LUND
UNIVERSITY

Centre for Languages and Literature

Sloppy, slab and slender:

a comparative study of the phonaestheme *sl-* in English and Swedish

Christoffer Modig Forser

ENGK01

Bachelor's Degree Project

Spring term 2019

Supervisor: Satu Manninen

Abstract

The primary aim of this essay is to add new insight as to the productivity and universality of phonaesthemes in general, and the *sl*-phonaestheme in particular. The data presented in this essay is generated in two ways: lexical analyses and an experiment. The lexical analyses show that the dominant semantic features of words beginning with the cluster *sl-* are the same in English and Swedish, namely 'wetness', long thin form' and 'inactive or lacking energy'. The experiment targets the productivity and universality aspect of the *sl*-phonaestheme and is conducted by means of a questionnaire. In it, informants are asked to pair neologisms constructed from different consonant clusters with the above stated semantic features. Results from the questionnaires are based on a total of 79 respondents, 40 of them native Swedish speakers and 39 native English speakers. The data indicates that the associative status of the *sl*-phonaestheme is largely similar in both languages. However, in relation to productivity the generated data proved unreliable due to a faulty method of designing the questionnaire. Consequently, it can at best provide information regarding possible tendencies rather than general conclusions.

The essay also aims to test the claim that the expressiveness, or associative ability, of phonaesthemes is related to the number of words that share the same phonological material in the same position and display the same semantic affiliation. Even though the data provides no conclusive information, a number of observations are made and discussed in relation to this aspect.

Table of Contents

1. Introduction 1
2. Background 3
2.1 Words, morphemes and phonemes 3
2.1 The linguistic status of the phonaestheme 4
2.2 Arbitrariness and universality 6
2.4 Previous research on the *sl*-phonaestheme 8
3 Methods and material 10
3.1 Lexical analysis of *sl*-words in English and Swedish 10
3.2 Key words 15
3.3 Construction of neologisms 16
3.4 Construction of questionnaire 17
4. Results 20
4.1 Results from the Swedish questionnaire 20
4.2 Results from the English questionnaire 22
5. Discussion 24
5.1 Universality and productivity 24
5.2 The associative nature of the *sl*-phonaestheme 26
5.3 Phonaesthemic association or word association 27
5.4 Remaining matters 28
6. Conclusion 30
References: 31
Appendix A 33
Appendix B ..... **Fel! Bokmärket är inte definierat.**
Appendix C ..... **Fel! Bokmärket är inte definierat.**

1. Introduction

A lot of the research on the subject of sound symbolism, often under such umbrella terms as expressives, iconicity, ideophones and mimetics, begins by stating how the subject has been greatly overlooked in mainstream linguistic theory (e.g. Dingemanse, 2018; Kwon, 2017; Svantesson, 2017). Andersson (2001) states that the study of iconicity is still regarded "a renegade departure from the classical structuralist approach to language, which insists upon its conventionality and the arbitrariness of linguistic signs" (Fischer & Nänny, 2002, p. 109). With regard to mainstream linguistic theory, sound symbolism has arguably been regarded the distanced half-blood relative, the disregarded Snow to the natural order of the Stark. Such pop-cultural analogies aside, the validity of sound symbolism in natural language has only recently been substantiated beyond hypothesising or linguistic intuition on part of intrigued scholars.

The field of sound symbolism encompasses a wide variety of different linguistic phenomena. Among these is onomatopoeia, i.e. words that imitate sound (Dingemanse, 2012). Onomatopoeic words include the English *crash* and *bang*, both of which imitate the sound of something being broken to pieces. Onomatopoeic words constitute a sub-category in the larger field called *Ideophones* (Dingemanse, 2018, p. 3). Ideophones are marked words that depict sensory scene, and while onomatopoeic words imitate sound, ideophones can also depict e.g. psychological states, manners of motion and textures (Akita & Dingemanse, 2019, p. 1). They can be formed in a variety of ways; one example is *reduplication*, i.e., the morphological process of repetition of the root, stem or word, oftentimes resulting in more 'expressive' or 'iconic' words (Mattes & Hurch, 2007, p. 3). Examples include the Swedish word *snicksnack* and the English *chit-chat*, both of which describe a more diminutive or pejorative element than the roots *snacka* and *chat*.

This essay however will focus on yet another sound symbolic sub-category, commonly referred to as *phonaesthemes*. It is widely accepted in mainstream linguistics that morphemes constitute the most elementary meaning-bearing units of language. Phonemes in turn are the smallest distinctive units, i.e. they can change the meaning of a word. However, a number of studies carried out in the 20th and 21st centuries argue for the existence of a sub-morphemic unit, oftentimes defined as a phonaestheme (Abelin, 1999; Bergen, 2004; Magnus, 2001). These studies show how sounds or sequences or sounds (in many cases consonant clusters) within a particular language, like the Swedish /sl-/ in [slask], [slem] or [slurk] display semantic affinities, or rather that they contribute to a semantic categorization of words sharing this onset. In this case, all of the mentioned words share the semantic feature of 'wetness'. The word-initial *sl-*

consonant cluster is also the target unit for analysis in this essay, as its status as a phonaestheme has been documented in both English and Swedish (Abelin, 1999; Mattiello, 2013) There have been attempts to prove the validity of these units by examining their productivity, i.e. whether they can produce neologisms with a meaning related to the same suggested semantic categories (Abelin, 1999; Magnus, 2001). On a related note, Abelin (1999, p. 254) observed that the most commonly shared semantic features found in the lexical analysis of specific phoneme clusters are often also the most successfully interpreted by subjects when asked to pair them with neologisms constructed from these clusters. To clarify with an example, if eight *sl*-words share the semantic feature 'wetness', and twelve share the semantic feature 'long thin form', subjects are more likely to associate the nonsense word *sloll* with the latter than the former.

Other studies of phonaesthemes have targeted their universality, i.e. whether they occur in more than one language and if they are 'expressive' enough to be understood by speakers of other languages (Kwon, 2017). Results indicate that speakers of unrelated languages are unable to correctly understand foreign words containing phonaesthemes. However, these studies tell us very little about the role of phonaesthemes in *cognate languages*, like English and Swedish. This essay will attempt to account for this aspect.

In summary, based on previous findings related to phonaesthemes, three primary research questions have been formulated with the aim to add new insight as to the function and universality of phonaesthemes in general, and the *sl*-phonaestheme in particular:

- Is the *sl*-phonaestheme associated with the same dominant semantic features in the cognate languages English and Swedish?
-Is the *sl*-phonaestheme productive, and if so, is it equally productive in English and Swedish?
-Is the sound symbolic expression of the *sl*-phonaestheme connected to the number of *sl*-words sharing the same semantic feature?

Section 2 will account for previous research on the *sl*-phonaestheme in terms of linguistic status, iconicity and universality. Section 3 will provide a lexical analysis of *sl*-words in English and Swedish respectively, as well as account for methods applied in creating the questionnaires used to generate data for analysis. Section 4 and 5 will present and discuss the results generated from said questionnaires. Finally, section 6 will account for conclusions.

2. Background

2.1 Words, morphemes and phonemes

In order to understand what phonaesthemes are and how they function, we must work our way down from the larger element in which they operate – namely words. The Oxford English Dictionary (2019) defines a word as:

> Any of the sequences of one or more sounds or morphemes (intuitively recognized by native speakers as) constituting the basic units of meaningful speech used in forming a sentence or utterance in a language (and in most writing systems normally separated by spaces), a lexical unit other than a phrase or affix, an item of vocabulary, a vocable.

Based on this definition, we can establish that for instance *monkey* and *car* are words in English: they are constructed from sequences of sounds recognized as meaningful elements of speech. The sentence *The monkey entered the car* shows that the words are separated by spaces in writing. The general idea is that a word form, like *monkey*, is connected to a meaning, or word sense. In the case of *monkey*, most people probably think of a tree-climbing primate living in some tropical country. But words can have more than one word sense. For instance, if someone utters the English word /nʌɪt/ out of context, it may be difficult for us to discern whether they are speaking of the period of darkness after day, spelled [night] or [nite], or a military servant of the king in feudal times, spelled [knight]. These are examples of what is known as *homonymy* (see, e.g. Johansson & Manninen, 2012, p. 133). Closely related to homonymy is the area of polysemy. In contrast to homonymy, polysemous words are related senses of one and the same form. To exemplify, the English word *crown* can refer to a number of things on top of something else: *a queen's crown* ('ornament for the head'), *a tree crown* ('branched or leafy top part of a tree') , *the crown* ('the empire of a monarch') (Enström, 2016, p. 18). The very basic notion is that words are signs representing a sense, and that the form-meaning pairing is arbitrary in nature. Words however are not the smallest units of language, which brings us to the topic of morphemes.

As was stated in the introduction, the smallest meaning-bearing unit in language is traditionally thought to be the morpheme, which cannot be deconstructed into smaller, meaningful parts (Johansson & Manninen, 2012, p. 18). To exemplify, the morphologically

complex word *elevators* can be split into *elevate* (root) + *or* (derivational affix) + *s* (plural affix), but cannot be deconstructed into even smaller meaning-bearing parts.

Even smaller than morphemes are phonemes, which are what morphemes are constructed from. They are generally described as the smallest distinctive unit in language, meaning that a phoneme can distinguish one word from another, but not carry any meaning on its own (Enström, 2016, p. 89). To exemplify, the words /kat/, [cat] and /rat/, [rat] are associated with completely separate senses, /kat/ meaning 'carnivorous quadruped' and /rat/ meaning 'rodent of the genus *Rattus*' (OED 2019). What separates them are the initial consonant sounds /k/ and /r/, distinguishing them from one another in terms of semantic information. However, the meaning-changing capability of phonemes is not always as clear-cut as in the above example. Consider the following word pairs: *clink* and *clank*; *jingle* and *jangle*; *ring, rang* and *rung*. In the first two pairs, the main meaning is retained. Both *clink* and *clank* mean 'sharp, abrupt sound' and both *jingle* and *jangle* denote a 'ringing sound', the latter possibly more discordant than the first (OED 2019). Here the meaning changing function of the phoneme is less tangible, yet present all the same. In the case of *ring, rang* and *rung,* the meaning-changing capability of the phoneme is more palpable, but associated with tense rather than semantic information.

Having stated as much, what if phonemes or combinations of phonemes in fact were meaning-bearing, could we then ascribe the similarity in meaning between *clank* and *clink* to the phonological material /kl/ or /ŋk/, or the combination of both? Moreover, if either or both of these units convey meaning, should they then be regarded as morphemes? This leads us to the linguistic phenomenon known as phonaesthemes, namely the idea that some sounds or clusters of sounds are associated with or evoke certain meanings. Their linguistic status, validity and morphological role is a hotly debated topic (Bergen 2004; Drellishak 2006; Mattiello 2013), and the next section will account for various and contrastive perspectives in terms of their form and function in natural language.

2.1 The linguistic status of the phonaestheme

Phonaesthesia is a phenomenon that refers to an affinity among an etymologically unrelated set of words within a given language to evoke similar semantic associations based on sharing the same clusters of phonemes in the same word positions (Mattiello, 2013, p. 199). Phonaesthemes, in turn, is the language material, or the units of sound, which give rise to such an effect. Examples of clusters of phonemes evoking the same semantic associations in etymologically unrelated words are for instance the word initial clusters /*gl*-/ and /*kr*-/, and the word final cluster /-*ɪə*/ in English. The word initial phonaestheme /*gl*-/ is documented as recurrent in a large

number of words denoting ‘light’, ‘looking’ and ‘dark light’, for instance in cases like [glimmer], [glance] and [gloom] (Bloomfield 1933, p. 245; Sadowskij 2002, p. 76). The sound-content relation of the cluster /*kr*-/, on the other hand, conveys the semantic association of an ‘abrupt onset’ in words like [crash], [creak] and [crunch] (Rhodes, 1994). The rime phonaestheme /-*ɪə*/ occurs in a number of words with a meaning pertaining to ‘expression of contempt’ in cases such as [sneer], [leer] and [jeer] (Bergen, 2004, p. 294). In contrast, there are many words sharing these phonological clusters that are not sound symbolic, as in the case of /-*ɪə*/ in [mountaineer] (/maʊntɨˈnɪə/) and [bombardier] (/bɒmbəˈdɪə/). Consequently, we can establish that not all occurrences of the potentially sound-symbolic items are in fact sound symbolic.

To give a slightly different account as to the form and function of phoneme clusters, Mattiello states that they are “recurrent sound-meaning pairings, i.e. sounds, or groups of sounds which, although they are not classifiable as proper morphemes, are usually associated with some kind of meaning” (2013, p. 200). The word *proper* in this quote is essential to the debate on their morphological status, seeing as phonaesthemes meet some of the requirements to be regarded as traditional morphemes, but not all. First and foremost, if they are to be considered morphemes, we must regard them lexical in nature, as they contribute semantic rather than grammatical information. Secondly, as they cannot stand on their own, we have to regard them as bound morphemes. This is the point where the analysis becomes problematic: If we look at the word [gloom] and consider /*gl*-/ a meaning-contributing affix that attaches to a root or stem, then /-uːm/, or [-oom], must be considered the root or stem, even if we don’t intuitively perceive it as such. The relation is even less apparent if we look at other words sharing this cluster such as /ruːm/, [room] or /buːm/, [boom]. Bergen argues that a uniqueness inherent to phonaesthemes is that they often occur in words where the remainder is “often less morpheme-like than the phonaesthemes are themselves” (2004, p. 292). At best, we could consider /-uːm/ another phonaestheme, which would result in the combination of two affixes without the presence of a root morpheme, in turn violating the traditional view of compositionality. (Bergen, 2004, p. 291).

In relation to the notion of compositionality, Mattiello compares phonaesthemes to portmanteau words like *smog* and acronyms like *NATO*, in that they are not analysable into morphemes. Her conclusion is that forms containing phonaesthemes are non-compositional in nature (2013, p. 201). Bergen further elaborates on the aspect of compositionality, comparing them to another difficult case, namely cranberry morphemes (2004). Phonaesthemes are similar to cranberry morphemes like *mul*- in *mulberry* in that they are bound, but differ from them in that they occur in numerous words, and the remaining complement is less morpheme like. In

some cases, and in contrast to what was stated by Mattiello, words may appear to be constructed entirely from phonaesthemic material. One such case is the previously mentioned [sneer]. In this case /*sn*-/ may be analyzed, perhaps somewhat optimistically, as conveying 'involving the nose/nasality' and /-*ɪə*/ 'expression of contempt'. Still, the majority of words containing phonaesthemes do not display this compositional nature. (Bergen, 2004, p. 294).

There are contrasting views of how to regard the meaning-bearing capability of phonaesthemes within morphological theory. Bolinger, in a less elaborated statement, asserts that "phonaesthemes are sub-morphemic units of potential interest in linguistic studies that can be simply defined as components of words that seem to correspond with an aspect of a word's meaning" (1965, p. 227). Many other scholars also refer to phonaesthemes as sub-morphemic units, but in various ways. Anderson argues that unlike morphemes, they "evoke a 'feeling'" rather than a meaning (1999, p. 66).

Abelin adopts a different perspective, namely that phonaesthemes are meaning-bearing and in reality better fit the description of a 'minimal meaning carrying unit' than morphemes do, seeing as a phonaestheme can exist within a morpheme (1999, p. 8). She also accounts for the many ways in which they differ from traditional morphemes and suggests that they be placed in a hierarchy between morphemes and phonemes. The hierarchical relation is accordingly that phonaesthemes are built up from phonemes, whereas morphemes are built up from phonemes and sometimes partly from phonaesthemes (Abelin, 1999, p. 7). As is visible in tables 1 and 3 in section 3.1, the consonant cluster *sl*- is sound symbolical in the word [slask], but not in the word [släppa].

To summarize, phonaesthemes pose problems to mainstream morphology, and their status is still a heated issue. Both the cognitive status and their role in the synchronic mental organisation of language remain open questions, and so do their relevance to expressive or unconventional word-formation (Mattiello, 2013, p. 200). We will examine the connection between sound and content closer in the next section.

2.2 Arbitrariness and universality

As previously mentioned, the subject of sound symbolism has historically been overlooked in mainstream linguistic theory, and the idea that the sign is arbitrary has reigned the predominant view and was further consolidated by De Saussure at the beginning of the 20th century (Ahlskog, 2016). However, the parallel view that sound symbolism is part of natural language has kept intriguing scholars and in the 1920s, linguists Otto Jespersen and Edward Sapir conducted studies whose results showed a general tendency for informants to associate the vowel sound

/a/ with something large and the vowel sound /i/ with something small (Magnus, 2001, p. 21). In 1929, Köhler added further evidence to this phenomenon, but this time informants were asked to associate the neologisms [maluma] and [takete] with certain semantic categories, resulting in a significant tendency for [maluma] to be associated with round figures and [takete] with sharp figures (Svantesson, 2017, p. 2). Consequently, the idea of some extent of natural connection between sound and meaning gained at least a marginal foothold.

Köhler's test was repeated by Ramachandran & Hubbard, but this time speakers of American English and Tamil were asked to pair the words [bouba] and [kiki] with either a round or a pointy shape. The results showed that approximately 95% of the informants, irrespective of their native language, associated [bouba] with the round shape and [kiki] with the pointy shape (2001, p. 19). Based on the results, the authors argue a connection between the structure of the visual stimuli and the phonological material (both in terms of manner of production and sound structure) that is universal (Ramachandran & Hubbard, 2001).

But let us now turn to the possible sound symbolic properties of phonaesthemes. Bergen summarizes the basic observation central to the idea of phonaesthemes as follows:

> On the basis of the assumption that a simple word's phonological form is entirely arbitrary, given its semantics, there should be the same portion of *gl*-words that have meanings related to 'light' or 'vision' as there are *sn*- words that share these meanings (Bergen, 2004, p. 293)

As we have previously seen, this is not the case. There are for instance more words beginning with *gl*- with a meaning related to 'light' or 'vision' than there are *sn*-words sharing the same meaning. This may be regarded evidence that the relation is not entirely arbitrary. In relation to this, Bolinger (1965) provides a different perspective. He defines this relation as a tendency of forms to mold themselves on other forms with like meanings and of meanings to mold themselves on other meanings. A similar perspective on how this process takes place is provided by Magnus (2001). She refers to *phonosemantic association*, a process by which words sharing the similar sound and meaning cluster to a central or fundamental word. Her example is how the previously mentioned word [house] (/haʊs/) represents one such fundamental word in English, and that words like [hut], [hangar], [hall], [hotel], [hollow] and [hive] among others cluster to it, causing a disproportionate amount of words starting with /h/ associated with 'house' and 'home' (Magnus, 2001, p. 7). She further proposes that the phonological material constructing the word for 'house' in any given language is specific to

that language and arbitrary. Abelin argues that if phonaesthemes are entirely language specific, then their origins could be attributed solely to the mentioned clustering effect. She provides a contrasting perspective, namely that if phonaesthemes show universal tendencies, they could partly involve a basic relationship between environment and individual (Abelin, 1999, p. 22). Bergen on the other hand argues that even though specific phonaesthemes are generally regarded language-specific, the occurrence of them is pervasive in human language and probably universal. He substantiates this claim by referring to how all systematic studies of a particular language has yielded results suggesting the occurrence of phonaesthemes (Bergen, 2004, p. 290).

As was mentioned in the introduction, there have been tests on the universality of phonaesthemes. Fordyce (1988) tested Arabic and Japanese informants understanding of English words containing phonaesthemes, resulting in below-chance averages of correct answers. In a study from 2017 comparing English and South Korean informants understanding of English words containing phonaesthemes, the results corroborate Firth's claim (1930) that they are part of a language habit shared by language users of a specific language. However, the results also show that both English and Korean informants were able to "establish the mappings to the corresponding motivated meanings for novel expressions" (Kwon, 2017, p. 89). Kwon's conclusion is that phonaesthemes display various kinds of iconicity, ranging from conventionalized primary iconicity to secondary iconicity, and that the primary iconicity level varies from one phonaestheme to another. Kwon defines primary iconicity as "involving a sufficient similarity between sign and referent to allow the understanding that the former stands for the latter" (2017, p. 73).

To reiterate, what this essay aims to contribute to the larger study on the natural motivations and universality of phonaesthemes is to analyze whether phonaesthemes occurring in two cognate languages display similar accounts of iconicity.

2.4 Previous research on the *sl*-phonaestheme

As I have previously stated, my research questions are firmly based on previous work by Abelin (1999). This is also the only piece of research I have found that investigates the consonant cluster *sl-* and its status as a phonaestheme in Swedish. Abelin (1999) compiled a list of all root morphemes in Swedish containing the consonant cluster *sl-* in word-initial position. Furthermore, she categorized them based on shared semantic features and absolute frequencies, displaying how they can be sorted into distinctive clusters of meaning. Abelin's research shows that the *sl*-cluster is the largest consonant cluster in Swedish in terms of absolute numbers. It

also shows that in terms of semantic features the dominant categories are: ‘pejorative (24); ‘wetness’ (12); ‘long thin form’; ‘slackness’ (11) and ‘quick strong movement’ (9). The list looks as follows:

’pejorative’	*slabba* (’splash’), *slabbertacka* (’gossipmonger’), *sladdra* (’chatter’), *slafs* (’sloppiness’), *slampa* (’slut’), *slams* (’slovenliness’), *slarvig* (’slipshod’), *slas* (’lazy and careless person’), *slasa* (’walk heavily and shuffling’), *slask* (’slush’), *slatt* (’drop’), *slattrig* (’slack’), *slidder* (’gossip’), *slinka* (’wench’), *slisk* (’sweet stuff’), *sloka* (’droop’), *sludder* (’slurred speech’), *slum* (’slum’), *slusk* (’shabby looking fellow’), *slyna* (’bitch’), *slyngel* (’young rascal’), *slö* (’sluggish’), *slödder* (’riff-raff’), *slösa* (’waste’)	24
’wetness’	*slabba* (’splash’), *slafs* (’sloppiness’), *slam* (’ooze’), *slask* (’slush’), *slatt* (’drop’), *slem* (’slime’), *slicka* (’lick’), *slipprig* (’slippery’), *slisk* (’sweet stuff’), *sluring* (’a soup’), *slurk* (’swig’), *sluss* (’sluice’)	12
’long thin form’	*sladd* (’cord’), *slamsa* (’rag’), *slana* (’scaffold pole’), *slang* (’tube’), *slank* (’slender’), *slant* (’a fishing rod’), *slejf* (’strap’), *slimmad* (’fitted’), *slinga* (’coil’), *slips* (’tie’), *slits* (’slit’), *släde* (’sleigh’).	12
’slackness’	*slack* (’slack’), *sladdrig* (’flabby’), *slak* (’slack’), *slamsa* (’rag’), *slana* (’scaffold pole’), *slang* (’tube’), *slankig* (’flaccid’), *slapp* (’slack’), *sliddrig* (’flabby’), *slinkig* (’slabby’), *sloka* (’droop’)	11
’quick or strong movement’	*sladda* (’skid’), *slinka* (’slip’), *slinta* (’slip’), *slipprig* (’slippery’), *slira* (’skid’), *slita* (’tear’), *slugga* (’slug’), *slunga* (’fling’), *slänga* (’fling’)	9
’talking’	*slabbertacka* (’gossipmonger’), *sladdra* (’chatter’), *slattrig* (’gossiping’), *slidder* (’gossip’), *sludder* (’slurred speech’)	5
’beat’	*slag* (’beat’), *slå* (’beat’), *slägga* (’sledge hammer’)	3
’smooth surface’	*slipa* (’polish’), *slät* (’smooth’), *slätt* (’plain’)	3
’Potential movement’	*slutta* (’slant’), *sluänt* (’slope’)	2
’walking’	*slasa* (‘walk heavily and shuffling’), *släntra* (‘saunter’)	2

Table 1. Abelin's list of sound symbolic words containing the *sl*-phonaestheme (1999, pp. 118-119)

In connection to a discussion of the questionnaire constructed for this essay, a revised version of Abelin’s list will be presented in section 3.1.

