



## Quick or Fast: A Corpus Based Study of English Synonyms

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### Abstract

This paper illustrates how the use of corpora can contribute to the study of English synonyms or near synonyms. Two English adjectives “*quick*” and “*fast*” were used in this study and the Corpus of Contemporary American English (COCA) from *corpus.byu.edu* was used as the source for exploring the similarities and differences between the two synonyms in question. Only the top 100 collocates of *quick* and *fast* with MI scores of at least 3 were extracted and ranked by frequency and the search was limited to nouns immediately following *quick* or *fast*. The result shows that some nouns are found to collocate with only either *quick* or *fast*, while a few can occur with both adjectives but usually focus on different aspects of meanings, i.e. *quick* tends to indicate merely the quality or property of an action while *fast* incorporates the sense of the manner of an action when used to modify the same noun.

### Introduction

One major difficulty in English language teaching is to explain the similarities and differences in meanings and usages of synonyms or near synonyms to foreign language learners so that they will be able to understand and use the word correctly. Consulting English dictionaries can yield only a partial explanation for the words in question. For example, learners may be confused when using the words *little* or *small*. Longman Dictionary of Contemporary English 5th Edition (2009) defines many senses of these two words, while some of them may overlap and are almost interchangeable in the same context. Learners have to go through the senses listed for both words themselves. Additional information is provided for learners in the entry of *little* that the comparative and superlative forms of its near synonym *small* are preferred as *smaller* and *smallest*, instead of *littler*, *littlest*. In addition, the words *quite*, *very*, and *too* can be used in front of *small*, but not *little*. And in the entry of *small*, the words in the thesaurus list of *small* include *little* as one synonym in the list, and states that the word *small* is used to indicate “*not large in size, amount, or effect*”, while the word *little* can mean small but should be used with objects, places and living things. Sometimes, it is used to “*show how you feel about someone or something*”. Such information is useful for understanding the similarities and differences between *little* and *small* to a certain degree. Nevertheless, when comparing information from the dictionary with the discussions found in the work of Biber, Conrad, and Reppen (1996) who used English corpora to investigate the differences between the use of *little* and *small*, information derived from the corpus based study is far more informative. Though most dictionaries now are corpus-based, they have limited space for each entry to summarize information found from the corpora. When users need further information beyond those encoded in the dictionary, they have to go to the

source or the corpora. In addition, for other near synonyms like the adjectives *quick* and *fast*, Longman Dictionary of Contemporary English provides only the senses of each word without explicitly showing the differences between the two words. Learners have to go through the list of senses in each entry and try to conceptualize the differences themselves. In addition, the list of thesaurus words found in Longman (2009) in the entry of *quick* does not include the word *fast*, while the list of thesaurus words in the entry of *fast* does include *quick* as one of its synonyms, and explains that *fast* refers to “moving or able to move quickly” while *quick* refers to “moving fast or doing something in a short time”. Information as provided in the dictionary does not seem to help learners understand when and why to use the word *quick* or *fast* for a different noun. One solution to this problem is to use English corpora in exploring the use of synonyms and near synonyms. Similarities and differences in meanings and usages should be revealed and summarized for learners in order to facilitate and contribute to a clear understanding of the semantic properties relating to the words within this group.

### Previous studies

Besides the work of Biber et al. (1996), which used *little* vs. *small* and *large* vs. *big* as a case study to show how the corpora can be used to see the differences between these two words, other scholars have been working on this issue on other near synonyms in English. For example, Katharina (2014) studied six synonymously adjectives in English, namely *nice*, *kind*, *lovely*, *friendly*, *gorgeous* and *pleasant* by using COCA. Katharina showed that the definitions of these six adjectives found in three dictionaries, The Macmillan Dictionary (2014), The Collins American Dictionary (2014) and The Merriam Webster Dictionary (2014), are not sufficient to indicate the differences between these adjectives. The corpus reveals that many of these adjectives can be used on the same nouns, which is likewise indicated in the dictionaries. But when looking at the list of the collocates of these adjectives by using mutual information score ranking, the differences of these six adjectives seem to be clearer, and this kind of information is absent from the dictionaries.

Taylor (2001) studied two synonyms in English, *high* and *tall*, based on LOB corpus. It was found that *high* is used ten times more often than *tall*. Both can be used beyond spatial domain, especially *high*. In spatial domain, *high* can be used both in terms of vertical extent (measured from the bottom to the top) and vertical position (relatively distant from the reference point), while *tall* can be used for only vertical extent, e.g. *high building*, *high ceiling* and *tall building*, *\*tall ceiling*. When used for vertical extent, *tall* tends to be used to describe humans.

