | kleptocratic | 28 | 5.80 | galvanize | 3 | 3.81 | diametrically |
| 3 | 5.82 | austral | 161 | 7.06 | binary | 3 | 5.44 | outspend | 3 | 3.44 | covertly |
| 6 | 5.76 | anticommunist | 19 | 6.80 | vociferous | 21 | 5.14 | defect | 4 | 3.42 | nominally |
| 12 | 5.75 | parliamentarian | 27 | 6.76 | implacable | 32 | 4.90 | boycott | 3 | 3.41 | correspondingly |
| 3 | 5.56 | babbling | 3 | 6.62 | busing | 41 | 4.79 | arouse | 3 | 3.32 | belatedly |
| 3 | 5.55 | anticorruption | 3 | 6.61 | pro-democratic | 137 | 4.78 | unite | 3 | 3.04 | direct |
| 8 | 5.43 | incineration | 17 | 6.43 | fractious | 16 | 4.61 | quell | 15 | 2.88 | ie |
| 3 | 5.39 | co-optation | 27 | 6.38 | exiled | 53 | 4.58 | silence | 3 | 2.82 | grudgingly |
| 5 | 5.35 | obstructionism | 3 | 6.38 | social-democratic | 48 | 4.58 | mobilize | 5 | 2.65 | chiefly |
| 6 | 5.30 | vehemence | 63 | 6.36 | staunch | 37 | 4.53 | reiterate | 3 | 2.63 | democratically |
| 3 | 5.19 | charism | 6 | 6.35 | emboldened | 23 | 4.48 | neutralize | 7 | 2.62 | brutally |
| 33 | 5.17 | stronghold | 6 | 6.25 | power-sharing | 14 | 4.48 | repress | 2 | 2.53 | popularly |
| 4 | 5.16 | formalist | 3 | 6.21 | reorganized | 31 | 4.37 | unify | 4 | 2.50 | selectively |
| 41 | 5.15 | crackdown | 34 | 6.15 | principled | 11 | 4.37 | bus | 2 | 2.49 | adamantly |
| 6 | 5.12 | rightist | 4 | 5.98 | dovish | 60 | 4.18 | rally | 4 | 2.48 | overtly |
| 5 | 5.10 | universalism | 4 | 5.97 | well-financed | 3 | 4.13 | mollify | 15 | 2.43 | formally |

Figure 4. Collocates of “Opposition”.

Then, the collocates of “resistance”, as indicated in Figure 5. Like “opposition”, significant collocates of “resistance” for adverbs are less than significant collocates for other parts of speech. The significant collocates for nouns, adjectives and verbs are abundant. Almost all of these significant collocates of “resistance” are about politics and medicine, for example, “anthracnose” (with the highest MI value 10.79 in COCA), “ampicillin”, “anti-nazi” and “nonviolent”.