Among the earliest analyses of the *sl*-phonaestheme in English is Firth (1930), who argued that the cluster *sl*- recurrently functions pejorative in word initial position, *slack*, *slouch*, *slush*, *sludge* and *slime* being cases in point. Bolinger (1965) added another semantic feature shared by a significant number of *sl*-words in English, which he coined ‘smoothly wet’ (Abelin, 1999, p. 33). This feature is further recognized by Rhodes (1994), who associated the content classifier ‘liquid’ with the consonant cluster *sl*- in word initial position. Magnus (2001) mentions how the word initial phoneme combination /sl/- expresses ‘clumsiness’ in words like *slouch* and *slip*; how it implies a ‘smooth, natural, downward movement’ in the word *slump* and how it expresses ‘smoothness and slipperiness’ in the word *slide*. Mattiello (2013) states

that the word-initial phonaestheme *sl-* in many words indicates either 'falling or sliding movement', as in *slash* and *sled*, or 'slime, slush, liquid', as in *sluice* and *slush*. She further recognizes Firth's idea (1930) that words containing the phonaestheme *sl-* oftentimes share a pejorative meaning, as in *slime* and *slander* (Mattiello, 2013, p. 203-204).

All of the above sources provide accounts for the iconic properties of the *sl*-phonaestheme in English although none of them do so to the same extent as was done by Abelin (1999). In other words, they all provide pieces of the puzzle, but not the whole picture. A number of English sources reference Hutchin's publication from 1999 (Bergen 2004; Drellishak 2006; Kwon 2017) as a having extensively compiled phonaesthemes based on proposals made in previous literature from a period of 70 years, along with some own additions. The same publication is said to confirm how phonaesthemes play a role in the processing of neologisms (Bergen, 2004, 295). Serious attempts have been made to locate and gain access to said publication, but all such efforts have proven futile within the time frame of writing this essay. As a result, I resorted to creating a new list of English words containing the consonant cluster *sl-* in word initial position. The next section will cover a discussion on constructions of both the English and Swedish list of *sl*-words.

3 Methods and material

The lexical analyses of *sl*-words presented in this section aims to answer the first research question: whether the *sl*-phonaestheme is associated with the same dominant semantic features in the cognate languages English and Swedish? This section will also account for methods applied in constructing the questionnaires used to gather data regarding the productivity of the *sl*-phonaestheme.

3.1 Lexical analyses of *sl*-words in English and Swedish

For the purpose of establishing a mapping of frequency and semantic association of *sl*-words in English and Swedish, two separate lexical lists have been created. The Swedish compilation of words is based on Abelin's list (1999), but seeing as it is some twenty years old, a number of new words have been added to dictionaries since, and it seemed essential to provide an updated version. In agreement with Abelin's method of gathering the appropriate etymologically unrelated root morphemes, I have primarily consulted *Svenska Akademins Ordlista* (henceforth:

SAOL), but I have also cross-checked a number of entries in *Svensk Ordbok* (henceforth: SO) and *Svenska Akademins Ordbok* (henceforth: SAOB).

I have also added words that were listed in the mentioned dictionaries at the time of Abelin's research process, and in such cases I can only draw the conclusion that our opinions differ on whether they qualify to be included in a specific semantic category. One such example is the Swedish word *slev* ('ladle'), which was not included in Abelin's list, but has been sorted into the semantic category 'long thin form' in this compilation. Own additions are underlined in the list whereas homonyms and polysemes occurring within more than one semantic category are written in bold face.

On the topic of categorization, another aspect that marginally differentiates this list from that of Abelin's is the number of semantic categories and the key words chosen to represent them. The category 'potential movement' has been changed into 'oblique movement or direction' and two more entries have been added to it. The reason for this is that the semantic feature 'obliqueness' in terms of movement or direction was deemed to better represent the factor shared by the four lemmas. In addition, two more categories have been added: 'meandering movement' and 'noise', containing two entries each.

Lastly, in contrast to Abelin's work, this compilation includes *sl*-root morphemes that are not considered sound symbolic, and all such entries are listed in the semantic category "miscellaneous". The final version looks as follows:

'Pejorative'	***slabba*** ('bedaub'; 'tarry'), ***sladdra*** ('chatter'), *slafs* ('sloppiness'), *slampa* ('slut'), *slams* ('slovenliness'), *slarvig* ('slipshod'), *slas* ('lazy and careless person'), ***slasa*** ('walk heavily and shuffling'), ***slask*** ('sludge'), *slattrig* ('whimsy'), ***slemmig*** ('slimy'), ***slibbig*** ('overly sweet'; 'disgusting'), ***slidder*** ('gossip'), ***slinka*** ('wench'), *slipprig* ('indecent'), ***slisk*** ('sentimentality'), ***sloka*** ('droop'), ***sludder*** ('slurred speech'), *slum* ('slum'), *slusk* ('shabby looking fellow'), *slyna* ('bitch'), *slyngel* ('young rascal'), ***slö*** ('sluggish'), *slödder* ('riff-raff'), *slösa* ('waste').	25
'long thin form'	*sladd* ('cord'), *slamsa* ('rag'), *slana* ('scaffold pole'), ***slang*** ('tube'), *slank* ('slender'), *slant* ('a fishing rod'), *slejf* ('strap'), *slejs* ('iron rod'), *slev* ('ladle'), *sling* ('line for lifting'), *slimmad* ('fitted'), ***slinga*** ('coil'), *slips* ('tie'), *slira* ('strim of glass'), *slits* ('slit'), *släde* ('sleigh'), ***slå*** ('narrow piece of wood for reinforcement or for connecting parts'), ***släppa*** ('crack').	18
'Wetness'	***slabba*** ('splash'), *slafs* ('sloppiness'), ***slam*** ('ooze'), ***slank*** ('dash'), ***slask*** ('slush'), *slatt* ('dash'; 'remains'), ***slem*** ('slime'), *slicka* ('lick'), ***slibbig*** ('squishy'), ***slipprig*** ('slippery'), ***slisk*** ('sweet and sticky'), ***sluka*** ('sink-hole'), *slunk* ('a gulp'), *sluring* ('a soup'), *slurk* ('swig'), ***slurpa*** ('slurp'), *sluss* ('sluice').	17
'slackness'	*slack* ('slack'), *sladdrig* ('flabby'), *slak* ('slack'), *slamsa* ('rag'),	15

	slana (‘scaffold pole’), ***slang*** (‘tube’), *slankig* (‘flaccid’), *slapp* (‘slack’), ***slasa*** (‘walk slowly and shuffling’), ***slattrig*** (‘slack’), *sliddrig* (‘flabby’), *slinkig* (‘slabby’), ***sloka*** (‘droop’), *slummer* (‘slumber’), ***slö*** (‘drowsy’).	
’quick or strong movement’	*sladda* (‘skid’), *slajda* (‘slide’), ***slamra*** (‘slammer’), *slashing* (‘swinging of a hockey stick’), *slipprig* (slippery), ***slinka*** (‘slip’), *slinta* (‘slip’), *slira* (‘skid’), *slita* (‘tear’), *slugga* (‘slug’), *slunga* (‘fling’), *slänga* (‘fling’).	12
’talking’	***slabbertacka*** (‘gossipmonger’), ***sladdra*** (‘chatter’), ***slang*** (‘slang’), *slattrig* (‘gossiping’), ***slidder*** (‘gossip’), ***sludder*** (‘slurred speech’).	6
‘beat’	***slag*** *(’beat’)*, ***slå*** *(beat), slugga (to box), slägga (sledge hammer).*	4
’obliqueness’	*slash* (‘slash’), *slutta* (‘slant’), *sländ* (‘slope’), slör (‘sailing with oblique wind coming from behind’).	4
’smooth surface’	*slipa* (‘polish’), *slät* (‘smooth’), *slätt* (‘plain’).	3
’meandering movement’	*slalom* (‘slalom’), *slinga* (‘meander’), *slingra* (‘to writhe, meander’).	3 (2)
’walking’	***slasa*** (‘walk slowly and shuffling’), *släntra* (‘saunter’).	2
’noise’	***slamra*** (‘slammer’), ***slurpa*** (‘slurp’).	2
’miscellaneous’	*slaf* (‘bunk’), ***slag*** (‘battle’; ‘condition’; ‘moment’; ‘species’), *slagg* (‘slag’), *slakt* (‘slaughter’), ***slam*** (‘slam’), *slang* (‘slang’), *slant* (‘coin’), *slant* (‘a specific fishing teqnique’), *slapstick* (‘slapstick’), ***slask*** (‘waste’), *slav* (‘slave’), *slav* (‘belonging to a group of slavic-speaking people’), *slejd* (‘movable seat on a rowboat’), *slentrian* (‘rut’), *slida* (‘part of the female genitals’;. ‘scabbard’), *slig* (‘ore grinded into powder’), *slik* (‘such’), ***slinga*** (‘sequence’, ‘stretch’), *slipover* (‘slipover’), *slipp* (‘a receipt strip with impression from a credit card’), *slippa* (‘to be excused’), *slippers* (‘slippers’), *slita* (‘to toil, to rip, to wear’), *slivovitz* (‘plum brandy’), *slockna* (‘to blow out’), *slogan* (‘slogan’), *slom* (‘smelt’), *slopa* (‘to abolish’), *slott* (‘castle’), *slovak* (‘slovakian’), *sloven* (‘slovenian’), *slowfox* (‘type of dance’), *slow motion* (‘slow motion’), *slug* (‘sly’), ***sluka*** (‘devour’), *slump* (‘happenstance’), *slup* (‘barge’), *slurven* (‘part of expression: everyone’), *sluta* (‘to end’; ‘to shut’; ‘to result in’), *sly* (‘bush wood’), *slån* (‘blackthorn’), *släcka* (‘to quench’; ‘to put out’), *släkt* (‘relatives’), *slända* (‘dragon-fly’; ‘spinning tool’), *slänga* (‘throw away’), *släpa* (‘to drag’), ***släppa*** (‘to let hold of’; ‘to let free’; ‘to publish’), *slätt* (‘part of expression: to be no match for’), *slöja* (‘veil’), *slöjd* (‘crafts').	49

Table 2. Revised list of Swedish *sl*-words

Compared to Abelin’s list, the most poignant difference is that in this compilation the semantic category of ‘long thin form’ contains more motivated root morphemes, albeit marginally, than the category of ‘wetness’. Such differences aside however, this altered version corroborates Abelin’s results that apart from the semantic feature ‘pejorative’, which will not be analyzed within the scope of this essay, the three most dominant features remain the same: ‘long thing form’; ‘wetness’ and ‘slackness’.

The lexical analysis of English *sl*-words is largely based on Sadowskij's analysis of the *gl*-consonant cluster from 2002. Although he does not describe them as phonaesthemes, his method of categorising them is comparable to that of Abelin's (1999). In line with Sadowskijs argument that an informed judgement on the iconicity of a specific combination of sounds can only be made after examining the entire lexical set, I have used the OED to examine the entire set of etymologically unrelated words containing the consonant cluster *sl*- in word initial position.

In selecting and categorizing these words, compounds, derivations, orthographical variants or words belonging to different parts of speech are seen as different instances of one root morpheme and are consequently not included in the list. In cases where the OED lists the etymological relation between two lexical items as 'uncertain' or 'possible', they have been regarded as separate, unrelated words. Other criteria for the selection of words have been that they are not to be listed as 'obsolete' nor 'international'. All other words have been accepted and included. As a result, the sample of words includes words listed as belonging to all geographically bound variants of English, such as: American English, Australian English, Scottish, Irish English, Newfoundland etc. Dialectal words along with words listed as 'local', 'colloquial' or 'slang' have also been included. In Sadowskij's analysis of the *gl*-words he allows for overlaps and connections between the clusters, meaning that the same words can occur in more than one distinct semantic group due to its poly-semantic nature (2002, p. 76). The same approach has been adopted in this essay, both in terms of polysemes and homonyms.

The list contains three headings: *semantic feature* (shared meaning), *word* (lexical item) and *number* (absolute number of etymologically unrelated lexical items). Words that occur in more than one semantic group are written in bold face. In some cases the relation between these words is homonymous, as in the case of *slew* (a very large number of) and *slew* (a small lake). In some cases the relation is polysemous, as in the case of *slur* (music sung or played in a smooth manner) and *slur* (imperfect utterance). In this case both words share an element of indistinctiveness. Lastly, in some cases words are listed twice based on different aspects of the word sense, such as in the case of *slang* (special vocabulary) and *slang* (low and vulgar language). Every word is listed along with a *code* (signifying word class) and a *number* (referencing and mirroring how the words are listed in the OED. A complete list of words containing the SL-cluster in word initial position is visible in Appendix C. The final list looks as follows:

Semantic feature	**Word**	**Number**
'pejorative'	**slab** (n.4), **slabber** (v.1), **slag** (n.1), slaister (v), slammakin/slammerkin (n. & adj), slander (n.), **slang** (n.3), **slat** (n.4), **slate** (n.4), **slather** (v.3), sleathy (adj), sleaze (n), **sledge** (n.3), sleer (v), **slight** (adj.3 & v.3), **slim** (adj, 1), **slime** (n.3), sliverly (adj), **slob** (n.1), sloff (v), **slonk** (v), sloothering (n. and adj), **slop** (n.2), **slorp** (v), **slosh** (n), **slotter** (v), **slouch** (n), **slouk** (n), **sloven** (n & adj), **slubber** (v), **slug** (n.1), **slum** (n.1), slumock (v), **slur** (v.1), slurb (n), **slurp** (v), **slush** (n.1), **slut** (n.1), **sly** (adj & adv),	39
'wetness'	**slab** (n.2), **slabber** (n.1), **slag** (adj), slake (v.2), s**lash** (n.2 & 3), **slather** (v.2), sleck (n), **sleech** (n), **sleech** (v), sleet (n.1), slem (n), slerg (v), **slew** (n.1), **slime** (n.1), **sling** (n.5), **slip** (n.1), **slob** (n.1), slobgollion (n), **slonk** (n), sloosh (n), **slop** (n.2), **slosh** (n), **slotter** (v), **slough** (n.1), slouse (v), sloush (v), **slub** (n.1), sludge (n), **slug** (n.2), sluice (n), **slum** (n.2), **slump** (v.2), **slumper** (v), **slush** (n.1),	34
'long, thin form'	**slap** (n.2), slappet (n), **slat** (n.1), sled (n1), slender (adj & adv), **slice** (n.1), **slight** (adj.2), **slim** (adj.1), **slink** (adj.1), **slip** (n.2), **slit** (n), sliver (n.1), **sloop** (n.1), **slot** (n.1), **slot** (n.2),	15
'quick or strong movement'	**slam** (v.1), **slap** (n.1), **slash** (n.1), **slat** (n.2), **slate** (v.2), **slent** (v.3), **slice** (v.1), **sling** (v.1), slirt (v), **slit** (v), slive (v.1), **slog** (v), **slosh** (n), **slug** (n.3),	14
'slackness'	**slab** (n.3), slack (adj.1), slagger (v), sleep (n), sletch (v), **sloom** (n.1), sloppy (adj), **slouch** (n), **slouk** (n), slounge (v), **sloven** (n), slow (adj), **slug** (n.1), slumber (v),	14
'movement'	**slew** (v), **slink** (v), **slip** (v.1), sliving (adj), slodge (v), **slog** (v), slumock (v), **slumper** (v), **slime** (v.2), slither (v),	10
'smoothness'	slape (adj), **slaphead** (n), **slee**k (adj and adv), slick (adj), slide (v), sline (n), slippery (adj), **slur** (v.1),	8
'oblique movement'	slant (v), **slash** (v), **slent** (n.1), slidder (n), slope (n.1), **slough** (v.2), **slype** (v),	7
'speech'	**slang** (n.3), **slate** (v.2), slaum (v), **sledge** (n.3), **slur** (v.1),	5
'noise'	slare (v), **slorp** (n), **slurp** (v),	3
'measure'	**slice** (n.1), **slight** (adj.5),	2
'miscellaneous'	slade (n.4), slade (n.3), slacky (n.), slalom (n), **slam** (n.2a), **slam** (n.4), slan (n), slart (n), slaughter (n), slav (n.1), slave (n.1), slaw (n), sleb (n), **sledge** (n.1), **sleek** (n.1), sleeve (n), sleever (n), sleight (n.1), sleight (v), slepton (n), **slew** (n.3), **slew** (n.4), slift (n.2), **slink** (v), slipper (n), slippy (adj.1), slivovitz (n), slize (v), sloan (n), slock (v.2), sloe (n), slogan (n), slogger (v), sloka (n), **sloom** (v.2), **sloop** (n.2), **slop** (n.1), **slosh** (n), **slot** (n.1), **slot** (n.3), **slough** (n.2), **slough** (n.5), slour (v), slovakian (adj), slovenian (adj), sloyd (n), **slub** (n.2), **slubber** (v), sludder (n), **slug** (n.2), **slump** (n.1), **slump** (n.2), slup (v), **slut** (n), **sly** (adj & adv), **slype** (n),	56

Table 3. List of English *sl*-words

Much like in Swedish, the categories of 'wetness', 'long thin form' and 'slackness' are among the most dominant groups in terms of how many motivated words they contain. In terms of absolute numbers, the semantic group 'wetness' is more dominant in English than in Swedish. The category 'miscellaneous' contains all etymologically unrelated words that do not fall into

clearly distinguishable semantic groups, and are consequently not considered sound symbolic. This brings us to a discussion on the method of naming these semantic categories.

3.2 Key words

Key words are words that represent a semantic feature. In the case of the phonaestheme *sl-*, the key word 'wetness' represents the semantic feature shared by words like [slime], [slosh] and [sludge]. The key words present in this essay are largely drawn from Abelin (1999). Her method of establishing these key words is based on them appearing as "a word in the definition of the actual word, or a word in the definition of a word which is in the definition of the actual word, or another word in the paraphrase of a more peripheral meaning of the actual word, or a synonym" (Abelin, 1999, p. 72). Seeing as the purpose of this essay is to examine the productiveness of the *sl*-phonaestheme in Swedish and English, its three most dominant semantic categories were chosen, which in Abelin's list (1999) were categorized as: 'wetness', 'long thin shape' and 'slackness'. Out of these, the categories 'wetness' and 'long thin form' were adopted and used in this essay.

The category of 'slackness' proved problematic for two reasons. Firstly, there is a translation issue as to what senses the key word is associated with. All of the Swedish words listed by Abelin are connected to the key word 'slackness' ('slakhet' in Swedish) in the sense that they share the semantic feature of not being tight or firm, but flaccid or lax. The semantic properties of 'slackness' in English (and arguably in Swedish), however, encompass a wider range of sense relations, and is equally associated with 'inaction', 'passive action' and 'lack of energy', as is portrayed by the words [sloom], [sloppy], [slow] and [slug] (OED 2019).

A second issue is related to the possible priming effects of choosing the key word 'slackness'. Seeing as the word itself already contains the cluster *sl-* in onset position, informants may be influenced to choose similar looking and sounding neologisms when presented with multiple answer questions. This is for instance visible in Magnus' dissertation from 2001, in which she concludes that when a informants were asked to come up with a neologism for 'scraping the black stuff off overdone toast', 27% invented a word containing the phoneme sequence /skr-/, which far outweighs the possible combinations in language overall (2001, p. 153). While the priming capability of phonaesthemes is interesting in itself, this essay aims to investigate their productiveness in association to certain semantic features, Consequently, priming effects were unwanted in the design of the questionnaires.

With these factors in mind, the key word ‘slackness’ was changed into ‘INACTIVE or LACKING ENERGY’ in an attempt to encompass the wider sense relations connected to the key word ‘slackness’ and to avoid unwanted priming effects.

3.3 Construction of neologisms

In order to test for the productivity of the phonaestheme *sl-* in English and Swedish respectively, neologisms containing this consonant cluster in word-initial position were created. In accordance with Abelin’s (1999, p. 221) argument that longer neologisms increase the risk of motivated meanings appearing in the non-initial part of the word, all of the constructed neologisms are mono- or bisyllabic. Efforts have also been made to diversify the neologisms in terms of what vowels and consonants follow the onset consonant cluster. In order to establish a method of constructing these as little tied to subjective linguistic instinct as possible, two different approaches were selected.

The primary method consisted of selecting and modifying appropriate words found in non-cognate languages, in this case Serbo-Croatian; Czech and Polish, as visible in the table below:

Serbo-Croatian words (Dahl & Gustavsson, 2001)	**Polish words** (Nordstedts, 2005)	**Czech words** (Nordstedts, 2005)
[slâst] (‘sweetness’) [slàvin] (‘faucet’) [slôj] (‘layer’)	[sloik] (‘jar’) [slawny] (‘famous’) [slony] (‘salty’) [slota] (downpour) [glupi] (‘stupid’)	[slib] (‘promise’) [sloup] (‘pole’) [slon] (‘elephant’) [sluch] (‘hearing’)

Table 4. Words used to create neologisms

Some of the words were then modified in order to better represent both English and Swedish orthography and phonotactics, others maintained their original form. While most words generated neologisms that were used in both questionnaires, a selected few words were used only in one or the other. The original words were primarily used to create real test items, in other words neologisms containing the *sl*-cluster. In some cases, however, they were utilized to create filler items as well. The words in table 5 below make up a representational sample of the neologisms used in the questionnaires, displaying the process of creating neologisms:

Original word	**English neologism**	**Swedish neologism**
[slast]	[slast], [grast], [crast] & [glast]	[slast], [grast], [krast] & [glast]
[slôj]	[sloy], [bloy] & [gloy]	[sloj], [bloj] & [floj]

[slib]	[slib], [blib] & [grib]; [slig], [flig] & [blig]	[slibb], [blibb] & [gribb] [sligg], [fligg] & [bligg]
[sluch]	[glutch], [flutch] & [blutch]	[gluck], [fluck] & [bluck]
[sloup]	[sloup], [floup] & [bloup]	[slepp], [blepp] & glepp]
[slota]	-	[slota], [krota] & [grota]
[slawny]	[slawny], [grawny] & [crawny]	-

Table 5. Sample of words modified into neologisms.

All of the constructed neologisms were cross-checked against the OED and the SAOL/SO to ascertain they were not already existing words in either language. Exceptions were made in cases when a neologism corresponded with an already existing word, but that was listed as 'obsolete'. One such case is [slavin], which is listed as 'obsolete' in the OED meaning: 'a pilgrim's mantle' (2019). These words were included on the basis that it should be highly unlikely for the word to be part of informants' mental lexica.

On a related note, words were also chosen on basis of their ability to produce two other words containing different onset consonant clusters to be used as filler items. Naturally, these constructions were also cross-checked against dictionaries to verify that they were not established words in either English or Swedish. The process of creating these fillers items simply consisted in swapping one consonant cluster for another, as in the case of *slast*, *crast* and *glast* (Appendix B, question 3.1).