Chung (2011) studied two near synonyms in English, *create* and *produce*. Two corpora, namely the Brown Corpus and the Frown Corpus, were used in this study. While many constructions are found with both verbs, some appear only with one verb, e.g. “*over produce*”, “*\*over create*”, “*create .... out of*”, “*\*produce .... out of*”. Likewise, there is an overlap in some senses found in both verbs, while some are found only with one verb. When looking at objects of *create* and *produce*, different types of objects are found for each verb. The results support that corpora are very useful in signifying the similarities and differences between two near synonyms.

Cai (2012) used COCA to investigate the use of *great* and its near synonyms, i.e. *awesome*, *excellent*, *fabulous*, *fantastic*, *great*, *terrific*, and *wonderful*. The number of occurrences of these adjectives in different genres were reported and the co-



occurrences of these adjectives, e.g. "*it's fantastic and wonderful*", "*a great, wonderful reason*", were also pointed out, and different collocates of these adjectives are reported. These adjectives were used to modify mainly abstract nouns. *Excellent* tends to be used for movement/events. Others tend to be used for concepts/ideas. *Awesome* can be used for both concept/ideas and movements/events.

Phoocharoensil (2010) studies five synonyms in English, i.e. *ask*, *beg*, *plead*, *request*, and *appeal*. Three learner dictionaries and a corpus of *Time* in 1995 were used in this study. Differences in meanings and grammatical patterns of each verb were drawn from both dictionaries and corpus data. Their usages are explained in terms of dialect, formality of the context, connotations, and collocations.

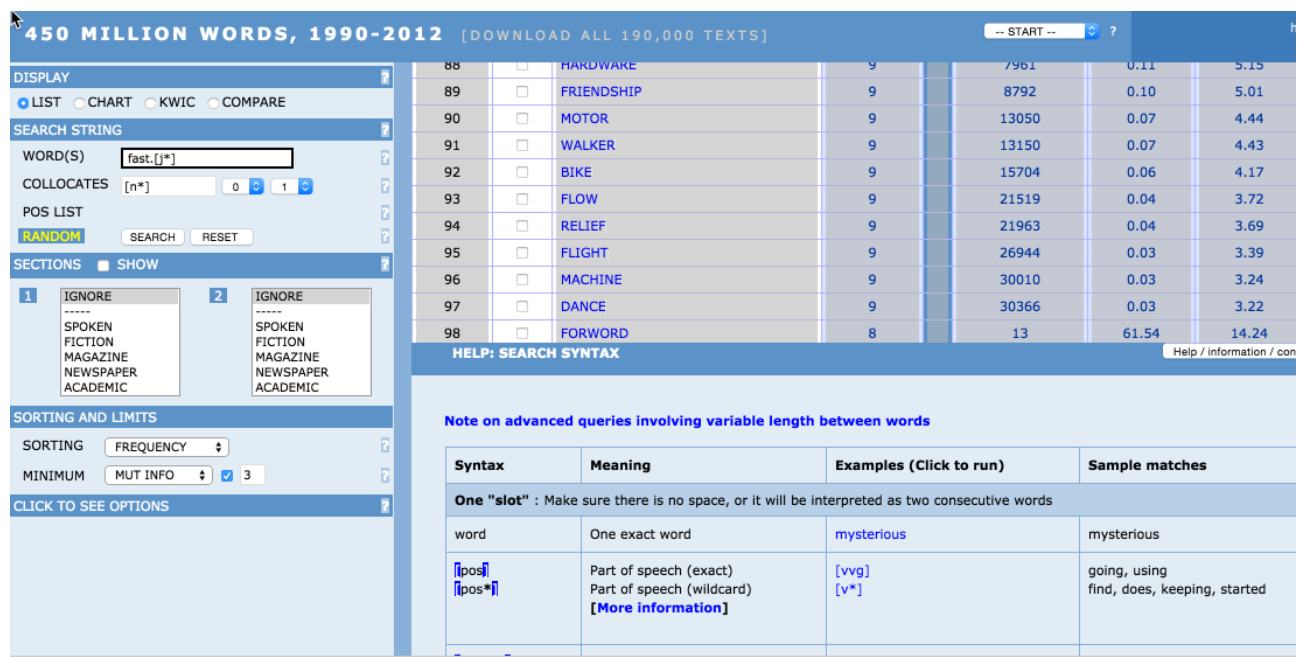
In addition to the works that used corpora to reveal the differences between synonyms or near synonyms, some works focused on the implication of corpora in teaching synonyms. Jafarpou, Hashemian, and Alipour (2013) conducted an experiment to compare the performances of two groups of students in learning collocations of synonyms, one learned by traditional methods, and the other learned by using a concordance program on the British National Corpus. The result confirms that students who used concordance program performed better than students who learned through traditional methods. Chung (2010) gave an overview of research studies on near synonyms using corpus linguistic methods. Various corpus-based works on synonyms in English were reviewed in this work, such as Sinclair's work on *set in* and *happen* (1987), which was later further explored by Partington (2004) by examining words in this category, namely *happen*, *occur*, *come about*, *take place* and *set in*. Xiao and McEnery (2006) worked on words that are synonymous with *cause*. With respect to the adjective synonyms, the following works are reviewed: Partington (1998) on the set of adjectives *sheer*, *pure*, *complete* and *absolute*; Partington (2004) on the adverb *absolutely* and its synonyms, namely *perfectly*, *entirely*, *completely*, *thoroughly*, *totally* and *utterly*; Oh (2000) on the adverbs *actually* and *in fact*. As for the noun synonyms, the work on *result*, *outcome*, *consequence*, and *aftermath* (Xiao and McEnery 2006) is summarized. All these works confirm that differences between synonyms can be revealed using a corpus based method. Chung (2010) then concludes that corpora can be used to fill the gap where a dictionary and thesaurus cannot provide information for learners. The use of corpora is also suitable for the New Senior Secondary English Language Curriculum (2009) that requires students to do a research project.

