Mateusz Fabiszewski-Jaworski

Spontaneous defining by native speakers of English
Implications for lexicography

Praca doktorska napisana
na Wydziale Anglistyki
Uniwersytetu im. Adama Mickiewicza
pod kierunkiem prof. UAM dr. hab. Roberta Lwa

Poznań, 2012

Imię i nazwisko Mateusz Fabiszewski-Jaworski
Kierunek i specjalność Filologia angielska
Numer albumu 325159
Wydział Anglistyki
Promotor prof. UAM dr hab. Robert Lew

1. Oryginalny tytuł pracy dyplomowej

Spontaneous defining by native speakers of English. Implications for lexicography.

2. Tłumaczenie tytułu pracy dyplomowej

a) na język polski (w przypadku prac napisanych w języku obcym)

Definiowanie spontaniczne u rodzimych użytkowników języka angielskiego. Implikacje dla leksykografii

b) na język angielski (w przypadku prac napisanych w języku innym niż język angielski)

Podpis promotora

.....

Podpis studenta

.....

Miejsce i data

Poznań,

OŚWIADCZENIE

Ja, niżej podpisany

Mateusz Fabiszewski-Jaworski

student Wydziału Anglistyki

Uniwersytetu im. Adama Mickiewicza w Poznaniu

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że przedkładaną pracę dyplomową

pt. Spontaneous defining by native speakers of English. Implications for lexicography.

napisałem samodzielnie.

Oznacza to, że przy pisaniu pracy, poza niezbędnymi konsultacjami, nie korzystałem z pomocy innych osób, a w szczególności nie zlecałem opracowania rozprawy lub jej istotnych części innym osobom, ani nie odpisywałem tej rozprawy lub jej istotnych części od innych osób.

Oświadczam również, że egzemplarz pracy dyplomowej w formie wydruku komputerowego jest zgodny z egzemplarzem pracy dyplomowej w formie elektronicznej.

Jednocześnie przyjmuję do wiadomości, że gdyby powyższe oświadczenie okazało się nieprawdziwe, decyzja o wydaniu mi dyplomu zostanie cofnięta.

Poznań, ...

(miejscowość, data)

.....

(czytelny podpis)

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Introduction

Definitions, being a central point of monolingual dictionary entries, are important elements of the microstructure of a dictionary. As monolingual dictionary definitions, especially in monolingual learners' dictionaries, are utilized not only to decode meaning, but also for other purposes such as vocabulary retention or encoding, continued study of their structure and effectiveness is important. It is here that the knowledge of the language system and its lexis as perceived by an ordinary user comes into play. Naive users' perceptions of the meaning of words and their defining habits have long been proposed as models that should be taken into consideration in professional definition writing and dictionaries should reflect users' folk picture of the world in their definitions. Such calls have been partly realized in dictionaries which adopted some putatively folk defining models in their definitions. Research on folk definitions, their format and wording acquires additional importance in the context of internationally published learners' dictionaries with target audiences composed of users belonging to different cultures, as differences between folk defining strategies may possibly influence comprehension of dictionary definitions. All things considered, folk definitions constitute rich material for analysis, which can bring interesting insights from which conclusions can be drawn not only for lexicography.

Issues such as the structure, vocabulary and meaning relations of folk definitions are important, but only one aspect of folk definitions is central to this dissertation and it is their (grammatical) format and the dissertation itself is an account of an extensive study of defining strategies utilized by native speakers of English who have no expert linguistic or lexicographic knowledge. The dissertation begins with the theoretical background of defining in Chapter One, in which different faces of definitions are

listed, with a special focus on defining in linguistics, especially in the lexicographic context. In this chapter popularly employed dictionary defining formats are named and characterized, enumerating their different advantages and disadvantages. Some remarks are made on what constitutes a successful definition in lexicography and how a successful dictionary definition can be achieved.

In Chapter Two, the notion of spontaneous defining is explained and characteristics of folk definitions are given on the basis of, among others, Stock (1988) and Rundell (2006). Folk definitions are compared with formal dictionary definitions, and the usefulness of folk defining strategies in dictionary making is discussed. Furthermore, criticism of already employed, allegedly folk-originating dictionary formats is provided and a review of the literature on folk definitions in lexicography is presented, dating back to the 1960s and up until the present day. Different studies and methodologies are presented, each study having a slightly different emphasis. Out of the studies described, a few of the more recent ones have had a major influence on the study described in this work: Mikołajczak-Matyja (1998), Lew and Dziemianko (2006a,b), as well as some of my previous authored or co-authored work on folk defining. It is in this chapter that calls for further studies have been made and reasons for studying folk definitions are elaborated on. Further, commonly employed methods of studying folk definitions are delineated and factors influencing elicitation results are named. The chapter ends with a rationale for another study.

Chapter Three is an extensive description of an experimental study of folk definitions that included elicitation of folk definitions of 9 target noun lexical items. The description starts with an extensive background of the study, justification and clarification of the design of the study and its methodology: the pilot study, data collection, the lexical items tested, subjects, procedures and data analysis. It presents in detail two modes of eliciting folk definition material: written and spoken, thus clearly dividing the study into two parts. The parts are referred to as Spontaneous Defining Written Task (or simply written elicitation) and Spontaneous Defining Spoken Task (or spoken elicitation), respectively. An important part of the description is the system of categorizing responses that was based on a combination of semantic and syntactic criteria and involved a number of labels for definition formats, in part adapted from earlier research and in part originally proposed in this work. Data are analyzed globally, as well as broken down by individual items tested. Three aspects of data analysis are emphasised: (1)

the format of the definition, (2) its length and (3) complexity. Detailed graphs presenting results are given. In addition, more difficult and often unorthodox responses are exemplified, followed by a commentary. At the end of each section describing a given part of the study, a discussion and a list of partial conclusions are included. In Chapter Three, a separate section is devoted to the analysis of dictionary definitions of the corresponding entries that were tested in the experimental study. All the results are analyzed jointly and compared.

Finally, Chapter Four, the concluding chapter, provides a general discussion of the results of the entire study, highlighting some differences between the elicitation modes and juxtaposes folk defining with formal dictionary defining. Some of the characteristics of folk definitions as presented in Chapter Two are evoked and addressed again in the context of the results of the experimental study. The results of the described study are compared and contrasted with the studies presented in the theoretical section. Conclusions are given on the nature of folk definitions and how folk defining habits have been affected by formal education. Some opinions are ventured about the application of the results of the study conducted in practical lexicography. Suggestions as to further studies and their methodologies are proposed to verify and extend the conclusions of the present study.

Chapter 1: Definition and defining

1.1. Background

Definitions have always enjoyed a significant role within the microstructure of a dictionary entry and defining itself has always been considered to be one of the basic abilities of lexicographers. Defining, however, is not a domain solely reserved for dictionaries and lexicographers. Quite the opposite, the practice of defining is present in many domains of human activity and can be observed from such simple everyday situations as friendly and informal conversations in a pub, through definitions in textbooks to those found in very advanced fields of science. Language users define frequently, consciously or unconsciously, and for different purposes. Since this work treats of defining, it is vital to review the theory behind the concept of definition and specify certain basic problems behind the practice of defining. It must be established what types of definitions there are, how they differ, and what the differentiating factors behind the different definitions are.

The type of definition, its wording, and the general approach to defining will vary according to a number of determinants. These will include:

1. who formulates a definition (a naive user, a trained lexicographer, a researcher, a mother, a child, etc.);
2. the expected recipients of the definition created;
3. the situation or context in which a definition is worded;
4. the intended type of definition (e.g. lexical vs. real);

5. applicability and scope of the definition (working, stipulative definition vs. absolute, non-stipulative definition);
6. the field of science in which a definition is created (science, law, etc.).

The final shape of a definition will hinge upon these and many other factors which are consciously or unconsciously considered in the course of producing a definition.

1.2. Etymology

The etymology of the word *definition* clearly indicates its original meaning. The word definition originated from Latin *definitio* and *definire* which roughly translates as 'delimit, determine, circumscribe, set bounds to' (Harris and Hutton 2007: vii), which means that certain boundaries are imposed on an item defined in order to clearly mark the differences it exhibits in comparison to other items. This understanding of the word *definition* is directly connected with logic that, in turn, draws upon the theories expounded by Aristotle. It will be clarified later, however, why this approach to the understanding of the concept of definition may in many cases be highly risky, especially in view of the fact that, because of the nature of language, it poses a challenge to its modern understanding in lexicography and other areas of linguistics.

1.3. Defining in linguistics

The etymological view of definition, as Dolezal (1992: 2) puts it "explicitly demands boundaries" and because of the nature of language this fact can be rather problematic. In linguistic theory, neither the concept of meaning, nor the concept of definition have a formal status as meaning is a flexible hyphothesis (Dolezal 1992) and the meaning of a word is understood differently (if only slightly) by each speaker of a given language. It is an inherent characteristic of human language that the meaning of words is extendable to cater for the description of new concepts introduced with the advancement of language. As Hanks (2005b: 400) points out, "this imprecision is not a fault but a design feature of natural language, enabling speakers to use existing words to say new things and to use language rapidly". For this very reason, it would be too rigid to use the ety-

mological approach to the concept behind the word *definition* described above in order to define words in natural language. Therefore, another understanding of definition in linguistics is necessary and this would be its reading as (for example) lexicographic definition. The way a lexicographic definition is understood will be elaborated on below.

1.4. Stipulative definition

One possible way that is believed to help to avoid misinterpretations connected with the imprecision of words is by means of using the so called 'stipulative definition'. This type of definition is a working definition that is an agreement between the author and the reader as to how a concept behind a word will be interpreted and understood in a rather limited context of a given written work. The use of such a strategy dates back to the times of Euclid (Harris and Hutton 2007: 3). Following Stanford Encyclopedia of Philosophy (Gupta 2008) "A stipulative definition imparts a meaning to the defined term, and involves no commitment that the assigned meaning agrees with prior uses (if any) of the term." Therefore, it is mostly created for the purpose of an argument in a given context and may not always be similar to the ones accepted in common usage. The stipulative definition is regarded as a distinct and separate category from the 'lexical' definition.

1.5. Defining in the lexicographic context

An important distinction must be made to understand different approaches to defining and to understand what is meant by a lexicographic definition. This is the distinction between defining words and defining things in the real world. The latter would be referred to it as a 'real definition'. A real definition is one that explains the nature of the concept that it refers to, rather than, like the 'nominal definition', explain what a word means. The realization of this fact is crucial because this means two quite different matters. In a frequently quoted example of *gold* as a word versus *gold* meaning 'substance' Harris and Hutton (2007: 38) go on to explain that "Asking what gold is has to be dis-

tinguished from asking what the word gold means. The reason for drawing this distinction is usually said that the former question could be asked (and answered) without ever mentioning (or even knowing) the word *gold*. One is a request for information about a certain metallic substance, while the other is a lexicographical inquiry."

Definition in the lexicographic sense, the nominal definition, must therefore be understood as describing lexical meaning. It has explanatory, rather than stipulative features. Lexical meaning of a word in turn, according to Farina (1992), who echoes Zgusta (1971: 24-26), is "an abstract, relational value determined by the system of language as a whole". Lexical meaning is of multifaceted character and although not clearly classified (Geeraerts 2003: 87), can involve subtypes of meaning such as denotational meaning and non-denotational meaning types: emotive (connotational) meaning, grammatical meaning, pragmatic meaning. As was previously mentioned, although the word *definition* is associated with boundaries, words in natural languages cannot be so clearly discriminated as their boundaries are often fuzzy. The fact that natural language is not always an orderly structure that can be described by the rules of logic and has many gaps was observed by Locke back in 1690 (Locke [1960] 1975). Far more recently, Hanks (2005b) pointed out that fuzziness is a vital property of language that makes words available to be used in new contexts and creative ways as well as extend their meanings. Moreover, actual dictionary definitions will never fully reflect the true lexical meaning for there are several constraints due to the fact that dictionary definitions are created by lexicographers, whose "knowledge of the system is never complete, the meanings and the rules of the application of the single signs of this system are not so clear-cut as it would seem, and the system itself changes constantly" (Zgusta 1971: 26). This very fact is problematic because users expect dictionaries to provide perfect instances of definitions. As Iris et. al. (1988: 238) state, "[t]he most idealized form of definition is found in the dictionary, which represents an omniscient, inclusive and consensual speaker." For Fischer (1991) "[d]efinitions are metalinguistic statements about the meanings of words. They are derived from reflecting on how words are used." Dictionary definitions will in no way be 100% accurate and will be certain approximations to lexical meaning instead. This fact led some authors such as Hanks (2005b) to hold an opinion that dictionary definitions can only typify meaning, rather than define it, or as he states elsewhere (Hanks 2000) specify "the meaning potential", as the meaning of words can only be determined fully when they are embedded in context. Apart from the

constraints mentioned above, there will be further constraints imposed on definitions in actual dictionaries and these will be more closely bound to actual limitations of a given dictionary. For example, limited space if a dictionary is to be published on paper, the criterion of intelligibility to the target and/or average user of a given dictionary, access to and the amount of the evidence on the use of a word to be defined, the purpose of a definition (whether it is chiefly for decoding or encoding language), whether it is a definition in a dictionary or perhaps just a glossary, the type of user a dictionary is targeted at (a native/non-native user, a child, a learner/proficient user), the nature of a dictionary (its relative degree of prescriptiveness/authority[1] or descriptiveness), social, cultural colouring and in the most extreme cases, catering for a political agenda. All these factors can be taken into account consciously, or quite independently of the intention of a lexicographer can shape the final definition that is being created. Besides, definitions can vary across dictionaries because they are often interpretations based on usage at a given time and by a given community. In terms of their scope of coverage of senses within one lexical unit, dictionaries more frequently describe more central and frequent senses as if referring to the notion of stereotype (Geeraerts 2001).

1.6. Dictionary definition formats

Before the dictionary defining styles we are familiar with today were developed, dictionaries had gone a long way shaping and reshaping the language and form they used within their entries. It was not until the 18th century that the shape of the entry in dictionaries started to formalize (Hanks 1993: 119). Before that time, dictionary entries provided either single equivalents and/or long-winded, prolix and sometimes informal and subjective explanations or descriptions. Changes came in the 18th century, a great period in English lexicography with some of its landmark achievements such as Dr Johnson's *Dictionary of the English Language*, which aspired to order and organize the English language and was at that time praised for its accurate and meticulously written definitions (Schreyer 1992). It was also in the 18th century that formalized structures

[1] Today lexicographers imply or clearly state that their definitions are based on usage, claiming their definitions are not prescriptive or stipulative (Hanks 2005b).

became popular[2] thanks to Leibniz, who compared language to a mathematical system and thus the notion of substitutability in lexicography was engendered. These ideas had a long-lasting effect as it was more than 150 years later that, with the advent of the first edition of the Cobuild dictionary (COBUILD1), new formats were introduced. In fact, in the meantime several modifications or improvements were introduced over time, such as the 19th century addition of brackets within entries, the development of dictionary-specific language of description, certain conventions such as the use of prepositional phrases to describe subjects or agents etc. Long and discursive explanations were, in a rather inferior way, ascribed to folk traditions of defining and for some time lexicography was dismissive of voices in favour of wider focus on the context and use of words within dictionary entries.

In dictionaries, several defining strategies are usually employed and these will now be discussed. In order to narrow down the list to match the focus of this thesis, mostly the strategies used for nouns will be presented[3]. The list below is based on Harris and Hutton (2007), Kipfer (1984), Rundell (2008) and Adamska-Sałaciak (in press).

a) Classic definition. All things considered, the Aristotelian form of defining is regarded as the most ideal, refined and organized form of defining which at lies at the far end of the sequential stages of mastery of defining techniques in the course of the developmental stages of defining (Iris et. al. 1988: 240). It is also the epitomization of the western notion of an ideal definition (Caramelli 2006: 157). Classic Definition is a definition model based on describing the definiendum in an analytic way (hence also called Analytic Definition, or sometimes referred to as 'ideal definition' or 'referential definition') in terms of a superordinate term called *genus* and one or more subordinate qualities (*differentia specifica(e)*) that make the lexical item defined different from all the others from the category signified by the genus[4]. An example of a classic definition is presented below, adapted from MEDAL2. *A cat* is defined as an animal (genus

[2] In the Polish lexicographic tradition, for example, it was the 19th century, with previously appearing dictionaries filled with informal descriptions of meaning, paraphrases, synonyms (Bańko 2001).

[3] Other parts of speech require very different defining strategies. Much as some definitional styles such as the classic definition may be used with reference to verbs, it cannot be as freely used to define adjectives and adverbs for which there are other techniques.

[4] This intentional defining strategy can be enriched by extensional elements in dictionaries through provision of typical hyponyms.

proximum) and characterized by such characteristics as soft fur, a long thin tail etc. (differentiae specificae).

cat - an animal with soft fur, a long thin tail, and whiskers, that people keep as a pet or for catching mice.

This is a classic style that dates back to the times of Aristotle and is based on a taxonomic model of description used originally in biology and with reference to real definitions (rather than lexicographic ones). Aristotle's basis for using such a defining style was an assumption that words can be described as having five levels of different concepts (a bit more sophisticated model than the one actually used in dictionaries): Genus (a person, a member of the genus animal), Species (human species), Differentia (Humans are rational as opposed to animals), Properties (Laughter: All humans laugh), Accidents (Jim is tall) (Hanks 2005b: 399). Such a model is too complicated and difficult to follow in creating lexical definitions for reasons explained below. The classic definition is characterised by being able to substitute for the word defined and the truth value of the statement is not changed (salva veritate). Substitution itself is supposedly a natural and subconscious process that users perform (Kipfer 1984: 66). In its lexicographic application, although very widespread, the classic definition is not free from problems. As in logic, an ideal classic definition would imply a set of necessary and sufficient conditions has to be satisfied for it to be true and would have to unequivocally specify the object defined. This poses a problem for natural language, as only for technical terms or ideal concepts can we find such conditions. If such conditions are strictly defined, there still might be aberrations found in individual members referred to by a given word that can exclude them from the group if it is considered strictly in logical terms[5]. Another problem is the relative difficulty in finding genus terms for many concepts which are fuzzy, or which users of a language do not consider as having clear boundaries (fuzzy words). For example, many users will disagree about what can be referred to as *a cup*, *a window*,

[5] Here following the work of Putnam (1975), Stock (1992: 113) describes the case of a dog, which can at some point be defined as a four-legged animal. In view of this definition, all dogs which lose one leg could not be considered dogs any more. Here is where the notion of stereotype becomes useful (Stock 1992).

a hat, red. etc. (Labov 1973). In other words, "[...] all knowledge is not so neatly organized in the hierarchical categories or taxonomies presupposed by an Aristotelian form"[6] (Iris et. al. 1988: 242). In fact, if we adopt Wittgenstein's family resemblance philosophy, we can understand why a classic definition can fail in defining natural language. Wittgenstein observed that not all objects belonging to one class[7] (described by one word, one hyperonym term) necessarily have to share all common features[8]. In other words, it will be impossible to find necessary and sufficient conditions. Instead, the ideas can be more or less loosely connected by a network of mutual, overlapping relationships. Therefore, only a few concepts can be described properly using analytic definitions. This linguistic indeterminacy results in many a problem for the lexicographic approach to defining. Heyvaert (1994) describes a problem of classic definitions regarding their referential features. One might be led to believe that it is always possible to arrive at a referent of a classic definition, whereas in many cases this might prove impossible[9]. Another problem is that even if logical substitutability is achieved, contextual substitutability may not be not. For certain words[10], this format may render a definition clumsy, awkward-sounding or too formal (Bańko 2001: 84). Also, it is impossible to use classic definitions to define certain classes of words, mainly function words such as conjunctions, pronouns or interjections and some types of nouns, for instance abstract nouns, can be difficult to analyze and there-

[6] The model, Aristotelian form was based on the biological system of taxonomic classification which is supposed to be regular and in fact is claimed not to be by some authors (Piotrowski 1988: 56).

[7] As a model example Wittgenstein presents the concept of *games*, which although described by one single word, are a very wide concept that holds a very substantial number of activities which sometimes may share very little between them. Instead, Wittgenstein proposes to concentrate on describing semantic components of a concept that can be combined to cater for the different senses of one concept.

[8] Another famous example quoted by Heyvaert (1994: 87) is the word *fruit* which "[...] is undefinable in terms of a single unambiguous, sufficient and verifiable set of features [...].

[9] This problem is evident, for example, in the so-called categorical sentences that do not have real referents but only describe categories. A more specific example can be the famous example of the word *a bachelor* for which the concept is easily described, yet finding a referent for this word in certain practical situations can create paradoxical situations. Heyvaert (1994) claims, for instance, referring to a Roman Catholic priest as a bachelor would be a clumsy way of describing reality. In other words, if one is referred to as a *bachelor* conceptually, they do not have to be a bachelor empirically.

