A Corpus-based Study of English Adjective Formation Using the Suffix –ish การศึกษาการสร้างคำคุณศัพท์ภาษาอังกฤษด้วยปัจจัย -ish โดยอาศัยคลังข้อมูลภาษา



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#### Abstract

Affix productivity allows native as well as non-native speakers of English to create new words that sometimes have not yet coined in standard dictionaries. Among the top suffixes that contribute to productivity in English is *-ish*. This research article was aimed at exploring how adjectives were formed from the suffix *-ish* and what meaning they conveyed using data from the Corpus of Contemporary American English (COCA). It was found that there were five classes of words attached by this suffix: common noun, proper noun, adjective, numeral, and verb. Adjectives suffixed with *-ish* were further categorized into three groups according to their meanings: 'somewhat', 'have a quality of', and 'approximately'. Pedagogical implications are also provided for teachers who wish to incorporate the suffix *-ish* into their lessons.

Keywords: Corpus-based, Adjective Formation, Suffix, -ish

# บทคัดย่อ

ผลิตภาพของอุปสรรคปัจจัย (affix productivity) ทำให้ผู้พูดภาษาอังกฤษทั้งที่เป็นเจ้าของภาษา และที่ไม่ใช่เจ้าของภาษาสามารถสร้างคำที่บางครั้งยังไม่ได้รับการบัญญัติในพจนานุกรมมาตรฐาน ปัจจัย -*lsh* เป็นคำเติมท้ายคำหนึ่งที่ส่งผลต่อผลิตภาพของอุปสรรคปัจจัยในภาษาอังกฤษมากที่สุด บทความวิจัยนี้มุ่งศึกษา คำคุณศัพท์ที่เกิดจากการเติมปัจจัย -*ish* และความหมายที่คำเหล่านี้สื่อออกมาโดยสกัดข้อมูลจากคลังข้อมูล ภาษา Corpus of Contemporary American English (COCA) ผลการวิจัยพบว่า ปัจจัย -*ish* สามารถ ต่อท้ายคำได้ห้าชนิด ได้แก่ สามานยนาม วิสามานยนาม คุณศัพท์ ตัวเลข และกริยา ผลการวิจัยยังพบว่า คำคุณศัพท์ที่ลงท้ายด้วยปัจจัย -*ish* อาจแบ่งออกได้สามประเภท โดยแบ่งตามความหมาย ได้แก่ 'ค่อนข้าง' 'มีคุณสมบัติ' และ 'โดยประมาณ' งานวิจัยนี้ยังเสนอวิธีการประยุกต์ใช้ปัจจัย -*ish* ในบทเรียนภาษาอังกฤษ อันจะเป็นประโยชน์ต่อครูผู้สอน

## คำสำคัญ: คลังข้อมูลภาษา การสร้างคุณศัพท์ ปัจจัย –ish

## Introduction

Affix productivity – the use of affixation including prefixes and suffixes to create new words – is a common process among inflectional languages like English. It allows native speakers to create new words that sometimes have yet not been coined in standard dictionaries. Although the interlocutor has not heard of such a nonce word before, it is acceptable because he or she can relate the meaning of the affix to that of the root word. Let's suppose, for example, two best friends, Kate and Kathie, are going to prom and discussing what to wear. Kate says she wants to look *Kim Kardashian-ish*. Kathie, though never before having heard of that adjective, understands her friend right away: she will flaunt her curves in black dress, wear lots of nude lip gloss, and use dark, smokey mascara. This is

because she knows what the celebrity looks like and the meaning the suffix *-ish* is associated with. In fact, *-ish* is among the top suffixes that contribute to productivity in English as pointed out by Nishimoto [1] who analyzed potentially new words used by native speakers of English from the British National Corpus (BNC).

Corpus data allow researchers to explore affix productivity and find words that are not recorded in dictionaries as they are formed by a very productive word formation rule. To date, there are a plethora of mega text corpora in English that contain billions of words used in different varieties and registers of spoken and written language. One of the largest corpora available is the Corpus of Contemporary American English (COCA), which contains over 600 million words. At the same time, it is also free to use [2]. A number of corpus-based studies have investigated linguistic phenomena including affix productivity drawing data from the COCA, which seems to enjoy more popularity than other corpora as it is considered 'monitor' or updated all the time [3]. Corpora like the BNC are considered 'static' as they have never been updated since they were created.