The use of corpora in language teaching and learning is one important aspect of corpus linguistics. This area is discussed extensively in many introductory books on corpus linguistics, such as Kennedy (1998), McEnery and Wilson (2001), Aroonmanakun (2010), etc.

## Scope and Methodology

The Corpus of Contemporary American English (COCA) from corpus.byu.edu was used as the source for exploring the similarities and differences between *quick* and *fast*. COCA is a large corpus of American English, containing 450 million words. The data is POS tagged so that only the adjective forms of *quick* and *fast* can be retrieved. The number of *quick* as an adjective is 33,578 occurrences, while the number of *fast* as an adjective is 14,766 occurrences. Thus, *quick* is used about twice as much as *fast*. Based on the findings of previous studies that collocations are useful in showing the differences between synonyms, the list of top 100 collocates of *quick* and *fast* with MI scores of at least 3 was then extracted and ranked by frequency. The search is limited

to nouns immediately following *quick* or *fast*. This search parameter yields a more interesting result than searching collocates with minimum frequency 10 and sorted by MI scores. The latter setting results in only nine nouns that collocate with both adjectives, but the first setting results in nineteen collocates that can occur with both adjectives. Figure 1 is the screen showing the parameters used in the search. These collocates represent the words that are highly significant for the two adjectives. It can be seen that a few nouns occur with both adjectives, but some nouns are found to collocate with only either *quick* or *fast*. The collocates can thus be categorized in three groups, i.e., those that occur with both adjectives in the top 100 words, those that occur with *quick* in the top 100 words, and those that occur with *fast* in the top 100 words. It should be noted that nouns in the second and the third group might also be



used with the near synonym adjective of the other group or vice versa, but their collocation is not as significant as those found in the top 100 list.

Figure 1: searching *fast* as an adjective that collocates immediately with a noun

### Basic information of *quick* and *fast*

In this study, the author uses the Longman Dictionary of Contemporary English as the main resource for finding basic information of the two synonyms. Nine senses/usages of *quick* and eleven sense/usages of *fast* as an adjective are listed in the table below. When comparing information of both words, we can see that many of these definitions belong to specific patterns of uses, i.e. *quick* (5)-(9), *fast* (4)-(6), *fast* (9)-(11), *fast* (13). Some of them are not commonly used, i.e. *fast* (7), (8), (12) while some refer to specific meanings of each word, i.e. *quick* (4), *fast* (3). The rest seem to be the overlapping senses between the two words and may cause difficulties for learners to use correctly, i.e. *quick* (1)-(3), *fast* (1)-(2). It is also found that some nouns can occur with either *quick* or *fast*, e.g. *quick learner* and *fast learner*, and the



difference in meaning is already coded in the definitions. A *quick learner* demonstrates a property of a person, while a *fast learner* focuses on the short period of time of that activity. Other noun collocates will be further discussed in the next section.

