

## Negative Prefixation and the context

### A corpus-based approach to *un-* adjectives with positive evaluation\*

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#### 1. Introduction

Affixation is a morphological process where a bound morpheme is attached to a free morpheme, which makes an inflectional or derivational expression as a whole. English negative prefix *un-* is one of the few affixes that have attracted the most considerable attention. *Un-* is quite productive, so it can be attached to many adjectives. However, the value of its productivity consists rather in the fact that it can be attached to the past participles of verbs, as in *undecided* or *uneaten*. The prefix also appears together with the suffix *-able*, as in *undecidable* or *uneatable*. Regarding this verb-based *un-*prefixation, almost all the combinations would be possible, some of them might be quite infrequent though. In contrast, the productivity of *un-* is much more limited when the base is a simplex adjective (e.g. *big*, *small*) or a lexically integrated adjective despite its suffix (e.g. *dirty*, *economical*).

One well-known generalization about the constraints on *un-*prefixation is the one related to the evaluative meaning of base adjectives: *un-*, which is negative itself, tends to refuse an adjective with negative evaluation as its base. It is not surprising so much that this generalization has some exceptional cases. *Unafraid*, *unselfish*, and *unpretentious* are the famous examples of a few *un-* adjectives exceptionally established almost as a single lexical item. However, little has been made clear about for what reason and under what condition these exceptions are possible. In order to solve the problem, this study conducts a corpus-based research, paying attention to their surroundings, particularly as to what kind of words they appear with, and suggests that they owe their appearance greatly to the context.

The aim of this paper is to reveal under what condition English negative affixes (e.g. *un-*, *in-*, *non-*) can appropriately be attached to a base which is negative *per se*, which has long been supposed to be unusual since Jespersen (1917). By analyzing the examples of some *un-*adjectives in relation to their contexts, this study argues that they are more likely to appear when it is listed or contrasted with another adjective nearby.

#### 2. Theoretical background

One of the most well-known generalizations about English negative affixes that has survived over many decades is that a negative prefix cannot be attached to positive bases. It originates from Jespersen's observation that "the most adjectives with *un-* or *in-* have depreciatory sense" (1917: 144). Unfortunately, a negatively prefixed adjective is not always negative as a

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whole. For example, we can find many *un*-prefixed adjectives whose value is positive or neutral. Horn (2002) includes *undecidable*, *uneaten* and *unexpired* in the list of neutral ones, and *unbeaten*, *unbigoted*, *unblemished*, *undeterred*, *unblamable*, *unconquerable*, *unimpeachable* in that of positive ones. Considering the fact, Zimmer modifies Jespersen's generalization, maintaining that "[n]egative affixes are not used with adjectival stems that have a "negative value" on evaluative scales such as "good–bad", "desirable–undesirable" (1964: 15). Both Jespersen and Zimmer's generalization are based on evaluative meaning, but are different in that the latter is based on the adjectival stems, while the former is based on the whole derivational forms. This modification allows us to exclude "exceptions" ending with productive suffixes like *–ed*, *–ing*, and *–able*. In *unpronounceable*, for example, what is negated by the prefix *un-* is not the whole following unit *pronounceable*, but the suffix *–able* (Zimmer 1964:38). By analyzing this way, there occurs no conflict whatever verb comes between the affixes or even if the resultant form takes on positive or neutral evaluation.

The remaining problem is concerned with the following set of adjectives provided by Zimmer:

- (1) uncorrupt, undegenerate, unfaulty, unguilty, uninjurious, umalicious, unobnoxious, unselfish, unsordid, untroublesome, unvicious, unvulgar, unbitter, unhostile, unpresumptuous, unpretentious

None of them ends with *–ed*, *–ing* or *–able*. Nevertheless, they still have both *un-* and positive or neutral evaluation. Zimmer (1964) solves the problem by considering them to belong not to grammar, but to lexicon. We cannot be too careful in examining these examples, mainly for two reasons: first, because it would not be reasonable to think that all *un-* prefixed adjectives with negative value are governed by grammatical rules; second, most of the items in (1) appear quite infrequently. Regarding the first reason, some of them are used quite frequently, the examples of which include *unhappy*, *unclear*, and even originally verb-based ones such as *uncomfortable*. Besides, the lexicalized status of some *un-*adjectives can also be confirmed in the fact that some of them have somewhat not transparent meanings.<sup>1</sup> As for the second reason, extremely low frequency of some expressions suggests the possibility that they have not established their lexical status yet and have appeared simply as a realization of the purely