[10] In fact, sometimes more than one hyperonym can be found for a given word. The hyperonyms found can sometimes be conflicting in meaning. An example of *cornflower* which can be considered a flower, a weed, a plant etc.

fore require other methods. The analytic definition functions best when defining nouns, verbs and adjectives[11].

b) Extensional definition is a type of definition that at first sight may resemble the classic definition but in fact has a different semantic structure. It is used instead of a classic definition "in cases when the definiendum is a general category, hard to subsume under a yet more general one" (Adamska-Sałaciak in press). Rather than providing a hyperonym (genus), it extends the meaning by enumerating the examples (hyponyms) of the definiendum, sometimes combined with an overly general hyperonym or elements typical of the classic (intensional) definition's definiens. This extension is usually achieved by enumeration of prototypical hyponyms followed by words such as *especially*, *typically*, *usually* etc. (Geeraerts 2003). An extensional definition can be exemplified by a definition provided below, taken from Hartmann's "Dictionary of Lexicography" (1998: 55) and followed by a slightly modified version of extensional definition taken from LDOCE5 (*food*), where *vegetables or meat* is the truly extensional part.

a. *academic staff member – professor, lecturer, instructor, demonstrator...*

b. *food – things that people and animals eat such as vegetables or meat*

c) Definition by Synonym (Synonymous Definition) is basically one that provides the user with a synonym or at least an item that is close in meaning to the one defined. Despite being a strategy that produces brief and easy-to-read definitions, there are several problems connected with the application of synonyms to define, the first of which is the widely known fact that the mere existence of synonymy is questioned in linguistics (Walter 1992: 129). It is next to impossible to find two lexical items that will be exactly synonymous in terms of their denotation, connotation, collocational patterns and substitutability at the same time. Most often, words that are more easily found to stand in exchange of other words can be described as near-synonyms, but in their case it must be remembered that the differences including semantic nuances, contextual distribution, possible collocates, embeddability in fixed phrases, grammar of a word, register,

[11] Although it is not considered the best strategy to define adverbs and adjectives by some authors, namely Atkins and Rundell (2008: 416)..

attitude of a user (connotation) can be even greater (Walter 1992)[12]. Another problem is that we may never be sure that the meaning of the synonym provided is understood by the user in the same way as by the lexicographer. If we use highly polysemous words as synonyms, the task of decoding the right meaning becomes even more complicated. At times, several synonyms are given at a time for one item define and these can be either fuller or more partial synonyms and – since one might never be certain of that – also creates further problems of interpretation[13]. For these reasons a synonym definition can be used as the sole defining strategy for a word only to a limited extent. An example definition by synonym (MEDAL2):

canine – a dog

d) Definition by antonym is a more marginal defining strategy that is, however, utilized in dictionaries most often in conjunction with another defining style within one entry. In this strategy someone sad could be defined as 'unhappy' or simply 'not happy' and someone fast as 'not slow' or 'opposite of slow'. This definition type shares some of the problems with the synonym definition. An example definition by antonym of *impatient* is 'not patient'.
e) Synthetic definition is a type that is not always mentioned or considered in the literature when listing definitional styles. A common comparison of this defining style is with the classic, i.e. analytic definition. The two can be differentiated by saying that while the analytic definition sees the concept as being a whole made up of parts, the synthetic one - as it being a part of a larger whole. This explanation may not always be apt or clear enough to understand what this strategy consists in. The synthetic definition often lends itself easily to explain the meaning of colour terms and it relates the colour in question to a familiar object that represents a given colour ('Red is the colour of blood', 'yellow – the colour of lem-

[12] In fact, Walter (1992) gives a range of solutions to overcome these problems. Whenever a synonym definition is given, the synonymic set can be further set-defined using qualifying definitions, extra information on grammar, register etc. contained in between brackets or negative information concerning differences in word use between (near-) synonyms.
[13] A more detailed coverage of the structure of a definition as well as some potential problems with interpretation is discussed in Wiegand (1992).

ons'). In fact, the synthetic defining strategy closely resembles a subtype of ostensive definition described below.

f) Descriptive definition/Definition by description describes certain, not necessarily essential, features that all the referents signified by the definiendum possess. Here the definiens of a definition of the word *dog* could be *Dog barks*. This strategy is also often ascribed to folk defining strategies.

g) Implicative definition/Contextual definition/Full-sentence definition (FSD)/Cobuild definition uses the word defined in the context of a full sentence thus illustrating its meaning. The creation of FSDs is corpus-driven, so the context illustrated is supposed to be natural and reflect the actual use of a word. It is a fairly recent addition to the repertoire of defining strategies whose usability and effectiveness is frequently discussed. As it is often named a 'folk definition', it addresses the needs of a naive language user, who is not familiar with the technicalities of lexicographic defining. Full sentence definitions are supposed to reflect natural everyday speech and heavily rely on the use of corpora in their creation. As the definiendum is in the neighbourhood of co-text of a sentence, not only is the meaning illustrated, but also some typical collocational patterns of an item are shown and a host of additional information. A typical FSD has its definiendum embedded in one clause (the clause that shows how the word is used) and its definiens within the other (the clause that describes the meaning). The strategy works best for nouns, verbs, adjectives and adverbs, but is not free from disadvantages[14], one of which is the increased length of the definition and some limitation of many possible contexts a word is used to just one that is illustrated. Full-sentence definitions were for the first time widely adopted in the first edition of Collins COBUILD English Dictionary in 1987 (COBUILD1). A full-sentence definition example from COBUILD6:

evict – If someone is evicted from the place where they are living, they are forced to leave it, usually because they have broken a law or contract.

[14] See below for a fuller discussion and criticism of FSDs.

h) Although Wierzbicka's type of definition has been never employed in any dictionaries, it has had some impact on today's approaches to defining. This Australia-based Polish researcher proposed a set of concepts (universal semantic primitives) that, due to them being the most basic, simple and primitive, are impossible to be defined. The number of these concepts grew over the years from 14 (in 1970s) to 55 in 1996 (Hanks 2005b). Wierzbicka would use these primitives to describe the meaning in a rather prolix way using a list of conditions, assumptions and implications accompanied by a discussion. This type of conceptual analysis is very accurate and at the same time difficult to achieve and decode, and therefore cannot be easily employed by lexicographers to write actual dictionary definitions. Such definitions, as the author herself claims and exemplifies, have the potential to distinctively pin down the meaning of even the most difficult words and shades of meaning (Wierzbicka 1992). As Piotrowski (1988: 59) states with reference to Wierzbicka's proposals: "The definitions formulated by linguists and those found in dictionaries have to be quite different because the function of a dictionary is different from that of a linguistic description." A dictionary is supposed to be a practical tool which ought to provide quick access to knowledge and help to integrate it with the knowledge already possessed by its user, so such a defining format does not seem to lend itself to practical application in lexicography. A sample of the format is given below:

sacrifice ("it was a sacrifice'')
she did something because she thought like this:
''I want to do something good for this person
I know that if I do it something very good cannot happen to me
I know that this will be very bad for me
I dont want not to do it because of this
I want to do it"
(Wierzbicka 2004: 424)

i) Ostensive definition is a nonverbal method of explaining meaning by exemplifying it with a real specimen (object) signified by the definiendum. Strictly speaking this method may not deserve the label of a definition, yet it has the potential

of coping with word meaning, especially for children at their early stages of linguistic development. Lexicographically, it is often realized iconographically – by means of using images (with captions), sound or clips in dictionaries. In spontaneous defining context, the ostensive definition may be understood as referring back to example referents seen before. An example can be: "A monkey is what you saw at the zoo yesterday" or "A monkey is the animal you saw at the zoo yesterday", the latter example more closely resembling a classic definition with elements of ostension. In this way more referents can be described, such as: sounds, colours, fragrances, flavours, shapes etc. (Bańko 2001: 145). This reading of ostensive definition does not differ from what was earlier referred to as *synthetic definition*. This strategy is not without problems, as here again the problem of showing the typicality emerges. In order for the definition to be successful a (photo of a) typical example must be depicted and a discussion of what is a more or less typical example is difficult, so the issue of prototypicality of depiction is to be considered. The use of images in dictionaries carries the risk of overspecification[15]. In other words, much as the ostensive definitions have a considerable power of exemplification, they carry the risk of presenting accidental features that are not central to the meaning of the word defined. Ostensive definitions can most readily 'define' concrete nouns and verbs describing actions.

j) Definition by rule (metalinguistic definition) is a strategy employed to define mostly function words such as pronouns, interjections, prepositions, and is in fact a full-sentence description of rules and contexts where a given item is used in a given language, when and how it is used. Apart from conveying grammar information, the strategy is also used to provide pragmatic information when explaining meaning of fixed phrases with specific reference, expressions, proverbs, idioms and in fact they are not restricted to these. The meaning of regular content words can also be explained by means of this strategy. Such a definition starts with phrases like *a word used when, a term used to describe* etc. and con-

[15] This risk can be decreased by showing different specimens of what a word refers to at a time, contrasting a specimen with an object that is not a typical referent, giving negative examples etc (Bańko 2001: 143).

tinues a as a regular classic definition. Metalinguistic definitions cannot be syntactically substituted as classic definitions.

the – used when you are referring to a particular thing or person that has already been mentioned or is already known about (MEDAL2)

k) (Single-clause) *when*-definitions[16] (SC) are the most recent format[17] composed of a single, subordinate clause which usually starts with a subordinating conjunction *when* or *if*[18]. This style is supposed to refer to folk defining styles and is most successful in defining abstract nouns. Its form reflects the first (subordinate) part of an FSD but does not contain the headword. One of the criticisms directed at this technique is that it is not able to successfully convey grammatical information such as the part of speech of the definiendum (when a noun is defined by means of a single clause with an inflected verb), thus causing comprehension problems. An SC definition is not substitutable, either. A broader look at this defining format can be found in the section on the effectiveness of folk defining strategies in 2.1. below. An example SC definition introduced by *when* is given below.

envy – when you want something that someone else has

l) Multiple definition is a rather randomly structured format that contains a few definition types separated by commas, colons or semi-colons to be interpreted as a single definition, for a single sense within a dictionary entry. Bańko (2001: 103) criticizes this still common dictionary defining strategy for difficulties with interpretation that it creates. Namely, the interpretation of how to understand the linking behind this punctuation. Whether these punctuation signs are to be in-

[16] A term first introduced by Lew and Dziemianko (2006)
[17] In fact it was utilized first as early as in the 16th-17th century in such works as Coles's *English Dictionary* from 1676 in which the format was used to save space as these definitions were actually truncated and adapted versions of longer descriptions found elsewhere. This strategy was used to mostly define specialist words and, in Coles's dictionary, not only nouns were defined using this strategy, but also verbs or adjectives and the definitions were introduced by *when, where, whereon, which, who,* or *whose*. The dictionary itself was very successful commercially. In view of these facts the use of single clause *when*-definitions nowadays is kind of a re-introduction of the strategy to the lexicographic tradition.
[18] Other words possible here are: how, where, whereupon etc.

tepreted as *and*, *or* or another phrase, according to the author, often remains unclear. In between the punctuation signs, synonyms or supposedly synonymous phrases can be found. The difference between a definition by synonym which uses a few synonyms at once and a multiple definition can also remain unclear. Such an accumulation of lexical or syntactic synonyms has been criticized for failing to properly analyze a concept, which is, according to some, the ultimate goal of a definition (Bańko 2001: 106). Use of this strategy may be dictated by the fact that they are easy to write for a lexicographer; yet they are difficult to decode for a dictionary user, as they are often written using the compact dictionarese style. An adapted and translated example from Bańko (2001: 103) is given for the verb *inform*:

inform – «give information, guidelines, notify, communicate, clarify»

Having all this information in mind, one must not forget what was mentioned before: dictionary definitions are mere approximations and this view is nicely phrased by Hanks (1993), who writes: "[...] all meanings rely on constructive interpretation by the hearer/reader, as well as by the utterer. If that is true, there is no such thing as literal meaning, and a dictionary explanation is no more than a compromise with the impossible, a desperate attempt to state the unstateable."

1.7. Lexicographic vs. scientific definition

Definitions in science can be described as real (as opposed to nominal) definitions. This means they describe the meaning of existing concepts, objects or phenomena rather than explain the meaning of words that serve to signify them. Very frequently, in science, also words that are defined are different types of words that the lexical words we use in our everyday language. The words most described are terms. Terms lend themselves to very strict defining as they are often artificially created and/or agreed on by international organizations and institutions. In this way terms are highly stipulative and are not, like lexicographic definitions, subject to interpretation. Terms are not targeted at ordinary language users. Terms will often be found in encyclopaedias or terminological

dictionaries, as these works of reference concentrate on expert knowledge and chiefly focus on open word classes, unlike dictionaries, which describe all word classes, yet from a different angle. Descriptions of meaning of terms will, unlike dictionary definitions, lack grammatical information and other types of linguistic information such as pragmatic aspects of meaning or collocations. Definitions in encyclopaedias are also impersonal and abstract. Differences can be seen in classifications as well. Terms in natural sciences, for instance living species, are classified using scientific models differing in perception from the every-day, possibly naive model a dictionary aims to present (Piotrowski 1988: 57). A lexicographic definition, unlike the definition as understood in logic or science, does not have to unambiguously identify the object defined. It is sufficient for it to list those features which help differentiate the word defined from other lexical units. Although strict separation of encyclopaedic and linguistic knowledge is achievable for highly specialized terms, in dictionaries such separation is not entirely possible for some entries, especially nouns describing plants or animals, and not always does it have to be necessary, depending on the type of dictionary created and its approach to treatment of such entries. In other types of entries such separation will not be possible, either, because lexical (semantic) and encyclopaedic knowledge overlap. Wiegand (1992: 253) proposes a model of everyday knowledge on the example of *lemon*: the typically semantic knowledge will include such facts as: *lemon* is a noun, a predicator etc. Encyclopaedic knowledge will include having factual knowledge, for example "lemons are cheap", "lemons are available". The shared area between the semantic and encyclopaedic knowledge will involve knowing about stereotypes ("lemons are yellow"), categories ("lemons are fruit") etc.

1.8. A successful lexicographic definition

The understanding of what it means for a definition to be successful is vital not only in creating professional dictionary definitions but also in composing word explanations on an everyday basis. In fact, it has been experimentally shown that well-written, adequate definitions contribute positively, not only to the understanding of the meaning of a word, but also to productive performance of their users (Nist and Olejnik 1995: 189).

Although not universally proven, there are claims that good definitions can fulfil their pedagogical purpose as not only can they serve to decode meaning, but can also be utilized in learning new vocabulary. At the same time, the issue seems to be very important in light of the evidence from several studies such as Fischer (1991) whose results suggest that very frequently dictionary definitions are not understood at all by dictionary users or, in other cases, they are understood but nonetheless unhelpful in understanding the word explained by them. A definition that will successfully guide a reader to the understanding of a word can be neither too general nor too distinctive. It must be stressed that a successful definition of a word need not be exhaustive. Not always do complexity and length contribute positively to the correct understanding of a definition. To quote Atkins and Rundell (2008: 420), "[t]he moral here is that it is important to distinguish here between information which is true and information which is relevant". The authors also claim, after Landau (2001: 170), that "[a] lexical definition could nearly always be truer by being longer", which means that there is no need to provide more information than necessary (Atkins and Rundell 2008: 420). Good definitions describe what is typical, rather than having to concentrate on what is necessary. In order to avoid problems with interpretation, definitions often have to rely on what is stereotypical about the meaning of a word[19]. A successful definition will also take into account other aspects. To rephrase Atkins and Rundell (2008: 450), the writer of a definition must take care of its content and form. It is here that the defining style comes into play. Also, when speaking of content, writing a successful definition means being able to analyze whether it will be better to look at the form or function of the referent, and decide whether the former or the latter is a more essential aspect that needs to be foregrounded when explaining its meaning. At times, a combination of both will work. For example, in order to define the word *lamp*, it seems more reasonable to focus on its function, as there will be literally thousands of different shapes, forms and sizes that lamps can take. To define the word triangle, focus on its form would be indicated. Finally, a definition writer needs to establish strategies of handling non-denotational types of meaning: whether to include it within a definition or outside it, by means of extra

[19] This, while helping to solve one problem can, unfortunately, create some new ones. This strategy helps to make it possible for a definition to account for aberrant referents characterized by some deviations from the norms imposed by it. Yet, it can shape cultural interpretations of a word and fossilize stereotypes about its referents. Stock (1992: 117) gives an example of how such stereotypes work in words like *mother*, *parent*.

usage labels in the entry. McKeown (1993) lists several principles of writing effective definitions, which are:

a) identify the role of the word, when it is used, what it is used for;
b) characterize the word, that is, explain the characteristic or prototypical use;
c) make meaning accessible, for instance by using simpler vocabulary or developing a straightforward way of communicating a concept;
d) arrange for attention to the whole definition in order to avoid reliance on fragments of definitions for their interpretation as "definitions should be phrased to diffuse the effect of particularly salient terms in order to direct attention to the whole definition" (McKeown 1993: 22);
e) reach a balanced level between precision and vagueness in order to account for variability of shades of meaning a given word can express depending on the context, as Wierzbicka (1985) puts it, "it must aim at precisely that level of vagueness which characterizes the concept itself".

Adamska-Sałaciak (in press) further extends the list by enumerating several issues that will here be rendered as guidelines:

f) Avoid explaining difficult lexical items using equally or even more difficult wording. Although this approach is impossible when defining very simple, everyday lexical items, a well thought-out strategy for the content of the definiens can be of help[20].
g) Avoid circularity which is still often enumerated as one of the problems of definitions even in modern dictionaries. For example, Adamska-Sałaciak (in press) highlights both direct (internal; where the unit defined is used in its own definition) and indirect circularity (where lexical units are used to define each other) as one of common though largely avoidable flaws that make definitions less effective. Although it is impossible to completely avoid it, a careful approach can extend the size of the circle thus making it unnoticeable (Adamska-Sałaciak in press).
h) Avoid using lexicographese, that is special language sometimes introduced in dictionary definitions. Lexicographese uses certain punctuation such as brackets

[20] One of the strategies employed in Monolingual Learner's Dictionaries is using a limited set of defining vocabulary consisting of typically 2000-3000 basic words. This, however, carries a risk of imprecision and condescension towards the reader (Adamska-Sałaciak in press).

or slashes in order to use less space and introduce some extra information into the definition, which can in fact hinder the process of decoding it.

i) Account for both denotative and (possible) connotative meaning (presenting connotative information is also advocated by Piotrowski (1988: 58), who emphasises that dictionaries are a good place for inclusion of this naive point of view of the world).

j) Avoid bias in presenting a worldview; that is be sensitive when conveying information relating to history, people's religious or cultural beliefs.

Apart from these, several surveys, including Fischer (1991), claim that the presence of contextual information within a definition, or at least within a dictionary entry contributes to more successful comprehension of the meaning of a word. Bańko (2001: 79, 99) observes that lack of contextual information hinders the process of decoding a definition and emphasises that contextual information acts as a clear criterion for sense discrimination.

It is worth noting that there are several features that may render definitions less effective. These were neatly specified in McKeown (1993: 20), who enumerates the following as definitional problems:

a) Weak differentiation, which occurs within a definition that provides a domain that is too general to successfully distinguish an item within the domain. McKeown (1993) gives as an example the word *intricate* defined as "very difficult to follow", and the definition is too general to differentiate *intricate* from other words with similar meaning.

b) Likely interpretation, when a definition is worded in a way that imposes a certain likely interpretation which does not necessarily correspond to the full meaning of a defined item.

c) Vague language "uses wording that has low explanatory power" (McKeown 1993: 20) and therefore "does not provide sufficient meaningful information to develop a representation of the word". The author exemplifies this problem with a definition of the word *ally* which reads "one (as a person or nation) associated or united with another in a common purpose", where, in fact, the word itself can carry far more connotations.

d) Disjoint components, when a definition provides loosely connected chunks of information that can be difficult to interpreted together. The author supports her

claim with an example of a definition for the word *convince*: "make (person) feel sure; cause to believe; persuade". In such cases it can be very difficult for a reader of a definition to interpret its components as a whole.

As can be seen, writing effective definitions requires consideration of many factors at the same time, which makes the art of creating good definitions a skill one has to master and an activity one has to approach with great care and insight. Apart from that, the effectiveness of a defining method will be judged on the basis of its ability to successfully guide its reader towards the specific target a given dictionary is aiming to cater for globally, be it only understanding of an unknown word in context, solving a semantic dispute, providing one of various types of different-language equivalents[21] or practical (classroom) language production.

[21] Adamska-Sałaciak (2006) differentiates between four types of equivalence (1) explanatory/descriptive, (a paraphrase), (2) cognitve/semantic (only general and of limited use) (3) translational/insertable (that can be substituted) and (4) functional (of denotational and connotational correspondence).

Chapter 2: Spontaneous defining

Spontaneous defining, in this work interchangeably referred to as folk defining or naive defining, is understood as an activity undertaken by language users in everyday situations, when a situation necessitates the provision of a contextual definition or explanation of an unknown vocabulary item. Spontaneous defining is associated with teachers, who explain meanings of words to their students, parents explaining meaning to their children, or with naive users of a given language who explain word meanings to each other or to speakers of other languages whenever a situation requires it. By the term naive users those users are understood who are non-lexicographers and non-linguists and are unskilled at professional, scientific or lexicographic defining strategies. Therefore, naive users are not expected to consciously apply guidelines on writing successful definitions, some of which have been mentioned above.