Quick	Fast
1. [short time]: lasting for or taking only a short time, e.g. a quick drink	1. [moving quickly]: moving or able to move quickly, e.g. a fast car
2. [fast]: moving or doing something fast, e.g. quick steps	2. [in a short time]: doing something or happening in a short time, e.g. a fast learner
3 [no delay]: happening very soon, without any delay, e.g. quick decision	3. [clock]: a clock that is fast shows a later time than the real time, e.g. five minutes fast
4. [clever]: able to learn and understand things fast, e.g. a quick learner	4. fast track a way of achieving something more quickly than is normally done
5. be quick used to tell someone to hurry	5. fast road a road on which vehicles can travel very quickly
6. be quick to do something to react quickly to what someone says or does	6. fast film/ lens a film or lens (2) that can be used when there is little light, or when photographing something that is moving very quickly
7. quick fix (informal) a solution to a problem that can be done quickly, but is not a good or permanent solution	7. [colour]: a colour that is fast will not change when clothes are washed,
8. have a quick temper to get angry very easily	8. [sports]: a fast surface is one on which a ball moves very quickly
9. be quick on the draw a) to be able to pull a gun out quickly in order to shoot b) AmE informal to be good at reacting quickly and intelligently to difficult questions or in difficult situations	9. fast and furious done very quickly with a lot of effort and energy, or happening very quickly with a lot of sudden changes.
	10. somebody is a fast worker (informal) used to say that someone can get what they want very quickly, especially in starting a sexual

Quick	Fast
	relationship with another person
	11. fast talker someone who talks quickly and easily but is often not honest or sincere
	12. [woman] (old-fashioned): becoming involved quickly in sexual relationships with men
	13. fast friends (literary) two people who are very friendly for a long time

Table 1: Senses and patterns of uses defined in LDOCE

### Corpus-based information of *quick* and *fast*

As seen from the collocates listed in Table 2, both *quick* and *fast*, when modifying nouns in this group, denote the quality or property of the activity. However, in some cases, the use of *fast* seems to focus on the manner of the action or motion as well, while the use of *quick* seems to focus merely on the quality of the action. *Quick access* and *fast access* may both refer to an action done in a very short time but the utterances should read with different focuses. The former tends to highlight the short period of time spent on the activity while the latter emphasizes the great speed of the activity or process being conducted. For example, “*Today, Highway 101 provides relatively quick access to the urban centers to the south.*” conveys the activity of getting access being done within a short period of time thanks to a shortcut provided by Highway 101, compared to “*The hard drive needs a fast access time -- generally less than nineteen milliseconds -- to transfer audio data.*” which implies the notion of the speed of the activity being conducted when used with computer related terms. In the same way a *quick decision* and a *fast* or *fast decisions* can be interpreted as a decision that comes out very soon. The sentence “*Finally, we know how often you need a quick decision before an opportunity disappears.*” indicates the quality of the action that must be taken without any delay; “*He was a man of few words, quick decision.*” shows that the focus is on the quality of the person. Meanwhile, a *fast decision* or *fast decisions* as in “*Some people pick and choose candidates based on hard fast decisions on a number of issues*”, which, in this case, *fast* is paired with *hard*, and thus may incorporate the sense of the manner of the action that is both difficult and in a hurry.



Collocate	quick	fast	ratio
fix(es)	901	37	24.4
decision(s)	156	11	14.2
cuts	111	10	11.1
turnaround	65	11	5.9
recovery	55	11	5.0
response	183	38	4.8
access	91	21	4.3
break(s)	786	186	4.2
meal	54	13	4.2
getaway	35	9	3.9
rise	35	11	3.2
action	128	52	2.5
cash	49	25	2.0
buck	73	40	1.8
dinner	34	19	1.8
motion	45	47	1.0
learner(s)	45	56	0.8
start	68	125	0.5
pace	37	186	0.2

Table 2: Collocates of both *quick* and *fast* sorted by the ratio of *quick* to *fast*.