The purpose of the current study is two-fold. First, it aims to explore how adjectives are formed from the suffix *-ish* and what meaning they convey using data from the COCA. It is believed that monitor corpora like the COCA, as opposed to static corpora like the BNC, would allow the researcher to search the continually expanding corpus and see how language is changing with respect to affix productivity. Second, it attempts to offer pedagogical implications for teachers or language practitioners who wish to incorporate the suffix *-ish* into their lessons. Memorizing new words with the help of affixes is indeed a much easier and more efficient way of learning the English language. For example, Kim [4] investigated the effect of vocabulary acquisition with affixation among L2 English learners and found that basic knowledge of commonly used affixes helped students learn English vocabulary much faster and avoid the need to repeatedly look up words. Thus, not only does the current study investigate the use of the suffix *-ish* from the COCA, but it also shares ideas on how to design lessons targeting the suffix *-ish* in English.

#### **Related Concepts**

#### 1. Affixation

An affix is a bound morpheme that is attached to a root to create a new word. Affixation is thus a morphological process whereby bound morphemes are attached to roots to mark changes in meaning (e.g. im- + perfect = imperfect) or part of speech (assist + -ance = assistance). In English, there are two types of affixes: prefixes and suffixes [5]. Prefixes are bound morphemes that are attached to the left of roots (e.g. contra-, de-, multi-, sub-, xeno-, etc.), whereas suffixes are bound morphemes that are attached to the right of roots (e.g. -able, *-ish*, -fold, -phile, -trix, etc.). Compared to other inflectional languages, English has a relatively large number of affixes and this might explain why it is the richest in vocabulary of all the world's languages [2]. According to Laws and Ryder [6] who investigated a corpus called MorphoQuantics that contains almost 18,000 complex word types extracted from the spoken component of the BNC, for instance, there are as many as 554 prefixes and 281 suffixes in English.

#### 2. Productivity

Productivity refers to the process in which new words are created through affixation [7]. Not all affixes in English have the property of coining new complex words. In fact, a few may not be productive at all. For example, the nominal suffix -th as in the word 'length' can only attach to a limited set of specified words, but cannot attach to any other words beyond that set. By contrast, suffixes like -ness can turn many adjectives into their noun counterparts, such as 'Trump' into 'Trumpness'. Nishimoto [1] analyzed potentially new words used by native speakers of English from the BNC and found that there is a handful of suffixes that are highly morphologically productive. The top five ones are -ness, *-ish*, -er, -ly, and -ize, respectively.

#### 3. The Suffix -Ish

According to Quirk, Greenbaum, Leech, and Svartvik [8], the suffix -ish is used with (1) adjective bases to convey the meaning of 'somewhat' as in *coldish*, *brownish*; (2) with people's ages to convey the meaning of 'approximately' as in *sixtyish*; (3) with hours of the day to convey the meaning of 'somewhere near' as in 'She will arrive at about tenish'. Online Oxford English Dictionary [9] provides an even more thorough explanation as to when the suffix -ish is used and what meaning it conveys. Originally, it is added to adjectives of colors with the sense of 'somewhat' such as brownish, reddish, and the like. Later on, it is possible, in colloquial use, with nearly all monosyllabic adjectives such as brightish, broadish, coldish, darkish, dimmish, dryish, dullish, and many more. The suffix -ish can also be denominal and of a slighting or depreciatory nature as in Mark Twainish, Queen Annish, merry-go-roundish, and the like. More recently, Online Oxford English Dictionary [9] also explains that -ish can be used as an adverb to qualify a previous statement or description, especially as a conversational rejoinder – almost, in a way, partially, vaguely – as in "You must try to remember that some people are normal. Ish." Similarly, online dictionaries like Dictionary.com [10], Lexico [11], and Macmillan Dictionary [12] indicate that *-ish* can also function as an adverb. Other online dictionaries including Collins English Dictionary [13] treat -ish in this respect as a sentence substitution, which is used to express reservation or gualified assent as in "Things are looking up. Ish".