By a closer analysis of folk definitions, it appears to be clear that their structure and content differ in several ways from those definitions which are created by professional lexicographers as naive users may have different perceptions of meaning. I will enumerate these differences referring to, among other works, those enumerated by Stock (1988). One basic difference is that spontaneous definitions rely heavily on the context in which they are created, which is completely in opposition to dictionary definitions, which are context-neutral and usually devoid of any situational information. This very fact contributes largely to differences in wording between the two types. The second difference may be in their length. Presumably, folk definitions will be less constrained by spatial restrictions and therefore might tend to be longer (this fact, however, has not been directly confirmed by studying actual folk definitions and it seems that folk definitions can actually be shorter). Another difference lies in the fact that folk def-

initions are devoid of prescriptive authority as is sometimes the case in dictionaries. Apart from these, very often spontaneous definitions will not be substitutable for the word in a given context, unlike many dictionary definitions. Also, folk definitions do not use standard dictionary conventions of description (lexicographese), special punctuation, brackets etc. Notably, many folk definitions employ defining strategies more marginally used in dictionaries, according to Stock (1988) these include:

a) diversion from the classic definition and reliance on a typical genus and differentiae, and instead;
b) employing a number of alternative techniques such as ignoring the visual aspect of a referent and concentrating on its function (definitions are functional rather than analytical; hence definitions 'by function' are created that describe "what something is used for");
c) subjectiveness and emotional colouring;
d) higher context-dependence;
e) more frequent use of exemplification (defining by example/hyponym);
f) more frequent use of synonyms (defining by synonym) often modified by accompanying phrases such as: *like, such as, similar to*;
g) incorporation of register information into the body of the definition (what dictionaries usually achieve by means of additional labels);
h) use of description (hence: definitions 'by description' that simply describe "what something is like", "what something looks like" etc);
i) use of the strategy of repetition (hence: defining "by repetition" when the word defined is restated in a given context with a collocational pattern; e.g. a record – break a record);
j) use of negation;
k) more self-reference;
l) use of direct demonstration of an object.

The choice of a defining strategy used by a speaker will be heavily influenced by the part of speech of the word to be defined, linguistic and non-linguistic sophistication of the word and the concept behind it (Richards and Taylor: 1992).

It is worth asking the question why it would be worth studying folk defining strategies more closely. First of all, studying definitions and the practice of defining is important in itself, as defining is "[...] one aspect of becoming literate, where literacy is

defined as using and creating written texts" (Iris et. al. 1988: 238). Joan Manes (1980: 122) in her study published more than 30 years ago observes after Uriel Weinreich (1967: 42) that folk definitions can display recurrent patterns that are universal to languages and cultures. Studying folk definitions is vital, the author claims, as "most vocabulary is presumably learned without the use of explicit definitions" (Manes 1980: 123). They also reflect the ability of natural language to serve as its own metalanguage. Caramelli (2006: 158) quotes a number of reasons why classic definitions should not be assumed to enjoy a better status than others, exemplifying her claim with some, as she puts it, more 'naturalistic' strategies to be investigated, for instance exemplification, negation, referring to cause and effect, function or purpose etc. Apart from that, there are a number of reasons why folk definitions could positively contribute if they were taken into consideration in daily lexicographic practice. Again, Stock (1988) provides some very specific reasons. She claims that elegance of lexicographic definitions and their drive for perfection and completeness can actually hinder the process of decoding them by a user: "Lexicographic definitions have a curious tendency not to stick in the mind, whereas the immediacy, the accessibility and the vividness of folk definitions often make them more memorable and consequently more likely to be of help in both decoding and decoding" (Stock 1988: 87), and this is for reasons of brevity, concentration on function, lack of syntax information and information on the register quoted above.

The perceptions and feelings about the meaning and defining held by naive users of a language could be taken account of when creating dictionary definitions. Such a claim is made by Mikołajczak-Matyja (1998: 11), where she also enumerates other studies mentioning that need. Such works date back to the 1960s and include Imbs (1960), Weinreich (1967), Bartmiński (1980), Tokarski (1987), and many more. This need is also attested to by Bańko (2001: 120, 123). Therefore, from the lexicographic point of view they appear to be good material for analysis. Mikołajczak-Matyja believes that lexicographers should focus on the meaning as perceived by the language users, including different aspects of their knowledge of the society they live in, values and beliefs, which can differ quite considerably from a scientific point of view on these issues. In fact, in the very introduction to her work, she observes that since our language describes our (human) experience, therefore this experience should be considered and incorporated within a dictionary itself, as a dictionary aims to describe language. The incorpo-

ration of such data would make the picture of the semantic aspect of a language presented by a dictionary more objective, albeit simplified in comparison with what could be achieved by scientific analysis. Mikołajczak-Matyja (1998: 9) expresses some doubts as to practical feasibility of such a proposal, enumerating several problems connected with it, one of which being the impossibility of gleaning data from literally millions of users. Another problem in this approach is the difficulty consisting in analyzing someone's (or even one's own) experience. Such activity would involve a lot of data mining and still the findings would be filtered through the subjective eyes of a lexicographer before entering a dictionary entry in the form of a definition. Apart from that, what kind of data should be gathered, who should be appointed to actually gather such data, and how this should be done in order to make this naive view of the world as objective as possible are further issues to be solved.

These questions may not be so easily answered. A lexicographer's knowledge and experience, as Mikołajczak-Matyja points out, can enhance their performance on the one hand, but can also limit their perception, on the other hand, and the fact that lexicographers have to, at times, make arbitrary decisions can, in spite of their best intentions to remain objective, cause them to impose their own knowledge, beliefs, political and a host of other views. It must also be remembered that lexicographers' knowledge of a given language is broader than the linguistic knowledge of a naive user, which may additionally influence their subjectiveness and can divert them from describing true typicality. Having all these arguments in mind, Mikołajczak-Matyja still claims that a deeper analysis of folk definitions can be useful to draw conclusions for practical lexicography. She expresses a belief that studying research material in the form of definitions created by naive users could bring rich insights into the nature of meaning as perceived by speakers of a given language.

2.1. The effectiveness and criticism of some folk defining strategies

Two defining strategies frequently associated as drawing on folk defining traditions: full-sentence definitions (FSD) and single-clause when-definitions have been widely and practically applied in dictionaries, notably Collins COBUILD dictionaries. Having folk definitions applied so extensively in a dictionary allows one to look more closely at

their practical effectiveness. Rundell (2006) paraphrases their advocate, the editor of COBUILD dictionaries John Sinclair, as saying that they are more effective and readable than could be achieved using traditional styles. Some of their advantages as seen by Rundell (2006: 3) are as follows:

a) rejection of traditional defining conventions found in dictionaries;
b) a switch towards a less technical defining language that is supposed to reflect everyday English;
c) practical application of Sinclair's philosophical approach to lexical items, which never appear in isolation and therefore should never be defined in that way. In other words, the co-text around the item is necessary for its meaning to be successfully demonstrated.

In practice, FSDs seem to perform better defining several types of lexical items: verbs that mostly occur in the passive, defining verbs which require specific prepositions, phrasal verbs, reflexive verbs, transitive verbs (especially those followed by specific objects), defining adjectives (especially those followed by specific complements), lexical items which would normally require overly sophisticated language if traditional conventions were used. Additionally, they make it easier to avoid distracting punctuation, symbols, brackets commonly found in, especially older, traditional definitions. Bańko (2001: 101) claims that contextual definitions better fulfil the purpose of actually explaining meaning to dictionary users, rather than just, as he puts it, reminding them about meanings already known. This feature is of paramount importance in dictionaries for foreigners. Traditional definitions, on the other hand, although less effective in defining the abovementioned items, can be rendered more effective when supported by examples, pattern illustrations, collocates etc. Fischer (1991), who compared classic definitions with contextual ones (FSDs) found that the presence of contextual information contributed positively to the understanding of the words defined by definitions with such information therein.

However, some criticism has been directed at FSDs. Rundell (2006: 4) and others enumerate:

a) Their increased length in comparison with traditional formats, which tends to result in increased complexity, and even if they do not use inflated language, they can be difficult to process and the words used are often redundant.

b) Overspecification – as they present lexical items in a very narrow context which is not necessarily the only one, neither is it the most common one.
c) The fact that in spite of claiming to break from original conventions they actually impose new conventions in place of the old ones. These include the necessity to know certain specific issues concerning the wording of FSDs, such as the distinction between the use of *if* and *when*, which is well motivated, but can be unclear to users, or the interpretation of personal pronouns (you) vs. indefinite pronouns (someone). One also needs to know some rules of how the so called displacement strategy works, which serves to encode, for instance, politeness.
d) The patronizing tone of contextual definitions resulting from the use of the second person singular (you) pronoun – this fact sometimes provokes claims as to their unsuitability for use in dictionaries for adults because, to some users, they are too simplistic and do not sound serious (Bańko 2001: 101, 132).
e) Causing certain problems with the interpretation of anaphoric expressions.
f) Inability to explicitly convey grammatical information (for example on the part of speech).
g) Their non-substitutability.

When practically studied, the effectiveness of folk-inspired strategies such as FSDs was confirmed only to the extent that traditional formats would achieve. In a study by Cumming et. al. (1994) that compared standard formats of defining (in that case: defining adjectives and verbs) with full-sentence definitions it was found that although subjects preferred the contextual format, the preference did not translate into any significant difference in the subjects' performance and results. In other words, it was found that FSDs had no advantage over analytical definitions. As can be seen, although folk defining strategies have many benefits, these can be weighed down by a number of disadvantages. Additionally, as Hanks (1979) put it, definitions should be characterized by what he refers to as elegance, which means they "combine simplicity and economy with effectiveness and adequacy" (Rundell 2006: 15). FSDs can often lack this quality.

Apart from several studies mentioned here, folk definitions so far have not received much systematic focus, especially in terms of their effectiveness in comparison with traditional methods. Neither was much research conducted to testify to the claims that certain forms of definitions are so deeply rooted in the English tradition. As Lew and Dziemianko rightly put it, "[w]hat is perhaps of more immediate importance to lexicog-

raphy, is the practical usefulness of the new definition format, rather than its genesis" (Lew and Dziemianko 2006a: 227). Nevertheless, there being so little evidence of the popularity of such structures among native speakers of English, strategies of defining and folk definitions appear to be a good material for investigation. On top of that, folk defining strategies of non-native speakers of English do not necessarily have to be convergent with the strategies existing among speakers in the English speaking countries.

2.2. Studying folk definitions: literature review

Studying folk definitions in order to draw conclusions for practical lexicography is understandable and several reasons for these studies will be described below. It is worth noting that folk definitions can serve to answer linguistic inquiries in other fields of linguistics such as semantics. Some general questions were posed with regard to folk definitions and their semantic relations as early as 1967 by Casagrande and Hale (1967: 192): They included a) what types or semantic relationships are employed by speakers of different languages? b) are the relationships to any extent universal? c) can the relationships be practically applied in dictionary making? d) are any types of semantic relationships associated firmly with definitions of words in specific word classes/lexical domains? e) What are the circumstances in which folk definitions are spontaneously produced? Their pioneering study, one of the earliest studies of folk definitions, is the study of Papago folk definitions described in Casagrande and Hale (1967). The study is specific for several reasons, one of which is the fact that it studies folk definitions of an unwritten language which at the moment of performing the study had no dictionaries to refer to. Moreover, at the time of conducting the survey described, allegedly no previous studies had been performed on folk definitions of an unwritten language. The works on the meaning of words in Papago tended to be mere lists with corresponding meanings or equivalents, rather than systematically compiled dictionaries. In the study, the data come from only one informant. The paper proposed 13 definition types based on 13 different semantic relationships. The types served to classify the responses given by the informant. The classifications rely heavily on semantics. The types were introduced on the basis of the data collected rather than a preconceived classification scheme and in-

cluded the following relations, which seem to be overlapping and the boundaries of which are at times unclear:

a) attributive;
b) contingency;
c) function;
d) spatial;
e) operational;
f) comparison;
g) exemplification;
h) class inclusion;
i) synonymy;
j) antonymy;
k) provenience;
l) grading;
m) circularity.

The results of another study that involved folk definitions were published by Madeline Mathiot (Mathiot 1979). In her very extensive study she used folk definitions as a practical tool for investigating lexical meaning. To be more precise, a database of folk definitions was collected in order to analyze and ascertain the meaning of colour terms in two different groups of informants, from two different countries, origins and backgrounds. For this purpose folk definitions of colour terms were acquired from the informants. The informants hailed from the USA and Chile. As an aiding category, along folk definitions the author introduced in her study folk characterizations. Folk characterizations were explanations/associations provided by the informants to clarify how they arrived at a given folk definition and were utilized to obtain metadata that further served to subscribe responses to concrete category labels. Thus, a folk definition of white could be "the colour of fresh snow", whereas a folk characterization would read "a natural occurrence people are familiar with". A label derived from such characterizations would be "natural occurrence". Such a label would then serve to define a native category of a response. In this carefully planned scheme, a once-assigned category label would then be verified by means of a specific diagnostic question and a diagnostic answer (a Q-A technique). Through the procedures described above, the author arrived at the following 11 native categories ascribed to colour terms: 1) synonymy, 2) exemplification, 3) expe-

riencing, 4) qualification, 5) make-up, 6) spatial relation (which was used to propose a spatially orientated topological model), 7) taxonomy, 8) prototypic comparison, 9) amount, 10) ranking, and finally 11) skill-based viewpoint. The categories collected were then ordered and related to one another. Two levels of ordering were proposed, on two levels of abstraction: that of immediate similarity and that of some underlying notions. After the analysis of these levels, Modes of explanation were derived (Metalinguistic, Extrinsic, Intrinsic). Finally, a frame of reference for the study of lexical meaning of colours was proposed. However, it was also concluded that the frame of reference can be applied to analyze the meaning of any domain in any language. To sum up, this semantic study depicts how, in a practical and fairly controlled way, folk definitions can be used to build semantic models.

Manes (1980: 124) differentiates between two major methods of studying folk definition which differ in their mode of elicitation. One of them is eliciting List definitions from speakers who were specifically asked to define items and Contextualized definitions which occur in natural situations. Although List definitions are easier to obtain, the data collected and the subjects are under control, they are "to a certain extent, artefacts of the data collecting process" because it is "unlikely that any speakers in any society are normally called upon to define lists of words out of context and for someone who almost certainly already knows the meanings of the words (…)" (Manes 1980: 125). This method of elicitation assumes more formality and stiffness. In order to avoid this effect, collection of Contextualized definitions is necessary by observing different everyday situations. The analysis of folk definitions offered by Manes in her study is very detailed as it analyzes in depth the semantic relationships between the definitional styles provided by her informants. Thirteen different relationships are used as categories, based on the classification proposed by Casagranade and Hale (1967). These include relationships such as: attributive, contingency, function, spatial, operational, comparison, exemplification, class inclusion, synonymy, antonymy, provenience, grading. Much as this classification worked in the case of list definitions of common words, for contextualized definitions it proved insufficient and had to be expanded by introducing twelve new categories for the remaining 45% of definitions in that major study. Therefore, she further extends her initial set by twelve additional definition categories ("semantic relationships"): situational, descriptive, field inclusion (taxonomic), functional, temporal, exemplification (or ostensive), spatial, operational, objective-agentive, in-

strumental, provenience, comparison and exemplification. The system proposed is large and impressive. It examines in detail the possible semantic relations between the semantic fields of defined items. This collective framework of classification, however, is too detailed from the lexicographer's point of view and would be very difficult to apply in day-to-day lexicographic work as a lexicographer will not be given so much time to analyze items in such detail. For an average user, these relations will be invisible during a lookup process that takes only a few seconds.

Another notable study on folk defining that tried to investigate the ways naive users define in a similar, spontaneous-defining task was Richards and Taylor (1992) in which a different approach to classification was taken. The authors devised the following set of classes: a) taxonomic definition (hyponymy or meronomy), (which in my work is split between a hyponym and hyperonym and will be described later), b) definition by exemplification (while in my work only clear examples are classified as Definintion by example, here a range of modifications was allowed such as phrases like "something like", "as in") c) Definition by function, which was in the form 'X is used to', 'X can do Y', 'use X to…', d) Grammatical definition used to explain the meaning of function and grammatical words, e) Definition by association, which defines by means of rather loose associations (here the authors quote the following examples: 'danger – lives have not been protected' or 'round – shape') which by the classification used in the study described here could be classified as 'Descriptive definition' or 'Hyperonym definition', f) Definition by classification – which would basically be a Hyperonym definition in my study, and g) an Unclassified field for all definitions which would not fall into any of the above.

In this study, which broke down users into three groups (native speakers, advanced learners, intermediate learners), the dominant defining style was analytic (78% for the native speaker group, 83% for advanced learners and around 61% for intermediate learners).

Yet another, fairly recent study that engages folk definition is by Scott and Nagy (1997). The authors' area of interest here were definitions formulated by teachers or elicited from students in a classroom context. The authors observed that such folk definitions typically consisted of a formal part accompanied by one or two sentences containing contextual information. In the study, two separate experiments were conducted. The first experiment checked the comprehension of definitions by school-age children

and one of its findings was that the students proved unable to fully use the full structure of a definition to decode meaning and category to which an item tested belonged. This finding was further supported by the results of the second experiment. The second experiment was more relevant to the actual study of folk definitions. In this experiment the authors investigated the effects of modifications to standard definition formats, that is the effects of higher user friendliness of definitions, increased informality of language used in them, or structural modification of definitions. Apart from that, the influence of adding an example to a definition was investigated. In practice, three different formats were tested: conventional (formal, one found in dictionaries targeted at the informants); conventional supported by an example; and a folk or, to be more precise, folk-inspired definition format, which was mostly a full-sentence definition (FSD) or a single-clause *when*-definition. One of the main research questions was whether the format would influence the comprehensibility of a definition. In fact, the format of a definition only marginally improved the results, but the differences were not statistically significant. Folk definitions proved no more helpful in decoding the meaning of the items, which sheds a dim light on the effectiveness of folk definitions in general.

An extensive study by Mikołajczak-Matyja (1998) is important in the context of this work for several reasons. First of all, it is one of the most extensive and recent systematic studies of folk definitions. Secondly, it concentrates on speakers of Polish, some of whom no doubt use English Monolingual Learner's Dictionaries as part of their English-as-a-Foreign-Language education, so an investigation of the correlation and comparison of possible folk defining strategies and their common points as well as discrepancies between Polish and English speakers is justified. Also, Mikołajczak-Matyja is among those who express the need for more meticulous study of folk definitions and their wider application in lexicography (Mikołajczak-Matyja 1998: 11). Finally, she uses a sophisticated system of classification and responses that can serve as a model for further studies, and in fact helped devise a system of classification in the study described here.

In her study, Mikołajczak-Matyja conducted a psycholinguistic experiment in which she collected folk definitions from a group of 150 Polish respondents and compared their responses with definitions found in five dictionaries of Polish. The collection of data was carried out in writing. Altogether, the author analyzed 200 lexical units: nouns, adjectives and verbs. The units were selected using strict criteria and belonged to

one of a set of groups; each group being a single, superordinate conceptual category and mostly those units were analyzed which had been previously widely discussed in the literature as posing lexicographic problems. The author analyzed the responses obtained using four criteria: whether it was a single or a multiple response, definition type(s) within the response, information type contained in the response, and comparison with dictionary definitions. The framework of definition types included, among others, such types and subtypes as classic (Aristotelian), classic negated, synonym, synonym negated, hyperonym, hyperonym negated, denotative, denotative negated, contextual. Also, multiple definitions were analyzed as combinations of different types. On top of this, types of information were analyzed in line with psycholinguistic labels such as function, features or a given superordinate/subordinate class. Mikołajczak-Matyja conducted a detailed qualitative and quantitative analysis of a wide range of aspects of her results. In terms of complexity, the author differentiated between single, multiple and no responses. Furthermore, the responses classified as multiple could either be homogenous (one type) or heterogeneous (different types). As far as the results are concerned, the percentage of single responses was 73%, multiple homogeneous responses – 9.7% and multiple heterogeneous responses – 16% with very few blank, no-response fields. The dictionaries examined displayed a slightly lower preference for single responses, ranging from 40-68% across the five dictionaries examined, with large-volume dictionaries tending to provide more complex, multiple structures. As far as the types of definitions (defining styles) are concerned, the prevalent format used by the respondents was the classic definition, with over 90% of the respondents selecting it as their strategy for the 79 lexical units defined. The second most commonly applied format was synonym, especially for defining abstract nouns, followed by hyperonym and contextual definitions. All other types appeared only occasionally. The results confirm there was convergence between the information found in dictionaries and the responses provided by the informants in terms of the dominance of the classic definition, synonyms (for similar semantic categories) and the limited use of contextual definitions. Although contextual definitions were defined slightly differently than in this work, their appearance was fairly frequent, though only for a narrow group of lexical items. At the same time, the responses provided by the informants were more varied in terms of defining formats used and the author indicated this might have been due to the fact that the informants had not been provided with any guidelines as to the form of definitions, unlike in dictionary

projects. In her qualitative analysis, the author enumerated a significant number of different types of information found in the informants' responses. The data were compared with dictionary definitions again with focus on more detailed issues connected with defining related lexical units. The types of discrepancies between dictionary definitions and respondents' responses were different for different categories of lexical units but some systematicity was detected. Apart from that, naive users' definitions were found to focus more on the function of the designate, contained more redundant information or had a higher emotional load. Also, they were more circular and used overly general hyperonyms for the genuses in their classic definitions.