Lastly, a selected few words like *slythe* and *fleb* were created on the basis of subjective linguistic intuition. The reasoning behind this was to further diversify what phonological material the constructed neologisms contained. For instance, none of the words from the non-cognate languages contained the vowel or diphthong sounds: /ʌɪ/ or /y/; /e/ or /ɛ/. Consequently, neologisms containing these phonemes were created and included in the questionnaires.

3.4 Construction of questionnaire

The goal of the experiment was twofold: to test the validity of the *sl*-phonaestheme from the perspective of productivity (ability to create neologisms associated with dominant semantic categories) and to compare whether the *sl*-phonaestheme is more productive in either of the two cognate languages English and Swedish. In order to receive qualitative data with regard to these aspect, two questionnaires were produced: one targeting individuals with Swedish as a first language and one targeting individuals with English as a first language. The questionnaire targeting Swedish-speaking informants was constructed in Swedish and vice versa. The

questionnaires were constructed using the online accessible software 'google forms' and access to the questionnaires was distributed by means of a URL-link.

The questionnaires were constructed in such a way that they contained two types of questions: In question type 1, informants are asked to choose one of three neologisms most associated with a meaning. In question type 2, informants are asked to choose one of three meanings most associated with a set of neologisms. Examples of both question types are available below:

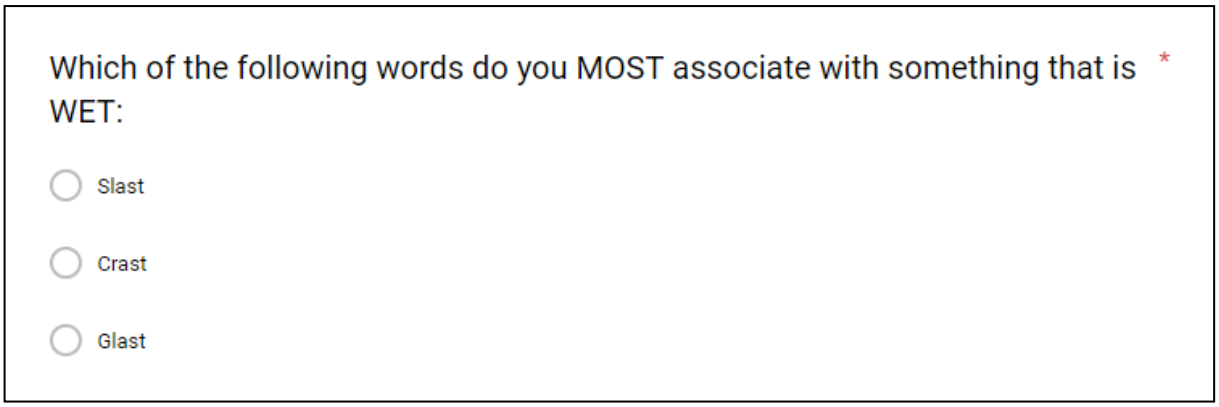


Figure 1. Question type 1.

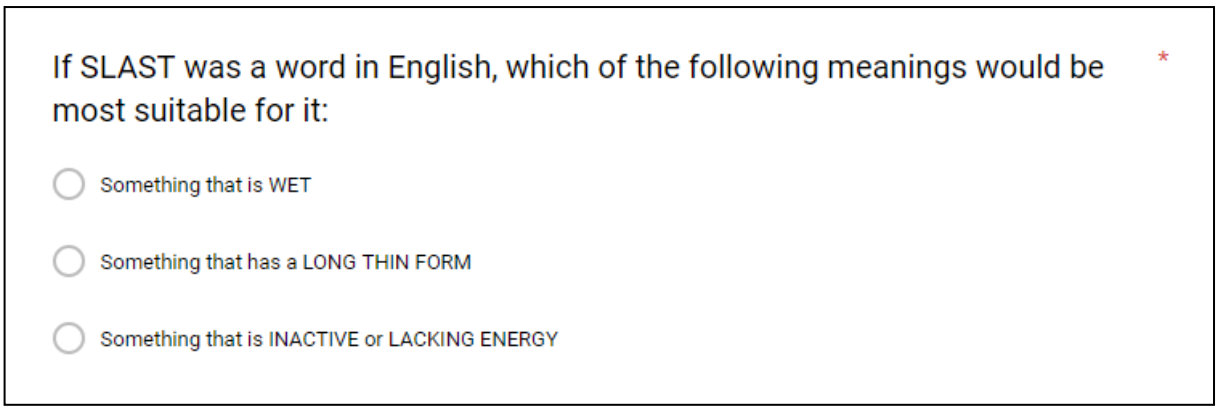


Figure 2. Question type 2.

Both neologisms and semantic features were consistently written in capital letters to avoid confusion on part of the informants. The first type of question contained nine real questions and nine fillers. The second type of question contains three real questions and six fillers.

In order to validate the claim that the *sl*-cluster functions as a phonaestheme in words sharing the semantic features 'wetness', long thin form' and 'inactive or lacking energy', the consonant clusters used as fillers were chosen based on the premise of not being documented as closely associated with any of the above categories (Abelin, 1999; Mattiello, 2013; Rhodes, 1994; Sadowskij, 2002). Moreover, they were chosen on the basis of sharing the same phonological

realization in both languages. The filler clusters along with suggested semantic associations are listed below:

Cluster	**Dominant semantic features in English:**	**Dominant semantic features in Swedish:** (Abelin, 1999)
/gl-/	*Light, looking, light movement* (Sadowskij, 2002)	*Light, smooth surface structure, gaze.*
/bl-/	*Negative (deprecative) value* (Mattiello, 2013)	*Light*, *gaze* and *talking*. The semantic feature *wetness* is present in four root morphemes.
/kr-/	*Abrupt onset; twisted movement or position* (Rhodes, 1994; Mattiello, 2013)	*Winding form, sound* and *thin form*.
/gr-/	*Deep-toned, menacing noises* (Mattiello, 2013)	*Hollow form*, *bad mood* and *talking*.
/fl-/	*Phenomena of movement* and *liquid motion* (Mattiello, 2013).	*Quick or strong movement*, *thin form* and *light*.

Table 6. List of filler clusters

In order to avoid any priming effects purely based on how the questions were ordered, the question types were divided into two separate sections and all questions belonging to one type were randomized within that given section. In addition, within each question the option order was shuffled. This meant that in theory, no two informants would receive the exact same test in terms of how the questions were presented. This also means that there is no one representational version of the test, and the questionnaires visible in appendix A and B mirror how the original test was designed, but do not account for the randomness in the ordering of the questions. Finally, in order to avoid any potential initial priming causing the informants to weigh the scales in favour of words containing the *sl*-consonant cluster, the instructions explaining how the test is designed did not contain any neologism constructed from the word initial *sl*-cluster.

Informants were selected in two different ways. Regarding the Swedish questionnaire, all informants are friends or relatives, the large majority of which have a university education but none of which have ever studied linguistics. This resulted in a total of 40 respondents. Seeing as my social network containing native English speakers is tangibly smaller, and in order to achieve close to equal figures in terms of the number of informants, other sources had to be consulted. Accordingly, I asked members of two facebook-groups targeting English-speaking individuals residing in Sweden to partake in the survey. One group is called “The English-speaking Malmö-dwelling Society” and another is called “Expats World in Stockholm”. After having removed responses in which the informant stated any other language than English as ‘first language’, a total of 39 respondents remained and the results stated in the following section are based on their answers.

4. Results

The questionnaires were designed to answer the question of whether neologisms containing the *sl*-consonant cluster are more associated than other clusters with any of the three semantic categories ‘wetness’, ‘long thin form’ and ‘inactive or lacking energy’. If they are, not only would it suggest that phonaesthemes do contribute some level of meaning, but it would also attest to their productivity, altogether corroborating the claim that they to some extent function as sub-morphemic units. The questionnaires are also designed to provide results regarding whether the *sl*-phonaestheme function similarly in English and Swedish. Individual questions along with results from the Swedish questionnaire are visible in appendix A, whereas corresponding results for English are visible in appendix B. Within appendices A and B, each question is assigned a number and are referenced accordingly in the following sub-sections.

4.1 Results from the Swedish questionnaire

The results show that in question type 1, where the informants are asked to choose an appropriate neologism for any of the meanings: ‘WET’, ‘LONG THIN FORM’ or ‘INACTIVE or LACKING ENERGY’, they consistently choose a neologism containing the *sl*-cluster at a considerably larger rate than they do any other cluster. We begin by looking at results related to the semantic category ‘wetness’:

Key word: ‘wetness’	**Test item**	**Filler item 1**	**Filler item 2**
Question: 1.1	[slast] 90%	[krast] 0%	[glast] 10%
Question: 1.3	[slibb] 85%	[blibb] 15%	[gribb] 0%
Question: 1.5	[slupig] 60%	[flupig] 10%	[glupig] 30%
Average result:	78,3%		

Table 7. Swedish results related to the key word: ‘wetness’.

The results show that neologisms containing an onset *sl*-cluster are far more associated with ‘wetness’ than any other cluster. The figures vary quite notably depending on how the neologism is constructed and what other neologisms it is paired with, as is displayed by the difference in figures between [slast] and [slupig] (compare questions 1.13 with 1.15 for further reference). We continue by looking at results related to the key word ‘long thin form’:

Key word: 'long thin form'	**Test item**	**Filler item 1**	**Filler item 2**
Question: 1.8	[slyte] 67,5%	[blyte] 12,5%	[glyte] 20%
Question: 1.10	[slavin] 62,5%	[kravin] 20%	[gravin] 17,5%
Question: 1.12	[sligg] 72,5%	[fligg] 25%	[bligg] 2,5%
Average result:	67,5%		

Table 8. Swedish results related to the key word: 'long thin form'.

Much like in the previous table, *sl*-neologisms are more associated with the key word 'long thin form' than any of the neologisms containing filler cluster, although not to the same extent as they are to 'wetness'. Next, we look at results related to the key word 'inactive or lacking energy':

Key word: 'inactive or lacking energy'	**Test item**	**Filler item 1**	**Filler item 2**
Question: 1.13	[sloj] 65%	[bloj] 7,5%	[floj] 27,5%
Question: 1.15	[slota] 85%	[krota] 7,5%	[grota] 7,5%
Question: 1.17	[slepp] 75%	[glepp] 12,5%	[blepp] 12,5%
Average result:	75%		

Table 9. Swedish results related to the key word: 'inactive or lacking energy.

The same pattern is visible here as well, as *sl*-neologisms are clearly favoured above neologisms constructed from filler clusters. Based on results from question type 1, it would seem that the *sl*-phonaestheme is most associated with the semantic feature 'wetness'. This claim is further substantiated by results from question type 2 which are visible below:

***sl*-neologism**	**'wetness'**	**'long thin form**	**'inactive or lacking energy'**
[slast]	57,5%	10%	32.5%
[slota]	15%	27.5%	57.5%
[sligg]	37.5%	55%	7.5%
Average result:	36.6%	30,8%	32,5%

Table 10. Results from the Swedish questionnaire, questions 2.1, 2.4 and 2.7.

These results mirror those from question type 1, illustrating a clear hierarchical relation in terms of associative status. There is a tendency for informants to associate *sl*-neologisms with 'wetness' over 'inactive or lack of energy', which in turn is slightly favored over 'long thin form'. Let us now move on to look at the results from the English questionnaire to see whether the same relation holds true for both languages.

4.2 Results from the English questionnaire

Results from the English questionnaire also indicate the reality of an *sl*-phonaestheme. However, its associative connection to any of the three semantic categories is somewhat lower than in Swedish based on answers from the English informants. The aggregated result of association with any of the semantic categories is 66.9%, compared to 73.6% among Swedish informants. Let us begin by looking at results from question type 1, and more specifically at answers connected to the key word 'wetness':

Key word: 'wetness'	**Test item**	**Filler item 1**	**Filler item 2**
Question: 3.1	[slast] 71,8%	[crast] 2,6%	[glast] 25,6%
Question: 3.3	[slib] 76,9%	[blib] 23,1%	[grib] 0%
Question: 3.5	[slupy] 71,8%	[flupy] 5,1%	[glupy] 23,1%
Average result:	73,5%		

Table 11. English results related to the key word: 'wetness'.

Much like in Swedish, the semantic feature 'wetness' is most associated with the *sl*-neologisms in question type 1. In contrast to the Swedish results, English informants are more consistent in the extent to which they associate *sl*-neologisms with 'wetness', seemingly irrespective of what phonological material the neologism is constructed from. Although, the situation is not the same with regard to the key word 'long thin form', as is displayed below:

Key word: 'long thin form'	**Test item**	**Filler item 1**	**Filler item 2**
Question: 3.8	[slythe] 74,4%	[flythe] 20,5%	[glythe] 5,1%
Question: 3.10	[slavin] 61,5%	[cravin] 20,5%	[gravin] 17,9%
Question: 3.12	[slig] 64,1%	[flig] 33,3%	[blig] 2,6%
Average result:	66.6%		

Table 12. English results related to the key word: 'long thin form'.

While it is still true that *sl*-neologisms are preferred among informants, some of them are more associated with the stated key word than others. The largest gap being between [slythe] and [slavin], displaying a 12.9 point difference. The next set of results displays this phenomenon even more clearly:

Key word: 'inactive or lacking energy'	**Test item**	**Filler item 1**	**Filler item 2**
Question: 3.13	[sloy] 64,1%	[bloy] 15,4%	[gloy] 20,5%
Question: 3.15	[slawny] 79,5%	[crawny] 7,7%	[grawny] 12,8%
Question: 3.17	[sloup] 38,5%	[floup] 41%	[bloup] 20,5%
Average result:	60,7%		

Table 13. English results related to the key word: 'inactive or lacking energy'.

These results display a notable fluctuation in numbers depending on the target *sl*-neologism and what other neologisms containing other onset clusters are listed along with it. The most striking example being the difference in numbers between [slawny] and [sloup] as is visible above. On average the gap between the semantic categories 'wetness' and 'inactive or lacking energy' is considerably larger in English (12.8%) than in Swedish (3.3%), possibly indicating that the latter is a less associated with the *sl*-phonaestheme in English than in Swedish. Having stated as much, the results from question type 2 display a whole other tendency as is illustrated below:

***sl*-neologism**	**'wetness'**	**'long thin form**	**'inactive or lacking energy'**
[slast]	43.6%	33.3%	23.1%
[slig]	25.6%	61.5%	12.8%
[slawny]	10.3%	33.3%	56.4%
Average result:	26,5%	42,7%	30.7%

Table 14. Results from the English questionnaire, questions 4.1, 4.2 and 4.3.

Here informants on average associate the *sl*-neologisms with the semantic category 'long thin form' at a considerably larger rate (42.7% on average) than they do the other categories. Moreover, the semantic feature 'wetness', which was dominant in question type 1, is here the least opted for with an average score of 26.5%. Having looked at the results separately, the next section will provide a contrastive analysis and discussion of the results.

5. Discussion

The discussion will be divided into three parts. The first and second sub-sections address the research questions stated in the introduction of this essay. The third sub-section accounts for the possibility of skewed data and the fourth sub-section discusses observations related to data generated from filler items.

5.1 Universality and productivity

At this point, let us paraphrase the basic notion put forward by Bergen in section 2.2: if the relation between phonological form and meaning is entirely arbitrary, there should be no discernable pattern in informants' choices between neologisms constructed from different phonological material. However, results from both questionnaires show how informants consistently associate neologisms containing the word initial *sl*-cluster with all three semantic features to a larger extent than they do any other cluster. This indicates that the onset *sl*-cluster is sound symbolic in both languages, hence realized as a phonaestheme.

Having stated as much, the results need to be discussed in relation to the possibility of skewed or limited data. Unfortunately, in the process of designing the questionnaire one basic notion was overlooked, namely that of whether any of the suggested neologisms were deemed suitable in combination with a designated semantic feature. In hindsight, an option such as *none of the suggested neologisms fit the semantic feature* should have been included. Seeing as no such option was available to informants, it is impossible to draw any general or substantial conclusions with regard to the productivity of the *sl*-cluster. To exemplify, even though *slast* is clearly favoured above *krast* and *glast* among Swedish informants in question 1.1, we cannot tell whether informants find it suitable overall or only in relation to the selected set including filler items. In other words, it might be the case that the *sl*-neologism in the above case is considered the least bad among a set of poor alternatives. Consequently, the results will be discussed and analysed as showing possible rather than likely or definite tendencies in relation to the aspect of productivity.

In reference to research question one, we can establish that the *sl*-consonant cluster is present in a large number of words sharing the same semantic features in both English and Swedish, as was stated and illustrated in section 3.1. In addition, based on the number of motivated words (in this case *sl*-words sharing the same semantic feature), the dominant semantic categories are the same in both languages, set apart only by how many motivated words each category contains. These findings can be taken to suggest two things: the reality of a *sl*-phonaestheme and that its

potential meaning-bearing or associative function ought to be largely the same in both languages.

In reference to research question two, the data generated from the questionnaires strongly indicates that the *sl*-cluster is productive in both languages, in other words able to create new words sharing its dominant semantic features. This observation adds further legitimacy to the notion that the *sl*-phonaestheme functions as a sub-morphemic unit, as it contributes to the semantic categorization of words. Figures 3 and 4 below are chosen to represent the general tendency for informants to associate *sl*-neologisms with the stated semantic features above other alternatives containing other onset clusters, in turn indicating its productive status in both English and Swedish:

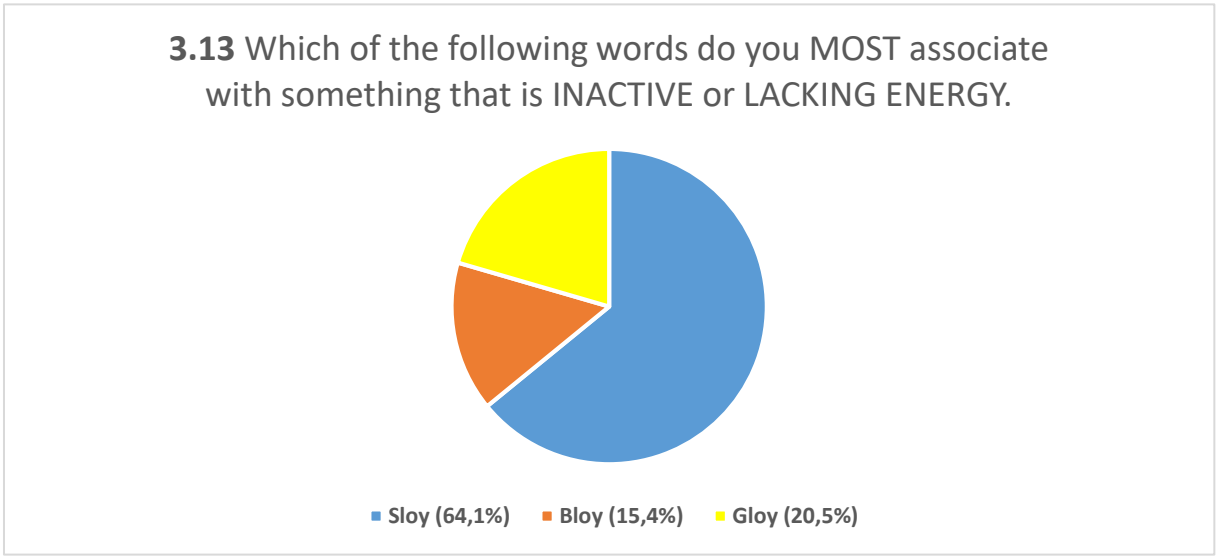


Figure 3. English questionnaire. Question 3.13.

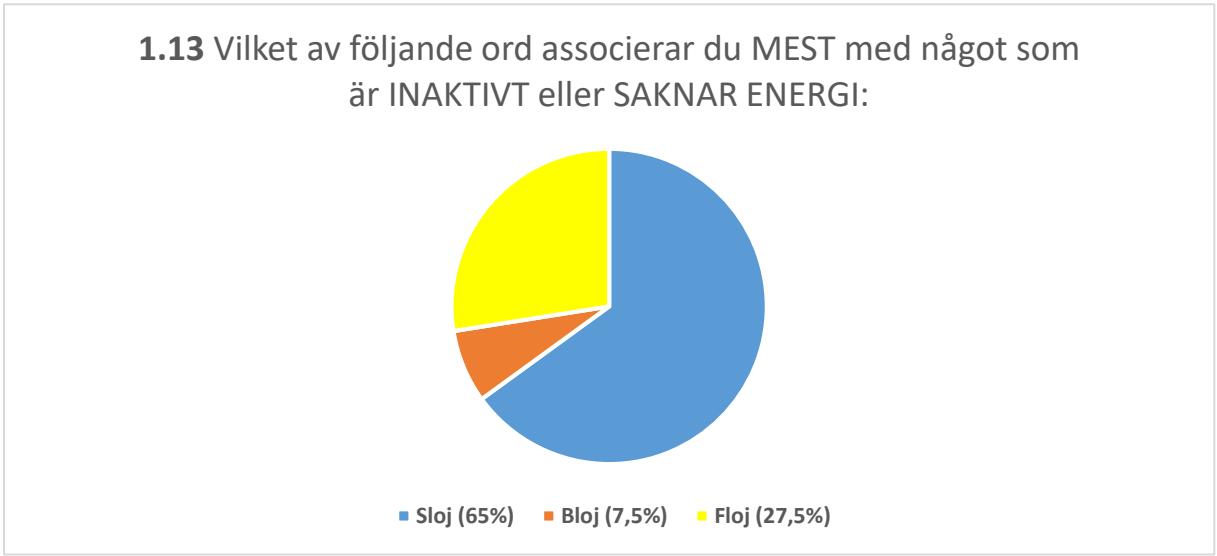


Figure 4. Swedish questionnaire. Question 1.13.

However, not all questions show as similar figures as the ones stated above. When comparing results from the two questionnaires, it would seem that the overall productiveness of the *sl*-phonaestheme in connection to the three dominant semantic features is slightly stronger in Swedish than in English. Based on results from question type 2, it would also seem that there is a slight difference in terms of what semantic features it is most associated with; The English data shows that *sl*-neologisms are most associated with 'long thin form' whereas the Swedish data suggests that 'wetness' is the dominant feature.

These results could add new insight as to the universality of phonaesthemes in general, and of the *sl*-phonaestheme in particular. We mentioned in the background section that data from previous investigations have suggested that phonaesthemes are language-specific, as speakers of unrelated languages produced below-chance averages of correct answers when presented with foreign words containing phonaesthemes. In relation, the data presented in this essay could be taken to suggest that the *sl*-phonaestheme is not language-specific, but to a large extent cognate-language-specific, seeing as the *sl*-neologisms on average are more associated with all three dominant semantic features in both languages. Having stated as much, one would need to investigate whether this statement holds in analysis of other phoneme cluster for other cognate languages, for instance Dutch and German.

5.2 The associative nature of the *sl*-phonaestheme

Another observation made from the contrastive analysis is that the results are inconclusive as to the notion that a higher number of motivated words (sharing the same phonological material and semantic affiliation) increases the likelihood for informants to associate a neologism that is similar in sound and shape with the same semantic feature. Even though the results from Swedish informants are close to equal in figures (section 4.1), there is a notable pattern in both question types for the semantic feature 'long thin form' to be slightly less associated with neologisms containing the onset *sl*-cluster, even though the lexical analysis shows that specific category to contain the highest number of motivated words (table 3). These data speak against Abelin's observation that "the most common semantic features found in the lexical analysis are often also the most successfully interpreted by subjects" (1999, p. 254).