### Objectives of the Study

It may not be an exaggeration to say that adjective formation using the suffix *-ish* in English is exemplar of how people come up with creative ways of making language choices through affixation. To the best of the researcher's knowledge, there has been no study investigating adjective formation using the suffix *-ish*. It is thus interesting to observe this language phenomenon from a large data source like the COCA. This study has two objectives as follows:

1. to explore how adjectives are formed from the suffix *-ish* and what meaning they convey using data from the COCA

2. to offer pedagogical implications for teachers or language practitioners who wish to incorporate the suffix *-ish* into their lessons

## Methodology

#### 1. Research Instrument

Data were drawn from the Corpus of Contemporary American English (COCA) that contains more than 600 million words (1990 - 2019). The corpus was created by Mark Davies, Professor of Corpus Linguistics at Brigham Young University. The texts come from five genres: spoken, fiction, popular magazines, newspapers, and academic journals. The COCA is also considered a monitor corpus, which means it has been updated frequently.

### 2. Data Collection and Analysis

The procedure for collecting and analyzing data was as follows:

1) Extract all the words that end with the suffix -ish from the COCA

2) Eliminate the undesired words (i.e. words that are not derived from the suffix  $-ish^2$ )

3) Analyze the top 10 percent of the unique forms that represent all the words that end with the suffix -ish

4) Analyze the etymology of the selected words and put them into different groups according to their root words' part of speech

5) Analyze the meaning the selected words convey and put them into different meaning categories.

### **Results and Discussion**

### 1. Adjective formation types using the suffix -ish

Out of 838,242 words ending with the suffix *-ish*, there are a total of 4,193 unique forms. The top 10 percent of the unique forms (420 words) were scrutinized. Out of these 420 words, there were 149 adjectives that are derived from the suffix *-ish*. Regarding root

<sup>&</sup>lt;sup>2</sup> For example, lavish is derived from Middle French lavasse (n.), which means "torrent of rain, deluge" [14].

words of the suffix *-ish*, there are six classes of words that are attached by this suffix as shown in Table 1 below:

Table 1 Adjective formation types	using the suffix -ish in	the first 420 unique forms in the
COCA		

Formation	Common n.	Proper n.	Adjective	Numeral	Verb
types	+ -ish	+ -ish	+ -ish	+ -ish	+ -ish
Number of unique forms	71	39	28	5	6
Examples	girlish, wonkish	Netherlandish, Pollyannaish	purplish, sweetish	fortyish, fiftyish	ticklish, peckish

It can be seen that common nouns are most frequently attached by the suffix *-ish*, followed by proper nouns, adjectives, numerals, and verbs, respectively. In the proper noun category, the majority of words refer to nationalities or people of a particular geographical or ethnic group, such as *Danish*, *Amish*, *Finnish*, *Netherlandish*<sup>3</sup>, and *Rhienish*. As for the adjective category, the top ten words with the highest frequency are mostly related to colors, such as *reddish*, *bluish*, *greenish*, and *yellowish*. All the 149 adjectives with the suffix *-ish* can be found in Appendix A.

It is worth noting that all the words with a high frequency have been already recorded in standard dictionaries, while many words with a low frequency have not (*English*, *British*, *Jewish*, *foolish*, *selfish*, and *sluggish* vs. *Pollyannaish*, *blondish*, *dickish*, *trollish*, and *twentyish*). For example, while words occurring more than 10,000 times like *foolish* and *selfish* have been coined in all standard English dictionaries, words occurring 60 times like *trollish*, formed from the Internet slang 'troll', which refers to a person who posted comments intended to stir up controversy, have not. This is in line with Plag's [15] observation who drew on data from the BNC to explore affix productivity in English and found that the suffix *-ish* is suitable for the coinage of new words since this suffix produced more hapaxes than other suffixes like *-ness* and *-ion*.

Although this study focuses on adjectives with the suffix *-ish*, the use of *-ish* as an adverb is worth a discussion. As mentioned in (2.3), *-ish* can also be used as an adverb, rather than a bound morpheme. The first instance of this usage, according to Online Oxford English Dictionary [9], is in 1986. As of 2019, this suffix has been used 606 times as an adverb. For example, "She is one of my close friends and business partners and she knows her, *ish*." The use of *-ish* in this context may be replaced by an adverbial phrase like 'pretty well'.

<sup>&</sup>lt;sup>3</sup> Netherlandish is not an adjective for Dutch people. Rather, it refers to something that is quite representative of a Dutch behavior or architecture, for example.