One fairly recent study on folk defining is Lew and Dziemianko (2006a), which tests how useful single clause when-definitions prove when compared with regular analytic dictionary definitions in conveying information about syntax. The study is based on a claim that for Polish learners of English, definitions are a major source of grammatical information and the ability to recognize the part of speech of abstract nouns on the basis of single clause *when*-definitions was tested among Polish learners of English. The subjects were asked to perform a test consisting in providing a Polish item for a given definition and writing a sentence with the headwords given. In the study it was found that much higher accuracy levels were achieved both in part of speech recognition and sentence composition when analytic definitions were used (scores were about twice as high for analytic definition). More generally speaking, single clause *when*-definitions, which were supposedly non-existent in the Polish tradition proved rather ineffective. It was concluded that folk defining traditions may indeed play a major role in decoding tasks. The study also indicates that a lot of research is needed in the field of folk defining, not only in the English tradition, but also outside Britain as the traditions across countries and cultures might not be convergent.

A follow-up study of folk definitions to the study by Lew and Dziemianko described above is Lew and Dziemianko (2006b). This study again looks at how folk-inspired single clause *when*-definitions perform in conveying information on the part of speech of an item in comparison with standard, analytical definitions. However, in this case extra labels were provided alongside the definitions (a richer entry microstructure). The study also refers to the results of Lew and Dziemianko (2006a). In the follow-up, in contrast with the results of the previous study, the differences between the effectiveness of analytical definitions versus single-clause *when*-definitions were minor and practical-

ly insignificant in a part-of-speech (POS) identification task, and generally the degree of consistency in the results was much higher. In all likelihood, this was due to the fact that in this study the syntactic POS labels in each entry were most frequently utilized to derive POS information. To summarize, it may be concluded that the standard information on the grammar of a word contained in a traditional analytic definition can be compensated by POS labels within the entry microstructure if a non-standard definition format is given.

In order to verify the results of their two 2006 studies, Lew and Dziemianko conduct another follow-up study (Lew and Dziemianko 2012). This time, more realistic conditions are created for the subjects who are now provided with a richer microstructure that resembles one found in a dictionary and a more natural meaning-based (rather than grammar, POS-oriented) task. The subjects are asked to provide Polish equivalents based on the definitions provided, which are either in the single clause *when*-format or in the classic analytic format. The subjects' performance in the identification of the part of speech is, again, compared. In the study, classic definitions have been found to perform only marginally better than single-clause *when*-definitions (90% against 87% of successful responses). Although this result is statistically significant, it has no practical significance. This means that, although single-clause *when*-definitions can have serious disadvantages, in a naturalistic look-up task these disadvantages can be compensated by other elements of the microstructure.

Finally, two recent studies on folk defining were co-authored by me with collaboration with other researchers. The first, unpublished study done as part of my master's thesis was with Karolina Kryspowicka (Fabiszewski-Jaworski and Kryspowicka 2008). In the study, 190 Polish university students, aged between 20 and 25, were examined by being asked to define a set of six nouns spontaneously in order to determine their prevailing defining styles, compare the informants' defining styles with those commonly used in Monolingual Learner's Dictionaries. The nouns ranged from abstract to concrete and included *zazdrość* ('envy' or 'jealousy') followed by *naród* ('nation'), *wykształcenie* ('education'), *spojrzenie* ('look', 'glance', 'gaze'), słońce ('the Sun'), and finally *młotek* ('hammer'). The mode of elicitation was dual: spoken and written, and the conclusions were drawn from the responses derived from both modes. 140 subjects participated in the main study and the division was equal between the modes (70 subjects each). In the oral mode the interviews were based on the written mode, yet it was con-

ducted by an interviewer asking questions and recording the subjects' responses. One major difference between the spoken and the oral mode was that in the latter the subjects had far less time to think so as to provide a more spontaneous elicitation (between 45 and 90 seconds for all items, compared with around 15 minutes for all items in the written mode). The responses were classified as one of the following types: classic definition, synthetic definition, definition by synonym, definition by hyperonym, full-sentence definition (FSD), single-clause *when*-definition, definition by example, functional definition (describing "what something is used for"), ostensive definition, mixed-type definition, unclassified definition. In the written part of the study, out of the 420 responses provided, 84% were formulated as the classic definition. Remaining responses were distributed among all other types except the synthetic and the functional definitions, which did not appear at all. In the oral part, out of 420 responses provided, the classic definition constituted 65%, so were less dominant than in writing. The percentage of hyperonym responses was much higher than in the written mode, however, reaching 14% of all the responses. Considering the responses jointly, singly occurring classic definitions constituted around 74% of all the responses provided in the entire study, with hyperonyms reaching a level of 8.0% for both modes. Single-clause *when*-definitions (SC) constituted 5.0% of the total number of responses, which stood in contradiction with the conclusions of some previously mentioned studies (Lew and Dziemianko 2006b) claiming that SC definitions are practically non-existent. Synonyms and mixed definitions (combinations) constituted around 3.0% for each type. Ostensive definition and definitions by example did not appear at all. The dominance of classic definitions was statistically proven not to be accidental. The classic definition was also the most dominant strategy to define the word *naród* ('nation'), whereas SC definitions were most common in the case of the word *zazdrość* ('envy'). The words *słońce* ('the Sun'), and *młotek* ('a hammer') were frequently defined using hyperonyms (second most common strategy after the classic definition for these items). The most striking differences between the two modes of elicitation were only evident in the case of individual items, for example classic definition response percentages in the written:spoken mode for the item *zazdrość* ('envy'): 81% vs. 44%. For SC definitions, which, being the supposed folk defining strategy, were of special interest and focus in the study, the difference between the written and the spoken mode was 3.3% vs. 7.0. In the study it was concluded that certainly the classic definition was the most dominant defining style, yet

it cannot be considered as a truly folk defining strategy for Poles for many reasons. Full-sentence definitions did not appear, so cannot be considered a valid folk defining strategy. In a sense, it can be said that the folk defining study described here is a continuation and extension of the study of Fabiszewski-Jaworski and Kryspowicka (2008).

The other of the two studies I co-authored was with dr Marta Grochocka (Fabiszewski-Jaworski and Grochocka 2010). Its focus was narrowed down to abstract nouns only in the context of folk defining as well as monolingual learner's dictionary (MLD) defining styles. As the meaning of abstract nouns is much harder to grasp than concrete nouns and much less easy to define using standard dictionary methods such as the classic definition (for example due to difficulties connected with finding a suitable genus proximum), the abstract nouns tested were divided into several types differing in the level of abstraction. In addition, abstract nouns were a perfect material for testing the occurrence of purportedly folk-originating single-clause *when*-definitions. The study itself was divided into three parts (stages): analysis of definitions of some abstract nouns in the most popular English MLDs, investigation of the ways native speakers of Polish spontaneously define abstract nouns, and finally testing the comprehension of definitions.

In the first stage, the definitions of 30 abstract nouns[22] were analyzed in the so called Big Five – the five most popular English MLDs which include: Cambridge Advanced Learner's Dictionary, Oxford Advanced Learner's Dictionary, Collins Cobuild, Macmillan English Dictionary for Advanced Learners, Longman Dictionary of Contemporary English. The abstract nouns tested were different types of abstract nouns characterized by different levels of abstraction. In fact, 83% of all the definitions provided were in the classic (Aristotelian) format, with all the remaining types possible occupying a minor proportion of the definitions (here such types were included as: FSD (3.0%), SC (5.0%), a classic definition supported with a synonym or no entry at all).

In the second stage, spontaneous definitions were elicited from 100 speakers of Polish, aged between 20 and 25, with no background in linguistics or lexicography. The informants were asked to describe the meaning of items as if they had to do it in front of a foreigner or a child. The set of items to define consisted of six abstract nouns inter-

[22] The set of nouns was: *racism, sadness, endurance, love, bereavement, uncertainty, hangover, hatred, friendship, attention, mobility, glory, courage, kindness, hunger, freedom, idea, communication, mind, pleasure, childhood, annoyance, transportation, guidance, oppression, embarrassment, profession, loneliness, realism, cruelty.*

spersed with four distracters – words belonging to a different part of speech. The items included: *rasizm* ('racism'), *rozważać* ('to consider'), *smutek* ('sadness'), *niewiarygodny* ('amazing', 'unbelievable'), *wytrzymałość* ('endurance', 'resistance'), *miłość* ('love'), *rozczarowany* ('disappointed'), *żałoba* ('mourning', 'grief'), *nienawidzić* ('to hate'), *niepewność* ('uncertainty'). The informants' responses were recorded and transcribed later. Each response was analyzed and classified as one of the following types: classic/analytic definition, definition by synonym, definition by hyperonym, SC (single-clause *when*-definition), FSD (full-sentence definition), ADJ/VERB (a response in the form of a definition explaining the meaning of a different part of speech: an adjective or a verb), a hybrid, in which more types were combined and finally all unclassified responses were placed in a dumping ground – an X category. Again, the classic definition was the most common strategy (over 61% of cases). Other major types were synonyms (11%), hyperonyms (9.8%), and single-clause *when*-definitions (7.3%).

In the final stage of the study, the effectiveness of the most popular defining styles appearing in the second stage was tested. The task consisted of arriving at the correct meaning and a proper equivalent on the basis of definitions of abstract nouns. However, synonyms and hyperonyms as the sole defining strategies were disregarded as it would have been impossible to arrive at the right equivalent solely relying on one of these strategies. In addition, hyperonyms or synonyms are hardly ever to be found in dictionaries as single defining strategies. For these reasons only classic and SC definitions were tested. The subjects this time were 150 secondary school students, aged between 16 and 18, with a sufficient command of English[23]. They were asked to fill in tests that consisted of 22 elements (15 target[24] items and 7 distracters). The items were meant to be difficult English nouns that the subjects had little or no chance of coming across before. The definitions for the items were taken either from Cambridge Advanced Learner's Dictionary (CALD3) or from Longman Dictionary of Contemporary English (LDOCE5). As most of the dictionary definitions were in the classic format, in several cases they had to be transformed into the SC format to fit the two versions of the test where both these formats were examined. The subjects were asked to provide one-word Polish equivalents. The equivalents provided were marked and labelled using one

[23] The subjects level of prociciency was around Upper-intermediate (B2 according to CEFR)

[24] The target items: surfeit, rancor, imbroglio, allegiance, turpitude, opprobrium, acrimony, proclivity, depredation, acumen, altercation, adulation, compunction, languor, candor.

of these labels: YES (correct equivalent), NO (an empty field), WRONG (an incorrect equivalent provided), ADJ or VERB – where the part of speech of the equivalent was confused and a semantically corresponding adjectival or verbal equivalent was given instead of a nominal one. All in all, classic definitions yielded more correct answers in comparison with SCs (33% vs. 26%) and this difference proved statistically significant. However, the subjects failed to provide any equivalents in about 20% of cases both for the definitions in the classic and in the SC format. Also, the percentages of wrong answers were comparable for both types of definitions – roughly over 40%. The subjects provided a semantically correct different part of speech equivalents in about 3.0% of those cases where the classic format was used and just below 10% in the case of SCs. If these different POS equivalents are treated as correct answers, then the percentages of correct answers for Classic definitions vs. SC would both yield around 36% of correct responses. In general, the results of this part of the study point to the ineffectiveness of some types of definitions in certain tasks. This ineffectiveness could be partially ascribed to the definitional format, however it is not the only factor as certain other issues have to be considered such as the wording of the definitions, their language and the fact that they most likely used controlled defining vocabulary. The study concluded that the classic definition should be the first-choice strategy for abstract nouns and SC definitions should be resorted to in the cases when a genus proximum is difficult or impossible to find. Also, synonym-supported definitions would be likely to be more effective.

2.3. Ways of studying folk definitions for lexicographic purposes

Studying folk definitions can answer many a linguistic enquiry and folk definitions are studied in such fields of linguistics as:

a) semantics: to deeply analyze meaning and discover complex meaning relationships;
b) ethnolinguistics/anthropology: to describe undescribed languages;
c) dialectology;
d) lexicology;

e) practical lexicography: where this source of information can be used alongside other sources such as citations from linguistic usage, meaning descriptions found in other works of reference, native speakers' intuitions (Swanepoel 1992: 421);
f) sociolinguistics;
g) psycholinguistics: in order to test maturity and (meta)linguistic development (Caramelli et. al. 1999, Charkova 2005);
h) studies on bi-, tri- and multilingualism (Charkova 2005).

In lexicography, folk definitions can serve to investigate such aspects as:

a) discovering the most popular spelling of a word;
b) drawing conclusions about the meaning of words: discovering meaning relationships, arriving at prototypical meaning, specifying or selecting meaning, studying polysemy, prioritizing polysemous senses, studying word connotations and social aspects of meaning. The information obtained is usually further verified by editors of dictionaries or lexicographers to dispel doubts, extract best examples of use and decisions about universally shared meaning are voted to filter out the influence of linguistic individual experience;
c) format of a definition: that is the defining style used to construct a definition, where a defining style is understood as a combination between specific syntax and semantics – such studies help discover what the prevalent format is and how successful it is in conveying information.

When approaching the task of collecting definitions, it must be remembered that any enquiry into word meaning is in fact a probe into an intricate system of semantic relationships. To quote Swanepoel:

> A common assumption of most cognitive semantic theories is that lexical meanings are highly abstract, complex, conventionalized mental knowledge structures, commonly referred to by terms such as concepts, conceptualizations, idealized cognitive models, schemata, scripts, frames and various others, each of which highlights a certain aspect of the nature of these knowledge structures that are associated with or activated by lexical forms. The mental nature of lexical meaning has the direct consequence that one does not have any direct introspective access to the representations that underlie these meanings (Swanepoel 1992: 421).

There are numerous methods for studying folk definitions and these can vary depending on the area of linguistics that studies them. For instance, Mikołajczak-Matyja (1988: 19) observes that approaches and means of selecting informants and collecting

data in dialectology can differ substantially from those used in lexicography. Bearing this in mind, only several methods that can or have been applied in lexicography will be named here. The methods can be divided depending on whether they are based on:

a) Written elicitation; which includes employing different procedures, for example obtaining
    a. List definitions (Manes 1980) - asking informants to define decontextualized words; a method that makes it possible to quickly gather large volumes of data from many informants. However, the data are obtained in a less spontaneous way than in the case of other (chiefly spoken) methods and the situation created is not a natural defining context. It must be remembered that due to the fact that obtaining information in such a way is an artificial situation, subjects realize they provide knowledge-demonstrating answers, rather than true informative replies (Iris et. al. 1988: 244). The same will be the case in a similar situation in the spoken mode of elicitation. In this method, as well as its spoken variant, the most culturally universal question to be asked that is proposed by researchers (Weinreich 1967 as cited in Matyja 1998: 25) is *What is x?* which is an object-related question and allows one to obtain spontaneous definitions without imposing rigid defining rules which could be suggested by other forms like *Define X* or *Provide a definition of X, What do you mean by X?, What is the meaning of X? What does X designate/name?* The latter are more typically meaning related, linguistic questions in what Wiegand (1992: 241) refers to as the context of designation[25].
    b. Definitions from questionnaire-based tasks (proposed for example by Mikołajczak-Matyja (1998: 22) who follows the ideas of Hiorth (1957)) consisting in creating tasks which would help to obtain implicative definitions by means of asking informants to create sentences illustrating the use of specific words rather than directly asking them to define these items. This method might be effective, however, it is not devoid of possible problems. First of all, its application requires more creativity from

[25] Context of designation is an informal dialogue in which the meaning of a word is explained by someone who knows it to someone who enquires about it.

informants and may be a bit more difficult than providing list definitions. Secondly, the meaning provided has to be inferred from the context in which a given word to be defined is embedded. Finally, the method does not allow one to investigate the most common format of definition. It concentrates on the study of meaning instead.

b) Spoken elicitation – can include collecting list or questionnaire-based task definitions as in the written mode but ensures a higher level of spontaneity than in the case of written elicitation due to fewer possibilities of introducing changes or edits by respondents as is the case on paper. It is at the same time not free of problems, either. One of them is that in order to collect proper definitional material that can be analyzed, spontaneous responses have to be in some way recorded[26]: either using voice recording devices or video cameras. Even though the technical side of such an experiment is nowadays easily surmountable, it presents a challenge for the researcher and, even more so, his or her respondents. Recording, storing and using anyone's responses without their awareness and consent is unethical and in some countries may be illegal. The mere presence of an interviewer may influence the form and content of responses. Apart from a common interrogation stress, some other factors may be at play. It was found that people examined might be influenced by the observer-expectancy effect and wish to please the researcher (Dziemianko and Lew 2006: 215) and shape their responses to make them fit an expected research framework. Owing to that, any superfluous word or instruction provided by the researcher can seriously influence the results[27]. On top of that, the consciousness of there being recording devices which register responses creates additional stress for interviewees and stifles spontaneity. Yet another fact must be considered. If time constraints are imposed on informants to ensure spontaneity, it must be remembered that the interviewees will tend to provide information that is most easily accessible to them

[26] Unless the responses are analyzed and categorized on-the-fly, which is difficult and impractical in the case of dealing with large amounts of data.

[27] In this study such behaviour can be exemplified the case of a female respondent in front of whom the instructions were, rather unfortunately, rephrased slightly differently in order to clarify misunderstandings. The respondent would then hang on tightly to every word in the instructions and instead of providing spontaneous definitions, talked about her methods of word clarification using metalanguage.

at a given moment and need not represent their full knowledge of the lexical item under investigation.

c) Observation

   a. Natural situations are observed to spot spontaneous definitions and draw information about the meaning and format of definitions. Such methods are described in detail by some authors, for instance Wiegand (1992: 237pp) where the author describes everyday dialogues as reference points for monolingual lexicography. Everyday dialogues may often serve to bridge conceptual and lexical gaps and their analyses can show reveal much about defining strategies. This method, although allowing to obtain naturally occurring responses, is too erratic to efficiently provide sufficient amounts of data. A researcher has practically no control over informants or the content acquired. The method is also very time consuming.

   b. Extraction of information that can be found in a corpus of a spoken language in an automated way. The method assumes access to a sizeable and up-to-date spoken corpus of a given language that can provide a sufficient number of folk defining contexts. Similar methods of folk definition retrieval from corpora have already been described by Stanaitytė (2005) or Paryzek (2008), with regard to neologism extraction. Paryzek would utilize the fact that neologisms are likely to appear either within inverted commas (non-lexical discriminants) or after specific phrasemes (lexical discriminants), such as (for English): *so called*, *termed, called, known as, defined as*. These methods, after some modifications, can be utilized to extract definitional material for analysis. As the newly explained neologisms would be found on one side of a corpus derived definition (as a definiendum), the other side would provide a definition (or, to be more precise, definiens). Another type of phraseme to be sought is a direct question of the type *What is, What's, What do you mean by*[28] which, within a spoken corpus, can be followed by an explanation/characterization, thus a type of definition. Some difficulties have to

[28] Some other possibilities are *What is X used for* etc. In this case, however, a functional description is assumed to follow, so the type of definition obtained is somehow dictated by the question.

be addressed in this method, however. One is that it could in many cases be difficult to assess how spontaneously a given definition was created, even if it is a spoken one: whether it was read out loud, produced instantly, memorized or so. In other words, the analysis would require to include proper investigation of contexts in which the definitions were found in order to establish their spontaneity levels. Besides, a really substantial corpus of spoken language would have to be at hand and there would be the additional difficulty of establishing some information about the informants: their age, education etc.

2.4. Spontaneous defining style vs. age, education and intelligence

One of the factors determining the style one employs when producing a definition is their age, education and intelligence. Assuming that intelligence naturally develops with age, it is worth looking at how these two factors interplay together influencing the form and content of a spontaneous definition. As Markowitz and Franz (1988) state "[w]ord definition tasks are regarded as one of the most accurate measures of intelligence [...]." Intelligence and development are reflected in one's defining style and the defining style, especially the definitional format, develops gradually with age and increasing intelligence. Although this view has now changed, the ability to create definitions was classically regarded as being a measurement of intelligence which was thought to be recognition of taxonomic class relations (Caramelli et.al. 2006: 155). There have been several models proposed to describe how definitions develop with intelligence. These models are usually described as having two, three or more stages of development in which there are evident differences in the styles of definitions used. Markowitz and Franz (1988: 254) report on several different studies on the development of definitional style which show that in the early research on defining styles there was much agreement among their authors claiming that usually, definitions of children at very early ages of four or five are very basic: with very little (single words) or no syntax (non-verbal ostensive definitions) and most often they are concrete, describe action and use, and are based on perception rather than analysis and result from the child's egocentric thinking, in line with Piaget's model of cognitive development. Descriptions, syno-

nyms or classifications are not usually used. Much as the intermediary stage receives little attention, it is usually ages between 9 and 11 that are considered to be borderline stages when definitions become less functional and more abstract. Definitions at this stage become less individually-centred and more focused on the socially shared meaning. At the final stages of the development of the definitional form is the classic definition, the adult type of definition in terms of form and content, which is said to result from age, experience, maturation and intelligence (Markowitz and Franz 1988: 260). Watson (1985) lists four different types of definitions produced by children. These are (1) functional, in which the use of a referent is presented; (2) perceptual, in which external, perceptible features are enumerated; (3) transitional, an intermediary stage that mixes functional and perceptual elements; and (4) formal definitions that are the last stage and they resemble classic definitions. It is interesting to note that single clause *when*-definitions typically occur in the intermediate stages of the development of definition formats. As far as adults are concerned, it is possible that the definitional format and content are further refined. It must be mentioned that certain studies indicate that some definition types fully develop much later. The results of research by McGhee-Bidlack (1991) and Charkova (2005) demonstrate that "the ability to define abstract nouns is a late developing metalinguistic skill, usually not revealed before the age of 18" (Charkova 2005: 517).