| + NOUN | NEW WORD | + ADJ | NEW WORD | + VERB | NEW WORD | + ADV | NEW WORD | | | | |
|--------|----------|-----------------|----------|--------|------------------|-------|----------|------------|----|------|---------------|
| 37 | 10.79 | anthracnose | 203 | 9.37 | antimicrobial | 120 | 6.29 | confer | 5 | 7.27 | conclusively |
| 37 | 9.90 | ampicillin | 13 | 8.82 | anti-nazi | 365 | 5.72 | encounter | 2 | 6.21 | stably |
| 10 | 9.54 | methicillin | 6 | 8.52 | race-specific | 293 | 5.39 | overcome | 2 | 4.89 | clandestinely |
| 28 | 9.49 | chloroquine | 5 | 8.45 | under-resourced | 29 | 4.99 | band | 16 | 4.44 | eg |
| 9 | 8.91 | inductance | 14 | 8.42 | second-line | 19 | 4.76 | stiffen | 5 | 4.15 | vitro |
| 18 | 8.81 | metronidazole | 70 | 8.27 | compressive | 4 | 4.60 | blight | 2 | 3.86 | concretely |
| 720 | 8.80 | insulin | 18 | 7.80 | non-communist | 12 | 4.49 | quell | 24 | 3.85 | ie |
| 8 | 8.76 | isoniazid | 4 | 7.72 | lock-step | 3 | 4.28 | ionize | 2 | 3.69 | thereto |
| 7 | 8.67 | neomycin | 182 | 7.68 | nonviolent | 55 | 4.16 | weaken | 3 | 3.67 | inversely |
| 11 | 8.55 | rifampin | 12 | 7.49 | antimalarial | 15 | 4.00 | assimilate | 2 | 3.65 | linearly |
| 17 | 8.55 | fluoroquinolone | 6 | 7.46 | oscillatory | 30 | 3.77 | breed | 2 | 3.57 | impulsively |
| 11 | 8.48 | cephalosporin | 5 | 7.39 | chemotherapeutic | 3 | 3.69 | pacify | 5 | 3.05 | fatally |
| 12 | 8.38 | antimicrobial | 28 | 7.53 | tensile | 12 | 3.64 | shear | 3 | 3.04 | passively |
| 13 | 8.17 | streptomycin | 13 | 7.30 | anti-colonial | 3 | 3.53 | quash | 2 | 2.96 | artfully |
| 4 | 8.11 | chloramphenicol | 8 | 7.27 | anti-japanese | 6 | 3.49 | gauge | 10 | 2.96 | swiftly |
| 6 | 8.08 | hepatitis | 145 | 7.23 | futile | 84 | 3.49 | evolve | 5 | 2.95 | chiefly |
| 15 | 7.91 | desiccation | 3 | 7.15 | nonchemical | 36 | 3.46 | induce | 13 | 2.86 | genetically |
| 5 | 7.91 | axial | 2 | 7.13 | otological | 3 | 3.44 | leaf | 27 | 2.74 | thereby |
| 35 | 7.90 | leptin | 10 | 7.10 | anti-soviet | 31 | 3.43 | provoke | 3 | 2.50 | adversely |
| 9 | 7.78 | ductility | 8 | 7.09 | leaderless | 8 | 3.43 | pedal | 2 | 2.48 | purportedly |

Figure 5. Collocates of “Resistance”.

As for the collocates of “defiance”, as the first two, significant collocates for nouns, adjectives and verbs are rich while significant collocates for adverbs are relatively rare. Comparatively speaking, significant collocates of “defiance” are more diverse than the first two, which include military (e.g. “battlecruiser” and “refusenik”), medicine (e.g. “enuresis” and “dismember”), personal state (e.g. “submissiveness” and “belligerence”), and others (e.g. “deliciously”, “rosewater” and “fro”).