On the other hand, the English results both corroborate and contradict this claim depending on question type. Based on results from question type 1 (table 6), the semantic category of 'wetness' is most associated with the *sl*-neologisms, although arguably not to the extent it should be seeing as the 'wetness'-category far outweighs all other semantic categories in terms of the number of motivated words. Such observations aside, these numbers do however reflect

and correlate with the hierarchical disposition established based on motivated words in table 2. In results from question type 2, however, the relation is a whole other. Here, the semantic category of 'wetness' is least associated with the three *sl*-neologisms, whereas the category of 'long thin form' accounts for 42.7% of all answers.

One interpretation of these results is that the associative nature of phonaesthemes cannot be defined only in terms of a quantitative aspect (in this case how many *sl*-words share a specific semantic feature), but perhaps also in terms of what may be defined as a 'qualitative aspect'. It may be the case the certain words containing the word-initial phonaestheme *sl-* are perceived as 'central' and 'strong' in the mental lexicon of language users, consequently influencing the associative status of similar looking words. In other words, the semantic feature 'wetness' coded in the phonaestheme *sl-* may be perceived more clearly in some words than others. Having stated as much, the data provided by the experiment in this essay gives little indication of what gives rise to 'stronger'and 'weaker' phonaesthemic association. This leads us to the possibility of alternative means of association discussed in the next sub-section.

5.3 Phonaesthemic association or word association

A notion to account for is the risk that informants associate the target neologisms with other words sharing the same semantic feature and overall similar-looking language material, rather than being subconsciously prone to pick a word containing the onset *sl*-cluster. In the process of constructing neologisms, efforts were made to avoid such possible effects. However, it proved easier said than done to construct quasi words such that they were 'realistic' to native speakers as well as clearly distinct from already established words, a notion also observed by Magnus (2001, p. 139). All things considered, it seemed more important to follow a methodical way of constructing these neologisms (see section 3.4 for reference) while at the same time making sure they were not part of the established vocabulary of language users in either English or Swedish. We will however take a closer look at some of the neologisms which might prime word association rather than phonaesthemic association.

The neologism [sloj] could perhaps be intuitively interpreted by Swedish informants as a portmanteau blend of the words [slö] ('drowsy') and [loj] ('indolent'), which are close to interchangeable synonyms in Swedish and in turn both related to the semantic feature 'lack of energy'. The neologism [slepp] is similar to the Swedish word [slapp] ('lazy'), differentiated only by vowel quality in middle position. Consequently, one has to bear in mind that the high tendency for Swedish informants to pick [slepp] over [glepp] and [blepp] may be linked to intuitive word association. The same argument can be made for the neologism [slota], which

is phonologically and orthographically similar to the Swedish word [sluta] ('to quit'), which could intuitively be interpreted as going from a state of activeness to a state of inactiveness.

The results vary from 85% association in the case of [slota], 75% in the case of [slepp] and 65% in the case of [sloj]. It should however be mentioned that [slota] was paired with neologisms containing the clusters *gr-* and *kr-*, which on average are notably less associated with any of the semantic features. Having stated as much, consistent mixing of what filler clusters are paired along with *sl*-neologisms should provide close to representative figures, even though the sample size is limited. Question 3.17 is particularly interesting in that it is the only case in both questionnaires where a neologism containing the *sl*-cluster is picked at a lesser rate than any other alternative, in this case trumped by the *fl*-cluster as visible below:

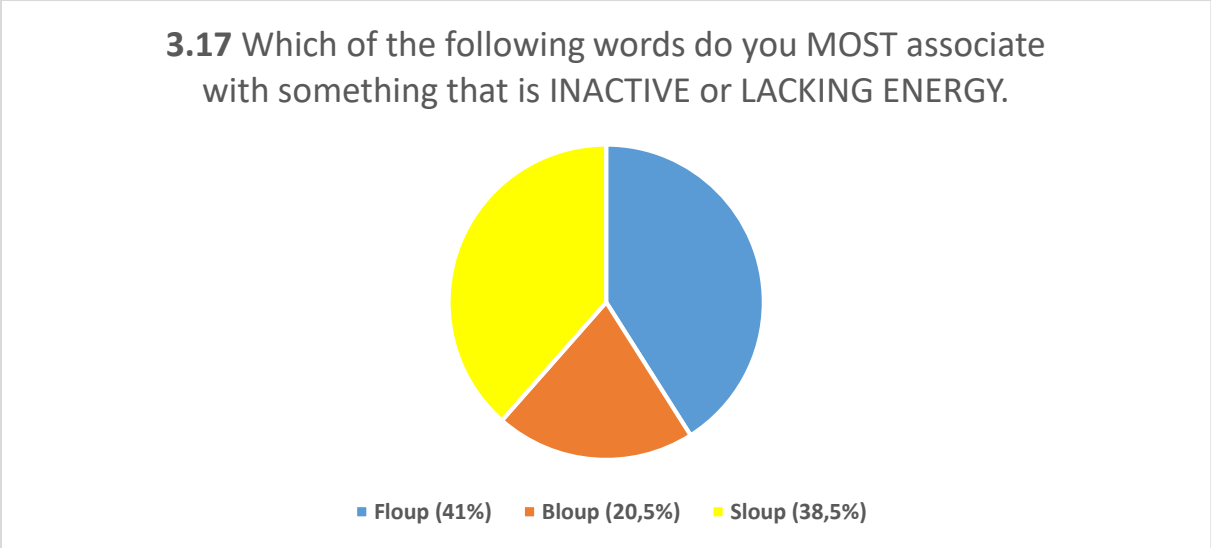


Figure 5. English questionnaire. Question 3.17

This could be analyzed as having to do with whether the neologism is closely similar to an already existing word. For instance, informants might intuitively relate to the word [flop] and its word senses 'a flabby or soft person'; 'a place to sleep' or 'something loose and pendulous' (OED 2019). All of which are to various extents related to 'inactivity' and/or 'lack of energy', whereas a similar looking and sounding word like [slop] and its word senses are not (OED 2019).

5.4 Remaining matters

While in most cases it is not necessary to discuss the filler items, as they are intended to be just fillers and not part of the analysis, I have noticed some tendencies even in the filler items that are worth bringing up here in passing.

The first observation is that words containing an /l/-sound as part of the onset cluster on average are more connected with the three semantic features presented in the questionnaires than are clusters containing an /r/-sound. However, the questionnaires also show that this is especially true with regard to the semantic category ‘wetness’, as is visible in for instance questions 1.1 and 1.3; 3.1 and 3.3. This seems a pervasive feature in both languages, as it holds for all questions related to ‘wetness’.

Another interesting observation is that in cases where any onset consonant cluster is followed by the vowel /ɪ/, informants tend to associate the word with the semantic feature ‘long thin shape’. Both when it comes to the *sl*-phonaestheme as well as in cases where the words contain other onset clusters (see questions 2.3; 2.5 and 2.7 for reference). In these cases, we might argue that the /ɪ/-sound in itself functions as a phonaestheme, much in line with what has previously been observed by Jespersen & Sapir; Ramachandran & Hubbard mentioned in section 2.3. Conversely, a tendency for the vowel sounds /ɔ/ to be associated with ‘inactitivty or lack of energy’ can be observed in questions 2.8 and 4.6. Ramachandran & Hubbard’s ‘*bouba-kiki*’ experiment may also account for the *bl*-cluster’s incompatibility with the category of ‘long thin shape’ as is visible in tables 8 and 12.

The final observation made is that second to *sl-*, there is a general tendency in both languages for the cluster *gl-* to be associated with both ‘wetness’ and ‘inactivity or lack of energy’ and the cluster *fl-* with ‘long thin shape’. In terms of informants affinity to associate the cluster *gl-* with ‘inactivity or lack of energy’, it could be explained in terms of association with the semantic feature ‘pejorative’, which in turn is documented as occurent in a number of *gl*-words such as *glib* and *gleek* in English; *glupsk* (‘voracious’) and *glop* (‘lout’) in Swedish (Abelin, 1999, p. 96); Sadowskij, 2002, p. 76). One might argue, purely based on linguistic intuition, that there is a tendency to associate that which is inactive or lacking energy with something negative, as is also displayed in Abelin’s list where for instance *sl*-words occur both in the semantic category ‘pejorative’ and in the category ‘slackness’, such as *sloka* meaning ‘to droop’ (1999, p. 117-118).

This concludes the discussion section and the essay ends with a short summary of conclusions.

6. Conclusion

The primary aims stated in the introduction of this essay was to investigate the productivity and universality of the *sl*-phonaestheme in English and Swedish respectively. Another aim was to test the claim that commonly shared semantic features found in the lexical analysis of specific phoneme clusters are often also the most successfully interpreted by subjects. The lexical analyses of words containing the consonant cluster *sl-* in word initial position show that the dominant semantic categories associated with the cluster are the same in both languages, namely 'wetness', 'long thin form' and 'inactive or lacking energy'. Data from the questionnaires strongly suggest that the *sl*-phonaestheme is productive in both languages. The data also shows that it is slightly more productive in Swedish than it is in English. This tendency holds for all three semantic features. When asked to pair a neologism with a meaning (semantic feature), Swedish informants on average picked a *sl*-neologism 73.6% of the times. The corresponding figure based on results from English informants was 66.9%.

In relation to the third research question, results are inconclusive as to the notion that a higher number of motivated words associated with a specific semantic feature increase the likelihood for informants to interpret new words along the same lines. Based on the results from the two questionnaires, arguments can be made both for and against this claim. Lastly, a number of interesting observations related to sound symbolism were generated from analysis of results connected to filler items, both in terms of other consonant clusters and vowel sounds.

In relation to the conclusions drawn in this essay, future research of interest would entail analyzing other cognate languages to see whether other potential phonaesthemes are realized in the same way cross-linguistically, but within one and the same language family.

References:

Abelin, Å. (1999). *Studies in sound symbolism.* Göteborg: University of Gothenburg dissertation.

Ahlskog, C. (2016). Därför är en häst inte en gris. *Språktidningen*, 5. Retrieved from: https://spraktidningen.se/artiklar/2016/06/darfor-ar-en-hast-inte-en-gris

Akita, K & Dingemanse, M. (2019). Ideophones (Mimetics, Expressives). In *Oxford Research Encyclopedia of Linguistics*. Oxford: Oxford University Press. Retrieved from: https://ling.auf.net/lingbuzz/004347

Anderson, E.R. (1998). *A Grammar of Iconism*. Madison: Farleigh Dickinson University Press.

Bergen, B. K. (2004). The psychological reality of phonaesthemes. *Language*, 80(2), 290-311. https://doi.org/10.1353/lan.2004.0056

Bloomfield, L. (1933). *Language*. New York: Holt.

Bolinger, D. L. (1965). *Forms of English*. Cambridge: Harvard University Press.

Dingemanse, M. (2012). Advances in the cross-linguistic study of ideophones. *Language and Linguistics Compass*, 6, 654-672. https://doi.org/10.1002/lnc3.361

Dingemanse, M. (2018). Redrawing the margins of language: lessons from research on ideophones. *Glossa: a journal of general linguistics*, 3(1): 4. Retrieved from: https://www.glossa-journal.org/articles/10.5334/gjgl.444/

Drellishak, S. (2006). *Statistical Techniques for Detecting and Validating Phonesthemes.* Seattle: University of Washington. Retrieved from: http://depts.washington.edu/uwcl/matrix/sfd/Drellishak%20-%20Phonesthemes.pdf

Enström, I. (2016). *Ordens värld. Svenska ord – struktur och inlärning*. Stockholm: Hallgren & Fallgren

Firth, J.R. (1930). *Speech*. London: Ernest Benn.

Fordyce, J.F. (1988). *Studies in sound symbolism with special reference to English*. Los Angeles: University of California Ph.D. dissertation.

Hurch, B & Mattes, V. (2007) The Graz Database on Reduplication. In *Faits de langues* 29: 191-202. Retrieved from: https://www.researchgate.net/publication/327691216

Johansson, M & Manninen, S. (2012). *English Linguistics: Introduction to Morphology, Syntax and Semantics*. Lund: Studentlitteratur.

Kwon, N. (2017). Empirically Observed Iconicity Levels of English Phonaesthemes. *Public Journal of Semiotics*, 7(2). Retrieved from: https://journals.lub.lu.se/pjos/article/view/16470

Magnus, M. (2001). *What's in a word? Studies in phonosemantics*. Trondheim: University of Trondheim dissertation. Retrieved from: http://www.trismegistos.com/Dissertation/dissertation.pdf

Mattiello, E. (2013). *Extra-grammatical Morphology in English: Abbreviations, Blends, Reduplicatives and Related Phenomena*. Germany: De Gruyter Mouton.

Svantesson, J.-O. (2017). Sound symbolism: the role of word sound in meaning. *Wiley Interdisciplinary Reviews*: Cognitive Science, 8(5). https://doi.org/10.1002/wcs.1441

Ramachandran, V. S. & Hubbard, E. M. (2001). Synaesthesia – A Window Into Perception, Thought and Language. *Journal of Consciousness Studies*, 8, No. 12, pp. 3–34. Retrieved from: http://cbc.ucsd.edu/pdf/Synaesthesia%20-%20JCS.pdf

Rhodes, P. (1994). Aural images. In: Hinton et al (ed). *Sound Symbolism*. Cambridge: Cambridge University Press.

Sadowskij, P. (2002). The sound as an echo to the sense: The iconicity of English gl- words. In: Fischer, O & Nänny, M (ed). *The Motivated Sign: Iconicity in language and literature 2*. Amsterdam/Philadelphia: John Benjamins Publishing Company.

Dictionary resources

Nordstedts akademiska förlag, 2005. *Nordstedts polska ordbok: Polsk-svensk/Svensk-polsk.* Nordstedts akademiska förlag: Stockholm.

Dahl, A & Gustafsson, A, 2001. *Jämförande ordbok från serbiska, kroatiska och bosniska till svenska.* Dahls: Uppsala.

Nordstedts akademiska förlag, 2005. *Nordstedts tjeckiska ordbok: Tjeckisk-svensk/Svensk-tjeckisk.* Nordstedts akademiska förlag: Stockholm.

English words in Oxford English Dictionary (2019). Retrieved from: https://www-oed-com.ludwig.lub.lu.se/

Appendix A

Questionnaire in Swedish (40 respondents):

Ord och betydelser

I den här enkäten kommer du bli tillfrågad att para ihop neologismer (nya ord som inte existerar i svenskan idag) med betydelser.

Frågorna har två olika former:

1. En betydelse presenteras tillsammans med tre olika neologismer.

Exempel:

"Vilket av följande ord associerar du MEST med något VÅTT

- Flebb
- Glebb
- Krebb"

2. En neologism presenteras tillsammans med tre olika betydelser

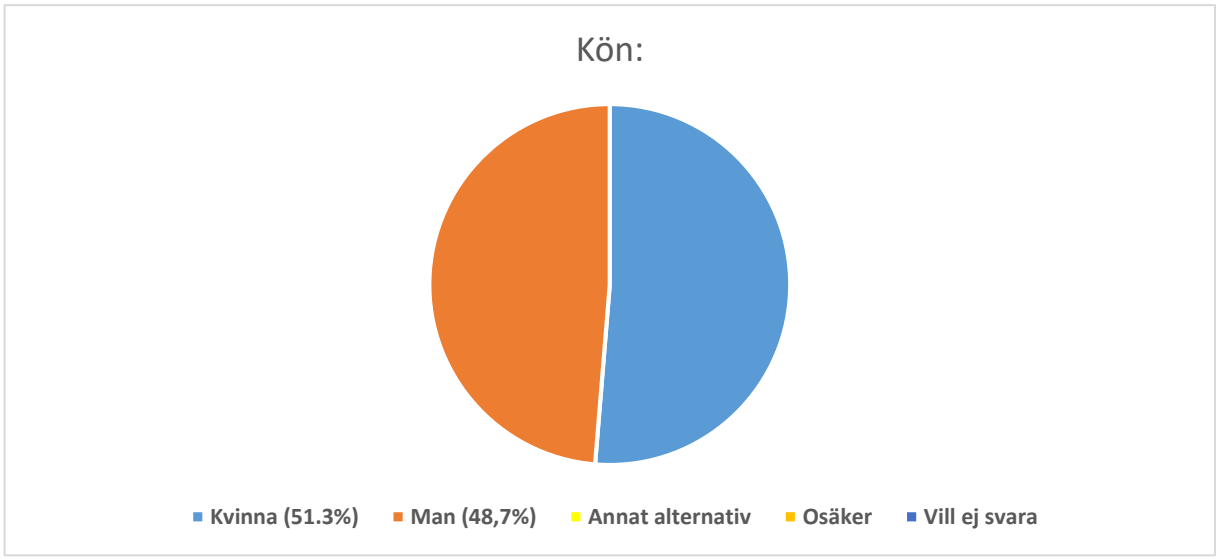
Exempel:

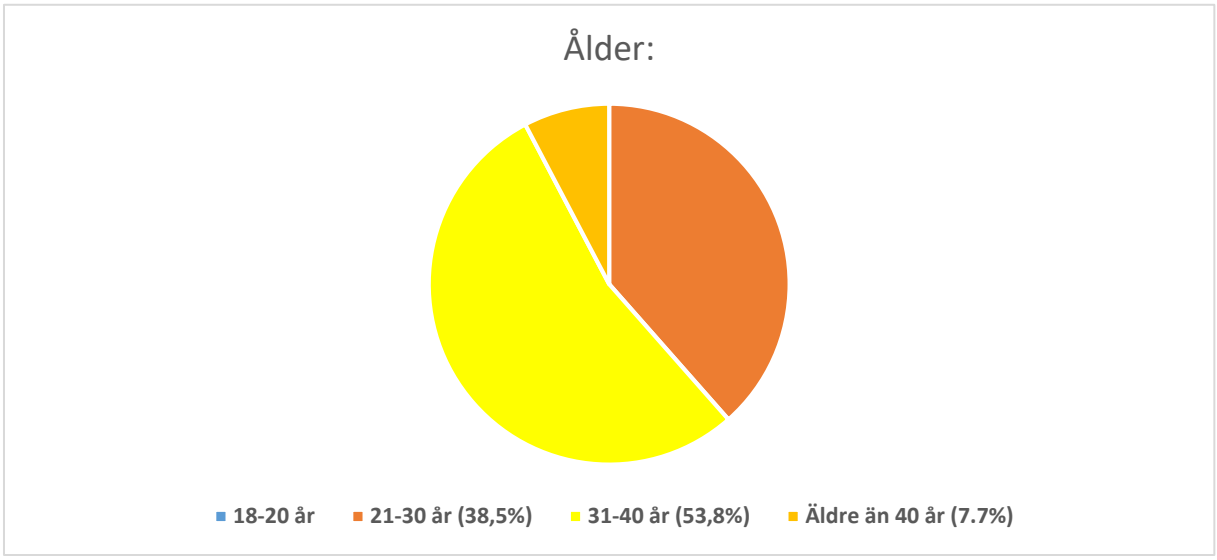
Om GLUPIG var ett ord i svenskan, vilken av följande betydelser skulle vara MEST lämplig

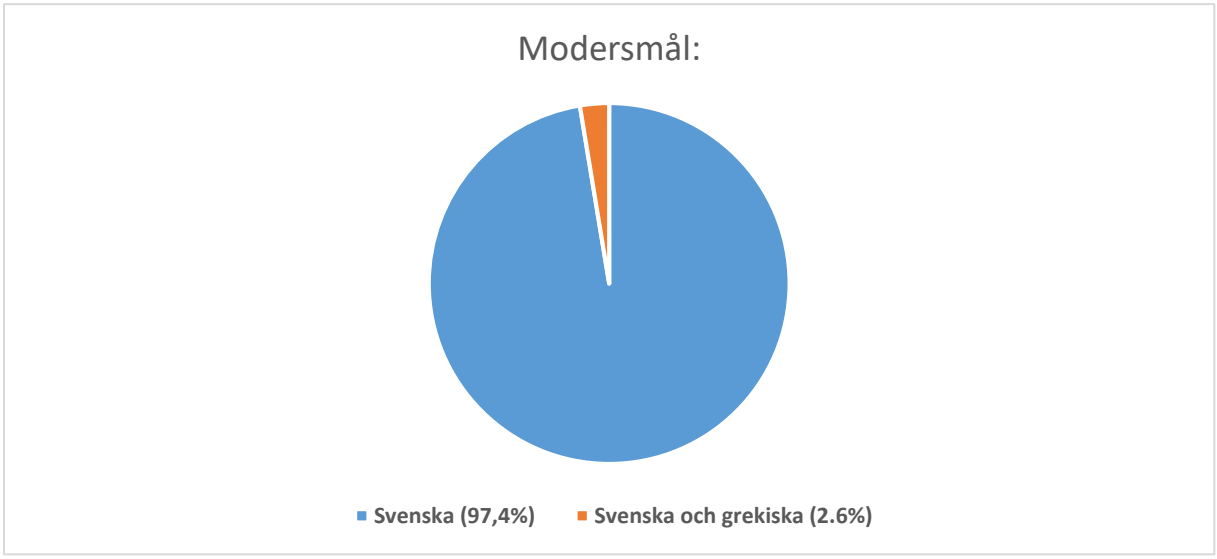
- Något som har en LÅNG SMAL FORM.
- Något som är INAKTIVT eller SAKNAR ENERGI
- Något som är VÅTT.

Tack för din medverkan!