Education is another factor influencing creation of definitions. The development of defining strategies is also largely influenced by schooling, where learning to produce formal definitions of the Aristotelian kind takes place and it is at school that the percentage of formal definitions in relation to other strategies significantly rises over a short period of time (Caramelli 2006: 156). It is also at school that the defining competence develops, which involves, according to Caramelli (2006: 157), clarification of meaning without repeating the definiendum, "referential, classificatory and linguistic skills on the part of the speaker/writer as they should allow the receiver to distinguish the defined object from the other objects in a setting" and metacognitive and metacommunicative abilities.

Age and education are important when analyzing the content and structures of definitions from yet another point. It has been suggested that the definiendum type can influence the type of definition produced by children. This includes relative difficulty in defining abstract nouns vs. concrete nouns for adolescents (McGhee-Bidlack 1991) and

also differences in defining other subtypes of nouns. Caramelli (2006: 158), for instance, refers to differences in definitions of nouns signifying natural kinds and those signifying artifacts in which the former evokes hyperonyms more frequently than the latter. Artifacts, on the other hand, facilitate the use of features, function, whereas abstract concepts – examples or cause/effects. In addition, definitional performance relates to the knowledge and experience of a given concept from a given domain as even an abstract concept experienced frequently is defined with more ease. The experiment by Caramelli (2006) demonstrated that the complexity of responses increases with age.

For the reasons described, in any form of elicitation of spontaneous responses, unless the influence of age or intelligence is to be measured as one of the variables, it must be ensured that subjects form a uniform group in terms of age, maturity, intelligence and education to minimize the possible influence of these on the defining strategy and avoid differences caused by these factors.

2.5. Rationale for another study

It appears that throughout the past few decades systematic studies of folk defining published were few and far between[29]. The focus of the first, pioneering studies was not always on practical applications in lexicography. In some other studies, their approach, methodology and classifications used remain incongruent with other studies and the investigations conducted were not always systematic. Several general problems can be enumerated:

a) The existing studies were conducted over the period of more than 40 years, which means that they tend to have very different methodological approaches. This fact makes them incomparable between each other.
b) The studies described placed emphasis on varied subfields of linguistics: semantics, lexicology, lexicography or even more practical dictionary use. Therefore, their goals and types of data collected were different.
c) The studies examined speakers of different languages, hailing from different countries, cultures, ethnic origins and backgrounds. Since folk defining is ex-

[29] Similar claims (already described above) and calls for further studies were made in such works as Mikołajczak-Matyja (1998) and reiterated in Bańko (2001), Lew and Dziemianko (2006a: 236).

pected to be deeply rooted within the traditions of a given culture, the scarcity of results makes it possible to only have a very general overview and it is impossible to draw solid conclusions on folk defining tradition in any of the cultures. Not many systematic studies exist, to the best of my knowledge, that would describe folk defining traditions for one given language or culture that would investigate and describe those strategies in-depth, using a considerable sample of informants and with a clear classification methodology.

d) While certain studies typically focus on analyzing the productive skills of naive speakers in search of their folk defining strategies, some others concentrate on their reception (comprehension) aiming to verify whether the supposed folk defining styles work (or work better, for that matter) in comprehension tasks (and only then: production tasks).
e) The studies tend to use incompatible frameworks for response categorization.
f) Not all the results of the studies conducted employed statistical analyses.

Therefore, it appears justified to state that there exists a gap and a need for establishing folk defining traditions specific of different cultures and seeing if these can be compared. This gap was signalled and partly filled by Lew and Dziemianko (2006a: 227). To be more precise, the following questions should be addressed:

a) How do naive users, that is, ones with no linguistic or lexicographic background define concepts on an everyday basis in their own languages? Several aspects of these spontaneously produced definitions should be analyzed: the type of vocabulary used (its degree of sophistication, register and connotational attributes), the grammar used (types and complexity of structures), their length (e.g. to address some claims made by Stock (1988), who claims that folk definitions would typically be longer than dictionary definitions; a fact that has not been corroborated) and most importantly, their format, i.e. their defining style.
b) Do the responses provided follow any general patterns? Can a typically distinct *folk* defining strategy be identified on the basis of its dominance in the responses?
c) Are the dominant defining strategies in any way convergent with what dictionaries offer in terms of defining styles? How close are the resemblances?
d) If any new patterns emerge from a sufficient number of folk responses, do they contribute to the effectiveness of a definition in achieving its goal? Can they

serve to be more effective in meaning explanation (can they enhance comprehension?)? Can some aspects of the definitions make them more useful than standard dictionary definitions in productive tasks?

e) Are full-sentence definitions (FSDs) and Single-clause *when*-definitions, which are often regarded as the types drawing on the English folk tradition and are, in fact, used in dictionaries to facilitate the process of decoding meaning, actually folk defining strategies?

f) What can be done in practice to modify dictionary definitions to make them resemble folk defining strategies and, as a result, be more accessible to a wider range of users?

To be more specific, the study described here will try to find answers to the questions posed above, with a more comprehensive description to follow in the next chapter:

a) with reference to native speakers of English;

b) with an emphasis on the format of the definition (its defining style) and;

c) with an additional analysis of the content of the responses (folk definitions); in other words, the focus will be shifted from the focus of other studies, notably Mikołajczak-Matyja (1998) from a qualitative towards a quantitative analysis, with less concentration on meaning relationships, polysemy and with a significantly smaller number of items tested;

d) using a dual method of elicitation (spoken and written);

e) with an attempt to address the issues concerning the existence of full-sentence and single-clause *when*-definitions in naive defining strategies in English speakers;

f) with an attempt to compare results with some other studies conducted on the speakers of Polish;

g) with a special focus on one part of speech only, namely nouns.

Chapter 3: The Study

3.1. Background

It appears that the scarcity of data on folk defining described in the previous chapter combined with repeated calls for the study of folk definitions in the lexicographic context are a sufficient reason to embark on a more extensive and thorough investigation of them. With regard to naive defining, the knowledge that can be drawn from existing research works is fragmentary and does not allow a broad view of folk defining strategies characteristic of dictionary users. However simple they may be, solid conclusions need to be drawn about the hypothetical existence of true folk defining strategies, their popularity and commonness, their content, structure and usefulness from the lexicographic point of view, which is the focus of this work. If such structures exist that are typical of folk tradition, it must be considered if their application in dictionaries can be beneficial for dictionary users. As signalled before, the study of the content of folk definition can give information about the naive picture of the world and language, especially lexis, that users have, whereas the study of the structure of folk definitions can bring insights regarding the most convenient syntactic-semantic definition format. These conclusions can be of help when creating more effective definitions in terms of reception (comprehension), vocabulary retention, as well as production, as a well-written definition can also aid production. Therefore, as key part of this work, a methodical survey was undertaken in order to probe and analyze folk definitions, and address the issues described here and in section 2.5. This chapter aims to describe in detail the procedures

applied in the organization, conduct, and analysis of an empirical study of spontaneous definitions carried out recently.

The study addresses the issues raised in 2.1. by collecting, organizing and classifying data on folk defining traditions in the speakers of English and tries to draw conclusions relevant for lexicography and practical dictionary making. The most general aim is to have a closer look at the defining patterns spontaneously appearing in different contexts and analyze their structure, content, length and complexity. The question to be answered is whether there are any special characteristics typical only of folk defining. Such data is then compared with the definitions for the same or similar lexical items in dictionaries. The central issue is whether the supposed folk defining strategies already applied in dictionaries (single-clause *when*-definitions, full-sentence definitions) are in fact commonly occurring patterns in folk defining. Besides, the study aims to answer the question of whether some type of information or characteristics of folk definitions can be consistently introduced into dictionaries to render them more effective and user-friendly.

An additional remark is due about the choice of reference dictionaries. As there are thousands of different dictionaries on the market nowadays, it was decided that the number of dictionaries with which the obtained definitional material will be compared will be narrowed down to just the five most famous, international advanced monolingual learners' dictionaries – the so called Big Five. These are: Oxford Advanced Learner's Dictionary, Macmillan Dictionary for Advanced Learners, Cambridge Advanced Learner's Dictionary, Collins Cobuild Advanced Dictionary, and Longman Dictionary of Contemporary English. These dictionaries are sold worldwide and have a very broad target audience, and so they tend to be quite careful and sensitive in the wording of their definitions. It is these dictionaries that have already made a lot of modifications in their macro- and microstructures to cater for the needs of naive users and learners; e.g. the introduction of SCs or FSDs. These facts make them a perfect material for comparison.

3.2. Basic information

This section develops the information on the study introduced in 2.5. The experiment was conducted on a group of informants who were native speakers of English. Apart

from the fact that this thesis was written at the Faculty of English at Adam Mickiewicz University in Poznań, which was the main determining factor behind the choice of the nationality of informants, there are several other reasons justifying this choice. The most basic one is the availability of literature on folk definitions. The earliest investigations of folk definitions found and described were published in English (see Casagrande and Hale 1967) and the observations contained in this study were seminal for other researchers continuing work on folk definitions. Secondly, the first and pioneering dictionary that consistently employed dictionary definition formats that were supposed to reflect folk defining traditions was the first edition of Collins Cobuild (COBUILD1) published in 1987. Cobuild was an English monolingual dictionary that worded its definitions in accordance with the style of full-sentence definitions (FSD) and single-clause *when*-definitions (SC). These, in turn, supposedly reflected the tradition of naive Anglophone users. At that time and practically until now, the hypothesis of the existence of these defining strategies in this tradition has not been fully confirmed. It therefore appears to be justified that a quest of folk defining strategies starts there. In addition, for speakers of any other language who are at the same time learners of English, which is still an internationally dominant language of business, science and modern media, information on folk defining strategies in English will indirectly be important. These speakers may often consult international editions of monolingual dictionaries, which more or less commonly tend to follow folk defining traditions in the composition of their definitions, not only with regard to the format of a definition itself, but also its vocabulary and the worldview. Last but not least, access to a sufficient number of English informants is crucial as well. Homogenous groups of English subjects could easily be found in Great Britain, located not far from Poland. At the same time, during the design of the study and a pilot study, relatively easy access to English informants in Poland was also a decisive factor. It must be stressed that any investigation of folk defining strategies in exotic or rare languages would create far more practical problems.

The focus of the study was primarily the format of the definition. Although this has been mentioned before, it should be repeated that by *format* it is meant that no special emphasis was placed on the analysis of the actual contents of definitions provided in the responses. No attempts were made to strive for correctness or truth of the responses provided as it was felt that too much interference in the subjects' responses can seriously stifle spontaneity. It is also the reason why some of the answers provided are

incorrect in view of scientific facts. The study's main aim was not to recreate or depict informants' naive view of the language and the world, influenced by their personal experience of them. Such attempts were made in the studies described above (cf. Matyja 1998), in which the author used a fairly substantial number of tested lexical items in order to analyze definitions with reference to their semantic relationships. Instead, the main goal of the study is to discover the format, i.e. the defining style which is understood as a combination of specific syntax and semantics in the organization of a definition. It is fairly easy to semi-automatically conduct a quantitative analysis of formats, provided that a consistent framework is developed. It will later be shown that with a database created for this study, many aspects of the format can be analyzed quickly, once they have been manually classified. Dictionary defining formats have been described in 1.6. above.

Despite what has been said above about investigating the format of definitions, in the study a large number of responses have been collected for varied noun items. Having this at hand, a qualitative analysis of the responses has also been performed in order to see how these different items are defined and if different noun types follow different defining patterns. In this analysis, such aspects can be described as the length of responses, the complexity of its lexis, their correctness, extralinguistic information, or any unusual, inventive strategies or patterns. In order to study lexical complexity of the responses, their contents from each noun served to create small "microcorpora" and analyzed jointly using simple concordance software MONOCONC PRO 2.0. On the basis of these analyses conclusions can be drawn about differences in approaches to defining concrete and abstract nouns, relative difficulty in defining them and even individual differences between informants in defining a given item.

Although data on the gender of informants have been collected, in both qualitiative and quantitative analyses gender differences are disregarded. This approach results from the fact that in the previous studies I co-conducted (Fabiszewski-Jaworski and Kryspowicka 2008) gender differences were practically insignificant globally and had some statistical though hardly practical significance only for individual items.

Another important matter to be discussed is the choice of elicitation method. It was crucial that large amounts of data from as many informants as possible are collected within a reasonable amount of time for the tested group to be large enough to allow a useful analysis and accurate conclusions. From among the possible methods described

in 2.3. above, all were taken into consideration and certain were pre-tested. One of the most modern and promising methods tried was corpus extraction. For this purpose, Longman Polish Corpus 2001 was utilized, provided courtesy of Pearson Education Limited. This spoken corpus was originally used to compile "Longman Słownik Współczesny" – an active dictionary intended for Polish intermediate learners of English. Although this very corpus was a corpus of the Polish language, it allowed to gain some insights into whether such extraction would be feasible on a larger scale. In this fairly small corpus of around 500,000 words, some possible definitional discriminants were searched for. Unfortunately, the queries yielded very few cases with true definitional material (<20). The conclusion was that a far greater and up-to-date corpus of modern spoken English would be needed in order for the search to give any conclusive results, to which at the time of conducting the study no access was granted.

Other proposed methods were inspected including observation or task-based extraction. Observation definitely ensures high spontaneity but at the same time is a far more time consuming and erratic mode of data collection and was not considered as an effective way in this study. Task-based extraction was regarded as too complicated for subjects and occupying too much time-per-informant.

It was decided that collecting list definitions would be the most suitable way of data collection for the purpose of this study. It must be stressed that there were several reasons behind this choice and it was an informed decision dictated by previous experience with collecting spontaneous definitions (Fabiszewski-Jaworski and Kryspowicka 2008, Fabiszewski-Jaworski and Grochocka 2010). To some extent, the methodology was replicated from the previous studies. However, many improvements were introduced and an entirely new classification framework was devised.

The list definitions were collected applying a dual mode of elicitation: spoken and written. There were two main tasks referred to, respectively, as the Spontaneous Defining Written Task (SDWT) and Spontaneous Defining Spoken Task (SDST). The Spontaneous Defining Spoken Task mirrored the methodology of the Spontaneous Defining Written Task, but either mode of elicitation was in a way free of the constraints imposed by the other one. In the SDWT, the subjects had more time for modifications and corrections of their responses. That made the responses a bit less spontaneous. At the same time, it was free from the stress effect existing in an interrogation environment. For these reasons, it was decided that both modes will be compared against each

other to find possible differences in spontaneous defining. A more comprehensive description of both modes of elicitation will be found below.

Particular attention was given in the study to the occurrence of a few types of definitions. The first one – classic Aristotelian format was investigated in folk defining to corroborate or reject the claim that it enjoys a privileged position not only in dictionaries, but also in naive users' spontaneous definitions. Some indications regarding its strong position could already be found in some previous studies (Fabiszewski-Jaworski and Kryspowicka 2008, Fabiszewski-Jaworski and Grochocka 2010, Richards and Taylor 1992). As our previous studies examined Poles, the natural next step was to examine native English speakers. Focus was put also on the two defining formats applied in dictionaries, yet based on hypothetical English folk traditions: SC and FSD definitions. Having similar methodologies for speakers of Polish, the results could be compared between two nations in the quest for folk defining universals.

Finally, some consideration was given to the length of the responses provided in order to address the issues regarding the length of folk definitions vs. dictionary definitions expressed in, for example Stock (1998).

Having considered all the issues above, something about the lexical items selected must be said. In the study, I decided on inspecting one part of speech only – nouns. First of all, nouns are the most numerously represented part of speech in the lexical systems of most languages. This translates into the number of definitions written for nouns in dictionaries. Secondly, classic definitions are most easily applied to nouns and also SC definitions in modern dictionaries are mostly applied to define (abstract) nouns. Thirdly, nouns are quite a heterogeneous part of speech with many subtypes. Some of these are more transparent than others and many can be important for a dictionary user or a learner of a given language using a dictionary. It was justified to look at such groups as countable versus uncountable nouns or abstract versus concrete nouns. The concrete-abstract continuum includes many different types. Abstract nouns themselves form a varied group. In concrete nouns, on the other hand, it would be worth investigating whether a spontaneous definition focuses on their form or function. Another issue to look at is how much scientific knowledge will be included in subjects' definitions of nouns. Finally, the focus on one part of speech only was influenced by some further methodological considerations. Namely, if more than one part of speech had been investigated, devising a uniform classification system would have been practically impossible

for the multitude of different definitional formats obtained. Separate systems would have had to be created for each part of speech and these would not have been easily comparable for conclusive findings. This fact was not only confirmed in the Pilot Study of the present study but was also one of the findings brought about by our earlier studies (Fabiszewski-Jaworski and Kryspowicka 2008, Fabiszewski-Jaworski and Grochocka 2010). A full description of the noun items tested will be found below.

3.3. Pilot Study

Conducting a sizeable study of this type requires preparation in the form of a pilot study. Such a study was conducted prior to the main study. As I had been equipped with practical knowledge about elicitation methods acquired in the course of performing my previous studies, the pilot study was conducted on a smaller than usual number of subjects.

The aims of the pilot study were as follows:

a) check the general understanding of instructions and, if need be, modify the instructions to aid comprehension;
b) check whether the instructions elicited real definitional material that could be worked on;
c) check the time needed to fill in the questionnaire and reach an optimum period allocated for administration;
d) verify the choice of the items tested, identify possible problems with their interpretation and with the responses provided. An important issue to look at was which sense of a given word will be most readily defined by the subjects. Can anything be modified in such a way that the intended sense is defined. Besides, the truth value of the responses was tested;
e) work out what aspects of responses can be analyzed having the data submitted by the subjects;
f) last, but perhaps most importantly – devise a preliminary classification of responses so as not to mix syntactic-structural criteria with semantic criteria and devise a system (a database) in which the data can be plotted for analysis.

The pilot study was conducted in writing only, as the pilot study primarily tested the effectiveness of the questionnaire for the written task but a few informal interviews on the basis of the written task questionnaire form were conducted as well. The purpose of the interviews was to check how much time would be sufficient for spontaneous oral responses and check participants' performance with a voice recording device working. Twenty subjects of different ages participated. This was a fairly low number of participants that was due to a low SDWT form return rate (less than 30%). All of them were adults of more than 20 years of age. For the purpose of the pilot study only it was decided that they would represent a slightly different group than a group intended to be tested. This means they were both native and non-native rather than solely native speakers of English, they were both naive users of English and more professional users such as students of English, EFL teachers and academic teachers. Although their education levels varied, they had received at least partial higher education. The differences resulted from the intention to check not only how the administration of the task can be organized, but also receive comments on the wording and layout of the questionnaire form, lexical item selection, as well as assess the difficulty of the task.

The subjects were asked to define 20 lexical items by filling the SDWT task form as presented in Appendix A, which they had received either in the printed or in the electronic form. No aims of the study were revealed, but the subjects were asked to provide their remarks and questions about the study in a special space on the questionnaire form. Additionally, they were asked not to use any dictionaries, reference sources, the Internet (applies to the subgroup who received electronic forms only and was not supervised). They were allocated an unlimited amount of time, but were asked to carry out the task in one session, without interruptions and provide extra information on the time they needed to complete the task. If supervised, the subjects were not strictly timed. Only after submitting the forms did the subjects receive extra information on the purpose of the study and the pilot study and were asked, again, to supply any additional comments. The participants could choose to remain anonymous.

The completed questionnaires along with the remarks were analyzed thoroughly. The analysis did not bring about any corrections in the instructions or the layout. The responses given allowed to devise a preliminary classification system of definition formats. The system included the following definition types: Classic (Aristotelian) coded as CL, definition by synonym (SYN), single-clause *when*-definition (SC), wrong re-

sponse. Other possible definition formats such as the full-sentence definition (FSD) did not appear in the pilot study. Yet, it remained to be considered for the classification system of the study itself. Some definition type candidates were identified. They included definition by hyperonym (HYP), sentence/clause type (CLAUSE) – which could be used to classify infinitival clauses, hyponym/example as well as antonym. The participants indicated that they would modify their language depending on the level of English of the imaginary foreigner and use more direct indication, gestures or ostension. This indicated that some extralinguistic content may be provided in both the written and the spoken elicitation mode that will have to be subsumed under a category, so new classifications will be necessary. One major conclusion drawn from the pilot study in terms of the classification system was that a mere replication of the framework used before would not at all be effective. As too many complex responses appeared, a mere hybrid label (HYB/MIX) utilized in Fabiszewski-Jaworski and Kryspowicka (2008) or Fabiszewski-Jaworski and Grochocka (2010) would not do them justice. It was confirmed that dealing with a multitude of definition types for many parts of speech within one framework would not be effective, and concentration on one part of speech only will enable a more coherent classification system.