Another example is "Yes sirs and madams, I'm done with it, I think. *Ish*. It's just getting boring." This exemplifies the use of *-ish* as adverb to qualify the previous statement, showing the speaker's feeling of uncertainty. The use of *-ish* as an adverb constitutes another piece of evidence that language changes rapidly; once a bound morpheme, now it is a free morpheme functioning as an adverb.

#### 2. Meanings conveyed by the suffix -ish

All the 149 adjectives with the suffix *-ish* can be categorized into three groups according to their meanings as show in Table 2 below:

Category	1	2	3
Meaning	somewhat	Have a quality of	approximately
Example	bluish, reddish,	Sino-British, Pollyannaish,	40-ish, 30-ish, 20-ish
	newish, longish	owlish, puckish	

Table 2 Meanings conveyed by adjectives ending with -ish

Category One represents adjectives with the suffix *-ish* that conveys the meaning of somewhat, such as *bluish*, *whitish*, *blondish*, *newish*, *oldish*, *shortish*, *darkish*, and *longish*. Some concordance lines from the COCA are shown below:

(1) I am a doctor myself in a *smallish* town in the Midwest. I'm in a specialty where we do not do ...

(2) I now had a tall, half-and-half, thin, *darkish*, handsome dude. There were many men in the Palm Beach area answering ...

(3) There was no visible family resemblance between us – she was blonde and *shortish* whereas I was brunette and *tallish*; her hair was straight, mine was wavy ...

In (1), the town is described as *smallish* in terms of its size; in (2), the man is described as *darkish* in terms of his skin color; in (3), the speaker describes herself as *tallish* in terms of height, whereas she describes her sister as *shortish*.

As for Category Two, it represents adjectives with the suffix *-ish* that conveys the meaning of 'have a quality of', such as *Netherlandish*, *Sino-British*, *Pollyannaish*, *owlish*, and *whorish*. Some concordance lines from the COCA are shown below:

(4) One week before Mr. Friedman published his *Pollyannaish* view of Iraq, fifty-one people died in a Shiite neighborhood in Baghdad when explosives ...

(5) She was too unaware of it to hide it. She wore *owlish*, round-lensed glasses that mocked the shape of her face. Her clothes ...

(6) His stepmother soon called my parents and demanded that they stop letting their *whorish* daughter out of the house ...

In (4), Mr. Friedman's view is described as *Pollyannaish*, which means unrealistically optimistic. This adjective is derived from 'Pollyanna', a young girl in Eleanor H. Porter's 1913 children's book, who tries to find something positive in every situation. In (5), the glasses of a woman are described as *owlish*, which means they come with a big, round frame like owls' eyes. In (6), the daughter is described as *whorish*, probably in terms of her escapades with the stepmother's stepson, too.

It is worth noting that some words may have a pejorative meaning even though their root words have a neutral meaning, such as *childish* and *womanish*. Some concordance lines from the COCA are shown below:

(7) Our children are simply immature and *childish*. That's why children need love and compassion, not harshness and guilt.

(8) If women would just stop being alluring, stop having urges, stop all their *womanish* behavior outside of their roles as wives, mothers, cooks, housekeepers, and ...

In (7), *childish* does not simply mean having the qualities of a child. Rather, it implies the negative attributes of silliness and annoying habits. Similarly, in (8), *womanish* does not mean having the qualities of women. Rather, it carries the negative connotations of being audacious, alluring, and given to urges. This is in line with Plag's [7] observation that the suffix *-ish* can also impose a negative meaning on various adjectives.

Some words have a figurative meaning associated with the word they are derived from, such as *dovish* and *hawkish*. In politics, the dove symbolizes people who prefer peace, while the hawk symbolizes people who prefer armed conflict. A concordance line from the COCA associated with these two adjectives is shown below:

(9) The statement overall was very *dovish* even though it was expected that it could be *hawkish*, but unquestionably ...

In (9), the statement is described as *dovish* as it most likely called for peace instead of military intervention, which was unexpected.

Finally, Category Three represents adjectives with the suffix *-ish* that conveys the meaning of 'approximately'. This group includes numerals that are used with people's ages, such as *30-ish* and *20-ish* or hours of the day, such as *three-ish* and *four o'clock-ish*. Some concordance lines from the COCA are shown below:

(10) The classroom instructor was Mr. White. He was a lean black man, *fortyish*, who walked with a limp. One leg wouldn't bend all the way ...