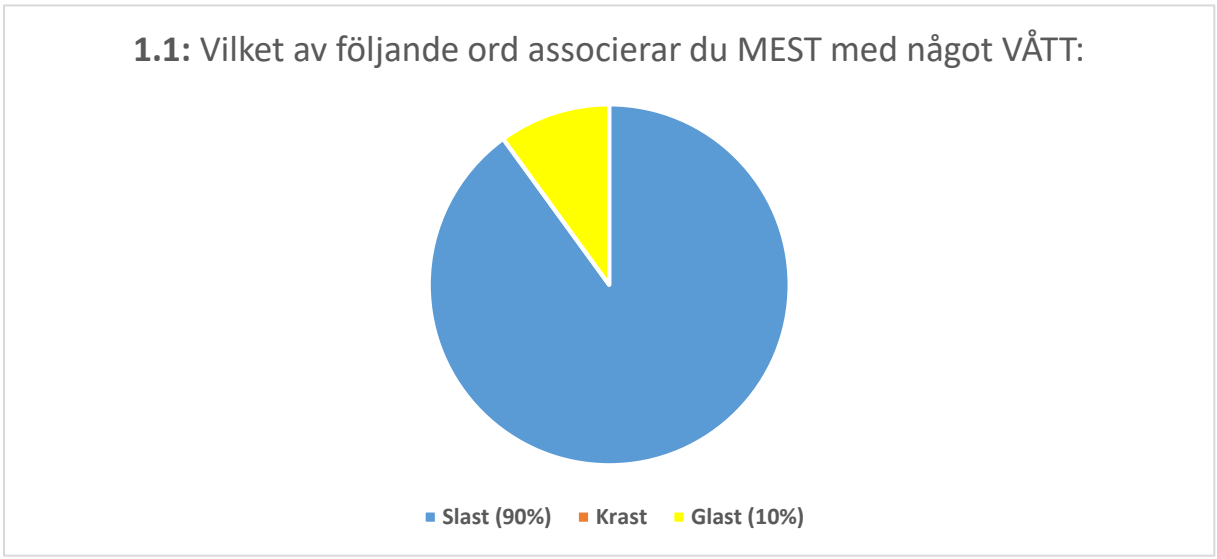
Christoffer Modig Forser, ENGK01, Lunds Universitet

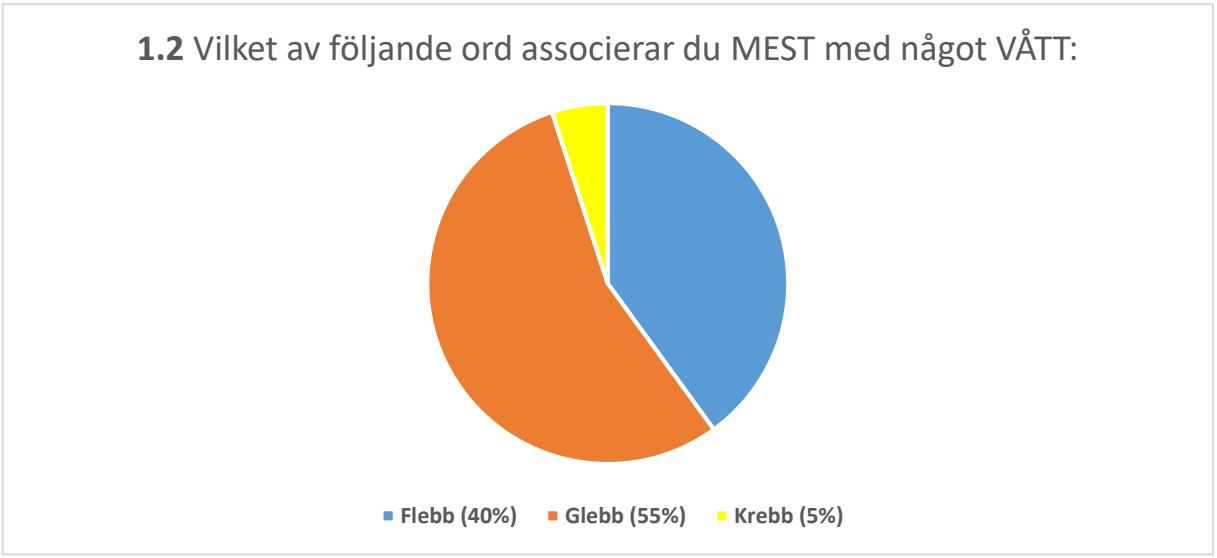

Kön:
Kvinna (51.3%)
Man (48,7%)
Annat alternativ
Osäker
Vill ej svara

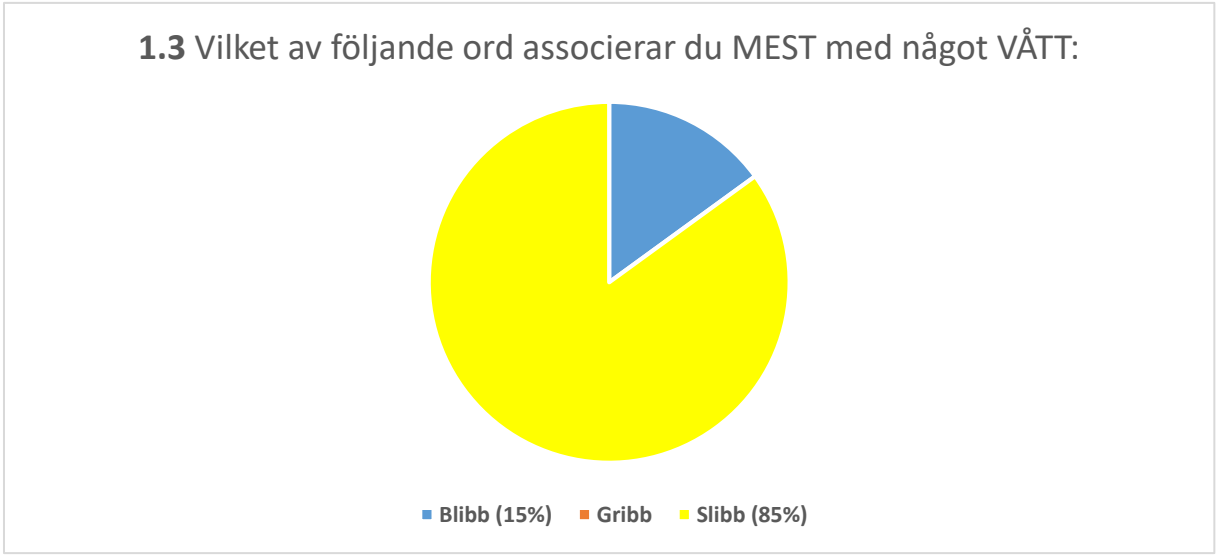

Ålder:
18-20 år
21-30 år (38,5%)
31-40 år (53,8%)
Äldre än 40 år (7.7%)


Modersmål:
Svenska (97,4%)
Svenska och grekiska (2.6%)

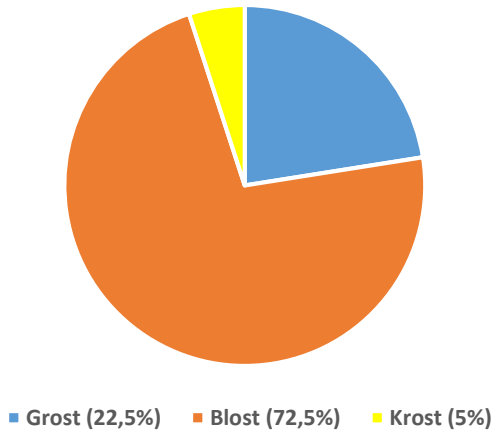
Question type 1:



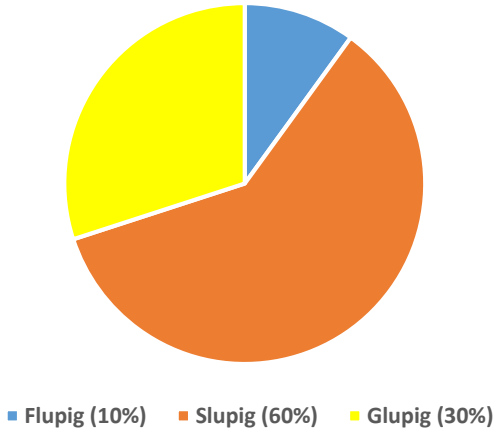




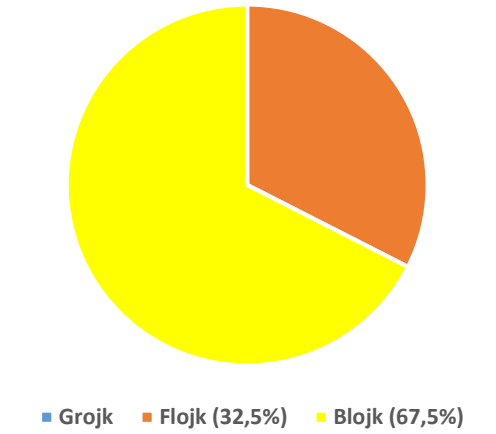
1.4 Vilket av följande ord associerar du MEST med något VÅTT:



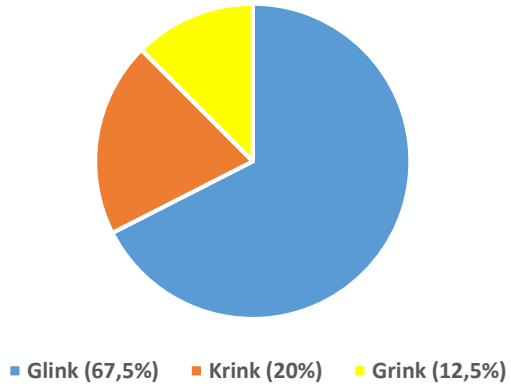
1.5 Vilket av följande ord associerar du MEST med något VÅTT:



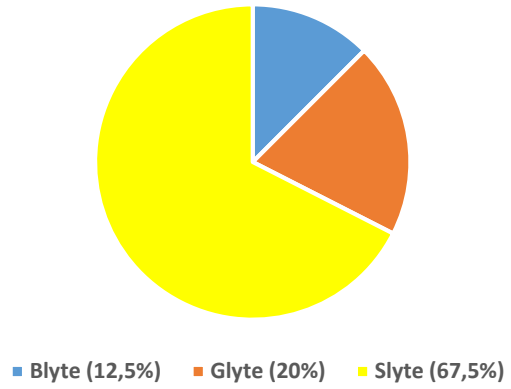
1.6 Vilket av följande ord associerar du MEST med något VÅTT:



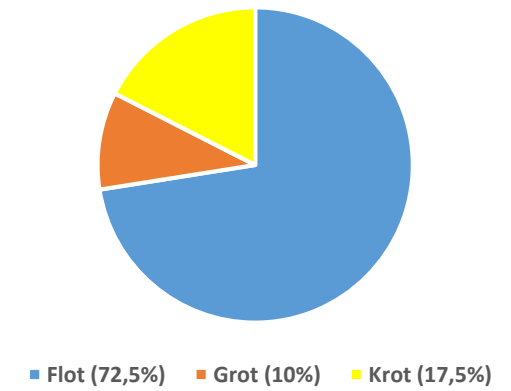
1.7 Vilket av följande ord associerar du MEST med något som har en LÅNG SMAL FORM:



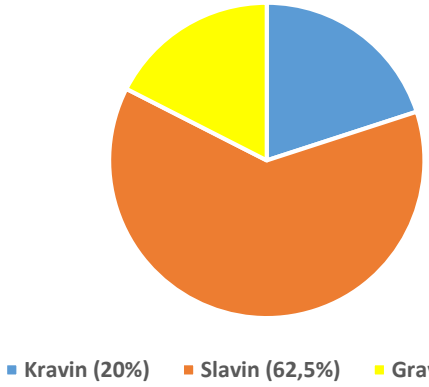
1.8 Vilket av följande ord associerar du MEST med något som har en LÅNG SMAL FORM:



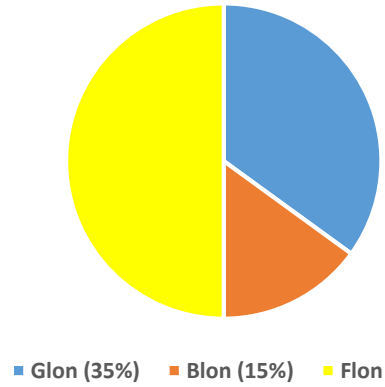
1.9 Vilket av följande ord associerar du MEST med något som har en LÅNG SMAL FORM:



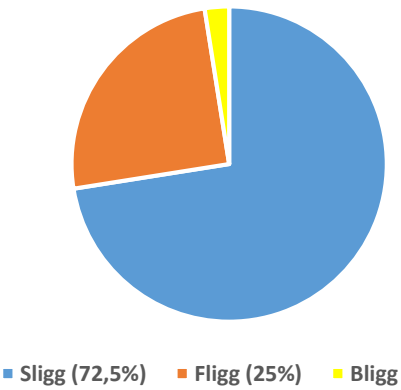
1.10 Vilket av följande ord associerar du MEST med något som har en LÅNG SMAL FORM:



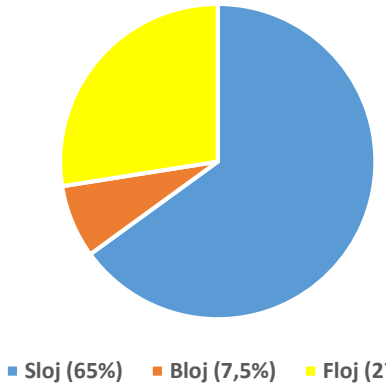
1.11 Vilket av följande ord associerar du MEST med något som har en LÅNG SMAL FORM:



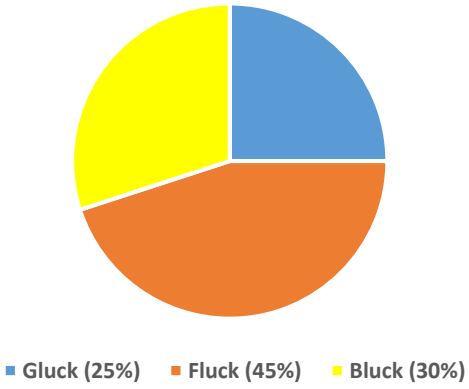
1.12 Vilket av följande ord associerar du MEST med något som har en LÅNG SMAL FORM:



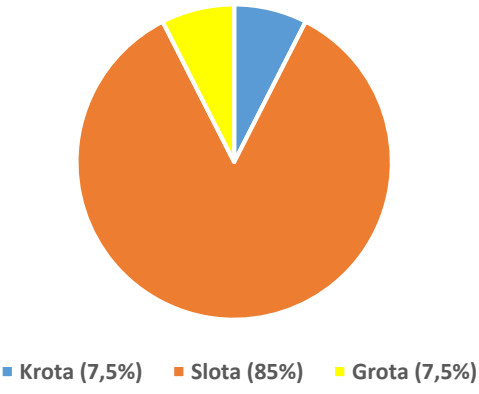
1.13 Vilket av följande ord associerar du MEST med något som är INAKTIVT eller SAKNAR ENERGI:



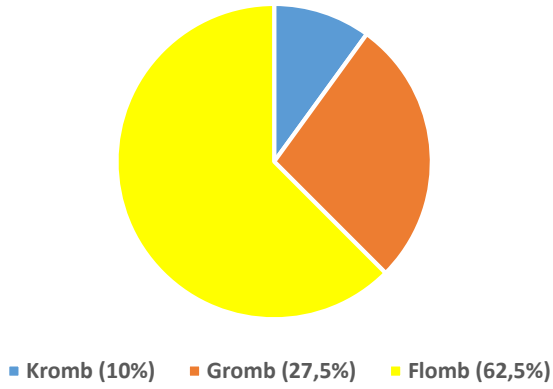
1.14 Vilket av följande ord associerar du MEST med något som är INAKTIVT eller SAKNAR ENERGI:



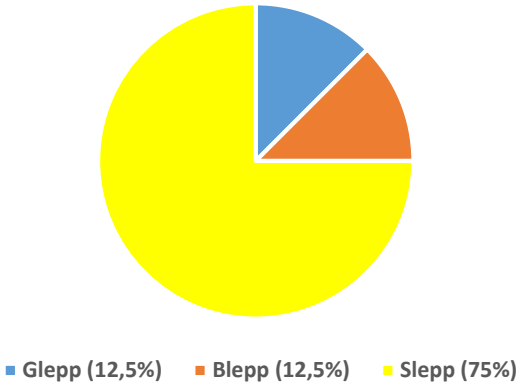
1.15 Vilket av följande ord associerar du MEST med något som är INAKTIVT eller SAKNAR ENERGI:



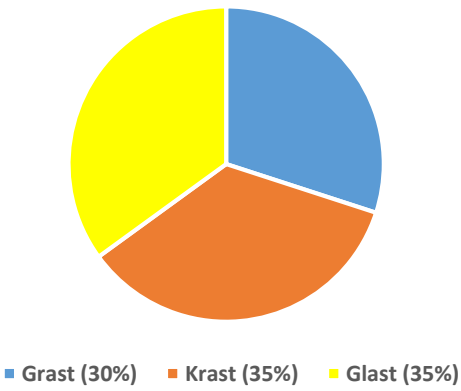
1.16 Vilket av följande ord associerar du MEST med något som är INAKTIVT eller SAKNAR ENERGI:



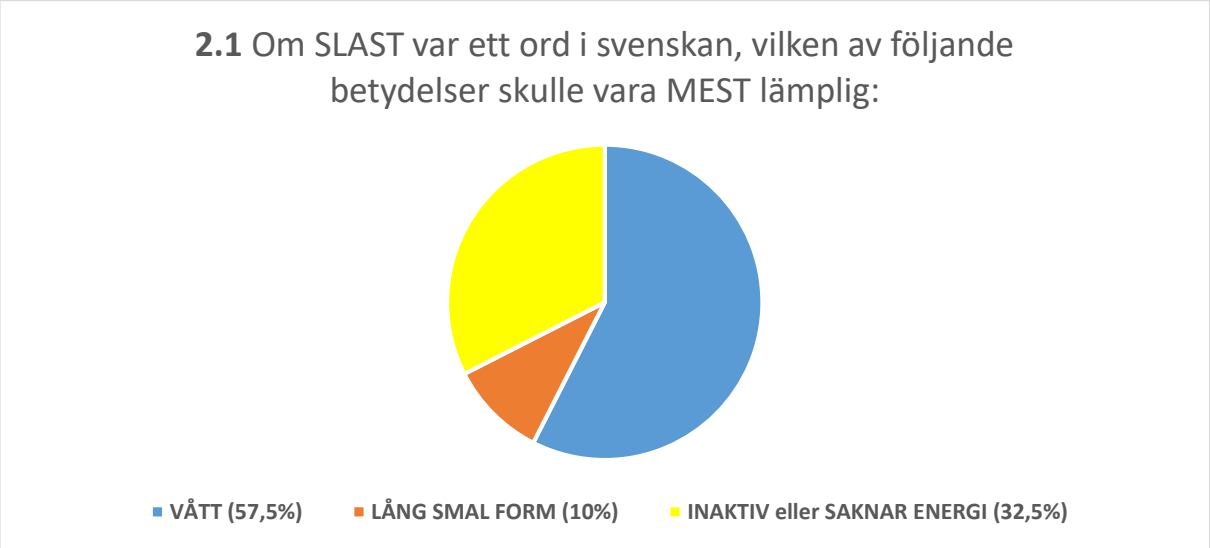
1.17 Vilket av följande ord associerar du MEST med något som är INAKTIVT eller SAKNAR ENERGI:

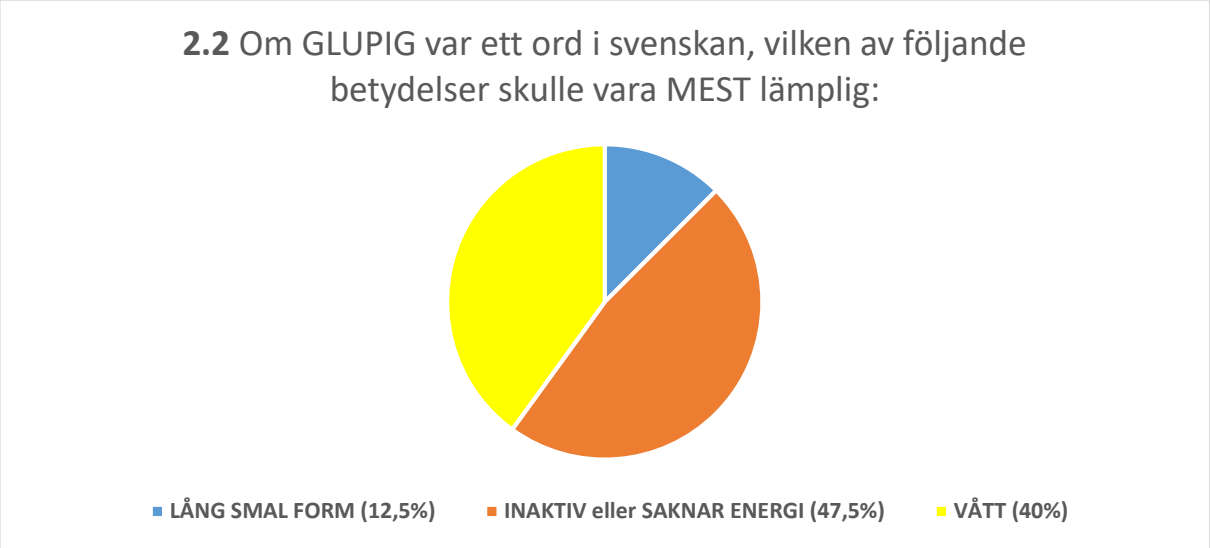


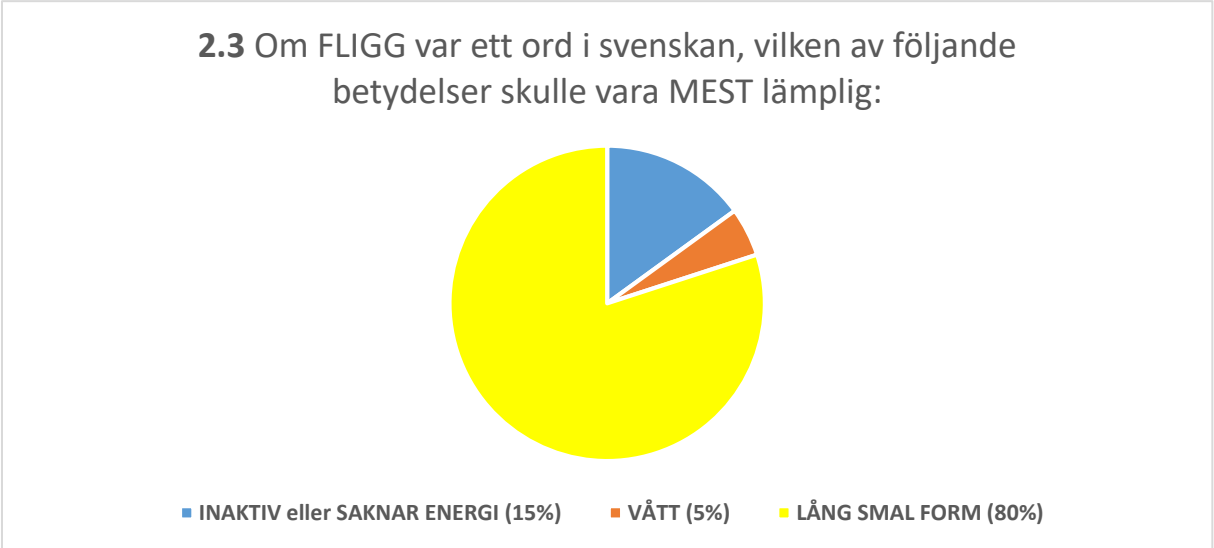
1.18 Vilket av följande ord associerar du MEST med något som är INAKTIVT eller SAKNAR ENERGI:



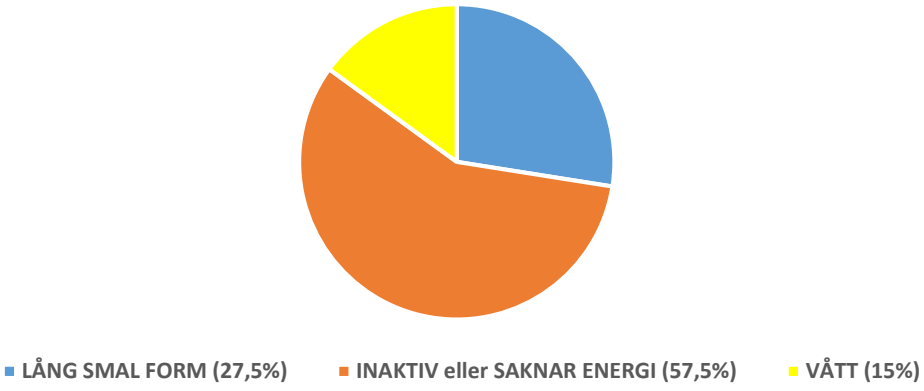
Question type 2:



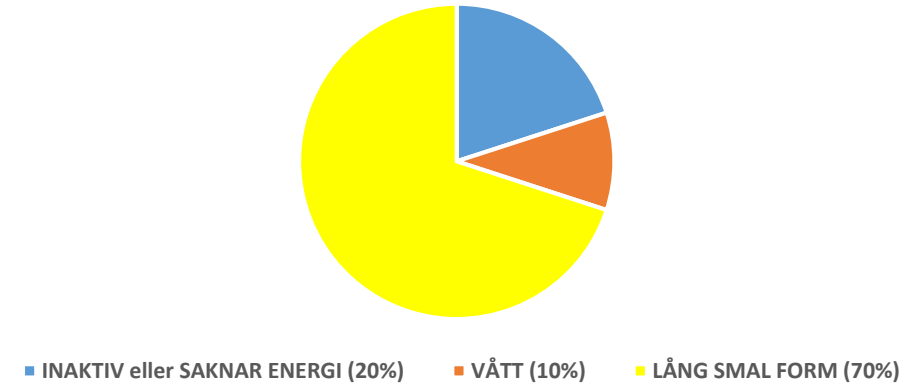




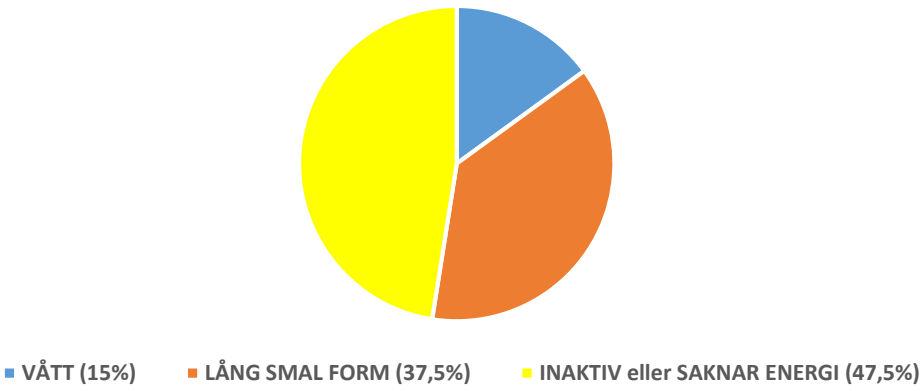
2.4 Om SLOTA var ett ord i svenskan, vilken av följande betydelser skulle vara MEST lämplig:



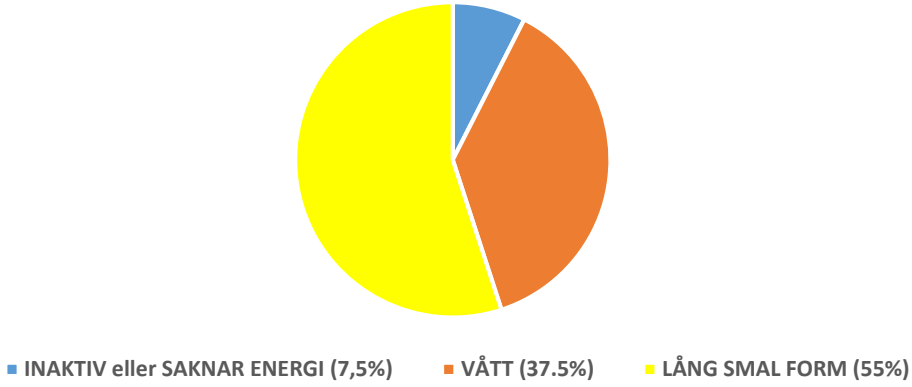
2.5 Om GLINK var ett ord i svenskan, vilken av följande betydelser skulle vara MEST lämplig:



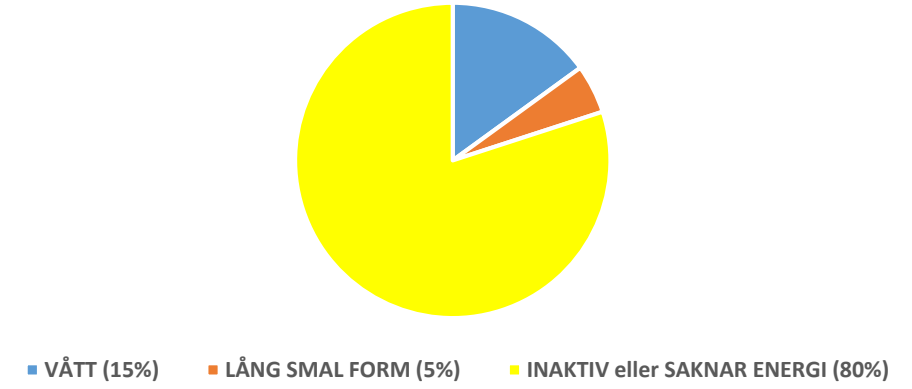
2.6 Om FLOMB var ett ord i svenskan, vilken av följande betydelser skulle vara MEST lämplig:



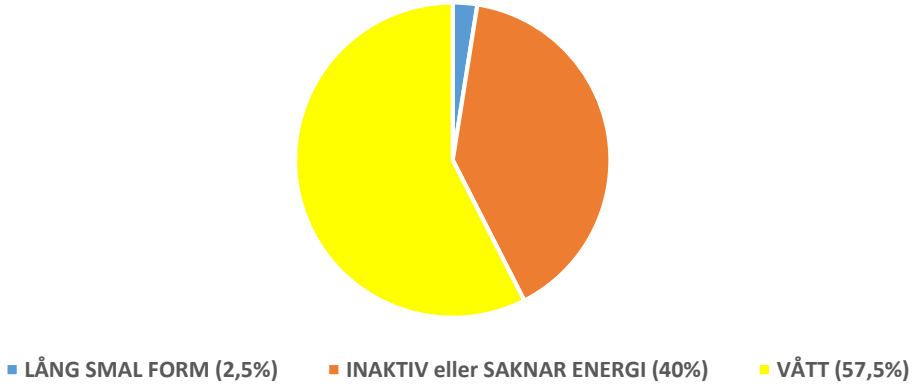
2.7 Om SLIGG var ett ord i svenskan, vilken av följande betydelser skulle vara MEST lämplig:



2.8 Om GLOJ var ett ord i svenskan, vilken av följande betydelser skulle vara MEST lämplig:



2.9 Om FLEBB var ett ord i svenskan, vilken av följande betydelser skulle vara MEST lämplig:



Appendix B

Questionnaire in English (39 respondents):

Words and meanings

In this questionnaire you will be asked to pair neologisms (new words/words which do not exist in English today) with meanings.

The questions are formulated in two different ways:

1. A meaning is presented along with three different neologisms.

Example:

"Which of the following words do you MOST associate with something that is WET

- Fleb
- Gleb
- Creb"

2. A neologism is presented along with three different meanings.

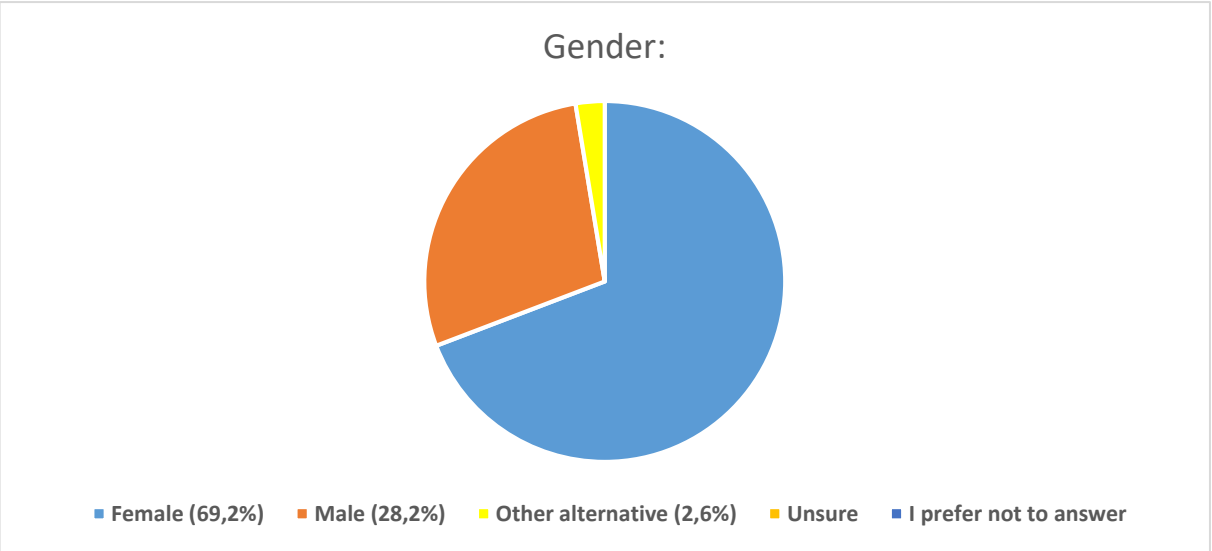
Example:

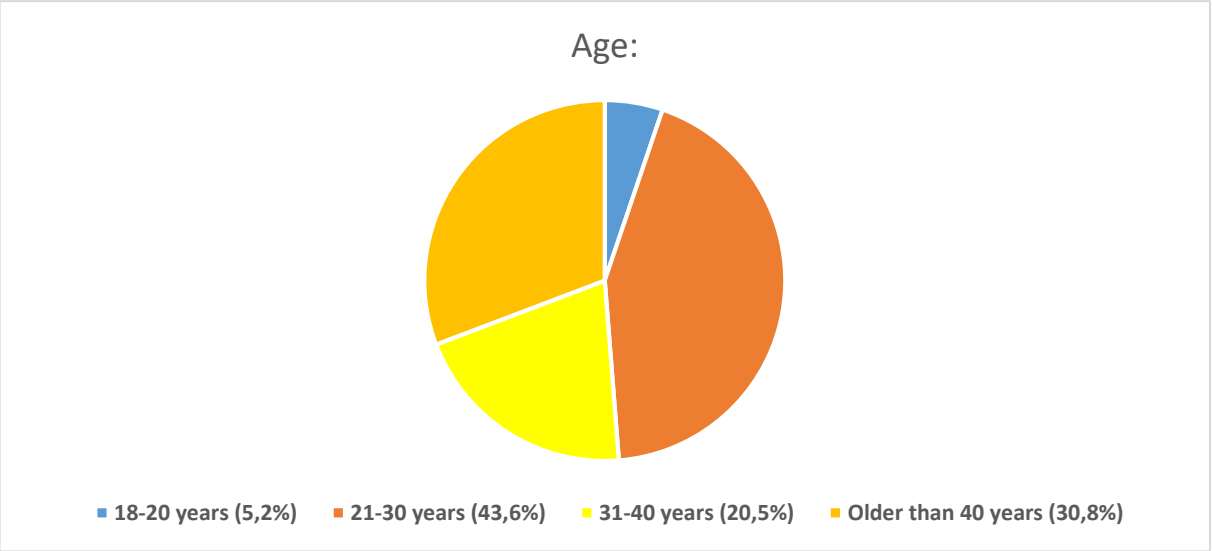
"If GLUPY was a word in English, which of these meanings would be most suitable for it:

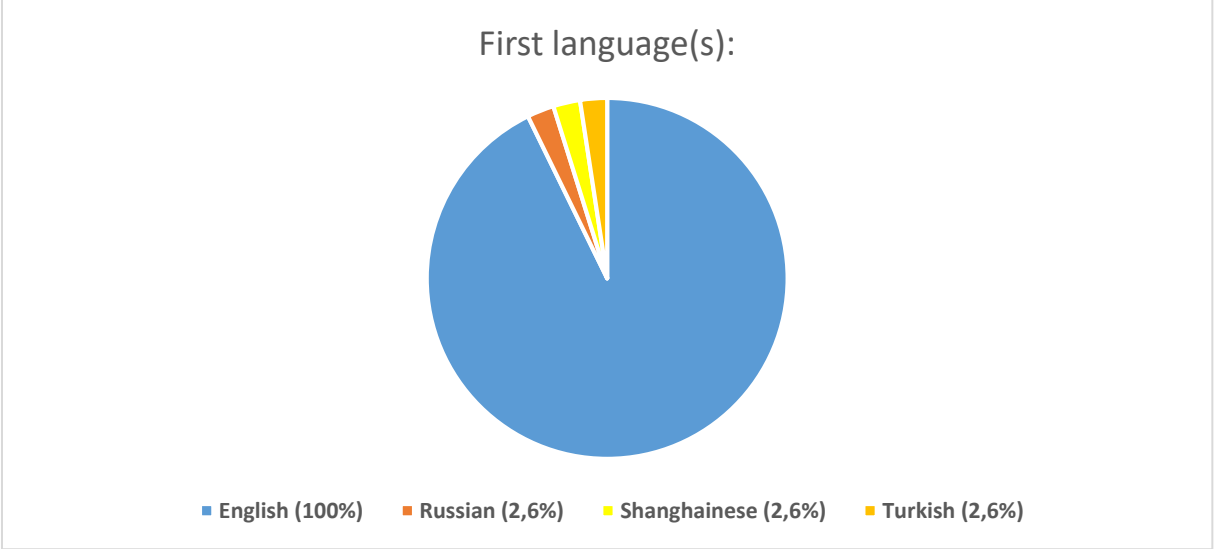
- Something that has a LONG THIN FORM
- Something that is INACTIVE or LACKING ENERGY
- Something that is WET"

Thank you for your participation!

Christoffer Modig Forser, ENGK01, Lund University

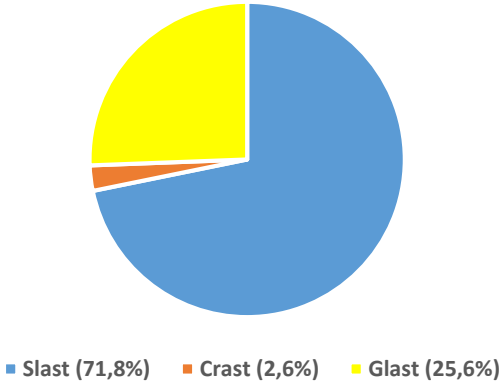

Gender:
Female (69,2%)
Male (28,2%)
Other alternative (2,6%)
Unsure
I prefer not to answer


Age:
18-20 years (5,2%)
21-30 years (43,6%)
31-40 years (20,5%)
Older than 40 years (30,8%)

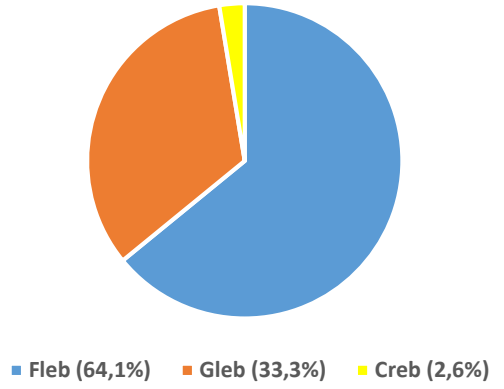

First language(s):
English (100%)
Russian (2,6%)
Shanghainese (2,6%)
Turkish (2,6%)

Question type 1:

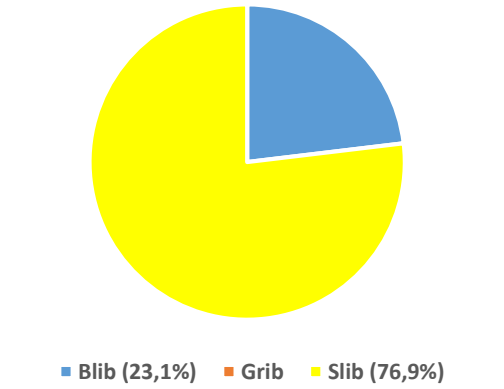
3.1 Which of the following words do you MOST associate with something that is WET:



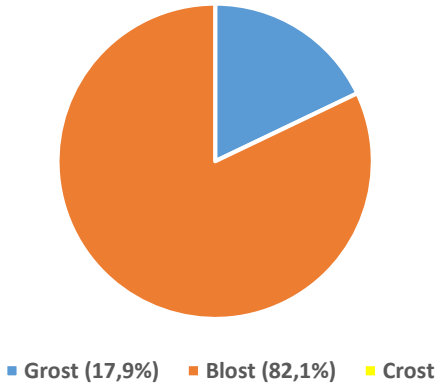
3.2 Which of the following words do you MOST associate with something that is WET:



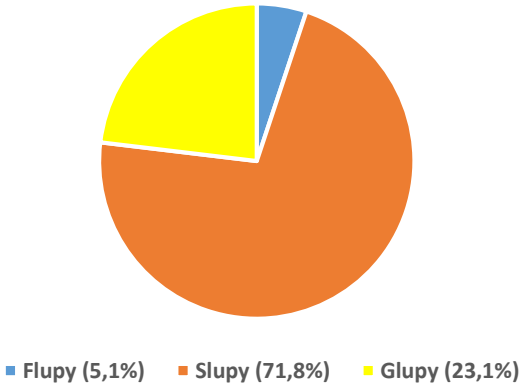
3.3 Which of the following words do you MOST associate with something that is WET:



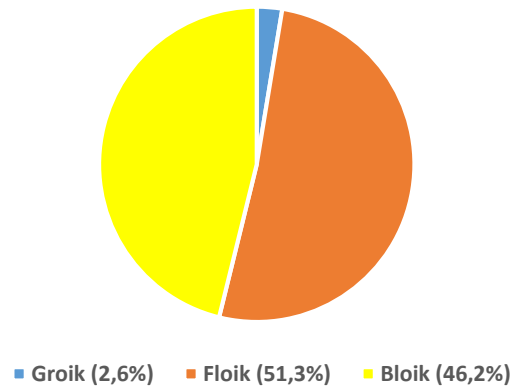
3.4 Which of the following words do you MOST associate with something that is WET:



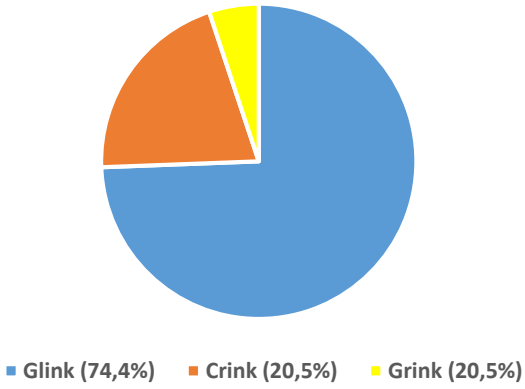
3.5 Which of the following words do you MOST associate with something that is WET:



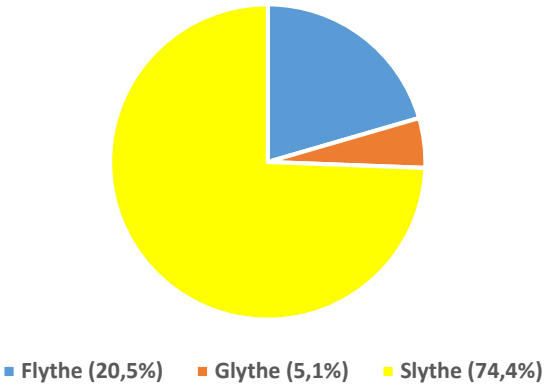
3.6 Which of the following words do you MOST associate with something that is WET:



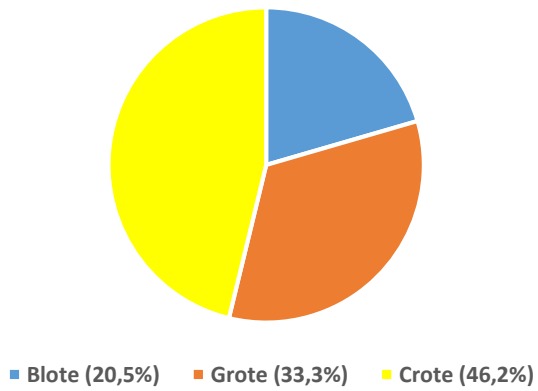
3.7 Which of the following words do you MOST associate with something that has a LONG THIN FORM:



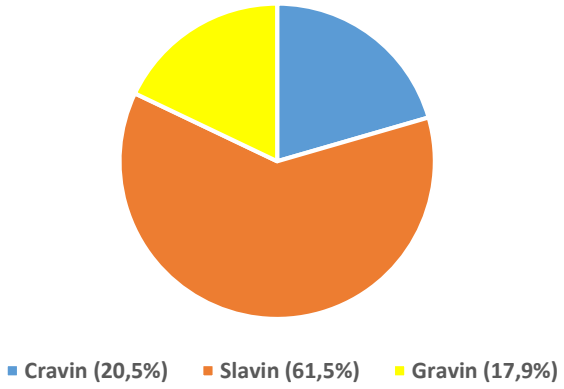
3.8 Which of the following words do you MOST associate with something that has a LONG THIN FORM:



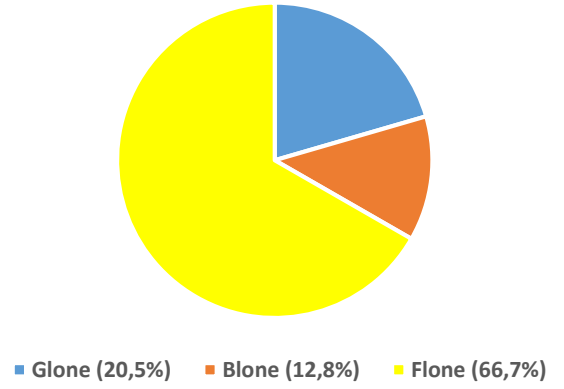
3.9 Which of the following words do you MOST associate with something that has a LONG THIN FORM:



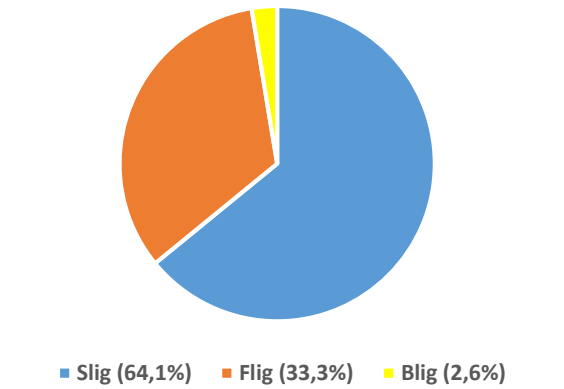
3.10 Which of the following words do you MOST associate with something that has a LONG THIN FORM:



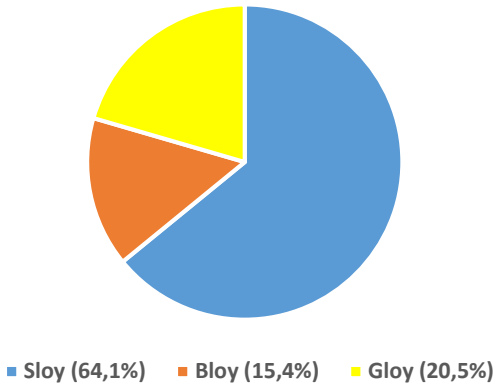
3.11 Which of the following words do you MOST associate with something that has a LONG THIN FORM:



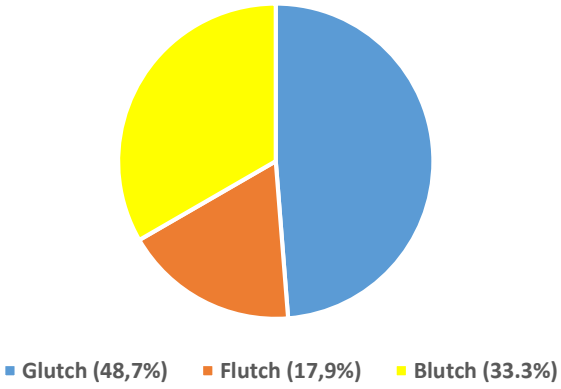
3.12 Which of the following words do you MOST associate with something that has a LONG THIN FORM:



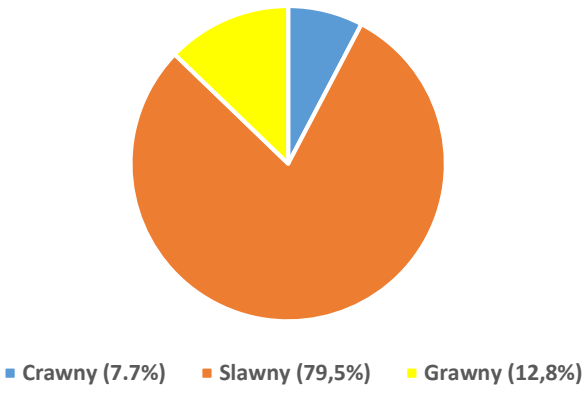
3.13 Which of the following words do you MOST associate with something that is INACTIVE or LACKING ENERGY.