| * NOUN | NEW WORD | * ADJ | NEW WORD | * VERB | NEW WORD | * ADV | NEW WORD | | | | |
|--------|----------|-----------------|----------|--------|-----------------|-------|----------|--------------|---|------|------------------|
| 2 | 10.17 | rosewater | 1 | 9.70 | poxy | 1 | 7.02 | inseminate | 1 | 9.25 | circularly |
| 1 | 9.53 | battlecruiser | 2 | 9.53 | insouciant | 1 | 7.52 | amalgamate | 1 | 9.00 | commensurately |
| 1 | 9.48 | emuresis | 1 | 9.48 | carnaval | 4 | 7.05 | tripe | 1 | 8.74 | raucously |
| 1 | 9.39 | truant | 1 | 9.46 | sanguinary | 1 | 7.03 | sashay | 1 | 7.12 | irretrievably |
| 3 | 9.12 | boomtown | 1 | 9.41 | untamable | 2 | 7.07 | reproach | 1 | 7.08 | tenaciously |
| 1 | 9.09 | memorialization | 1 | 9.28 | bull-headed | 2 | 6.80 | verge | 1 | 6.33 | quintessentially |
| 1 | 8.95 | hurt | 14 | 9.12 | oppositional | 1 | 6.68 | bespeak | 1 | 5.49 | deliciously |
| 1 | 8.87 | naughtiness | 1 | 8.66 | cockney | 20 | 6.65 | bid | 1 | 5.48 | ruthlessly |
| 2 | 8.83 | rebelliousness | 1 | 8.52 | red-orange | 1 | 6.59 | brawl | 1 | 5.27 | regrettably |
| 1 | 8.80 | refusenik | 1 | 8.50 | megalomaniacal | 2 | 6.05 | ingrain | 1 | 5.21 | intermittently |
| 2 | 8.77 | repugnance | 1 | 8.42 | high-visibility | 1 | 5.98 | hearten | 1 | 5.11 | foolishly |
| 1 | 8.55 | littelessness | 1 | 8.33 | becalmed | 1 | 5.96 | upstage | 1 | 5.08 | coldly |
| 3 | 8.51 | irreverence | 4 | 8.27 | whipping | 1 | 5.95 | resound | 1 | 4.98 | fro |
| 2 | 8.27 | steadfastness | 1 | 8.25 | anti-us | 7 | 5.80 | symbolize | 2 | 4.89 | eg |
| 1 | 8.21 | peacemaker | 1 | 8.08 | droning | 1 | 5.80 | dismember | 1 | 4.83 | head-on |
| 1 | 8.21 | docility | 1 | 7.98 | golden-brown | 1 | 5.65 | sprain | 1 | 4.58 | pointedly |
| 2 | 8.20 | bufflog | 1 | 7.83 | wilful | 1 | 5.64 | crest | 1 | 4.22 | harshly |
| 2 | 8.07 | belligerence | 5 | 7.66 | flagrant | 1 | 5.59 | whizz | 1 | 4.16 | anxiously |
| 1 | 8.07 | submissiveness | 1 | 7.65 | sisterly | 1 | 5.56 | circumscribe | 3 | 3.37 | deliberately |
| 1 | 8.05 | day-tripper | 1 | 7.63 | ridiculed | 2 | 5.55 | flaunt | 6 | 2.49 | previously |

Figure 6. Collocates of “Defiance”.

Therefore, “opposition” often appears with words concerning politics and personal state. “Resistance” usually show up with words in politics and medicine. For “defiance”, the collocates are more in the fields of military, medicine, personal state and others.

Semantic Prosody of “Opposition”, “Resistance” and “Defiance”

It is known that semantic prosody cannot be judged solely based on word meaning. Context is also an important reference factor. Therefore, significant collocates of the three words will be measured in context. Due to space limitation, 20 concordance lines of each target word are randomly selected for reference.

From what have been discussed above, as for the the significant collocates of “opposition”, the first category includes “anticommunist”, “parliamentarian”, “crackdown”, “rightist”, “vehement”, “exiled”, “reorganized”, “delegitimize”, etc., which are concerning politics. Based on contexts in COCA, it can be inferred that these collocates mostly have negative semantic prosody. For the second category about personal state: “re-energized”, “fractious”, “staunch”, “emboldened”, “principled”, “roughshod”, “ruthlessly”, “silence”, etc., which show strong tendency of negative semantic prosody with little positive semantic prosody according to contexts. Therefore, “opposition” is generally thought with negative semantic prosody.

Table 1
Randomly Selection of 20 Concordance Lines of “Opposition”