(11) Even though it was early evening (*5 o'clockish*) the bar and kitchen staff could not have been more helpful ...

In (10), the speaker was not sure how old Mr. White was, so he described him as

*fortyish*, which means he could have been forty something. In (11), the speaker was not sure what time it was; all he knew it was early evening, so he described the time as *5 o'clock-ish*.

To sum up, the suffix *-ish* can convey at least three types of meaning according to the corpus data drawn from the COCA in this study. The suffix can convey the concept of 'somewhat' as in *bluish* and *tallish*, represent a quality of X as in *Pollyannaish* and *Netherlandish*, and give the sense of approximation as in *fortyish* and *5 o'clock-ish*. Moreover, some adjectives might carry a negative connotation as in *childish* and *womanish* or have a figurative meaning associated with their base words, such as *dovish* and *hawkish*.

#### Pedagogical Implications

There is no doubt that *-ish* is one of the most productive suffixes in the English language as it can create a number of new words not coined in standard dictionaries, yet commonly used among native speakers. Teachers can incorporate the suffix *-ish* into their lessons in various ways, some of which are suggested as follows.

First, teachers can teach the use of the suffix *-ish* that conveys a sense of approximation when talking about how to round off numbers. While it is true that the word 'approximately' is preferred in the formal context, teachers can introduce the suffix *-ish* along with some other words like 'about', 'around', or 'roughly', which are more common in spoken, colloquial language. This gives students a wider word choice and also helps them understand what it means when they hear native speakers attach the suffix *-ish* to a number.

Second, teachers can teach students how to use the suffix *-ish* to talk about a personality of someone without using repetitive words like X looks like A. Instead, students can say X looks *A-ish*, which is common in spoken language. Teachers may have an activity that encourages the use of this suffix to convey a sense of likeness. For example, students may work in pairs and take turns describing each other's personality and teachers may provide them with Hollywood icons as prompts, such as *Brad Pitt-ish*, *James Dean-ish*, *Enrique Iglesias-ish*, and so on. Not only will this activity be fun, but it will create a greater word choice in learners' mental lexicon, which can help them better use and understand English.

Third, the suffix *-ish* can function similarly to a downtoner adverb. That is, it decreases the quality or the degree of something. This is evident in the case of color terms (e.g. *reddish* and *blondish*), words that describe sizes (e.g. *longish* and *shortish*), or conditions (e.g. *newish* and *oldish*). Teachers may present students with some color pictures that can elicit adjectives suffixed with *-ish*, such as a bear that is neither yellow or brown, but something in between, so students can describe it as *yellowish* or *brownish*.

Fourth, teachers can relate classic literature to some adjectives suffixed with *-ish*, such as *puckish* or *Pollyannaish*. This is a fun way to teach English suffixes and an interesting way to attract student's attention. For example, Puck is a character in William Shakespeare's A Midsummer Night's Dream and this fairy is mischievous, so this is why those who are described as *puckish* often behave in a way that shows they like to have fun and make jokes with other people. Nothing is more amusing and enjoyable than learning this suffix through literature.

Finally, the suffix *-ish* can also show a proximal social distance between the speaker and the interlocutor [16]. Pragmatics and metalinguistic knowledge are also a key factor to effective communication. This corresponds to the use of the suffix *-ish* as an adverb. When the speaker is not sure about what he or she just uttered, he or she may end his or her utterance with *lsh*. Teachers thus can point out this special function to students so that they can be equipped with more metalinguistic knowledge when communicating with native speakers. Some engaging activities to teach the suffix *-ish* are detailed in Table 3 below.

Activity	Goal	Description
1. "Where are you	Practice vocabulary for	T makes two information-gap worksheets.
from?"	countries and nationalities	There are two columns on each worksheet;
		the right one contains countries and the
		left one contains the corresponding
		nationalities, which end with common
		suffixes like -ian, -ean, -an, -ese, and -ish.
		One worksheet contains pieces of
		information missing in the other worksheet.
		T asks Ss to work in pairs and they take
		turns asking questions to fill out all the
		blanks. For example, Student A asks
		Student B "How do you call a person
		from Denmark?" and the correct answer
		is 'Danish'.