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<sup>1</sup> The lexicalized status of *un-* adjectives has been pointed out in many previous studies. Hamada (2012) examines the asymmetry between *readable* and *unreadable* as to what kind of things each evaluates, stating that the former is likely to describe books, while the latter is used to talk about facial expressions with no emotion. Arimitsu (2015) argues that the meaning of *uncanny* is so complex that it cannot be predicted simply by adding *un-* to the adjectival base *canny*, which is related to intelligence. Arimitsu points out that *uncanny* conveys both the positive and negative evaluation.

productive word-formation rule of *un-* prefixation. Therefore, some of these examples seem to be a little weak as counterexamples for the generalization.

This paper is not trying to decide if the expressions belong to grammar or lexicon, which seems quite difficult to judge. Nor is it trying to find an alternative way to analyze their internal structure. Rather, what would be the focus in the following discussion is the contribution of context to the appearance of *un-* adjectives which exceptionally have positive evaluation. Studies of morphology tend to be developed towards the explanation of internal structures of each item. Jumping over the word boundary and exploring the world spreading there would certainly be helpful to analyze the nature of *un-* prefixed items more in detail.

### 3. Research

Some *un-*adjectives with positive evaluation have been established apparently as a single word. Or others may happen to appear haphazardly from time to time. Why is it possible in spite of the overall tendency for them not to appear? The secret might be hidden in their surroundings. This study conducted a corpus-based analysis in attempt to reveal the nature of *un-*prefixed adjectives whose meaning can be interpreted as positive and their context. The Corpus of Contemporary American English (COCA), was adopted as its database. Mark Davies at Brigham Young University compiled the corpus, and it contains approximately 160 million words of modern American English. It should be noted that verb-based adjectives ending with *-ing*, *-ed* and *-able* were excluded from the object of research this time, because, as mentioned above, negative prefixation with positive evaluation is much less limited when these suffixes are involved. Some may argue that other suffixes like *-y* (e.g. *unfaulty*) and *-ous* (e.g. *uninjurious*) should be excluded as well. It is true that both the adjectival suffixes *-y* and *-ous* are productive to some extent, but there is a significant difference between their range of possible stems and that of more productive suffixes such as *-ing*, *-en* and *-able*. Actually, Allen (1982) attempts to analyze *un-* adjectives ending with *-y* and *-ous* in the same way as Zimmer analyzes those ending with *-ed* or *-able*, but it does not seem to lead to a consistent argument.

First of all, how often each *un-*adjectives with positive evaluation appears in COCA was investigated. It is important to know what kind of positive *un-* adjectives actually appear. As Igarashi (2008) points out, some *un-* adjectives with positive evaluation mentioned in the previous studies come into question regarding their acceptability. They are too infrequent; at least in the synchronic and corpus-based approach, what does not happen even once at the present time cannot be the object of observation. The following table lists the *un-* adjectives which clearly or possibly have positive evaluation in descending order of frequency.

1	unafraid	(564)	12	unbitter	(3)	14	unflirtatious	(1)
2	unpretentious	(535)		unjealous	(3)		unhostile	
3	unselfish	(364)		unmalicious	(3)		unobsessive	
4	unfussy	(84)		untroublesome	(3)		unobnoxious	
5	unostentatious	(19)	13	unguilty	(2)		unquarrelsome	
6	unflashy	(17)		unlazy	(2)		unsordid	
7	undogmatic	(13)		unmaterialistic	(2)		unsteep	
8	uncynical	(8)	14	unresentful	(2)		unstupid	
	uncorrupt			unarrogant	(1)		unsuperficial	
10	unconservative	(6)	unboastful	untimid				
11	unboring	(5)	unevil	unvulgar				

**Table 1: *un-* adjectives with positive evaluation in COCA**

It is not surprising that not an instance of some positive *un-* adjectives in (1), such as *unfaulty* and *uninjurious*, was found in COCA. In addition, most of the barely found ones appear only once or twice. On the other hand, there are a few that appear quite frequently; *unafraid* appears the most frequently, followed by *unpretentious*, *unselfish* and *unfussy*. This study mainly surveyed the top-four frequent adjectives as to what kind of contextual characteristics contributes to their frequent appearance.