| WEBSITE | | SORT | SORT | SORT |
|---------|----------------------------------|---|-------------|--|
| 1 | SPOK:2019:CB5_Morning | you will be talking about today . Russia 's most prominent | opposition | activist was released |
| 2 | MAG:2017:Daily Beast | the Syrian city of Raqqa in recent days , according to | opposition | activists and the Syrian state media . The U.S.-led coalition |
| 3 | WEB:2012:iawwai.com | is really consciousness . # This point of view stands in | opposition | against the alternative and more widely held view concerning |
| 4 | NEWS:1994:Houston | " strongly disapprove " of Clinton -- a measure of presidential | opposition | almost unheard of during a period of peace and moderate |
| 5 | SPOK:2010:PBS_NewsHour | that point had seen the results that showed high percentages of | opposition | amongst Marines and was trying to sort of get out ahead |
| 6 | BLOG:2012:baselinescenario.com | myself in his position and realistically consider the kinds of | opposition | and attacks and miserable economic conditions he inherited . |
| 7 | NEWS:2012:WashPost | coordinator . # Yong 's variance passed with some | opposition | and hurt feelings . She says she now realizes those opposing |
| 8 | WEB:2012:open.crngames.com | is the respondent . In play , often someone will anticipate | opposition | and state they want a contest , but someone still has to |
| 9 | MAG:1998:SatEvenPost | Mayersohn in her three-year campaign to overcome similar | opposition | and win for the babies and their moms . # Dr. Martin |
| 10 | MAG:1995:Astronomy | appears most striking in the eyepiece . Unfortunately , not all | oppositions | are favorable and 1995 's happens when Mars is about as far |
| 11 | SPOK:1992:ABC_Nightline | in that KOPPEL What kind of support , what kind of | opposition | are you getting among your colleagues ? Rep. SCHROEDER : Well , |
| 12 | ACAD:1999:Church&State | conversions , to be effected within a reasonable period ; | Opposition | arose mainly from Diaspora Jewish leaders in the United States |
| 13 | SPOK:2009:CNN_Dobbs | And what you 're seeing is that there is real intense | opposition | as there historically has been in periods of American history , |
| 14 | SPOK:1998:NPR_TalkNation | is that fair ? DECOSTA : Absolutely . I think the | opposition | as well as the family of Abiola have strongly indicated that the |
| 15 | ACAD:1992:ComplintDev | was unrelated to tendency to support either the FSLN or the | opposition | at any level . Gender was significantly related to levels of |
| 16 | WEB:2012:...dinary-gentlemen.... | a sign that that party or candidate is better than the | opposition | at anything other than winning elections , you have a deeply , |
| 17 | ACAD:2006:AfricanHist | protest at the shortage of school places. 21 UNIP faced growing | opposition | at this time over policies including the ban on chitemene |
| 18 | WEB:2012:nctimes.com | . # Many fans believe shortening the fences will favor the | opposition | because hitting teams have more power hitters than the Padres . |
| 19 | ACAD:1996:PerspPolSci | 1977 . # After losing the elections and returning to the | opposition | benches Likud changed its leadership . Since 1993 , Binyamin (|
| 20 | ACAD:2002:PublicInterest | # Since the Enlightenment , the Athenian experience of the | opposition | between his education and divine philosophizing has been |

For “resistance”, the significant collocates are mostly about politics and medicine: “anthracnose”, “ampicillin”, “methicillin”, “chloroquine”, “metronidazole”, “insulin”, “neomycin”, “fluoroquinolone”, “cephalosporin”, “auxin”, “anti-nazi”, “under-resourced”, “second-line”, “non-communist”, “anti-colonial”, “anti-japanese”, “anti-soviet”, “leaderless”, “confer”, “quell”, etc., which obviously present neutral semantic prosody based on contexts in COCA. Then “resistance” is inferred having neutral semantic prosody in COCA.

Table 2
Randomly Selection of 20 Concordance Lines of “Resistance”