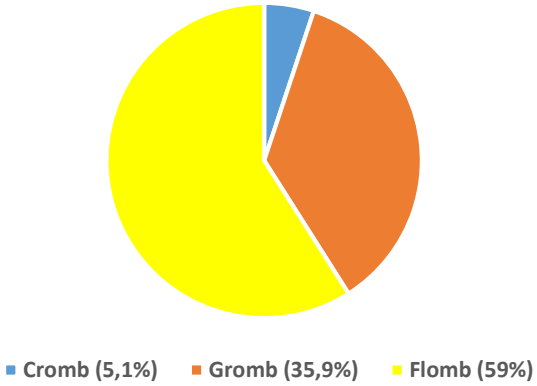
3.14 Which of the following words do you MOST associate with something that is INACTIVE or LACKING ENERGY.



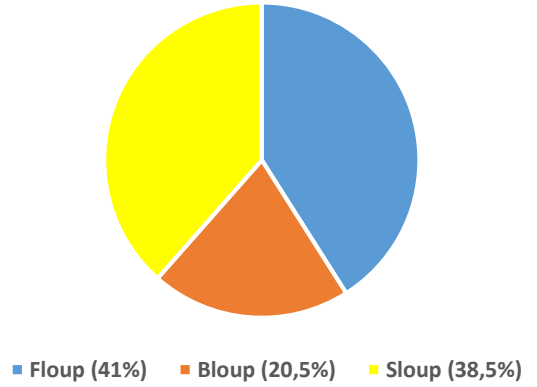
3.15 Which of the following words do you MOST associate with something that is INACTIVE or LACKING ENERGY.



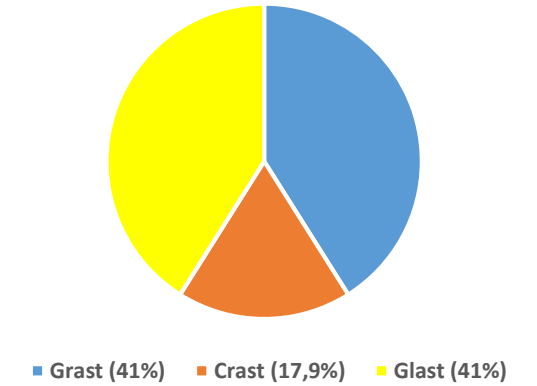
3.16 Which of the following words do you MOST associate with something that is INACTIVE or LACKING ENERGY.



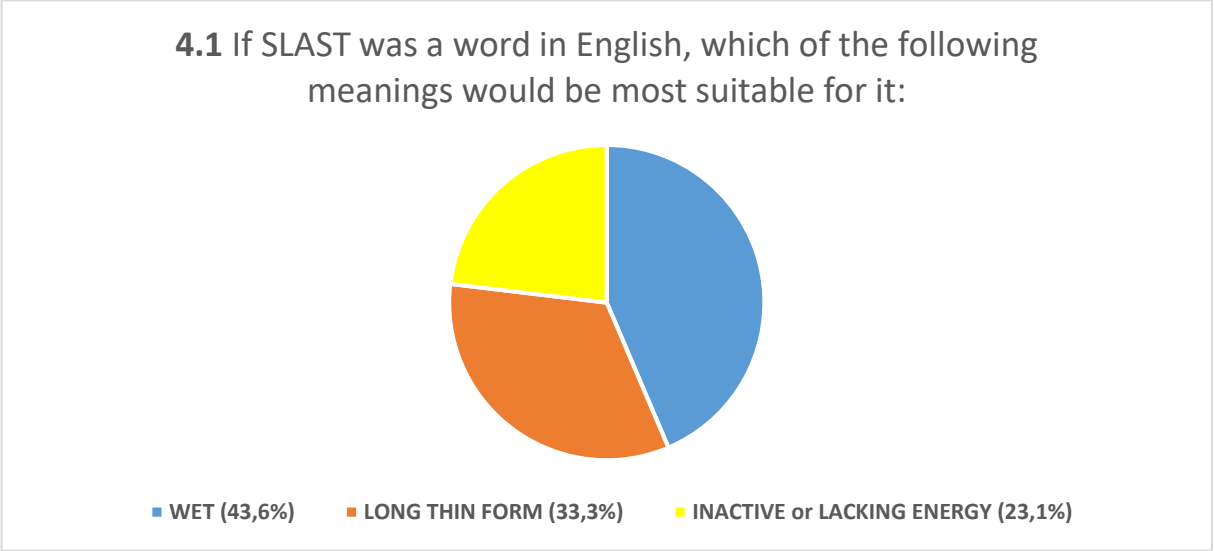
3.17 Which of the following words do you MOST associate with something that is INACTIVE or LACKING ENERGY.

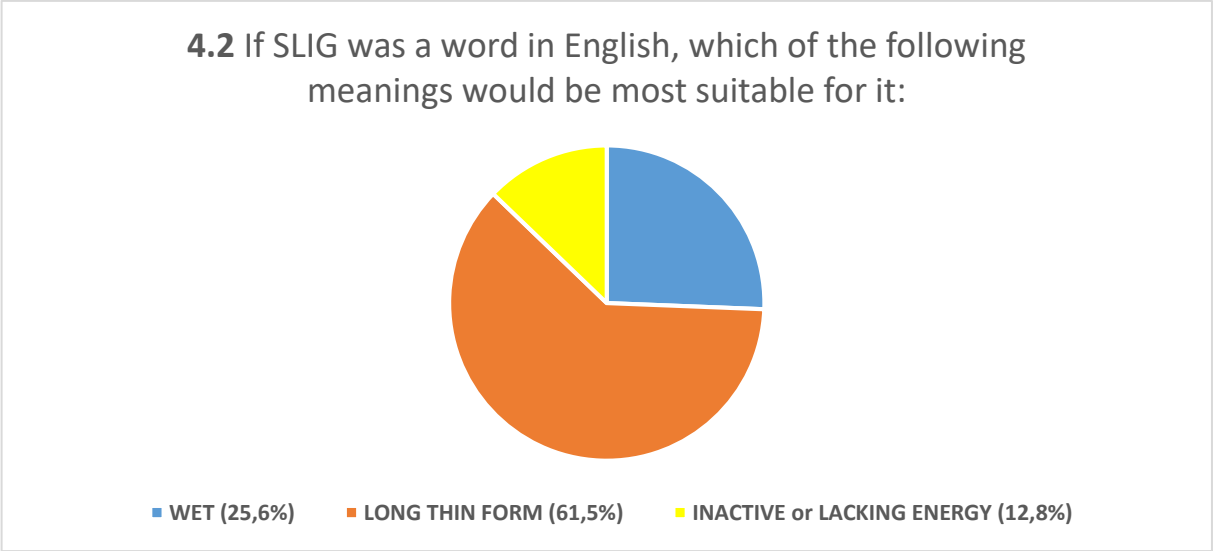


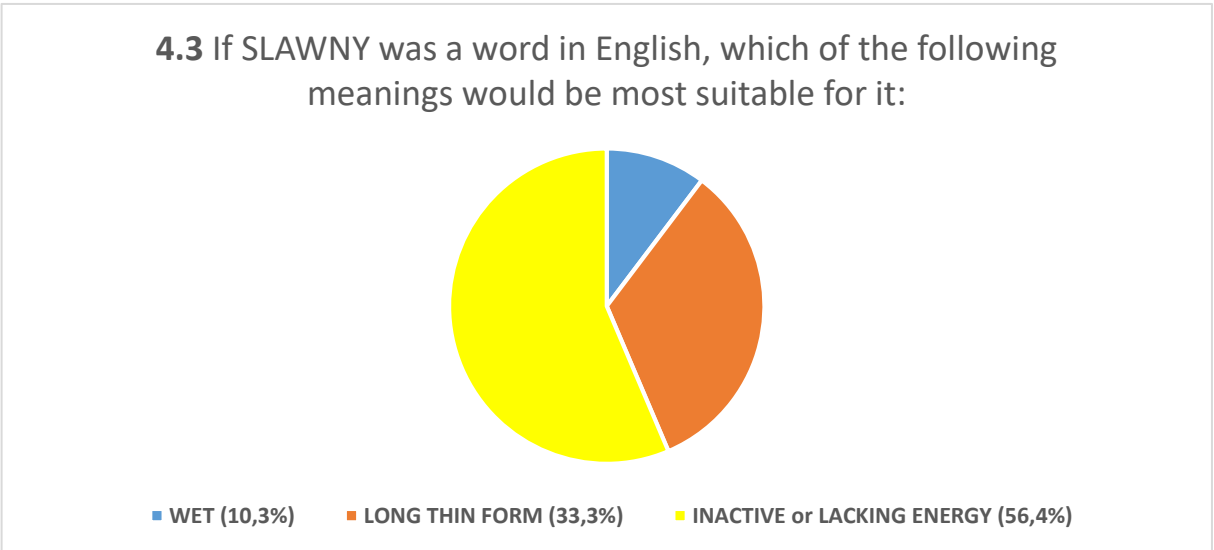
3.18 Which of the following words do you MOST associate with something that is INACTIVE or LACKING ENERGY.



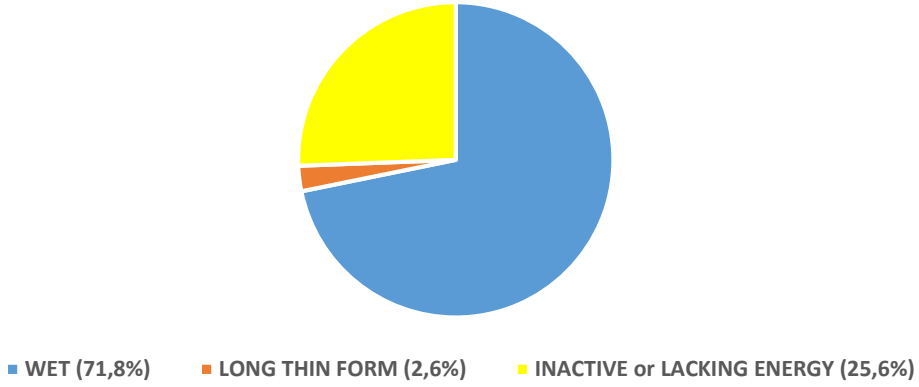
Question type 2:



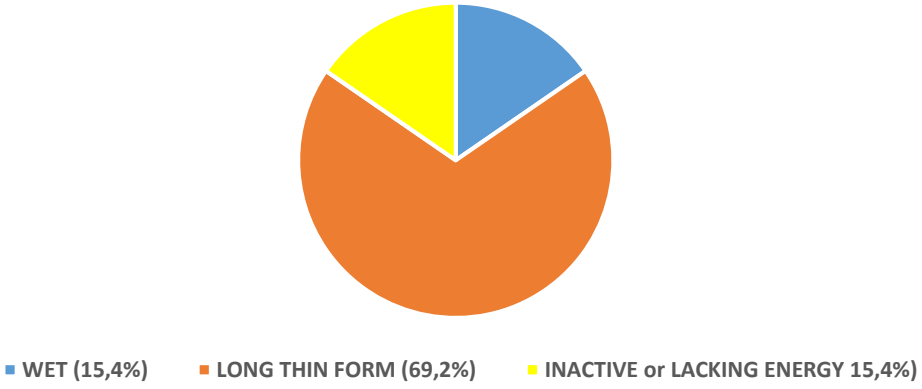




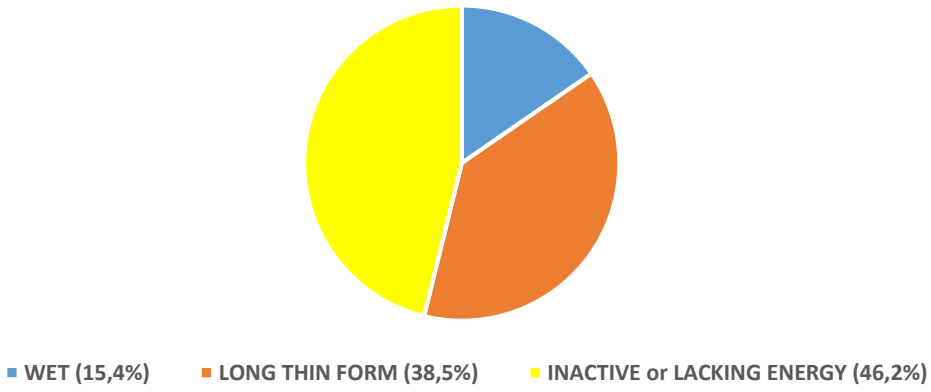
4.4 If GLUPY was a word in English, which of the following meanings would be most suitable for it:



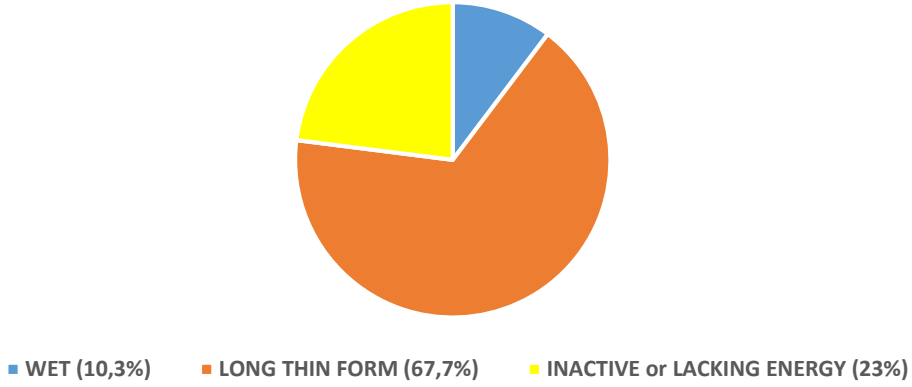
4.5 If GLINK was a word in English, which of the following meanings would be most suitable for it:



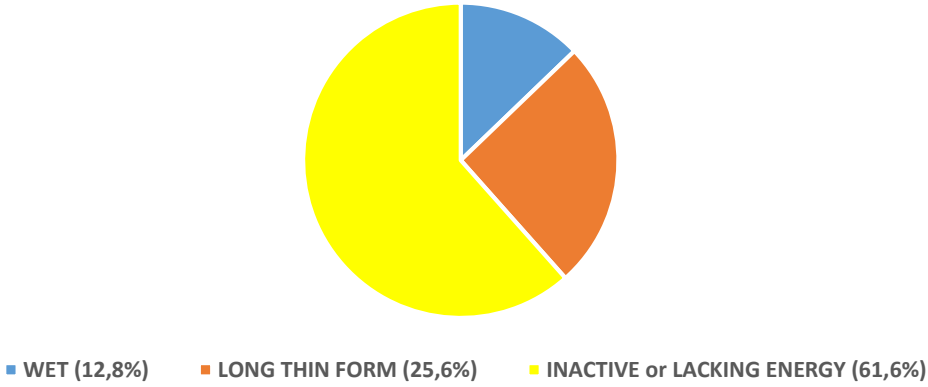
4.6 If GLOY was a word in English, which of the following meanings would be most suitable for it:



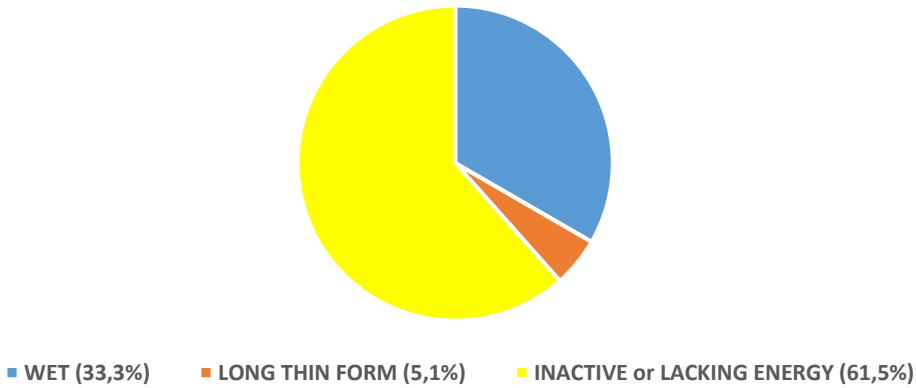
4.7 If FLIG was a word in English, which of the following meanings would be most suitable for it:



4.8 If FLUTCH was a word in English, which of the following meanings would be most suitable for it:



4.9 If FLEB was a word in English, which of the following meanings would be most suitable for it:



Appendix C

Complete list of etymologically unrelated English words containing the *sl*-cluster in word initial position (gathered from the OED 2019).

Slab n.1	A flat, broad, and comparatively thick piece or mass of anything solid
Slab n.2	A muddy place, a puddle. 2. Wet and slimy matter, ooze, sludge.
Slab n.3	*Nautical*. Any slack part of a sail haning down
Slab n.4	A weak or spent game fish, *esp* a diseased trout
Slab v.2	(dialect or obsolete) To eat or drink in a hasty or untidy manner.
Slab v.3	To clear of bark-wood.
Slabbed, adj. (n1 or v3)	Formed, or made, of or into slabs.
Slabber n.1	Slaver, excessive saliva. 2. Slobbering talk
Slabber n.2	A saw or machine for removing the outside slabs from timber, or dressing the outer portion of logs.
Slabber, v.	To wet or befoul with saliva, to beslaver or beslobber.
Slabber-chops, n.	*Rare (see quot. 1699)*
Slabberdegullion, n.	*Obsolete. Rare. See quot 1653).*
Slabbish, adj.	*Rare*. Somewhat slabby.
Slabline, n.	Etymology: probably < Dutch *slaplijn* (German *schlappleine*), < *slap* slack. *Nautical*. (See quots. 1769, 1846.). 1769 W. FALCONER *Universal Dict. Marine* *Slab-line*, a small cord passing up behind a ship's main-sail or fore-sail... It is used to truss up the sail.
Slab reef, n.	1882 G. S. NARES *Seamanship* (ed. 6) 125 There are the same number of slab reef lines.., and they are used for hauling up the slab reef or slack part of sail which hangs down abaft all when a reef is taken in.
Slack, n.1	A small shallow dell or valley
Slack, n.2	Small or refuse coal
Slack, adj. and adv.	1. Of persons: lacking in energy or diligence, inclined to be lazy or idle, remiss, careless, negligent or lax in regard to one's duties. 7 a. Not drawn or held tightly or tensely, relaxed, loose.
Slacken, n.	Slag. There is no evidence that the word has ever had any real currency in English.
Slack-ma-girdle	A variety of apple cider. Etymology: < phrase *slack my girdle*: compare SLACK *v.* 6.
Slacky, n.	A form of sling. Etymology: Of obscure origin.
Slade, n.1	A valley, dell, or dingle, an open space between banks or woods, a forest glade, a strip of greensward or of boggy land.
Slade, n.3	The sole of a plow. Etymology: Of obscure origin: perhaps related to SLIDE *v.*
Slade, n.4.	Used *attributively* to designate the School of Fine Art (founded 1871) at University College London and its members, and scholarships and professorships in fine art endowed by him at Oxford, Cambridge, and London. Etymology: < the name of Felix *Slade* (1788–1868), English art collector.

Slade, v.1	Etymology: apparently related to SLIDE *v.*
Slaffart, n.	*Scottish. Obsolete.* Meaning doubtful.
Slag, n.1	1. A piece of refuse matter (see 2) separated from a metal in the process of smelting. 5a-e (slang) A worthless or insignificant person (frequently used as a term of contempt, A prostitute or promiscuous woman, a slattern.
Slag, adj.	Slippery with mud, muddy.
Slagger, v.	To loiter, lag, walk slowly or lamely. Etymology: Of obscure origin.
Slain, adj.	1: That has been slain, killed, slaughtered. 3. *dialect*. Of grain: Affected by smut or blight.
Slaister, v.	To eat, work, etc., in a slobbering, wet, or dirty manner. Etymology: Of obscure origin.
Slake, n.2	Scottish and northern dialect. A name given to several species of Algæ, including marine and edible kinds as *Ulva* and *Porphyra*, and also the freshwater sorts, as *Enteromorpha* and *Conferva*.
Slake, n.4.	A flake. Obsolete.
Slake, v.2	*Dialect.* To lick with the tongue, to smear, daub, wet slightly, etc.
Slake, v.1	Related to slack, adj.
Slalom, n.	A downhill race in which skiers, descending singly, describe a zigzag course between artificial obstacles, usually flags. Frequently *attributive*.
Slam, n.1	1a**.** A severe blow; a violent impact.
Slam, n.2	2.a The fact of losing or winning all the tricks in a game of cards, esp. in whist. 2.b With the qualifying terms *grand* and *little*, *small* or *minor*, chiefly in Bridge. Cf. GRAND SLAM *n.* 1a.
Slam n.4	Prison, gaol
Slammakin/slammerkin, n & adj.	2a A slovenly female, a sloven, a slattern. 2B Untidy, slovenly
Slan, n.	In works of Science Fiction: a being of superior intelligence, physique, etc., a superman. Hence used *gen.*among fans of this type of literature.
Slander, n.	1a. The utterance or dissemination of false statements or reports concerning a person, or malicious misrepresentation of his actions, in order to defame or injure him, calumny, defamation.
Slane, n.	A long-handled spade, having a wing at one or both sides of the blade, used in Ireland for cutting turf.
Slang, n.2	*Dialect.* A long narrow strip of land. Etymology: Of obscure origin. Some dialects have the form *sling*, further variations are *slanget* (*slanket*) and *slinget* (*slinket*).
Slang, n.3	1a. The special vocabulary used by any set of persons of a low or disreputable character, language of a low and vulgar type. (Now merged in sense 1c.) 1b The special vocabulary or phraseology of a particular calling or profession, the cant or jargon of a certain class or period.