### 3.1. *Unfussy*

It requires little time to notice that *unfussy* often appears together with one or more adjectives nearby. Most typically, they are coordinated with each other, with *and* or a comma combining them. Surprisingly enough, as much as 78% of the whole examples appear under any of the four linguistic environments listed below (a, b, c, d):

- a. With one or more adjectives coordinated
  - (2) (...) delivers well-balanced, **unfussy** and cleanly directed productions.
  - (3) The city was snug, simple, **unfussy**, including many bars.
- b. Two or more noun phrases including adjectives coordinated
  - (4) With her rail-thin figure clad in jeans and her **unfussy** hair hidden under the hood of a rain-beaded slicker, (...)
  - (5) Louis-Dreyfus's unstoppable body, sophisticated wardrobe choices, and **unfussy** hair, which she has tamed from (...)

Note that this pattern is not found in *unafraid*, probably due to the fact that *unafraid* as well as its bare counterpart can be used only predicatively, thus not attributively.

- c. An adjective and a noun phrase coordinated
  - (6) For an archivist, Marchi is wonderfully **unfussy**, a man of eclectic, non-elitist tastes, enthusiasm and energy, (...)
- d. As a part of the complement of *with* indirectly preceded/followed by another adjective
  - (7) One of Stephen Sondheim's most moving ballads, delivered with **unfussy** finesse.
  - (8) Five guest rooms are furnished in an **unfussy** country style with vintage headboards, crisp white bed linens, and colorful hand-woven rugs.

It is true that (7) and (8) are not the examples of strict coordination, but *unfussy* and *moving* in (7) and *crisp*, *white* and *colorful* in (8) seem to have collaborative effect to convey the positivity in the entire sequence.

Despite the structural variety, examples (2)-(8) are all common in that *unfussy* is used together with other adjectives or adjective-included phrases. More importantly, the co-appearing adjectives are limited to evaluatively positive ones: *well-balanced*, *snug*, *simple*, and so on. That may be natural, because they are mediated with each other by *and* or a comma. To put it the other way around, however, it can also be said that *unfussy* is unlikely to appear in contrast to the negative evaluation. The entire text where *unfussy* appears is often filled with a kind of cozy atmosphere, and there is very little room for gloominess. It is not to say that the *un-* adjective does not come close to the conjunction *but* or *yet*. In fact, they sometimes come right next to *unfussy*:

- (9) a. Appetizers are sophisticated but **unfussy**.
- b. Aretha Franklin is a dignified but decidedly **unfussy** presence (...)
- c. **Unfussy** and self-assured, yet with a twinkle in her eye -- much like the restaurant itself (...)
- d. Meals are **unfussy** yet satisfying.

Obviously, *unfussy* in (9 a-d) is not used to convey negative evaluation. Each instance is placed before/after *but* or *yet* to form a contrast with another kind of “positive evaluation”. *Unfussy* is a kind of “modest” adjective. Something unfussy is good just because it does not

have any noticeable bad traits; to say it more simply, just because it is not fussy. It does not always have to have a conceivable good trait. Therefore, it may be a little too weak to praise something strongly enough to impress readers or listeners all by itself.

It seems that *unfussy* has somewhat an opaque meaning that cannot be predicted simply from its constituents. What *unfussy* describes is in most cases non-human such as food, hairstyle, and so on.

- (10) a. The Bijou Cafe's (···) lovely dining rooms, careful service and **unfussy** cuisine (···) make it a standout.
- b. Looped, bumped ponytails look **unfussy yet refined**.

On the other hand, its bare counterpart *fussy* can describe people, most typically followed by *about*:

- (11) a. He's **fussy** about her bare feet on their coffee table?
- b. I mean, you know, if you're that **fussy** about your lover's bare feet, there's no way you're going to survive.