| | WEBSITE | | WORD | WORD | WORD |
|----|---------------------------------|--|------------|---------|---|
| 1 | WEB:2012:...istsview.typepad... | a spark of protest against mindless consumerism , grass-roots | resistance | against | an impersonal logic, and an expression of communal |
| 2 | NEWS:2015:NYTimes | The Hunger Games . " and the ultimate leader of the | resistance | against | her nation 's totalitarian government . Based on the |
| 3 | MAG:2003:Newsweek | the jihad when I tell them stories of our heroic Islamic | resistance | against | Indian aggression . " # Some schools provide far more |
| 4 | SPOK:2001:NPR_ATC | the move . Hamas has vowed to continue what it calls | resistance | against | Israel The group has taken responsibility for dozens |
| 5 | ACAD:2010:Commentary | her passivity portrayed as something active , as an act of | resistance | against | maledom And to continue this perverse revision of the |
| 6 | BLOG:2012:copyblogger.com | Their shortcomings are often also their strengths , though . The | resistance | against | newbies you feel is actually a symptom of the strong |
| 7 | SPOK:2017:CNN: Anderson Cooper | young and hopeful . Do you think that some of the | resistance | against | Obama had to do with the color of his skin ? |
| 8 | FIC:2017:Bk:Impersonations | Blanche , a stay-behind group on Zanshaa intended to lead the | resistance | against | occupying Nazis # All the other members of the group |
| 9 | MAG:2017:News-Medical.net | and molecular analyses . While some bacteria acquired | resistance | against | one or two of the phages , no bacteria were resistant |
| 10 | ACAD:1990:AmerStudies | controlled , or transcended , one of the main sources of | resistance | against | self-projection is eliminated : even where we try to |
| 11 | ACAD:2010:CollegeStud | own voice " as a means by which to stage personal | resistance | against | strongly held cultural ideals suggesting that the only |
| 12 | MAG:2014:MilitaryHist | his most cunning and determined adversary , leading a selfiant | resistance | against | the numerically superior and highly organized Norman |
| 13 | MAG:2007:NatGeog | . This provincial capital served as headquarters for the Afghan | resistance | against | the Soviets , and jihad is still a going concern here |
| 14 | ACAD:2000:AmerStudies | be American " unlike their parents , and whereas there was | resistance | against | this pressure , in the diasporic period of today there |
| 15 | ACAD:2001:LatinAmResRev | . Here the narrative of domination and clandestine cultural | resistance | allows | activists to remain true to " our elders " while rejecting |
| 16 | ACAD:2008:GeographRev | " agency " model that stresses the importance of community and | resistance | among | African Americans (see , for example , McDougall 1993 ; |
| 17 | ACAD:2012:EmergingInfectious | . We assessed the prevalence of metronidazole and tinidazole | resistance | among | isolates and compared the prevalence of resistance to |
| 18 | ACAD:2007:TechTeacher | and , hence , a different thermal resistance . # The | resistance | analogy | lets us simplify the problem by combining the |
| 19 | FIC:2012:Bk:BornSilence | for your death . He 's ruthlessly determined to end our | Resistance | and | assassinate all of us in leadership roles . You are being |
| 20 | MAG:2004:MensHealth | . 14+ POINTS VERY HIGH RISK . You may have insulin | resistance | and | be a candidate for the metabolic disorder known as syndrome |

In terms of “defiance”, it consists of significant collocates from more categories: military (“battlecruiser”, “peacenik”, “refusenik”, “oppositional”, “anti-us”, etc.), medicine (“enuresis”, “sanguinary”, “inseminate”, “dismember”, “sprain”, etc.), personal state (“naughtiness”, “rebelliousness”, “listlessness”, “irreverence”, “steadfastness”, “docility”, “belligerence”, “submissiveness”, “insouciant”, “wilful”, “anxiously”, etc.), and others (“bullfrog”, “bull-headed”, “red-orange”, “golden-brown”, “droning”, etc.). Based on contexts in COCA, it’s observed that the first group of significant collocates presents negative semantic prosody, the second group of significant collocates shows both neutral semantic prosody and negative semantic prosody, the third one indicates both positive semantic prosody and negative semantic prosody, and for the rest significant collocates, they mostly present neutral semantic prosody. Therefore, “defiance” is regarded with mixed semantic prosody.

Table 3
Randomly Selection of 20 Concordance Lines of “Defiance”