The analysis also revealed that a one-dimensional analysis framework would be inadequate. Because of the richness of information provided in the responses, a variety of aspects had to be analyzed. These included their length and complexity (number of definition types within one response). Furthermore, the analysis allowed some insights as to future problem items. In some items, wrong or no responses were provided more frequently. One such item was *envy*, which was in all likelihood interpreted as a verb rather than a noun, contrary to my intentions, and yielded definition types typical of its verbal reading – infinitival clauses in the form of, for instance, "to wish you had something someone else has." However, CLAUSE responses like this appeared in other items (*a glance*) which had more transparent noun characteristics (articles) as well, and whether this was due to subjects' part-of-speech misinterpretation remained inconclusive. It was likely that one possible explanation was that it is typical of folk defining to mostly define the meaning, not the grammar part. Some confirmation of such assumption came from Fabiszewski-Jaworski and Grochocka (2010) where subjects had a ten-

dency to use one part of speech to define another[30]. After the pilot study, it was decided that the noun *envy* should not be changed, just to further test that hypothesis. In view of the results of the study this decision might be viewed as a flaw in the study. With hindsight, if *envy* had been replaced with *jealousy*, which had a typical nominal morphology, many problems would have been avoided.

This brings us to the discussion of the last set of conclusions drawn from the pilot study: that relating to lexical item presentation. Two basic presentation types were considered: individual words and words in context. Although one of the respondents indicated problems with deciding which sense[31] of a given word to define, the original wording was nevertheless retained for simplicity, and to adhere to the list-definition type of elicitation. If polysemy issues were to be reported by subjects in the study, indirect instructions would be given to guide them to provide a response on the basis of their first association, as no specific sense was aimed at and absolute clarity of a definition was of secondary importance. Using words in context could pose a danger of obtaining definitions for longer chunks of language such as phrases or sentence fragments. Another issue here was a decision to provide or remove definite and indefinite articles and full infinitive markers used to guide subjects to arriving at the right part of speech. Some problems with interpretation could already be identified in the item *envy*. Also, part-of-speech dictionary-like labels were considered. Again, these ideas were abandoned for the sake of clarity and simplicity: the form was not supposed to reflect a dictionary microstructure in any way and no metalanguage should be allowed.

To conclude, it was decided that the SDWT questionnaire form would remain unchanged and the same written form will be used as the basis for the spoken task (SDST). The difference will be that in the SDST it will be read out loud by an interviewer. Subjects will need no more than 15 minutes for the completion of the task and between one and two minutes for the task in the SDST. The classification system will be at least three-dimensional: type of definition(s) in a response, length of a response and complexity to cater for more than one aspect of data. The final classification system will be developed inductively – on the basis of all the data gathered throughout the study.

[30] This was with reference with translation/equivalent submission.
[31] Sense awareness might have been influenced by the fact that the pilot study involved linguists.

3.4. Subjects (written elicitation)

In order to diminish the effects of too many variables, the subjects had to constitute a uniform group in terms of age and education. Measurement of intelligence was abandoned since it would have been extremely difficult to administer intelligence tests prior to conducting a spontaneous defining task. Variables such as age and education were more easily controlled in a university context, so a group of university students from Lancaster University in the United Kingdom was selected for participation. The students had no linguistic or lexicographic background, so they could be considered as naive users of the English language. In the written task the informants were a group of 120 English native speakers who were either university/college students, were recent graduates or young adults with higher education. This number of subjects was considered sufficient to discover recurring patterns and consistencies. The subjects were mostly between 19 and 24 years of age, with minor exceptions. There were 85 female students, 33 male students and 2 students did not indicate their gender on the SDWT form. The informants were not asked to provide their names and were only asked to provide basic details for analysis such as age bracket (19-24, 25-30, 31+), gender, education level (primary, secondary, college/university, higher), their field of education and any further remarks (see Appendix A for the SDWT form).

3.5. Lexical items tested

The SDWT form was filled with 20 words the subjects were asked to define. However, only 9 words were actual test nouns and they were dispersed with 11 distracters. The words were randomly distributed across the SDWT sheet. The randomization of the items was performed using www.randomization.com. The nouns tested were to form a varied group differing in countability, concreteness/abstractness (covering a wide spectrum of the abstract-concrete continuum). Concrete nouns can signify physical objects but can also refer to simple actions or movements. Although it is often impossible to discretely label nouns as being fully abstract, one might still differentiate between different abstract noun types. Therefore, for abstract noun distinction I re-applied the crite-

ria used in Fabiszewski-Jaworski and Grochocka (2010) and considered such subtypes of abstract nouns as those denoting feelings, qualities, states, ideas, concepts and events.

For all words, possible grammar markers were retained. They included the full infinitive marker *to*, indefinite articles *a* and the definite article *the*. These were used in place of part-of-speech labels found in dictionaries and were introduced to guide the subjects to correct noun identification. The only instance of the definite article used in the SDWT form was in the case of *the sun* and was used for consistency only, as this noun was unlikely to be interpreted as any other part of speech. There was some risk that the presence of the definite article might trigger the daily newspaper reading but as the study was concentrated on the format, rather than the contents this was of secondary consideration. I also decided against introducing perforce the definite article in front of the noun *envy* to avoid verbal-reading misinterpretation. It was crucial that the subjects knew the meanings of the words in the form, unlike in Fabiszewski-Jaworski and Grochocka (2010), and stood a chance of explaining their meanings spontaneously. The difficulty the subjects were supposed to face consisted in actually grasping the meanings and verbalizing them.

The list of the tested items in the order in which they appeared on the SDWT form is presented below with additional observations.

a) *A storm*: a countable noun that can be classified as abstract rather than concrete, signifies an event, introduced to create opportunities for supplying single-clause *when*-definitions and full-sentence definitions, at the same time allowing the subjects to use the classic definition. Considered a medium difficulty word.
b) *Education*: a polysemous abstract noun that can, in certain contexts, be countable. Its morphology makes it impossible to be interpreted as a different part of speech. Considered a medium difficulty word, however, possibly more difficult than *a storm*.
c) *The sun*: a concrete noun with a few senses: an immediate sense that apart from having an accessible hyperonym allows to use ostension or descriptive defining strategies. A scientific sense also requires only basic knowledge. Considered a low difficulty item.
d) *Envy*: a highly abstract noun signifying feelings, with two main senses: envy of people (more difficult to pin down) and envy of possessions. Considered a

high difficulty item. Words signifying emotions are interesting from a cognitive point of view. Swanepoel (1992: 419) emphasises that people often do not have direct access to lexical meanings, which is true for both emotive and non-emotive words, and at the same time elicitation problems have to be dealt with. He states that:

> It is a common fact of life that people "know" a lot about their own emotional experiences and those of others, and that they know what the meanings of emotion concepts like "love", "anger", "fear" and "joy" are, but they do so only until asked to give a definition of them. And indeed the difficulty for the ordinary native speaker as well as for the lexicographer of coming up with definitions of even the most common word meanings, has been noted many times.

In view of this, *envy* was a replacement for other similar emotive nouns used in the previous studies. Originally tested words such as *love* were too complex feelings, highly polysemous and proved too difficult to explain. As a result, they triggered long and personal descriptions which were difficult to fragment and classify. *Envy* can be defined using many strategies included: the classic definition, SC, FSD, a hyperonym, a description, or an example. As mentioned above, the morphology of the word *envy* does not unambiguously identify it as a noun if given out of context. Additionally, the selection of this item also gave a possibility to verify whether folk definitions of emotions are indeed modelled in accordance with a folk model of emotions proposed by Swanepoel (1992: 425)[32]. Dictionaries tend to refer to a folk model of emotion, which includes a sense of loss of control, in their definitions rather than describing it from a purely scientific point of view. A dictionary definition format proposed by Swanepoel (1992) and frequently followed by lexicographers, sketched on the basis of a general cognitive model, would contain the following elements:

a qualifying adjective + feeling/passion/emotion + of + noun (denoting a synonymous emotion concept) caused by the belief that Z. It can be verified how far folk definitions fall from this neat structure.

[32] The prototypical folk model of emotions is a five stage model that involves (0) state of emotional calm, (1)cause of emotion, (2) the existence of emotion, (3) attempt at control, (4) loss of control, (5) action, (0) state of emotional calm.

e) *A glance*: a countable noun considered to be of very low difficulty, it being very common and having a few synonyms and hyperonyms being rather high frequency words (*a look*). A glance can be placed somewhere in between concrete and abstract on the abstract-concrete continuum.

f) *An aquarium*: a countable noun with a simple meaning and two likely senses: a container and the metonymous sense of a building holding these containers. A low difficulty item.

g) *A nation*: a countable noun with a few more or less abstract senses: the more concrete sense of "an area" or "a group of people" as well as the more abstract one evoking culture, tradition and a sense of belonging. Considered a medium difficulty item.

h) *A hammer*: the most concrete and simple lexical item used. Signifies a physical object – the most basic tool. Can easily be defined with a classic definition or a hyperonym. This item gives a chance to verify what aspect of description will be more prominent in the folk definitions: the form or function of the referent. The responses can further be compared with minimal frames of description of noun entries in dictionaries as proposed by Wiegand (1992: 257). Such frames of description are specially designed and grouped questions written to discover implicit knowledge about referents of words and can aid the practical writing of definitions.

i) *A television*: a countable noun signifying a piece of equipment was the intended sense of this low-difficulty item. Possible misinterpretations might have arisen from neglecting the predetermining indefinite article. The additional interpretations can involve 'an institution' reading or 'a broadcasting system' reading.

The distracters distributed between the tested items were verbs and adjectives:

a) *to kick;*
b) *black;*
c) *enchanted;*
d) *to be nervous;*
e) *to dream;*
f) *beautiful;*
g) *to lie;*

h) *to sneeze;*

i) *to play;*

j) *brilliant;*

k) *wicked.*

The complete list of lexical items in the SDWT form given in the order in which they appeared is as follows: *to kick, a storm, black, enchanted, education, to be nervous, to dream, beautiful, to lie, the sun, envy, to sneeze, a glance, to play, brilliant, an aquarium, a nation, wicked, a hammer, a television*.

3.6. Spontaneous defining written task (SDWT) elicitation procedure

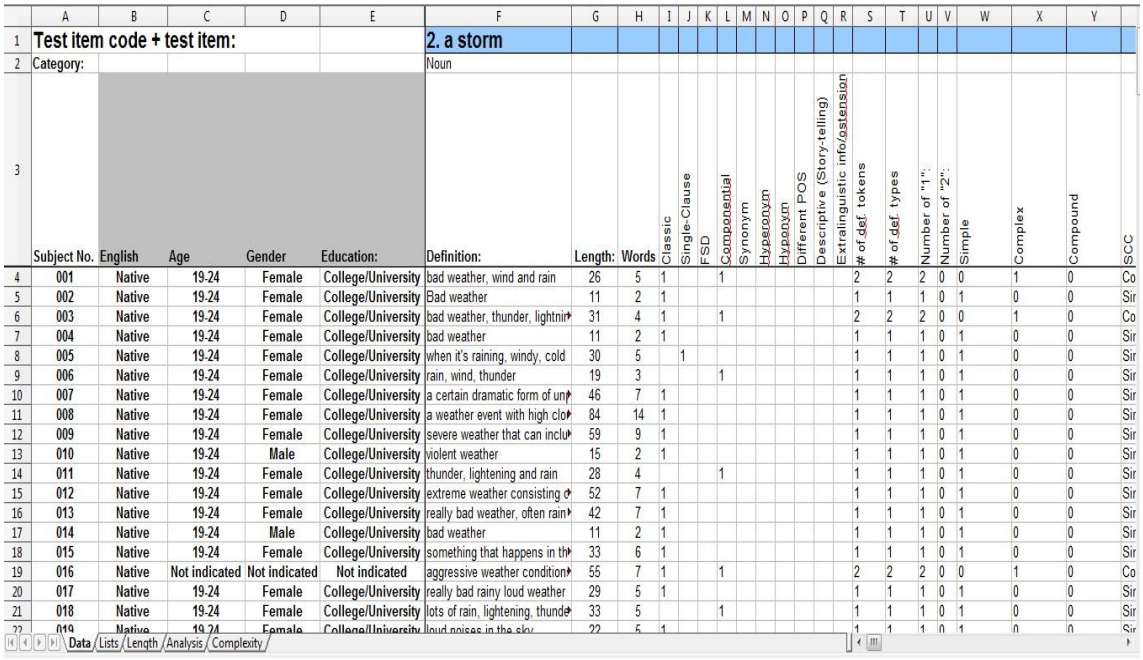
The SDWT sheet was a one-page, one-version test (see Appendix A). The printed SDWT sheets were distributed among the subjects who were asked to follow the instructions and not to edit their responses too much or introduce too many corrections. Electronic communication, personal consultations, the Internet, dictionaries or other reference works were not allowed. The subjects had no prior knowledge of the purpose of the experiment, nor the field of science it was conducted for and were given a maximum of 15 minutes to complete the task by filling in the blank fields.

The instructions were: "*Imagine that someone (such as a foreigner) does not understand the meaning of a word and asks you to explain the meaning of the items below. Please write the short and quick answers you would give them if asked the following questions in the street: What* ***does … mean? Explain the meaning of….*** *The content you provide remains fully anonymous."*. The instructions were supposed to ensure as high as possible a level of spontaneity of responses that can be achieved in writing, knowing that this medium has its drawbacks, one of which is an increased level of formality associated with paper. The choice of the questions asked (cf. 2.3. above) was influenced by the fact that lexical definitions were aimed at, rather than strictly object-related ones. The subjects were supposed to realize they were providing meanings of words rather than being asked to describe objects or concepts which could bring lengthy or even encyclopaedic descriptions. Question selection was originally performed in Fabiszewski-Jaworski and Kryspowicka (2008) and it was decided in this work that this selection would be optimal. It was additionally communicated, however, that a simpler

question of *What is X*? can also be utilized as long as the subjects remembered to define words. The word *definition* itself was never used or communicated in order not to impose a strict defining framework and render the responses more formal than they would normally be. It is for the same reason that the words *short* and *quick* appeared in the instructions. It was decided against trying to make the subjects imagine an adult-child defining situation as it was feared that responses obtained in such a fashion could be overly simplistic and include defining formats used primarily in front of children. On completion of the task, the sheets were collected and the subjects were informed of the lexicographic purpose of the task, of the special focus on noun definitions and were invited to provide further comments.

3.7. Data storage, organization and processing (written data)

In order to organize and process data, an easily editable, extendable and exportable database was developed in an Open Document Format *.ods spreadsheet file (which accompanies this work for reference and can be opened in, for example, the Open Office suite). Information on age, gender, nativity and education of each informant was collected next to which all the responses submitted were typed for analysis. Original wording, writing conventions and punctuation were retained. Paper SDWT forms were archived. An example screenshot of the database is provided in Figure 1 which shows a fragment of the Data tab.



	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	
1	Test item code + test item:					2. a storm																				
2	Category:					Noun																				
3	Subject No.	English	Age	Gender	Education:	Definition:	Length:	Words	Classic	Single-Clause	FSD	Componential	Synonym	Hypernym	Hyponym	Different POS	Descriptive (Story-telling)	Extralinguistic info/gstension	# of def. tokens	# of def. types	Number of "1":	Number of "2":	Simple	Complex	Compound	SCC
4	001	Native	19-24	Female	College/University	bad weather, wind and rain	26	5	1			1							2	2	2	0	0	1	0	Co
5	002	Native	19-24	Female	College/University	Bad weather	11	2	1										1	1	1	0	1	0	0	Sir
6	003	Native	19-24	Female	College/University	bad weather, thunder, lightnir	31	4	1			1							2	2	2	0	0	1	0	Co
7	004	Native	19-24	Female	College/University	bad weather	11	2	1										1	1	1	0	1	0	0	Sir
8	005	Native	19-24	Female	College/University	when it's raining, windy, cold	30	5		1									1	1	1	0	1	0	0	Sir
9	006	Native	19-24	Female	College/University	rain, wind, thunder	19	3				1							1	1	1	0	1	0	0	Sir
10	007	Native	19-24	Female	College/University	a certain dramatic form of un	46	7	1										1	1	1	0	1	0	0	Sir
11	008	Native	19-24	Female	College/University	a weather event with high clo	84	14	1										1	1	1	0	1	0	0	Sir
12	009	Native	19-24	Female	College/University	severe weather that can inclu	59	9	1										1	1	1	0	1	0	0	Sir
13	010	Native	19-24	Male	College/University	violent weather	15	2	1										1	1	1	0	1	0	0	Sir
14	011	Native	19-24	Female	College/University	thunder, lightening and rain	28	4				1							1	1	1	0	1	0	0	Sir
15	012	Native	19-24	Female	College/University	extreme weather consisting o	52	7	1										1	1	1	0	1	0	0	Sir
16	013	Native	19-24	Female	College/University	really bad weather, often rain	42	7	1										1	1	1	0	1	0	0	Sir
17	014	Native	19-24	Male	College/University	bad weather	11	2	1										1	1	1	0	1	0	0	Sir
18	015	Native	19-24	Female	College/University	something that happens in th	33	6	1										1	1	1	0	1	0	0	Sir
19	016	Native	Not indicated	Not indicated	Not indicated	aggressive weather condition	55	7	1			1							2	2	2	0	0	1	0	Co
20	017	Native	19-24	Female	College/University	really bad rainy loud weather	29	5	1										1	1	1	0	1	0	0	Sir
21	018	Native	19-24	Female	College/University	lots of rain, lightening, thunde	33	5				1							1	1	1	0	1	0	0	Sir
22	019	Native	19-24	Female	College/University	loud noises in the sky	22	5	1										1	1	1	0	1	0	0	Sir

Data / Lists / Length / Analysis / Complexity

Figure 1 Database sample layout

Two columns placed next to the “Definition” column are length columns where the length of each response is automatically calculated by means of function formulas and expressed in the number of characters (including spaces and punctuation marks) as well as the number of words used. The next 10 columns are type classification columns. These are manually filled columns and their function will be described later. The next 4 columns to the right are automatic complexity analysis columns. Here it is important to

S	T	U	V	W	X	Y	Z	AA	AB
# of def. tokens	# of def. types	Number of "1":	Number of "2":	Simple	Complex	Compound	SCC	Remarks:	Unclassified/Wrong
2	2	2	0	0	1	0	Complex		
1	1	1	0	1	0	0	Simple		
2	2	2	0	0	1	0	Complex		
1	1	1	0	1	0	0	Simple		
1	1	1	0	1	0	0	Simple		
1	1	1	0	1	0	0	Simple		
1	1	1	0	1	0	0	Simple		
1	1	1	0	1	0	0	Simple		
1	1	1	0	1	0	0	Simple		
1	1	1	0	1	0	0	Simple		
1	1	1	0	1	0	0	Simple		
1	1	1	0	1	0	0	Simple		
1	1	1	0	1	0	0	Simple		
1	1	1	0	1	0	0	Simple		
1	1	1	0	1	0	0	Simple		
2	2	2	0	0	1	0	Complex		
1	1	1	0	1	0	0	Simple		
1	1	1	0	1	0	0	Simple		
1	1	1	0	1	0	0	Simple		

Figure 2 Database sample layout 2

understand that they count the number of individual definitions appearing within one response (so called *definition tokens*) as well as the number of different types of definitions within one response (*definition types*). By scrolling to the right, more analysis columns appear (Figure 2).

The next 3 columns (“Simple”, “Complex”, “Compound”) perform a logical test to determine the complexity of the response. The result of this test is given in the SCC column. The remaining two columns are columns where remarks can be typed or an

additional classification field is provided for unclassified responses. Data for each noun are collated in such a way. Subsequent nouns tested are given to the right whereas the list of subjects expands further down. At the bottom, collective data are presented for each noun including the total number of entries, the total number of characters and words, mean lengths are calculated, all instances of each definition type are added and summaries are presented. Total numbers of definition types and tokens are also given for analysis to be used in charts introduced under other tabs.

The remaining tabs are where further analyses are performed and graphs are generated. The Lists tab is a content input verification tab that controls the data entered into the personal details columns in the Data tab. The Length tab collects mean lengths expressed in words and characters and generates comparative graphs. The Analysis tab analyses definition types and their distribution across the tested items. It also partially analyzes complexity. The Item Analysis tab is an accurate item-by-item noun analysis with regard to the percentage distribution of definition types. Finally, the Complexity tab is where final complexity analysis is performed globally and on an item-basis and where complexity graphs are generated.

All in all, such a data framework has made it possible to quickly enter and edit data, change graphs and export. With minor adjustments, it was used for both the written and spoken tasks as well as the analysis of dictionary definitions.