The difference above between *fussy* and *unfussy* clearly suggests that the latter is not mere a negative version of the former.

### 3.2. *Unselfish*

*Unselfish* is about four times more frequent than *unfussy*. The proportion of its appearance in coordination with one or more adjectives is a little lower than that of *unfussy* (35%). This might be related to the fact that the former can be used in a wider context than the latter. Nevertheless, there seems to be a preferable context *unselfish* is likely to appear. It is often used in the context of sports. This becomes clearer by comparing what kind of nouns *selfish* and *unselfish* are used to describe: despite the fact that as a whole *selfish* appears much more frequently than its prefixed counterpart, the number of *selfish* used to describe *play, player(s)* is smaller than that of *unselfish*.

- (12) a. It just takes very **smart and unselfish** players.
- b. You need **skilled** players who are **unselfish** and will give the ball up.
- c. Get the players to play **unselfish** baseball.

This may possibly be because of the specific meaning that would not emerge until the bare adjective is prefixed by *un-*, or may also be because sports players are usually more likely to be praised as “unselfish” than to be accused of being “selfish.” In any case, it would be true

that *unselfish* behaves in a different way from the negative counterpart of *selfish* whose context is highly general.

Another difference between *unselfish* and *unfussy* is that that the former can be placed in the contrast with its bare counterpart *selfish*, which does not happen to *fussy* and *unfussy*:

- (13) a. I had **selfish as well as unselfish** motivations for that,  
 b. (···) because it separates **selfish and unselfish** behavior.

The instances of *unselfish* in (13) are apparently compositional, at least compared with the ones in (12), motivated by *selfish* in the preceding sequence. Therefore, while the meaning of *unselfish* can be specific in some instances, it can sometime be transparent in others. Again, it is obvious that deciding *unselfish* itself is attributed to grammar or lexicon is not so easy a task.

### 3.3. *unpretentious*

*Unpretentious* occurs more frequently than *unselfish*. From this fact some might intuitively assume that it is more likely to appear with no other adjective nearby, but this is not the case. No less than 56 percent of its instances appear together with other adjectives.

- (14) The atmosphere is so **unpretentious and relaxing** that time seems to just melt away.

As expected, *unpretentious* occurs together with positive adjectives. More specifically, its behavior is alike to *unfussy*: They both appear with another adjective far more frequently than *unselfish* and *unafraid*. This may be probably because of their semantic closeness. Both convey a kind of modesty, which let them have synonymous adjectives on their side:

- (15) a. It was **unpretentious, unassuming**.  
 b. (···) but the place is still **low-key and unpretentious**.

Again similarly to the case of *unfussy*, the “reversing” connectors *but* or *yet* often appear before or after *unpretentious* which is contrasted with another adjective with positive but not modest evaluation:

- (16) a. Meal Guest Ranch and Resort. Set on a 10,000-acre working cattle ranch, the **unpretentious yet luxurious** Alisal Guest Ranch offers 73 cottages and a range of activities, (···)

- b. It is a homey and **unpretentious** but aesthetically exacting environment.

One difference between the two ‘plain’ *un-* adjectives is that *unpretentious* is significantly much more likely to describe a human being than *unfussy*, regardless of the fact that the bare counterparts of both can equally do that:

- (17) a. Norman was a gentle giant, he was **unpretentious**, sharing, imaginative, kind, and a loyal, very loyal, friend and business partner for over 40 years.
- b. I mean, he's a very, very **unpretentious** man, but he's also a very aggressive man.

This difference might suggest that they have different levels of lexical statuses. *Unfussy*, which does not behave the way *fussy* does, may have opaquer meanings than *unpretentious* which reserves a compositional meaning that the productive *un-* prefixation would predict. The example below might support this; *unpretentious* here is contrasted with the preceding noun *pretension*, which clearly has negative evaluation here:

- (18) This guy who, wasn't, you know, wasn't all full of pretension. He was completely unpretentious.