	1c Language of a highly colloquial type, considered as below the level of standard educated speech, and consisting either of new words or of current words employed in some special sense.
Slang, n.4	Watch-chain, a chain of any kind.
Slank, adj.	(Scottish) Of persons, parts of the body, the hair: Lank, thin.
Slant, v.	1. *intransitive*. To strike obliquely *on*, *upon*, or *against* something. 2a. To be in, to have or take, an oblique direction or position, to deviate from a straight line or course, to slope.
Slap, n.1	1a. A smart blow, esp. one given with the open hand, or with something having a flat surface, a smack, an impact of this nature. *slap on the back (*or *shoulder)*: as a hearty gesture of friendship or congratulation. Also *figurative*. Cf. BACK-SLAPPING *adj.* and *n.*
Slap, n.2	(Scottish) 1a**.** A breach, opening, or gap in a wall, fence, hedge, etc.
Slap, v.3	(Dialect) To lap, to gobble up
Slape, adj	(Northern dialect) **1.** Slippery, smooth. Also *figurative*, crafty, cunning, deceitful.
Slaphead, n.	(Slang) A bald or shaven-headed person, a bald or shaven head. Etymology: < SLAP *v.*[1] + HEAD *n.*[1]
Slappel, n.	(quot) 1674 J. RAY *S. & E. Country Words* A *Slappel*, a piece, part, or portion, *Suss*[*ex*]. [Hence in Grose, etc.]
Slappet, n.	A splinter or shiver of ore.
Slare, v.	(dialect) *Slare*, to make a noise by rubbing the boot-soles on an uncarpeted floor.
Slart, n.	(Dialect) Left-overs, scraps.
Slash, n.1	a. A cutting stroke delivered with an edged weapon or instrument, or with a whip
Slash, n.2	An act of urination
Slash, n.3	(U.S) Swampy ground, a swamp.
Slat, n.1	1a. A roofing-slate, a thin slab of stone used for roofing. Now *dialect*. 2. A writing-slate. Now *dialect*. 4c. *plural*. The ribs. *slang* (orig. and chiefly *U.S.*).
Slat, n.2	1. A slap, a slapping blow. Now *dialect*. 2. A sudden gust or blast *of* wind
Slat, n.4	A salmon out of season, a spent salmon.
Slate, v.2	2a**.** To beat or thrash severely. 2b**.** *Military*. To punish (an enemy) severely.
Slate, n.4	(Scottish, rare) A slovenly, dirty person.
Slather, v.	(Chiefly dialect and U.S.) 1. *intransitive*. To slip or slide, to move in a sliding or trailing manner. 2a. *transitive*. To spill or slop, to scatter. Also, to use in large quantities, to squander, to paste, spread, or smear liberally. Usually with adverbs. 2b. To besmear, to spread or splash liberally on. Usually with *with*. 3. *slang*. To thrash, defeat thoroughly, castigate.
Slatko, n.	(Croatian) Sugared fruit.

Slattering, n. & adj.	A woman or girl untidy and slovenly in person, habits, or surroundings, a slut. Slovenly, untidy, slatternly. Said of appearance, etc., or of persons.
Slaughter, n.	1a**.** The killing of cattle, sheep, or other animals for food. 3a**.** The killing of large numbers of persons in war, battle, etc., massacre, carnage.
Slaum, v.	To slobber, to blubber, also, to flatter obsequiously.
Slav, n. and adj.	1. A person belonging by race to a large group of peoples inhabiting eastern Europe and comprising the Russians, Bulgarians, Serbo-Croats, Slovenes, Poles, Czechs, Slovaks, etc.
Slave, n.1	a. One who is the property of, and entirely subject to, another person, whether by capture, purchase, or birth, a servant completely divested of freedom and personal rights.
Slave, n.2	(A member of) a grouping of Athabaskan-speaking North American Indians living in the boreal forest region of north-western Canada, the language of this people. Also *attributive* or as *adj*.
Slaw, n.	(U.S.) salad made of sliced cabbage, etc. Also, any dish the main ingredient of which is sliced cabbage.
Slawk, n.	(northern dialect and Scottish) 1. An edible sea-weed.
Sleathy, adj	Slovenly, careless.
Sleave, v.	(dialect) 1. *transitive*. To divide (silk) by separation into filaments. Also *transferred* and *absol.* 2. *dialect*. To cleave, split, rend, tear apart.
Sleaze, n.	(Slang) 1. Squalor, sordidness, sleaziness, dilapidation, (something of) inferior quality or low moral standards 2. A person of low moral standards.
Sleb, n.	Alteration of CELEB *n.*, reflecting a monosyllabic pronunciation in rapid speech. (British Colloquial) A celebrity.
Sleck, n.	(dialect) Soft mud, ooze.
Sleck, v.1	(dialect) To extinguish or quench (a fire), to allay, assuage (thirst, etc.)
Sled, n.1	(chiefly dialect and U.S.) 1a. A drag used for the transport of heavy goods, etc., = SLEDGE *n.*^{2} 2.
Sledge, n.1	a. A large heavy hammer usually wielded with both hands, especially the large hammer used by a blacksmith, a sledge-hammer.
Sledge, n.3	*Cricket* (orig. and chiefly Australian). A taunting, critical, or teasing remark made to a player (esp. a batsman) in order to affect concentration or confidence. Also in more general use.
Sleech, n.	(Dialect) 1. Mud deposited by the sea or a river, soil composed of this.
Sleech, v.	*Cheshire dialect* 1674 J. RAY *N. Countrey Words* in *Coll. Eng. Words* 43 *To Sleech*, to dip or take up water. [Hence in Grose, etc.].

Sleek, n.1	*Scottish*. A measure for fruit, etc.
Sleek, adj. & adv.	Etymology: Later variant form of Middle English *slĭke* SLICK *adj*. a. Of animals, their limbs, etc.: Having, or covered with, hair or fur which lies close and smooth, usually a sign of good condition or careful attention.
Sleep, n.	1a. The unconscious state or condition regularly and naturally assumed by man and animals, during which the activity of the nervous system is almost or entirely suspended, and recuperation of its powers takes place, slumber, repose.
Sleer, v.	Etymology: Of obscure origin. (rare) To look askance.
Sleet, n.1	1a**.** Snow which has been partially thawed by falling through an atmosphere of a temperature a little above freezing-point, usually accompanied by rain or snow.
Sleeve, n.	1a**.** That part of a coat, shirt, or other garment which covers the arm. In early use frequently, and still occasionally, a separate article of dress which could be worn at will with any body-garment.
Sleeven, n.	*Irish English* and Newfoundland. An untrustworthy or cunning person.
Sleever, n.	*Local*, *Australian*, and *New Zealand*. Also, a measure of drink (usually of beer) contained in a sleever.
Sleight, n.	4b**.** *spec.* Skill in jugglery or conjuring, sleight of hand. 5**.** Adroitness, activity, smartness, nimbleness *of* mind, body, etc.
Sleight, v.	2. To deceive, beguile, cheat.
Slem, n.	*Rare*. Now *dialect*. Slime.
Slench, v.	Now *Dialect*. *intransitive*. To slink, sneak.
Slendang, n.	In Indonesia, a long scarf or stole worn by women.
Slender, adj. & adv.	Slight in stature and related uses.
Slent, n.1	Now *dialect*. 1**.** A slope or declivity.
Slent, v.3	1**.** *transitive*. To split or cleave, to rend.
Slepton, n.	*Particle* Physics. The supersymmetric counterpart of a lepton, with spin 0 instead of ½.
Slerg, v.	*Scottish*. *transitive.*To slabber.
Sletch, v.	*Rare*. Now *dialect*. 2. *intransitive*. To abate, slacken, stop. *dialect*.
Sleuth, n.2	2a. A bloodhound.
Slew, n.1	1.a *U.S.* and *Canadian*. A marshy or reedy pool, pond, small lake, backwater, or inlet.
Slew, n.3	*Colloquial* (orig .*U.S.*) A very large number *of*, a great amount *of*. Also in plural.
Slew, v.	1. *transitive*. To turn (a thing) round upon its own axis, or without shifting it from its place, also loosely, to swing round:
Slew, n.4	*Basketry*. A filling made of two or more strands worked together. Etymology: Origin uncertain: perhaps a new sense of SLEW *n.*[2]
Slice, n.1	I. A thin piece or portion.
Slice, v.1	To cut into slices, to cut into or through with a sharp instrument.

Slick, adj.	Now chiefly *dialect* and *U.S.* 1. Of skin, hair, etc.: Smooth, glossy, sleek. Also, of a surface: slippery
Slidder, n.	*Dialect*. A trench or hollow running down a hill, a steep slope.
Slide, v.	To move from one place to another smoothly, to glide
Slift, n.2	*East Anglian*. The fleshy part of a leg of beef.
Slifting, n.	*Linguistics*. In transformational grammar, a rule or transformation which promotes material from an embedded sentence following a cognitive verb to a main sentence.
Slight, adj. and adv.	2a. Slender, slim, thin, of a small and slender form or build. 3a. Of light, thin, or poor texture or material, not good, strong, or substantial, rather flimsy or weak. 5a. Small in amount, quantity, degree, etc.
Slight, v.	3a. To treat with indifference or disrespect, to pay little or no attention or heed to, to disregard, disdain, ignore.
Slim, adj.	1a**.** Slender, (gracefully) thin. 1b. Small, slight, of little substance, poor.
Slime, n.	1a**.** Soft glutinous mud, alluvial ooze, viscous matter deposited or collected on stones, etc. 3b. Applied to what is morally filthy or otherwise disgusting.
Slime, v.2	*Harrow School slang*. *intransitive*. To move in a gliding, stealthy, or sneaking manner.
Sline, n.	*Coal mining*. 1875 R. HUNT & F. W. RUDLER *Ure's Dict. Arts* (ed. 7) I. 815 The smooth clean surface of the coal coinciding with this well-defined set of joints is known as the cleat, face, or slyne.
Sling, n.1	a. An implement or weapon for hurling stones or similar missiles by hand with great force or to a distance, consisting of a strap attached to two cords or strings, or to a stick or staff (= STAFF-SLING *n.*), the impulse is given by rapid whirling of the sling before discharging it. Also locally, a boy's catapult.
Sling, n.5	1. An American drink composed of brandy, rum, or other spirit, and water, sweetened and flavoured.
Slink, v.	1a. *intransitive*. Of persons or animals: To move, go, walk, etc. in a quiet, stealthy, or sneaking manner. Usually const. with prepositions and adverbs. 3a. Of animals, esp. cows: To bear or bring forth (young) prematurely or abortively.
Slink, adj.1	*Dialect*. Lank, lean, poor, ill-conditioned.
Sliotar, n.	*Hurling*. The hard leather-covered ball (similar in size to a tennis ball) used in hurling.
Slip, n.1	2a. Curdled milk. Now *U.S.* 4**.** *technical*. A semi-liquid material, made of finely-ground clay or flint, etc., mixed with water to about the consistency of cream, and used for making, cementing, coating, or decorating pottery, tiles, etc., also, clay suitable for making this.
Slip, n.2	I. A small shoot or scion, and related uses.

Slip, v.1	2. To pass or go lightly or quietly, to move quickly and softly, without attracting notice, to glide or steal. Used with various adverbs and prepositions. 8b. To slide or glide, esp. on a smooth or slippery surface, to lose one's foothold, = SLIDE *v.* 8. Also in figurative context.
Slip, v.2	a. To part (a slip or cutting) from a stock, stalk, or branch, esp. for the purpose of propagation, to divide (a plant, root, etc.) *into* slips.
Slipe, n.1	*Scottish* and *Northern*. 1a. A sledge or drag.
Slipe, n.2	Now *dialect* (and *U.S.*). A slip or slice, a long narrow piece or strip. Etymology: Of obscure origin: compare SLIP *n.*[2] and SLYPE *n.*
Slipe, v.2	Now *dialect*. 1. *transitive*. To strip, peel, skin, to take *off* by peeling or stripping, etc. 2. *intransitive*. To fall *over* softly. Etymology: Of obscure origin.
Slipper, n.	I. A light shoe easily slipped on, and related uses.
Slippery, adj.	1a. Having a smooth, polished, or slimy surface which renders foothold insecure.
Slippy, adj.1	2. *dialect* or *colloquial*. Of persons: Nimble, spry, sharp, quick, *esp.* in *to be* or *look slippy*.
Slirt, v.	*U.S. transitive*. To sweep or jerk lightly.
Slit, n.	1. A straight and narrow cut or incision, an aperture resembling a cut of this description:s
Slit, v.	a. *transitive*. To cut into, or cut open, by means of a sharp instrument or weapon, to divide or sever by making a long straight cut or fissure, (also) to take *off* or *out* in this way.
Slither, v.	1a. *intransitive*. To slip, slide, glide, esp. on a loose or broken slope or with a clattering noise
Slive, v.1	Now *dialect*. 1a**.** *transitive*. To cleave, split, divide.
	2b. To slip *off* or away, to move quietly or slyly in some direction, to sneak or hang about, to loiter, idle.
Sliver, n.1	1a. A piece cut or split off, a long thin piece or slip, a splinter, shiver, slice. Also *figurative*.
Sliverly, adj.	*Dialect. Rare.* Crafty, deceitful.
Slivovitz, n.	A central and eastern European plum brandy.
Slize, v.	*Now dialect. intransitive*. To look askance.
Sloan, n.	*Scottish*. *Rare*. A severe snub or reproof, a ‘taking-down’.
Slob, n.1	1a. Mud, esp. soft mud on the sea-shore, ooze, muddy land. 2. A large soft worm, used in angling. 3. A dull, slow, or untidy person, a careless or negligent workman, a lout, a fat person, one who is gullible or excessively soft-hearted, a fool, a person of little account. *slang*.
Slobberhannes, n.	A card-game for four persons played with only high-ranking cards, in which the object is to lose tricks. Also, a point scored at this game.
Slobgollion, n.	*Whaling slang*. 1851 H. MELVILLE *Moby-Dick* xciv. 465 It is called slobgollion, an appellation original with the whalemen... It is an ineffably oozy, stringy affair,

	most frequently found in the tubs of sperm, after a prolonged squeezing, and subsequent decanting.
Slock, v.2	Now only *south-western dialect*. 1. *transitive*. To entice away, to draw or lead *away* by some allurement.
Slocken, v.	*northern* and *Scottish*. 1. *transitive*. To quench, extinguish, put *out* (fire, flame, etc.). Also in figurative context.
Slodge, v.	*Dialect. intransitive*. To trail or drag the feet in walking, to walk slouchingly.
Sloe, n.	1a. The fruit of the blackthorn (*Prunus spinosa*), a small ovate or globose drupe of a black or dark-purple colour and sharp sour taste.
Sloff, v.	*Intransitive*. 1841 C. H. HARTSHORNE *Salopia Antiqua* Gloss. *Sloff*, to eat greedily, dirtily, or slovenly.
Slog, v.	*Colloquial* 1a. *transitive*. To hit or strike hard, to drive with blows. Also *figurative*, to assail violently. 2. *intransitive*. To walk heavily or doggedly.
Slogan, n.	a. A war-cry or battle cry, *spec.* one of those formerly employed by Scottish Highlanders or Borderers, or by the native Irish, usually consisting of a personal surname or the name of a gathering-place. b. *transferred*. The distinctive note, phrase, cry, etc. of any person or body of persons, now *esp.* a motto associated with a political party or movement or other group, or a short and striking or memorable phrase used in advertising.
Slogger, v	*Dialect*. *intransitive*. To hang loosely, to go about untidily, etc.
Sloka, n.	A couplet or distich of Sanskrit verse, each line containing sixteen syllables.
Slonk, n.	*Scottish* and *northern dialect*. 1880 W. H. PATTERSON *Gloss. Words Antrim & Down* *Slonk*,..a ditch, a deep, wet hollow in a road.
Slonk, v.	*Rare*. *transitive*. To swallow greedily.
Sloom, n.1	Now *northern dialect* and *Scottish*. A gentle sleep or slumber, a light doze. Also *attributive*.
Sloom, v.2	*Scottish*. Of grain, grass, etc.: To become laid or lodged through being soft and heavy in growth, to begin to decay on this account.
Sloop, n.1	1a. A small, one-masted, fore-and-aft rigged vessel, differing from a cutter in having a jib-stay and standing bowsprit.
Sloop, n.2	*Canadian*. A simple form of drag used in lumbering.
Sloosh, n.	*dialect* and *colloquial*. A pouring of water, a wash, a noise of, or as of, heavily splashing or rushing water. Etymology: Echoic: compare SLOSH *n.*, SLUSH *n.*[2] But perhaps partly a variant of SLUICE *n.*
Sloothering, n.	*Anglo-Irish*. Cajoling, wheedling.
Slop, n.1	2a. An outer garment, as a loose jacket, tunic, cassock, mantle, gown, or smock-frock.
Slop, n.2	1c. Liquid mud, slush. 2a. An act of spilling or splashing, a quantity of liquid

	spilled or splashed. 3a. Liquid or semi-liquid food of a weak, unappetizing kind, applied contemptuously to invalids' spoon-food, tea, etc. Now usually *plural*. 3b. *colloquial* (orig. *U.S.*). Sentimentality, affected sensibility.
Slop, n.3	*East Anglian dialect*. Growing underwood.
Slope, n.1	a. A stretch of rising or falling ground, a portion of the earth's surface marked by a gradual ascent or descent, whether natural or artificial. *spec.* in *plural*, ski-slopes.
Slope, v.2	*colloquial*. 1a. *intransitive*. To make off, depart, decamp. b. With adverbs, esp. *off*. Also, to move (*off*, *in*, etc.) in a leisurely manner, to amble (*in*, etc.), to depart surreptitiously, sneak off.
Slorp, v.	*dialect* and *Scottish*. *intransitive* and *transitive*. To drink, sup, or eat greedily, noisily, or coarsely.
Slosh, n.	1. Slush, sludge. 2a. Watery, weak, or unappetizing drink, watery, sodden, or unappetizing food. 4. A blow, an act of striking. 5. A game played on a billiard table with six coloured balls and one white, with which each player tries to pocket the coloured balls in a certain order.
Slot, n.1	Chiefly *northern* and *Scottish*. 1a. A bar or bolt used to secure a door, window, etc., when closed. Now *dialect*. 2a. A metal rod, a flat wooden bar, esp. one forming a cross-piece.
Slot, n.2	1. The slight depression or hollow running down the middle of the breast. Now *Scottish* and *rare*. 2a. An elongated narrow depression or perforation made in the thickness of a piece of timber, etc., usually for the reception of some other part or piece, whether fixed or movable. 2b. The opening in a slot-machine for the reception of a coin. Also *figurative*. Also (*slang*), a slot-machine.
Slot, n.3	1. The track or trail of an animal, esp. a deer, as shown by the marks of the foot, sometimes misapplied to the scent of an animal, hence generally, track, trace, or trail.
Slotter, v.	Now *dialect*. 1. *transitive*. To make foul or dirty, also, to spill or splash about, to slop. 2. *intransitive*. To be slothful or slovenly. *Scottish*.
Slouch, n.	1a. An awkward, slovenly, or ungainly man, a lubber, lout, clown, also, a lazy, idle fellow. 2. *elliptical*. A slouch hat or bonnet. 3a. A stooping, or bending forward of the head and shoulders, in walking, a loose, ungainly carriage or bearing, a walk or gait characterized by this.
Slough, n.1	1a. A piece of soft, miry, or muddy ground, *esp.* a place or hole in a road or way filled with wet mud or mire and impassable by heavy vehicles, horses, etc.

Slough, n.2	1a. The outer or scarf skin periodically cast or shed by a snake, adder, or similar reptile, also generally, the skin of a serpent, eel, etc.
Slough, n.5	1883 R. HALDANE *Workshop Receipts* 2nd Ser. 300/2 Dry materials:..Horn 'sloughs' (the pith or core of horns).
Slough, v.2	5. *intransitive*. Of soil, rock, etc.: to fall *away* or slide *down* into an adjoining hole or depression.
Slouk, n	*dialect* and *rare.* An idle, lazy fellow.
Slounge, v	*Scottish* and *northern dialect*. *intransitive*. To move, or hang about, in a lazy or slouching manner.
Slour, v	1819 J. H. VAUX *New Vocab. Flash Lang.* in *Memoirs* II. 206 *Slour*, to lock, secure, or fasten, to *slour up* is also to button up, as one's coat, pocket, &c.
Slouse, v	*Dialect*. *transitive*. To wash with a copious supply of water.
Sloush, v	*Dialect*. *transitive*. To slush or sluice (something) in washing, to dash or throw (water) *over*.
Sloven, n & adj	3. An untidy or dirty person, a person who is habitually indolent, negligent, or careless with regard to appearance, personal hygiene, household cleanliness, etc. Cf. SLOB *n.*[1] 3. 4. A person who is habitually indolent, negligent, or careless with regard to any activity, a person who works, speaks, acts, etc., in a careless or slipshod manner. 6. *Forestry*. Jagged wood at the edge of the cut surface of a tree stump or felled tree, resulting from the breaking of uncut wood during felling, (also as a count noun) an area of such wood.
Slow, adj	I. Not quick in mental or physical action, and related uses.
Sloyd, n	A system of manual instruction or training in elementary woodwork, etc., originally developed and taught in Sweden
Slub, n.1	Now chiefly *dialect*. Thick sludgy mud, mire, ooze. Also *attributive*.
Slub, n.2	1. A lump on a thread.
Slubber, v	Now chiefly *dialect*. 1**a.** *transitive*. To stain, smear, daub, soil.
Sludder, n	Dialect. 1796 W. MARSHALL *Provincialisms E. Yorks.* in *Rural Econ. Yorks.* (ed. 2) II. 345 *Sludder*, or *Sluther*, loose, broken, slippery, pappy matter, as curds and whey, loose fat, mud, &c.
Sludge, n	Variant of Slutch, n 1a. Mud, mire, or ooze, covering the surface of the ground or forming a deposit at the bottom of rivers, etc.
Slug, n.1	1a**.** A slow, lazy fellow, a sluggard. 1b. A contemptible person, a fat person.
Slug, n.2	1a. A piece of lead or other metal for firing from a gun, a roughly-formed bullet. b. *slang*. Some kind of strong drink (*obsolete*), a dram, a drink. Now chiefly *U.S.* **c.** A compact mass of liquid regarded as retaining its

	identity as it travels. 3a. A heavy piece of crude metal, usually rounded in form, a nugget (of gold).
Slug, n.3	*northern* and *U.S.* A heavy or hard blow, a beating.
Sluice, n	1a. A structure of wood or masonry, a dam or embankment, for impounding the water of river, canal, etc., provided with an adjustable gate or gates by which the volume of water is regulated or controlled. Also, rarely, the body of water so impounded or controlled.
Sluit, n	*South African*. A channel, ditch, or gully, usually one formed by heavy rain and dry during the greater part of the year.
Slum, n.1	I. Senses relating to an area of dense, squalid housing, and related uses.
Slum, n.2	*U.S.* = SLIME *n.* 4.
Slumber, v	1a. *intransitive*. To sleep, *esp.* to sleep lightly, to doze or drowse. 2. *figurative*. To live in a state of inactivity or negligence, to remain or be sunk *in* sin, sloth, etc., to be dilatory or tardy *in* doing something. 3a. Of things, faculties, etc.: To be dormant, inoperative, or quiescent.
Slumock, v	1. *transitive*. To eat up greedily. 2. *intransitive*. To move about awkwardly or clumsily. Also *transferred* of speech.
Slump, n.1	*Scottish*. A large quantity or number, chiefly in phrases *by* or *in (the) slump*, rarely *in a slump*, as a whole, not separately or individually, collectively, in the lump.
Slump, n.2	1. *Stock Market*. A heavy fall or sudden decline in the price or value of commodities or securities.