3.8. Written data analysis

Data analysis performed was quantitative and qualitative. Qualitative aspects of analysis will be discussed below in sections 3.10. - 3.11. while more details of the quantitative analysis are presented here. As hinted above this analysis was three-dimensional with the following aspects analyzed:

a) length: expressed in the number of characters including spaces and punctuation marks and in the number of words, including function and content words;
b) complexity;
c) type of definitions used within a given response.

The estimation of length of responses is important because it provides insight into the nature of folk defining. Comparing the written responses with the spoken ones is just one aspect of analysis showing possible differences in the medium of communication. Comparing folk definitions to dictionary definitions in terms of length provides yet another answer to the questions posed above (Stock 1998). This analysis is based on clear criteria and provides easily interpretable answers.

Complexity of the items shows how many strategies naive users employ at once to define a given item: how many definition formats are used and how it compares with what dictionaries offer in their entries. In addition, the results of this analysis may be interesting when compared with the results of other studies, namely Mikołajczak-Matyja (1998), which had a similar methodology and achieved a high number of single, one-format-only responses. This issue was raised again in Bańko (2001: 109) and was ascribed to time-constraints and haste. This assumption may now be tested in the analysis of the written vs. spoken medium against each other. It was decided that a response can be classified as either:

i. simple – consists of one single definition token and at the same time one single definition type (definition types/formats are described below); e.g. one single instance of the classic, Aristotelian definition;
ii. compound – consists of two or more definition tokens (definitions) of the same type, e.g. two occurrences of the classic definition;
iii. complex – consists of two or more different types of definition within; e.g. one occurrence of the classic definition and one occurrence of a synonym definition;
iv. complex-compound – consists of more than one type of definition, with two or more instances of at least one type; e.g. one occurrence of the classic definition supported by two synonyms.

The spreadsheet automatically gave one of these labels to a given response on the basis of the complexity analysis columns. The instances of particular definition tokens and types were added and a logical test was performed whose result was the complexity label.

With regard to the type of the definition, as complexity was analyzed, multiple-type responses were allowed as the subjects had never been constrained in their creation of responses or guided about the types of responses possible. Each response was broken

down into identifiable definitional formats. While identifying definition tokens and definition types, punctuation was considered alongside the syntax and the contents. The typology presented here was devised inductively on the basis of the data achieved through the pilot study and the actual study (just as in the study by Casagrande and Hale 1967 described above). Certain recurring patterns were identified and named in order to classify as many responses as possible and not to leave too many responses unclassified. At the same time, the number of categories should be neither to big nor too small so as not to leave any categories empty. The resulting framework is based on the application of syntactic and semantic criteria. Whenever a definition token of a given type appeared within one response, a "1" was entered into the respective cell in the spreadsheet file, under the right category. For example, if a classic definition token was found, "1" was entered in the row next to the definition in a respective (Classic) column (see Figure 1 or Data: I12[33]). If two instances of the same definition type were found (for example 2 classic definitions), a "2" was keyed in the respective field (see Data: I94) and so on, so that the numbers reflected the true number of occurrences. If within the same response another type was identified, the number of its instances was again entered in the respective column. If no response was submitted for a lexical item, the Definition (content) field was left blank and no classifications were given. A sample response analysis is given on the example of a definitions for *a storm* and *education*

(a storm) A state of weather - a combination of wind, rain (Data: F94)

(education) – process of learning, to be taught. (Data: AC73)

in which two definition tokens are separated by a dash or a comma. The response given as a definition of *a storm* is composed of two definition tokens of the same, classic type. Such a response would be classified as "compound". In the response given to define *education* the first definition token can be given the classic definition label, whereas the second one – Different POS label (to be discussed below). Such a response would be further labelled as "complex".

[33] The code refers to the tab and the cell number in the database file. Here the file is Written Database.ods found on the accompanying CD.

The following types were allowed with a clear description of what kind of definition token qualifies as a given type along with genuine examples from the database:

a) Classic definition: a typical member of this group is a definition token in which a clear genus term and a set of differentiae specificae are present. A slightly broader understanding of genus had to be assumed, however, than would be the case in dictionaries or taxonomic classifications. An example on the basis of definitions for *a storm*:

A type of weather, usually involving rain, thunder & lightening (Data: F28)

where *a type of weather* is a genus and it is characterized by *usually involving rain, thunder and lightning*.

Other similar structures were also considered to be instances of the classic definition. These included the cases where the genus part was only premodified:

Bad weather (Data: F17)

Jealousy feelings (Data: BW11, a definition of *envy*)

where *weather* is the genus and it is premodified by a qualifying adjective *bad* and *jealousy* is considered as a premodifying noun of the genus *feelings* rather than a synonym, which would be an alternative type candidate.

At times, structural considerations were given precedence in the analysis and responses of the type:

something that happens in the sky (Data: F18)

stuff that comes out of the sky (Data: F61)

which were also classified as classic definitions even though the genus is not really a directly hyperodinate term of *a storm*, neither does the *happens in the sky* qualify as its differentiae specificae. In this case the form resembles the form of the classic definition format, although this very response does not define anything clearly. Such responses may appear if a subject has categoriza-

tion problems and resorts to using an implicit, rather than explicit class. An explicit class is typically closer to the item defined, whereas an implicit class constitutes a term of far broader and very general nature (Mikołajczak-Matyja 1998: 78). Here the word *something* is sort of a placeholder (McGhee-Bidlack 1991).

If a response provided had a classic format, yet did not really define a word, still a classic format label was ascribed (again, a definition of *a storm*):

loud noises in the sky (Data: F22)

Even more problematic examples can be found which were also classified as the classic definition. For example *education* defined as

being taught (Data: AC6)

gaining knowledge (Data: AC13)

Teaching somebody something in a formal environment (Data: AC27)

where it was assumed that *being*[34] *taught*, in spite of having verbal qualities is understood nominally as "the state/condition of being taught/gaining knowledge" where the elided *the state* could serve as a genus and *of being taught/gaining knowledge* etc. as differentiae. Cases in which a gerund was followed by semantically empty placeholders, such as *something* or *sth* or *things*, for example *education – learning things*, were not considered classic definitions and were classified as other formats, here: a synonym (Data: AC99).

Similarly, cases resembling a definition of *education* like

what you have learnt at school or college (Data: AC37)

were also considered to be classic definitions with the genus term being *what* resembling *the things which* or *something* mentioned above (implicit classes).

Definitions in the form of

[34] In fact gerunds have dual nominal-verbal nature with different readings. Readings like *being taught* is closer to the verbal sense also in terms of its grammar, whereas readings such as *learning of different things*, which include prepositions – to the nominal sense.

Where fish live on land. (Data: FC61)

or those starting with *where you* or *somewhere where* were subsumed under the classic definition category, too, with the *where* element interpretable as "the place in which/where". It could be argued that if responses starting with *when* are classified as single-clause (SC) definitions, those starting with *how* or *where* can be, too, as they introduce single clauses. This proposal was, however, rejected in favour of the classic definition and in the definitions starting with *how, how* is interpreted as "the way (in which/of)".

Instances like

A storm is a type of weather, usually involving rain, thunder & lightening (Data: F28, modified)

where a word defined was repeated and embedded at the beginning as a subject of a full sentence[35] were also labelled as classic definitions rather than FSDs. The rationale behind this decision is that the definiendum is not presented in a real context, no typical collocations are given and the grammar of a word has been given already provided so the definition does not introduce any truly FSD-like features.

Finally, some marginal cases including definitions such as

(a nation) – a group of people (Data: GS8)

had to be classified too. Decisions in such cases were to some degree arbitrary, but based on consultation with other experts and applied consistently. In this example, alternative readings were possible. A classic definition reading, where *a group* was considered a genus and *of people* as very poor, yet sufficient differentia, vs. a hyperonym reading when it was assumed that *of people* does not sufficiently characterize *a group*. A syntactic approach was taken and these responses were classified as classic definitions.

b) Single-clause *when*-definition (SC): a folk-inspired category introduced into the framework to test the frequency of occurrence of the structure in sponta-

[35] Other possibilities are having a dash rather than a linking verb 'to be'.

neous definitions of naive users. An SC definition is composed of a single, subordinate clause introduced by *when*, *whenever* or *if* , so this classification is based on syntactic criteria. Although marginally occurring, the cases of responses starting with the word *it's when* were also classified as SC definitions. In theory, it works best when defining abstract nouns, but it can also serve to define other parts of speech such as verbs, adjectives, adverbs. An interesting thing to consider and observe was to compare its occurrence in writing and in speech. As mentioned above, single clauses starting with the words *how*, *what*, and *where* are not categorized as single-clause *when*-definitions[36]. Some examples of SC definitions are given below, based on the written database responses.

(a storm) when the weather's really bad (Data: F44)

Less typical examples of SC definitions (exceptionally taken from the spoken database):

(education) it's when you give people information (SDST Data: AD93)

(education) you learn stuff (SDST Data: AD78)

c) Full-sentence definition (FSD) signified a contextual definition in the form of a full sentence with a fully inflected verb. This type of definition was introduced in order to test the hypothesis of this strategy being a folk defining format. Responses in which the definiendum appears before a linking verb *to be* of the type: X is Y that Z are not considered FSDs. As occurrences of FSDs throughout the study were extremely rare and there were no occurrences of FSDs in the written data, an example is given from the spoken database

[36] In theory a single clause introduced by *when* could also be interpreted as an elided reading of "the situation when" and classified as the classic definition. This fact shows that in many ways classifications are arbitrary choices.

(education) – you get education through going to school or university (SDST Data: AD22)

where the definiendum is presented in context with a collocation pattern typical of more informal, spoken English.

d) Componential definition was a purely inductive and self-devised new type of format introduced in order to cater for large amounts of data in the database that conformed to a recurring new pattern. Some types of data that remained outside the traditional defining patterns appeared to follow a model that included enumeration of typical components that, in a way, together make up the concept behind the word defined or at least constitute its part. Thus, *a storm* could be defined as

rain, wind, thunder (Data: F9)

in which *rain, wind, thunder* cannot really be analyzed as a list of synonyms, nor hyperonyms or hyponyms of *a storm*. Instead, the concept behind *a storm* seems to be analyzed as consisting of several major parts appearing together, which make up "a storm" and are quoted in the definition. In order to apply this analysis consistently throughout the database, certain guidelines were used, about which some remarks will now be made. First of all, the factor deciding that (part of) a response (a given definition token) was classified as componential was there being at least two identifiable, semantically differentiable components constituting part of a concept. Thus, one-word-only responses (SDST Data: G12) like *a storm – wind* were not classified as componential as the item did not stand in the neighbourhood of other components. They were further analyzed and classified as either synonyms, hyperonyms or hyponyms. A more lengthy response, on the other hand, containing more instances of components of the concept of storm was classified as a single ("1") componential response – (SDST Data: G26) "*lots of rain, lots of thunder*". This approach is not free from ambiguities and some arbitrary decisions had to be made. A typical classification problem occurred in several instances where *a storm* was defined as *thunder and lightning*, when in order to perform informed classification one is forced to decide between classify-

ing it as a combination of two components or a synonym, if "thunder and lightning" is understood as a single lexical unit constituting one, single phenomenon[37]. In order to have a transparent strategy of dealing with such cases, several dictionaries and encyclopaedias were consulted for their treatment of this these lexical units. On consultation, it was decided that graphic representations such as *"thunder and lightning"*, *"thunder & lightning*" or *"thunder + lightning*" will be considered synonyms, whereas representations such as *"thunder, lightning*" separated by commas will be classified as componential definitions.

e) Synonym was a label given to definition tokens in the form of a single word or a short, lexically established fixed phrase that was similar in meaning to the word defined. This classification takes into account semantic criteria, especially in view of the fact that in this classification synonyms have to be distinguished from hyperonyms and hyponyms, which is extra difficult if a response is unclear or incorrect. Example synonym definitions:

education – schooling (Data: AJ92)

a nation – a country (Data: GS49)

A single word reply that was based on an association was classified as a synonym as well, even though it was not a true semantic synonym as a category of the type "definition by association" was not introduced into the framework:

the sun – summer (SDST Data: BA62)

f) Definition by hyperonym is another semantically-based definition type. A definition token to which this label was ascribed was just as in the case of synonyms either a single word or a short, lexically established fixed phrase that was a hyperordinate term in relation to the word defined. This label included responses in which a subject would provide a genus only to define a

[37] A similar case would be „Fish and chips" understood as a (single) dish vs. two separate dishes served together.

word without any following characterizations. Hyperonyms could be considered as unfinished attempts at composing classic definitions. For example:

sun – star (SDST Data: BA98)

Some modifications were allowed that were still labelled as hyperonyms because they did not in any way change the interpretation of a definition:

sun – like a star (SDST Data: BA49)

g) Hyponym is a label given to definition tokens composed of a single word or a short, lexically established fixed phrase that has a narrower semantic field than the word defined, so is an example specimen of a referent belonging to the group signified by the definiendum. Therefore, this label includes cases of extension, as illustrated in the example below. A closer semantic analysis had to be performed to classify responses as hyponyms with a view to distinguishing hyperonyms, synonyms, hyponyms and elements of a componential definition. Out of all the items tested, a hyponym was a most likely strategy of defining *a nation* as it was a noun with easily accessible set of examples. An example hyponym (extensional) definition:

a nation – Britain=Nation (Data: GS4)

h) Different POS is a category given to occurrences of definition tokens in which one part of speech was defined by means of strategies characteristic of definitions for a different part of speech. A subject would understand the meaning of an item correctly, but either failed to detect the right part of speech, failed to find a strategy to define the part of speech that would retain its syntactic substitutability, or paid attention to semantic rather than morphosyntactic aspects of an item. This label was introduced inductively to the framework in order to account for large amounts of data that had unexpected characteristics. The necessity to use this label occurred in more than one of the analyzed nouns. Some typical examples that occurred in the database:

(education) to be taught something (Data: AC7)

(the sun) To provide heat in the world[38] (Data: AZ30)

(envy) To want/desire someone else's possessions (Data: BW51)

(envy) jealous (Data: BW9)

(a glance) To look at briefly (Data: DM5)

(a television) to watch movies on a screen (Data: JF30)

These examples clearly show that even in spite of there being some grammatical indication as to the part of speech intended (noun), the definitions submitted fail to conform to typically expected noun strategies: *education* is given a definition more typical of the verb *to educate*, *the sun* is given a definition that would fit more to define *to warm up*, *to heat*, *envy – to envy* or *envious*, *a glance – to glance* and *a television – to watch*.

i) Descriptive (story-telling) definition is a definition type used to classify responses when a subject provides one or more qualities of the referent in order to characterize it or gives a long, personal story that is a description of a situation they found themselves in when the referent of a given word had some relevance. This strategy was introduced as a spin-off from the study by Fabiszewski-Jaworski and Kryspowicka (2008), in which the informant tended to provide long-winded personal situations when defining abstract nouns, and more specifically – *love*. It is for this reason, too, that *love* was changed to *envy*, yet as the likelihood of occurrence of the strategy remained, it was introduced into the system of classification. The occurrence of longer definitions of this type was limited by space constraints and closer interview invigilation. Some examples of descriptive definitions:

blood – is red

[38] If interpreted as the infinitive of purpose, this reading might be "used in order to watch" etc so it would be function-focused.

(sun) provides us with light, appears in the sky during daytime (Data: AZ15)

(sun) hot (AZ4)

love – I remember when I was in love for the first time and I couldn't stop thinking about my boyfriend.

If a response described the function a referent is used to perform, it was also subsumed under this category as a "by function" category was not present.

a hammer – is used to drive in nails

you use this to put a nail in some wood (SDST Data: IJ22)

j) Extralinguistic information/ostension was a label used in several distinct situations both in the written and in the spoken elicitation. It was assigned to definition tokens that were true ostensive definitions (spoken data) and a subject exactly pointed at the referent, e.g.

(the sun) – (pointing) (SDST Data: BA23)

specifically explained that a referent should be pointed at (written data), e.g.

(the sun) – Point to the sun (Data: AZ4)

produced or suggested production of onomatopoeias, e.g.

(a storm) – (make thunder noise) (Data: F93)

(a hammer) – bang bang! (Data: II22)

drew a referent on paper or circled it in the air, or suggested giving examples

(a hammer) - a nail action** (Data: II62)

described the word using a metalinguistic definition, gave extra information on the nature of use of the word or described how the meaning of an item should be explained e.g.

jealousy - noun for longing for something someone else has. (Data: BW101)

a nation - a country and its people - used with more abstract thought (Data: GS101)

(a storm) - I'd probably say something about the weather (SDST Data: G42)

k) Unclassified/wrong was a label used as a dumping ground for unclear, illegible responses. In fact there was no single instance it had to be used as all the cases of failed defining attempts could either still be classified as one of the categories above or were blank fields which did not count in the overall calculation and summary.

Having presented this classification framework, I would like to stress that not only this study, but also our previous studies (Fabiszewski-Jaworski and Kryspowicka 2008 and Fabiszewski-Jaworski and Grochocka 2012) demonstrated that eliciting highly spontaneous responses can cause an array of classification problems resulting from specific composition conventions used by informants both in writing and in speech. In the written data these encompassed instances of strange or unjustified punctuation (e.g. lower-case letters at beginnings of sentences, commas instead of full stops at the end), strikethrough, arrows, cross-references, doodles or even drawings. These unorthodox strategies resulting from unhindered production call for a special approach to classification. In a number of cases throughout the written database, several problem issues were identfied and discussed in order to find best and most logical solutions as such problems can reappear if similar methodology is applied in further studies. Fortunately, their instances were few and far between and constituted a minor percentage of the overall number of definition tokens. Some examples are presented below with discussion.

(education) your knowledge – learning (Data: AC90)

much as the second definition token can be easily labeled as a synonym, the first one, *your knowledge*, can either be a hyperonym qualified by a possessive adjective (specific *knowledge*), thus constitute a classic definition or be accidental and not contribute to the general meaning (a synonym). The issue was resolved in favour of the second interpretation.

(education) schooling. Books/teach (Data: AC93)

is a similar case where *Books/teach* can have multiple interpretations: a componential definition, a synonym combined with a Different POS format etc. Here resolved as the first option.

(education) school/uni/college (Data: AC9)

can be interpreted as a single token of componential definition or three synonyms. Here: the first option selected.

(the sun) light, planet, sky, daytime (Data: AZ98)

an awkward response based on free associations classified as complex with two synonyms, a (wrong) hyperonym and Descriptive.

3.9. Results and discussion (written data)

The group of 120 subjects participating in the written task provided 1070 responses for the 9 target items. This means that only 10 fields remained blank (undefined) throughout the whole database. In addition, the unclassified/wrong label was not used at all so the responses were ascribed to one of the existing categories.

3.10. A look at the definition types

It is very interesting to look at the general distribution of definition formats across the whole database. A global look at the frequencies with which different definition formats occurred is presented in the graph below (Figure 3)

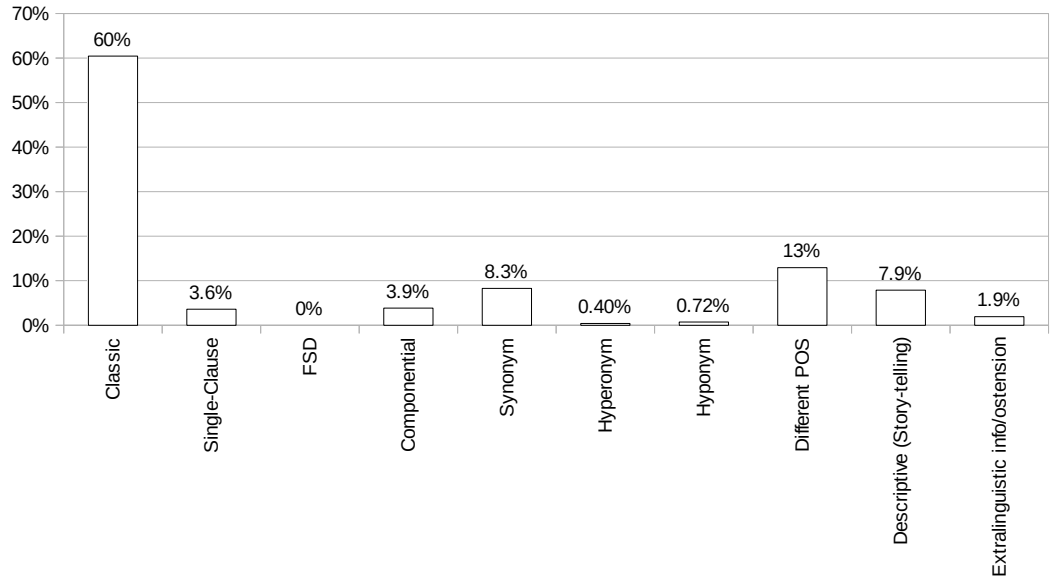


Figure 3 Distribution of definition formats (written)

Evidently, the classic definition is the dominant strategy constituting 60% of all definition tokens and no other strategy is able to match this proportion. If we analyze this proportion more closely, in 94%[39] of the cases in which it occurred, it did so as the sole defining strategy and only in 6.0% cases it appeared alongside another format. The classic definition with only one exception dominated practically every noun, regardless of its concreteness or abstractness. The highest proportion of occurrence for this strategy was in the case of *an aquarium* (89% of all definition tokens for this noun, 16% of its overall occurrence), *a television* (80% of all definition tokens for this noun, 14% of its overall occurrence) and *a hammer* (78% of all definition tokens for this noun, 13% of its overall occurrence). This result is justified as the above items were assumed to be easily definable concrete nouns of different types (a physical object, a building), and a normal adult knows their meaning. They should have rather easily detectable genus terms and clear differentiae specificae. In other nouns, the classic definition was slightly

[39] This data have not been presented on graphs. They calculations have been made within the database file.

less dominant – *the sun* (70%) – the meaning of which can involve some scientific knowledge; and in less concrete nouns such as *a storm* (56%), which signifies an event; *a nation* (54%), which does not signify an object as such: it encompasses a collection of people united by shared territorial, linguistic and cultural characteristics. Also, *education* (51%) is an abstract noun and proved a little more difficult to define using the classic format. It is in such cases that the classic format is replaced by other strategies (e.g. more dominance of SC in *envy, a storm, education*). The most interesting example is *envy* where the classic definition was not dominant at all (17%). This case was described individually above. A detailed look at the frequency of occurrence of definition formats broken down by item is given below in Table 1, where, nota bene, the percentages accumulate horizontally.