### 3.4. *unafraid*

As mentioned above, *unafraid* is the most frequent *un-* adjective with a negative base. Admittedly, it is necessary to be careful when examining this result, because 20% of the whole instances belong to the slogan of Fox News, “fair, balanced, and unafraid”. Even thinking about it, however, the high frequency of the *un-*adjective is still remarkable enough. 40 % of the instances is used with one or more adjectives adjacent or nearby, though half of them is contributed to by the slogan above. More than half the examples are used without a support of other adjectives close to them.

Just like *unfussy*, *unselfish* and *unpretentious*, there is a variety in the ways *unafraid* and other adjectives “appear together”. Some of them are listed side by side as in (19a), others appear a little in a distance, occasionally over the boundary of sentences:

- (19) a. (···) because using his skill to keep her **calm and unafraid** could not continue indefinitely.
- b. (···) You are **so magnificently American. So open, so unafraid.**

*Unafraid* is unlike others in that it can be used productively with a *to*- infinitive or *of*-prepositional phrase following it as in (20), which might contribute to its high frequency overall.

- (20) a. (···) was classic Sanders: **firm in his beliefs, fiery in his rhetoric, and unafraid of confrontation.**
- b. (···) a band that became known for **ferocious melodies and piercing vocals.** Their music was **unafraid** to tackle questions of politics and social issues, (···)

Note that *unafraid* is more likely to appear at the end of the sequence, but when it is coordinated with other *un*-prefixed expressions, it often appears at the beginning.

- (21) a. He seemed amazingly **unafraid, unfazed** by the heaving deck beneath them or the towering waves above.
- b. So that if a particular candidate is **unafraid or unabashed**, willing to talk about his faith in the public arena, (···)
- c. (···) with evangelicals or anybody else going with the guy who is **unafraid, unabashed,** (···)

It might admit some further discussion whether *unafraid* per se is evaluatively positive. While its bare counterpart *afraid* seems somewhat evaluatively negative, it is occasionally coordinated with other negative adjectives. This means that there is a possibility that these instances of *unafraid* are used negatively, or at least neutrally.

- (22) a. (···) her small quick hands, her crooked teeth -- but **enigmatic, unafraid** and it seemed unaware of her limbs and their languor.
- b. (···) She was **so abject, but so cheeky -- unafraid** of pain. Not sentimental or dippy like an American or French lovesong (···)
- c. (···) ready to drink the music until I'd become **intoxicated and unafraid.**

#### 4. Discussion

As observed in the previous section, *unfussy*, *unselfish*, *unpretentious* and *unafraid* share many similar traits, but differ from each other in various respects. It may not be easy to explain all of them with a single principle, but at least it could be said that as far as some *un*-

adjectives are concerned, whether there are synonymous or antonymous adjectives nearby is a key to their appearance.

This study has focused only on the “relatively” frequent *un-* adjectives with a negative base. However, “many a little makes a mickle”. The least frequent examples, if they have something in common, can be significant as a whole. These less frequent instantiations would be helpful to grasp the whole picture of what the affix is likely to be. Actually, there are many examples where an *un-*adjective at a lower rank appears together with its near-synonyms:

- (23)
- a. (···) it is a **sturdy, uncynical** contraption (···)
  - b. (···) **unflirtatious but voluble** about literature and philosophy (···)
  - c. Maxx, whom he found utterly **unsentimental, utterly unjealous, and utterly without shame of any kind.**
  - d. she was an exceptional woman, **peacefully labouring away and quite unresentful of the fact** that

The examples in (23) shows that co-occurrence with other positive adjectives is not just the trait of a handful of frequent *un-* adjectives. Of course, there would be gradience of the likelihood that they are coordinated with their synonymous expressions. Some *un-*adjectives seem to be particularly highly compatible with the coordination pattern, overwhelming even *unfussy* or *unpretentious*. For example, COCA includes 13 examples of *undogmatic*, most of which (10 examples) are used in coordination with (an)other adjectives with positive value.