| WEBSITE | | SORT | SORT | SORT |
|--------------------------------------|--|----------|---------|--|
| 1 ACAD:2005:ArabStudies | of her voice as a woman simultaneously assumes the voice of | defiance | against | Franco colonialism . By insisting on singing the banned |
| 2 NEWS:1993:CSMonitor | in Pretoria over the weekend to discuss a nationwide campaign of | defiance | against | government plans to integrate town councils . To |
| 3 WEB:2012:amazon.com | seen by both Kevin and Eva as his ultimate act in | defiance | against | his mother . # Ramsay tells her story in bits and |
| 4 MAG:1990:AmSpect | Cannes is something of an enemy fortress , a stronghold of | defiance | against | Hollywood ways and means Yes , some stateside movies |
| 5 ACAD:1994:Raritan | fine line between passionate devotion to the nation and hostile | defiance | against | it . These inconsistencies surface whenever Sassoon |
| 6 ACAD:2006:ChurchHistory | from the Commons House of Assembly in a coordinated act of | defiance | against | the Anglican establishment , a strategy designed to |
| 7 WEB:2012:askville.amazon.com | , refusing to disperse and it was an act of direct | defiance | against | the command to " replenish the Earth . " # Either |
| 8 BLOG:2012:dailypaul.com | more than 1,000 acres of Monsanto's GM maize in direct | defiance | against | the company . Peru also took a monumental stand against |
| 9 BLOG:2012:...om.blogs.nytimes.... | with her two sisters . It is six stories of polite | defiance | against | the conventional wisdom about independent bookstores |
| 10 FIC:2011:FantasySciFi | of choice was not open defiance , but rather endurance . | Defiance | against | the Dinisistri would lead to widowed wives while |
| 11 SPOK:2013:CBS: This Morning | The Muslim Brotherhood is calling for marches in a show of | defiance | against | the military . MAURICE-DUBOIS# Authorities have |
| 12 BLOG:2012:...ogpage.wordpress.... | to defy his master's summons . Such an act of | defiance | against | the most powerful ruler in Britain on the eve of what |
| 13 SPOK:1998:NPR_Morning |) of Belleair Beach says the idea is to turn teenage | defiance | against | the tobacco industry . JARED PEREZ , HIGH SCHOOL STUDENT |
| 14 WEB:2012:hitfix.com | center even as they carry out misguided , petty acts of | defiance | against | their school and local security guards . But Assayas |
| 15 ACAD:2012:JournalAmerican | as a Jewish person , even as the gesture also conveys | defiance | against | this repugnance and all of its implications . Miriam |
| 16 WEB:2012:reconfaculty.gmu.edu | black market , " tax evasion , and other acts of | defiance | against | unjust laws . # The desirable transitional path for |
| 17 BLOG:2012:solarplaza.com | look back and be surprised by the market's resilience and | defiance | along | what was initially a rocky road . I would also hope |
| 18 WEB:2012:slog.thestranger.com | by scandalous activities , liturgical abuses , ecclesiastical | defiance | and a | framing attachment to various left-wing political causes |
| 19 NEWS:2005:SanFranChron | " and " because of , " and combines irony , | defiance | and | acceptance in a way that many say you have to be |
| 20 FIC:2005:Triquarterly | , invincible , grotesque , demonic , terrifying , a flying | defiance | and | acceptance of the human destiny . If they could rise , |

In short, based on above analysis, it's evidently that “opposition” has negative semantic prosody, “resistance” presents neutral semantic prosody, and “defiance” indicates mixed semantic prosody.

Conclusion

The present study made an investigation on synonym differentiation “opposition”, “resistance” and “defiance” from the perspectives of frequency distribution, collocation and semantic prosody based on COCA. The major findings are listed as follows.

First, in terms of frequency distribution, “opposition” and “resistance” are more frequently used than “defiance” in COCA. Both of the two are most commonly used in academic journals. As for “defiance”, it is most frequently used in fiction. All of these three words rarely appear in TV and movie subtitles. Second, from the perspective of collocation, what has been observed is that “opposition” often collocates with words about politics and personal state, “resistance” usually appears with words concerning politics and medicine, and “defiance” more shows up in the fields of military, medicine, personal state and others. Third, from the dimension of semantic prosody, it can be inferred that “opposition” presents negative semantic prosody, “resistance” has neutral semantic prosody, and “defiance” indicates mixed semantic prosody in COCA.

The study provides valuable insights for language educators and learners. By examining frequency distribution, collocation, and semantic prosody, the research offers a more nuanced understanding of how synonyms can be in actual usage. However, any research has its limitations, this study is of no exception. In this study, the classification of significant collocates and semantic prosody for the target words are manually conducted, which could be subjective, and might lead to inconsistencies when compared to others' findings.

For the future study, more studies on synonym differentiation of various parts of speech including nouns are encouraged. Researchers are expected to expand the samples of concordance lines from the corpus.

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