Meanwhile in some uses, *quick* and *fast* do not demonstrate significant differences and thus seem perfectly interchangeable in the same context. For example, *a quick action* and *a fast action* as in “His quick action in the gym saved her lives.”, compared to “Doctors said Joey’s training and fast action saved his mother’s life.”; *make a quick buck* or *a fast buck* convey the same meaning, i.e., “make some money quickly, often dishonestly”. Therefore, the uses of the two near synonyms in question may illustrate both similarities and differences in their semantics and these patterns of usage should be taken into consideration in language learning. Besides, the ratio between *quick* and *fast* as shown in Table 2 suggests that *quick* is overall more common than *fast* when used with the same nouns. Only the last three nouns in the lists seem to prefer *fast* to *quick*, and this may pinpoint some particular patterns of usage that are marked and may signal that the speaker is focusing more on the fast manner of action.

Collocates that are found only with either *quick* or *fast* in the top 100 list are shown in Table 3. The data illustrate that *quick* mostly appears with a noun derived from a verb, e.g. answer, calculate, call, drink, etc. *Quick* in this case is used in the sense of quick(1) or quick(3), which indicates the action being carried out in a short time, or responded back in a short time, while *fast*, when used with a noun derived from a verb, is usually used in the sense of fast(2) to indicate the manner of movement rather than a short period of time, e.g. *acceleration*, *attack*, *connection*, *draw*, *ride*, etc. But the use of *fast* with most of the nouns in this group indicates the quality of that noun as defined in the sense fast(1), e.g. *bike*, *boat(s)*, *car(s)*, *company*, *computers*, *internet*, etc. It is used to emphasize the high speed of the action being conducted by that noun in question.

### Collocates

quick	answer(s), assessment, bite, bread(s), breakfast, breath, burst(s), calculation, call, check, comment, drink, exit, follow-up, glance, glimpse, guide, hits, hug, kiss, launch, lesson, lime, look, lunch, movement, nod, note(s), peck, peek, points, prayer, profit(s), question(s), reaction, reference, reflexes, release, reminder, resolution, results, return, review, scan, search, shot(s), shower, sketch(es), smile, solution, spin, squeeze, step(s), stop, strokes, study, succession, survey, temper, thinking, tip(s), tour, trip, turn(s), update, victory, visit, wit
fast	acceleration, attack, ball, bike, boat(s), breeder, car(s), chargers, clip. company, computers, connection, crowd, dance, delivery, draw, drying, eddie, fact(s), fashion, film, flight, flow, food(s), forward, fourier, freddy, friends, friendship, gait, gourmet, greens, grower, growth, hardware, horse(s), internet, lane, lap, machine, mapping, motor, neutrons, pass, pitch, plants, rate, reactor, relief, ride, rule(s), runner, sealift, shutter, song, speakers, speech, speed(s) talker(s), tempo, times, track, train, trot

Table 3: Collocates of quick and fast that found after with one in top 100 list.

### Conclusion

In this paper, we have shown that the use of corpora can provide information not included in a dictionary. *Quick* and *fast* are used in this study to demonstrate how the corpora could be used and analyzed. Only *quick* and *fast* functioning as an adjective are reported here. Nouns that can be modified with both *quick* and *fast* usually focus on different aspects of meanings. *Quick* is used to focus merely on the quality or property of an action while *fast* incorporates the sense of the manner of an action. This also explains why the same noun can be used with both *quick* and *fast*. In some contexts, the meanings signified are different. For example, *a quick learner* is someone who has an ability to learn something very easily, while *a fast learner* is someone who did learn something in a short time. But in some contexts, it does not





matter much whether *quick* or *fast* is used. For example, *a quick action* or *a fast action* is considered an action that is done in a short period of time. However, this study only analyzes both words functioning as an adjective. Further studies on the use of both words functioning as other parts of speech, i.e. adverb, verb, noun, should also be included to provide a thorough understanding of the synonyms. In addition, differences in uses of each synonym based on genres or text types is another factor that could be explored to understand in what contexts which word should be used.

As explored in previous research, learning the synonym word is not only about learning all the senses of that word, but also the contexts in which the word is used. Corpora are a good resource in providing frequencies and patterns of uses for each word. Details on collocation patterns retrieved from the corpora can help learners understand the similarities and differences between each near synonym. Given that very large English corpora like COCA, BNC, etc. are freely available for the public, it is clear why teachers and learners should learn to explore these corpora in order to gain more knowledge of English vocabulary.

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