- (24)
- a. He describes the work as **undogmatic, open-ended and experimental.**
  - b. When people their irrational beliefs to **undogmatic flexible preferences,** they become less disturbed.
  - c. Gregory offers a **cautious, undogmatic support** of the Origenist position.
  - e. (···) and it occurred to Pandora that she was an exceptional woman, **peacefully labouring away and quite unresentful of the fact** that

Another question to be answered is if this analysis can be extended to the discussion of negative affix in general. *Un-* is probably the most productive negative prefix, but it is also true that there are some competitors that are worth attention, such as *non-*, *im-/in-*, and *dis-*. Their existence can sometimes prevent *un-* prefixation from being grammatical, or at least from being natural. For example, the adjective *possible* combines with not *un-* but *im-*, thus *impossible*, not *\*unpossible*. This phenomena is called (lexical) blocking, by which one possible realization of productive word-formation cannot appear due to the existence of a

more lexicalized item. One good example is *non-dogmatic* (*nondogmatic*), the strong competitor of *undogmatic*. It outnumbers its *un-* counterpart in frequency in COCA (25 examples). It should also be noted 68 % of them are connected to other adjectives.

- (25) a. (···) the introduction of **nondogmatic and contextual** approaches. Doran's recent work expands them to include **nondogmatic, nondoctrinal** meaning.

Therefore, *non-dogmatic* and *undogmatic* behave the same way. What is implied here is that it is not just the issue of *un-*, and it is necessary to conduct a more comprehensive research involving other negative affixes.

## 5. Conclusion

This paper has paid special attention to *un-*adjectives with positive evaluation and their context. To conclude, they often appear together with its synonymous adjectives, typically in the form of coordination. It should be born in mind that it is not the case that they cannot appear without any other adjectives. In fact, some positive *un-* adjectives like *unafraid* or *unselfish* appear “alone” in more than half of the whole examples. Even the most “dependent” ones such as *unfussy*, *unpretentious* and *undogmatic* also have no difficulty appearing as a single predicate. To accurately delineate the characteristics specific to these “irregular but frequent” *un-* adjectives, it will be necessary to:

- a) quantitatively and qualitatively compare them both with much more frequent *un-* adjectives with negative evaluation, such as *unclear*, *unhappy*, and *unlucky*
- b) observe the behaviors of less frequent ones such as *unarrogant* or *unhostile* more in detail
- c) compare and contrast them with their near-synonyms with other suffixes such as *in-* or *dis-*.

## Bibliography

- Allen, M.R. (1978). *Morphological Investigations*. UCon PhD.
- Arimitsu, N. (2011). *Nichi-Eigo no taihi hyogen to hitei no mekanizumu: Ninchi-gengogaku to goyoron no setten* [Contrastive expressions and mechanism of negation in Japanese and English: The interface of Cognitive Linguistics and pragmatics]. Tokyo: Kaitakusha.
- Arimitsu, N. (2016). Expressions with the English Prefix *un-* that Are Not Antonyms: A Focus on the Asymmetry of *Canny* and *Uncanny*. *The Bulletin of the Institute of Human Sciences, Toyo University*, 18, 17-40.
- Bauer, L. (1983). *English word-formation*. Cambridge: Cambridge University Press.
- Bauer, L. (2001). *Morphological productivity*. Cambridge: Cambridge University Press.

- Hamada, T. (2013). Evaluative meaning of negative expression: Asymmetry between *readable* and *unreadable*. *Token 2*, 169-181.
- Horn, L. (2002). Uncovering the Un-word : A study in Lexical Pragmatics. *Sophia Linguistica*, 48, 1-64.
- Igarashi, K. (2008). Observation of *un-* attached to adjectives. 'Keiyo-shi ni tsuita un- wo meguru kosatsu.' *Ryukoku Kiyo*, 29(2), 67-79.
- Jespersen, O. (1917). *Negation in English and Other Languages*. Reprinted in *Selected Writing of Otto Jespersen*, 1969. Tokyo: Senjo.
- Sherman, M. (1973). Bound to be easier? : The negative prefix and sentence comprehension. *Journal of Learning and Verbal Behavior*, 12, 76-84.
- Zimmer, K. E. (1964). *Affixal negation in English and other languages*. *Word* 20. Supplement Monograph 5. New York: Clowes.

### Sources

*Corpus of Contemporary American English (COCA)*. Compiled by Mark Davies (Brigham Young University). <http://corpus.byu.edu/coca/>.