Table 3 Suggested activities to teach the suffix -ish

Activity	Goal	Description
2. "Let's meet up	Practice telling the time in	T explains how to tell the time in both
at 10 o' clock-ish	English and using words like	British and American English. T moves on
tomorrow!"	'around' and 'about' as well	to talk about approximations using words
	as the suffix <i>-ish</i> to make the	like 'about' and 'around' and points out
	time sound deliberately	that the former is preferred in British
	vague and approximate	English. T also explains that the suffix -ish
		can also be used when talking about
		approximate time. T then asks Ss to pair
		up and role-play a situation where one
		person tries to make an appointment and
		when to do what activity with the other
		on the following day. T emphasizes that
		Ss should also refer to both precise and
		approximate time when role-playing.
3. "Guess who?"	Practice describing people's	T provides Ss with a list of adjectives for
	physical appearances using	describing people's physical appearances.
	descriptive adjectives along	T shows Ss a magazine cover depicting
	with downtoner adverbs and	the full body of a model. ${\sf T}$ asks ${\sf Ss}$ to try
	the suffix <i>-ish</i>	describing the model with several descriptive
		adjectives. T moves on modifying Ss'
		answers by adding downtoner adverbs
		such as 'slightly', 'quite', and 'pretty' as
		well as the suffix <i>-ish</i> such as "She has
		longish blonde hair and slightly thick
		eyebrows". T then distributes some
		group photos to Ss who work in groups.
		Ss take turns describing a person in each
		photo using descriptive adjectives along
		with downtoner adverbs and the suffix
		-ish. Other Ss have to guess who in the
		photo is being described.

### Limitations and Suggestions for Future Research

There are at least two limitations in this study. First, it did not compare different registers where adjectives suffixed with *-ish* occurred. This is because if the number of registers had been limited, the researcher would have gained insufficient data to analyze all the words formed from this suffix. Second, data were limited to the COCA. Future studies might explore this linguistic phenomenon from the BNC or some other corpora in order to get a clearer picture. Also, as briefly discussed in (2.3) that *-ish* can stand alone as an adverb, future research can investigate in what context *-ish* is used as an adverb and what meaning it conveys from a sociolinguistic perspective.

### Acknowledgment

The researcher would like to thank Wendy Asplin and Thomas Grizzle at the University of Washington who shared valuable comments on the first draft of this paper.

## References

- [1] Nishimoto, E. (2004). Defining new words in corpus data: productivity of English suffixes in the British National Corpus. *Proceedings of the Annual Meeting of the Cognitive Science Society, 26.*
- [2]Davies, M. (2020). Corpus of Contemporary American English. Retrieved February 2, 2020. http://corpus.byu.edu/coca/.
- [3] Davies, M. (2010). The Corpus of Contemporary American English as the first reliable monitor corpus of English. *Literary and Linguistic Computing*, *25*(4), 447–464.
- [4] Kim, C. (2013). Vocabulary acquisition with affixation: Learning English words based on prefixes and suffixes. *Second Language Studies, 31(2)*, 43–80.
- [5] Bauer, L. (2015). The Oxford reference guide to English morphology. Oxford: Oxford University Press.
- [6] Laws, J., & Ryder, C. (2014). Getting the measure of derivational morphology in adult speech: A corpus analysis using MorphoQuantics. *Language Studies Working Papers*, 6, 3–17.
- [7] Plag, I. (2003). Word-formation in English. Cambridge: Cambridge University Press.
- [8] Quirk, R., Greenbaum, S., Leech, G., & Svartvik, J. (1985). A Comprehensive Grammar of the English Language. London and New York: Longman.
- [9] Oxford University Press. (n.d.). -ish, suffix1. Online Oxford English Dictionary. Retrieved February 2, 2020, http://oed.com/view /Entry/99965? rskey=sqK1R7&result=7&is-Advanced=false#eid99551.

- [10] Random House Webster's Unabridged Dictionary. (n.d.). -ish. In Dictionary.com. Retrieved February 2, 2020. https://www.dictionary.com.
- [11] Oxford University Press. (n.d.) *-ish*. In Lexico. Retrieved February 2, 2020. https://www.lexico.com.
- [12] Macmillan Education. (n.d.). *-ish*. In Macmillan Dictionary. Retrieved February 2, 2020. https://www.macmillandictionary.com.
- [13] HarperCollins. (n.d.). -ish. In Collins English Dictionary. Retrieved February 2, 2020. https:// www.collinsdictionary.com/dictionary/english.
- [14] Oxford University Press. (n.d.) lavish. In Online Oxford English Dictionary. Retrieved February 2, 2020. https://oxfordlearnersdictionaries.com.
- [15] Plag, I. (2006). Productivity. In B. Aarts & A. McMahon (Eds.), The handbook of English linguistics (pp. 537-556). Blackwell Publishing.
- [16] Asplin, W. (Interviewee). Namtapi, I. (Interviewer), Address: A101 Padelford Hall, Department of English, University of Washington, Seattle, WA, 354330. February 24, 2020. (In English)

Common noun + - <i>ish</i>	n + <i>-ish</i>	Proper noun + <i>-ish</i>	+ -ish	Adjective + - <i>ish</i>	+ -ish	Numeral + <i>-ish</i>	+ -ish	Verb + -ish	ish
Word	Freq	Word	Freq	Word	Freq	Word	Freq	Word	Freq
foolish	10701	English	92514	reddish	1706	fortyish	213	sluggish	2742
selfish	10096	British	70337	bluish	937	fiftyish	160	gibberish	987
stylish	4066	Jewish	46714	greenish	918	thirtyish	144	skittish	902
childish	3890	Spanish	33475	yellowish	746	sixtyish	46	ticklish	354
bullish	1410	Irish	21023	smallish	653	twentyish	27	snappish	72
boyish	1367	Polish	12122	brownish	545			peckish	70
feverish	1273	Turkish	10045	brackish	472				
hellish	1092	Swedish	6659	purplish	374				
nightmarish	897	Scottish	5295	whitish	348				
hawkish	765	Kurdish	4864	longish	318				
cornish	763	Danish	4588	youngish	241				
girlish	758	Amish	3715	prudish	232				
devilish	689	Finnish	2173	newish	201				
sheepish	688	Flemish	721	blackish	158				
selfish	699	non-Jewish	555	frankish	133				
bearish	616	anti-Jewish	413	largish	81				
cartoonish	009	non-English		darkish	70				
freakish	578	Moorish	388	blondish	67				
bookish	559	Anglo-Irish	382	shortish	61				
brutish	553	Spanglish	162	leftish	59				
amateurish	541	Netherlandish	124	sweetish	54				
ghoulish	453	Kentish		flattish	47				
boorish	394	pro-British	110	tallish	46				
impish	391	anti-British	85	noirish	43				

	Common noun + -isn	Proper noun + <i>-ish</i>	+ -ish	Adjective + -ish	+ -ish	Numeral + <i>-ish</i>	+ -ish	Verb + - <i>ish</i>	-ish
Word	Freq	Word	Freq	Word	Freq	Word	Freq	Word	Freq
slavish	299	Pollyannaish	83	orangish	39				
snobbish	290	Gnalish	83	biggish	34				
fiendish	272	popish		oldish	27				
churlish	246	Pictish	74						
thuggish	236	Rhienish	69						
elvish	225	Sino-British	58						
clownish	217	Romish	56						
dovish	211	Whiggish	52						
roguish	196	Anglo-Spanish	49						
mannish	185	Chinglish	49						
puckish	126	non-British	39						
faddish	109	Anglo-Scottish							
owlish	108	anti-Irish	33						
babyish	106	Dornish	32						
modish	87	non-Spanish	31						
foppish	85								
clannish	85		30						
dickish	72		27						
buffoonish	20		26						
loutish	69								
wonkish	69		26						
coltish	99								
whorish	66								
nrippish	61								

	1161- 11	Proper noun + - <i>isn</i>	n + <i>-ish</i>	Adjective + - <i>ish</i>	+ -ish	Numeral + <i>-ish</i>	(+ -ish	Verb + - <i>ish</i>	-ish
Word	Freq	Word	Freq	Word	Freq	Word	Freq	Word	Freq
tomboyish	61								
trollish	60								
lumpish	59								
piggish	57								
kittenish	56								
shrewish	56								
womanish	54								
doltish	53								
prankish	52								
waspish	50								
mulish	49								
punkish	41								
cliquish	40								
waggish	34								
swinish	33								
stalkerish	33								
gnomish	33								
fannish	32								
nerdish	27								
apish	27								
sluttish	26								
puppyish	26								
pixieish	26								