Judging by the percentage of occurrence of all other strategies, they can be considered as formats of tertiary or, at best, secondary importance.

	Classic	Single-Clause	FSD	Componential	Synonym	Hyperonym	Hyponym	Different POS	Descr. (Story-tell.)	Extraling info/ost.	
a storm	56%	8.9%	0%	28%	3.4%	0.7%	0%	0%	1.4%	1.4%	100%
education	51%	5.6%	0%	1.4%	22%	0%	0%	15%	4.9%	0%	100%
the sun	70%	0.65%	0%	0.65%	2.6%	1.9%	0%	0.65%	18%	5.8%	100%
envy	17%	13%	0%	0%	11%	0%	0%	56%	2.9%	0.71%	100%
a glance	52%	4.0%	0%	0%	1.6%	0%	0%	42%	0%	0%	100%
an aquarium	89%	0%	0%	2.3%	0%	0%	0%	0%	8.4%	0%	100%
a nation	54%	0%	0%	0.68%	30%	0%	6.1%	0%	5.4%	3.4%	100%
a hammer	78%	0%	0%	0%	0.79%	0.79%	0%	0%	17%	3.9%	100%
a television	80%	0%	0%	0%	0%	0%	0%	5.3%	13%	1.5%	100%

Table 1 Detailed distribution of definition formats (written)

The second most common strategy in the written data was, surprisingly, Different POS. Yet, its overall occurrence was low (13%). It occurred in 5 nouns, but only in three was it considerable: *envy* (56% of all the definition tokens in this noun, 48% of its overall database occurrence), *a glance* (42% of all the definition tokens in this item, 33% of its global occurrence), *education* (15%, 14% globally). In *a television* (5.3%) or *the sun* (0.65%) its occurrence is negligible. Whether its high occurrence is due to a design fault (especially in *envy*) or is an indicator of a new strategy, it is difficult to re-

solve. Its frequency cannot be ignored, however. Its occurrence may indicate that such a strategy is an informal folk strategy of sorts, however inaccurate and misleading it can be from the point of view of a professional dictionary maker. Such a hypothesis remains to be checked in the spoken elicitation and should be verified in a definition task that would involve other parts of speech. The results of this study indicate that subjects tend to engage verbal strategies or adjectives to define nouns. It would be interesting to see whether verbs or adjectives are defined using nouns, verbal nouns etc.

The next most common strategy is the synonym definition, which appeared in 8.3% of all definition tokens. Synonyms appeared on their own in about 53% cases (of their occurrence) and as a supporting strategy in about 47%. Synonyms are an interesting strategy because they are used in dictionaries as an additional strategy as well. In this part of the study, they tended to occur most frequently when defining *a nation* (30% of all the definition tokens for this item, 43% globally), which was defined as *a country* (the quality of this synonym is disputable, however); *education* (22%, 31% globally), where it was frequently defined using such words as *school(s)*; or *envy* (11%, 15% globally), which had a clear and close synonym – *jealousy*. Synonyms also defined *a storm* (3.4%) and *the sun* (2.6%). It is disputable whether the words provided to define these two words as their synonyms could be considered synonyms at all. Depending on the interpretation of the word *a glance* ("a look" vs. "a short look") in this case a synonym would be an appropriate defining format. Nonetheless, it was rarely used to define this word (1.6%).

The next most popular strategy was the Descriptive (Story-telling) definition, which appeared in 7.9% of all definition tokens. In 55% of the cases the format appeared on its own, whereas in the remaining cases as an aiding strategy. Description was the most common way of defining *the sun* (18% of all definition tokens provided for this noun, 29% globally), *a hammer* (17%, 21% globally), *a television* (13%, 17% globally) and *an aquarium* (8.4%, 11% globally). Although it did not appear only in the case of *a glance*, in the remaining cases its occurrence was negligible. In general, descriptive strategies were a convenient way of defining in cases where the informants found it difficult to find a hyperonym, possibly had problems with hierarchization and decided to describe the aspects of the concepts they knew, or which are perceivable. Within this set of target items, some were more likely to elicit description than others. It is likely that the occurrence of the Descriptive (Story-telling) strategy was diminished in

the case of the abstract noun denoting emotions which was *envy*, rather than *love* (as used in our previous studies) and no personal stories appeared.

All the remaining defining formats occurred only very rarely. The third-level formats occurring in the written data were componential and SC definitions, whose occurrence was comparable: 3.9% for Componential, and 3.6% for SC. Componential definitions appeared in 48 instances, in 22 of which they stood on their own (46%). By far the most common item in which it occurred was *a storm*. In this item it occurred in 28% of all definition tokens, which translated into 85% of the cases of its occurrence throughout the whole database. To a lesser degree, it also defined *an aquarium* and *education*.

The analysis of occurrence of SC definitions – the hypothetical folk defining strategy – is especially important in this study. Its occurrence was very low, scoring only 3.6% of all definition tokens in the database, which means it is far from common, much less dominant, especially in this elicitation mode. When SCs appeared at all, they functioned as the sole defining strategy in 93% cases. In the remaining 7.0% of the cases they appeared next to another strategy. SC definitions were most common in the noun *envy* (13% of all the definition tokens for this item and about 40% of SC definitions throughout the whole database), *a storm* (8.9% of all the definition tokens for this item and 29% of all SC definitions). SC definitions also occurred as definitions of *education* (5.6%, 18% globally), *a glance*, and *the sun*.

The next, very marginal, strategy overall is the use of Extralinguistic information/Ostension. This occurred only 24 times, i.e. in 1.9% of all definition tokens in the database: in 33% cases on its own and in the remaining cases in complex constructions. Its low occurrence can be justified by the medium of elicitation and by the fact that the informants do not tend to give extra metalinguistic information to their definitions and treat them as object definitions rather than word definitions. This remains to be compared with the spoken data where there was more opportunity for ostension.

It can safely be said that with the low scores they achieved, hyponyms (0.72%, only 9 instances) and hyperonyms (0.40%, 5 instances) practically did not occur, although both strategies were a theoretical possibility. Hyponyms could serve as at least supporting definitions of *a nation* and hyperonyms – *a hammer* so their occurrence had been expected to be higher.

Finally, the zero occurrence of FSD definitions is surprising as the subjects were given many target nouns that facilitated elicitation of this format, for instance: *a storm, envy*. This fact indicates that at least to the subjects of this part of the study this strategy is unknown, or at least – not applied in practice.

A summary of the distribution of definition types is given in Table 2 where percentages accumulate vertically.

	Classic	Single-Clause	FSD	Componential	Synonym	Hyperonym	Hyponym	Different POS	Descriptive (Story-telling)	Extralinguistic info/ostension
a storm	11%	29%	0%	85%	4.9%	20%	0%	0%	2.0%	8.3%
education	9.7%	18%	0%	4.2%	31%	0%	0%	14%	7.1%	0%
the sun	14%	2.2%	0%	2.1%	3.9%	60%	0%	0.62%	29%	38%
envy	3.2%	40%	0%	0%	15%	0%	0%	48%	4.1%	4.2%
a glance	8.6%	11%	0%	0%	1.9%	0%	0%	33%	0%	0%
an aquarium	16%	0%	0%	6.3%	0%	0%	0%	0%	11%	0%
a nation	11%	0%	0%	2.1%	43%	0%	100%	0%	8.2%	21%
a hammer	13%	0%	0%	0%	0.97%	20%	0%	0%	21%	21%
a television	14%	0%	0%	0%	0%	0%	0%	4.3%	17%	8.3%
TOTAL	100%	100%	0%	100%	100%	100%	100%	100%	100%	100%

Table 2 Detailed distribution of definition formats 2 (written)

In the remainder of this section, a detailed discussion of the defining patterns for each of the noun items follows.

3.10.1. *a storm*

Subjects did not find this noun difficult to define, as only in two (out of 120) cases the response fields were left blank. The easily identifiable hypernonym *weather* was consistently applied in classic and hyperonym definitions. Some other features commonly described were the existence of typical phenomena accompanying a storm such as thun-

der, lightning, flashes of light. In order to analyze the vocabulary of the responses of this and other items, microcorpora of responses were created in text files that were read by simple concordance software, MONOCONC PRO 2.0, to look at frequency lists. The most frequently appearing words in a microcorpus of around 780 words for *a storm* were (disregarding function words, without lemmatization) *weather* (almost 10% of all tokens in the microcorpus), *rain, thunder*, different spellings of *lightning, wind*. Qualifying adjectives such as *heavy, dark, extreme* were less frequently used. The use of these very specific differentiae specificae would probably render these responses successful defining attempts that would lead to correct interpretation. The mean length of definitions for this item was 41 characters or 7 words which makes them slightly longer than other items. The most commonly applied defining format to describe *a storm* was the classic definition (56%). Out of the 81 responses in which it appeared, in 58 cases it was used on its own (72%) and in 23 cases (28%) in combination with another strategy. However, in comparison with other nouns, the classic definition applied for *a storm* was not frequent. It is in the case of *a storm* that the componential definition became prominent, reaching 28% of all the responses. 18 informants used it as their sole defining strategy and as many as 23 used it in combination with another format. It seems that *a storm* had rather easily enumerable components that were readily evoked by the informants. It might be an indication that for nouns whose referents are composed of parts or ingredients this format may be frequently evoked in folk defining. The third most common defining strategy was SC (8.9%). This seems justified as this noun belongs to more abstract nouns describing events, which makes this format suitable to use. When it was used, it was practically the only strategy within a response. Thus *a storm* was defined in accordance with the model [*when* something happens in the sky/the weather is bad]. Other defining formats were very rare or did not occur. Synonyms constituted 3.4% (5 definition tokens) of the responses, which is a fairly high score considering the fact that there are not many synonyms of a storm – *a thunderstorm*. This relatively high score was influenced by the treatment of responses composed of multi-word units such as "thunder + lightning". There were a few instances of Descriptive (Story-telling) and Extralinguistic definitions (2 instances each). No occurrence of FSD was recorded, although such format was perfectly possible to compose. In terms of complexity, although single responses were dominant in this item (ca. 77%), this score was lower than in the

case of the remaining items. The remaining responses were largely of the complex type (22%).

3.10.2. *education*

The definitions of this item were submitted by all the subjects and had fairly simple wording with frequently appearing different morphological variants of *teach, learn* and a little bit less frequently *school, system*, or *process of*, and with a focus on the most general sense of *education*. In fact, the microcorpus data (813 words) indicate that different forms of *to learn* are the highest frequency items (about 12% of all the tokens). Most of the responses provided could be classified as successful defining attempts (although this aspect was not systematically analyzed), which means they were clear, correct and they were likely to guide the reader to the meaning of the definiendum. The mean length of a response was 31 characters or 5 words, which makes responses for *education* relatively short. The prevalent defining strategy employed was the classic definition, constituting just over half of all the definition tokens (50%). Its distribution was less frequent than in the case of *a storm*, in favour of the second most common strategy – synonym definitions (22%), the use of which can be explained by the existence of frequently used simple synonyms or near-synonyms for this item, such as *learning*. Twelve subjects used synonyms as their main and only defining strategy, whereas 8 used it as a supporting strategy. Surprisingly, the third most common format was Different POS (15% of definition tokens). Although *education* has clearly nominal morphology, for many informants it appeared to have been difficult to compose a formal definition of a noun and they resorted to defining its verbal equivalent (*to educate*) defining education as *to learn, to teach* etc. In fact, 12 informants used it as their sole defining strategy (responses classified as "Simple") and 4 used it as a supporting strategy. Some minor strategies used included Descriptive (Story-telling) definitions (4.9%) or componential definitions (1.4 %). Again, there was no occurrence of FSDs. The dominant responses were simple (ca. 82%) with some complex (10%) and compound (8.0%) responses and extremely rare complex-compound combinations.

3.10.3. *the sun*

The responses for this lexical item did not prove difficult as there was only one case in which it remained undefined. An interesting fact is that the contents of these responses varied in comparison with the responses in other items and used more different content words. The microcorpus of around 940 words reveals many references to *sky, light, ball, star* or *heat, system*. These were described using adjectives *big, yellow, hot, bright* or *solar*. Some other words used as the defining vocabulary include *earth, fire, provide, orange, centre, daytime, planet, gas, object, world*. This lexical item is easy to define using many techniques including the classic definition, hyperonym, and ostension. It has a known and easily accessible referent and most responses could be classified as successful defining attempts. However, an interesting fact about its definitions was that sometimes a wrong term from a scientific point of view was used with reference to *the sun – a planet*, which still possibly would not have rendered these defining attempts unsuccessful and the referent would have been interpretable. The mean length of a response was 39 characters or as many as 8 words – a relatively high value. The classic definition was, again, the dominant strategy (69%), and more dominant than in the case of *a storm* or *education*. The classic definitions stood mostly on their own (69% of the cases) and in about 16% of the cases they were accompanied by another strategy. Another interesting fact is that the second most common strategy was Descriptive (Storytelling). It might indicate that subjects found it easy to describe the sun and such an, often informal, description, in their view, would facilitate the understanding of the word. In their descriptions they referred to common knowledge and direct or indirect experience. The descriptions included: the sun's heat and source of light, brightness, its location in the solar system, the fact that earth orbits around it. Certainly many of these are palpable and prominent elements. Notably, Extralinguistic information/ostension category appeared in 5.8% of the cases, mostly as an aiding strategy, due to their being an easily accessible reference to quote, also in writing. The remaining 9.2% of the responses were distributed across other strategies with practically no occurrences of SCs or FSDs. Although non-occurrence of SCs seems justified as it is a concrete noun, FSDs are technically possible for this item. The highest number of responses are single (almost 73%) with a fairly high number of complex (19%) and compound (7.0%) responses.

3.10.4. *envy*

Only two subjects failed to define *envy* in any way. The responses provided had a rather poor defining vocabulary with fewer content words. The highest-ranking true content words (excluding indefinite pronouns) were *jealousy* or *jealous* used together with such verbs as *want* or *desire.* The responses were short (34 characters, 6 words mean length). What is striking about the definitions of *envy* is that it scored an extremely low number of classic-definition responses (17%), in spite of the fact that they were perfectly possible, as reference to feelings or emotions as a hyperonym was an optimum choice. When classic definitions appeared, they did so in isolation in 66% cases. The concept itself did not prove too difficult itself, at least in the perception of the informants. At the same time, they could be considered as effective definitions. The low classic-definition score was largely compensated by an unusually high occurrence of Different POS definitions – the percentage skyrocketed to 55% and mostly occurred on its own. This was due to the fact that *envy* was misinterpreted as a verb (*to envy*) and consequently defined as a verb. In fact this could have been avoided by the use of the noun *jealousy* instead (as discussed earlier). However, in a number of cases *envy* was defined by means of an adjective *jealous* or a combination of sorts of a verb + adjective (*to be jealous*). It is less likely that *envy* was in these cases interpreted as an adjective and a defining strategy typical of defining adjectives was used. It appears that the use of an adjective stems from sort of an association strategy. The third most common strategy was SC (which in fact reached the highest rate in this item), with 13%, and with one exception as a single strategy within a response. This is justified in view of the fact that *envy* is an abstract noun and it was a perfect opportunity for SCs to be used. Their fairly low occurrence is, therefore, rather disappointing. Interestingly, the SC definitions were almost always introduced by the pronoun *you* rather than an indefinite pronoun *someone* or *somebody*. This indicated a more informal, conversational style of defining. Apart from that, *envy* was frequently defined by the use of a synonym (11%), but synonyms were hardly ever used in isolation. Other responses involved some instances of Descriptive (Story-telling) tokens (2.9%), which included associations (*green*). No FSDs occurred, though also in this case they were a reasonable defining strategy. The responses for *envy* were by and large simple (81%) with a fairly high occurrence of complex (13%) and compound responses (6.0%).

3.10.5. *a glance*

Providing responses to describe the meaning of this noun did not prove difficult and every respondent submitted their answer and defined the word successfully. At the same time, the definitions provided were very short – on average 24 characters or about 5 words, and used few pretty basic vocabulary items (as indicated in the analysis of the microcorpus) such as *look* or *to look*, adjectives such as *quick, short*, adverbs such as *quickly, briefly*. In fact, the subjects used only 23 different forms (types in the corpus). This arises from the fact that this noun is a fairly frequent, simple word with few possible words that would be even simpler and serve well in its description. The dominant strategy employed was the classic definition (52% of all the definition tokens provided), and it mostly appeared in simple compositions. Much as in the case of *envy* the use of Different POS strategy was more justified as the morphology of the item could also suggest its verbal interpretation, the high occurrence of Different POS in the case of *a glance* is less understandable. Clearly, *a glance* is a noun phrase and yet, it was, in all probability, interpreted as a verb *to glance* and defined as such in more than 42% of the cases. The respondents used structures such as *to look quickly/briefly* etc. to define it and it appears that this strategy was very natural for them. Surprisingly, only two other formats were used in the remaining 6.0% of the responses and these were, SC definitions 4.0% - which translated to only 5 occurrences and one synonym or two synonyms (*a peek, a look*) as the status of *a look* is doubtful as a synonym in favour of its hyperonym interpretation. *A glance* was also the item for which the highest number of simple responses were given (96%), with only 3.0% of compound, and 2.0% of complex structures.

3.10.6. *an aquarium*

This item was defined by all the respondents. On average, the respondents used 36 characters and 7 words to define this noun, which makes its definitions relatively long. The microcorpus for this item reveals the relatively high sophistication of the vocabulary used – about 58 different types in the corpus including such words as (not given in order of frequency): *captivity, zoo, creatures, sealife, underwater, fish* (the most fre-

quent type), *tank, place, animals, aquatic, live*. Clearly, two senses of the word were defined, usually separately: "a tank for fish" or "a building where fish (tanks) are kept". What is noteworthy is that it is in this item that the classic definition was the most prominent strategy: 89% of all the definition tokens, mostly on its own (in 94% cases). This clearly nominal item facilitated provision of a hyperonym (*a place, a tank, zoo, a pool, where*) and did not pose problems in the detection of differentia specificae (*full of fish*). The responses also contained a lot of description (Descriptive (Story-telling) definition, 8.4 %). The third most common and the only other strategy employed was componential definition (2.3%). In fact, other strategies were likely to appear too (synonyms, hyperonyms or even hyponyms). The responses provided were largely simple (91%) but some compound (5.0%) and complex (4.0%) responses did occur.

3.10.7. *a nation*

This noun proved a bit more difficult to define for the informants. Although only two of them failed to give any answers, the high percentage of synonym (*a country*) definitions indicated that the item was not easy to define. The respondents used fairly sophisticated vocabulary (about 50 different word types) but it remains to be verified whether some definitions given would count as successful defining attempts leading to correct interpretation. It is felt that defining *a nation* by *a country* is an understatement, especially in view of the existence of literally hundreds of words naming different nations and communities that could be subsumed under the category of hyponym (extensional) definition and support the strategies making the definitions more accurate. 54% of the definition tokens were of the classic type, and when they appeared, in about 88% they did as a single strategy. These were usually elaborate and featured rich vocabulary: *identity, community, culture, geographical area, united* etc. These abstract descriptions could be considered as effective definitions, yet as the concept itself was not as simple as the concepts behind other nouns, the definitions would probably only be understood by adults. Only classic definitions in the form of *a nation – a group of people* could be regarded as misleading and inaccurate. These, however, occurred rarely. The second most frequently used strategy is the synonym definition, 30%, which, when used solely (74% of all synonym occurrences), seemed simplistic. Only 6.1% of definition tokens

constituted hyponyms and they never appeared on their own, but always as a supporting strategy. The next format used (common, yet still comparably rare) was Descriptive (Story-telling) definition – 5.4% of all the definition tokens and a few cases (3.4%) where metalinguistic information was contained (Extralinguistic information/ostension label), and the subjects specifically referred to their definitions as definitions of words, not things or concepts. The remaining strategies were practically non-existent in this item. As far as complexity is concerned, the responses were largely simple (81%) with some complex structures (10%), compound structures (5.0%) and even complex-compound constructions (3.0%, the highest score from among all the items).

3.10.8. *a hammer*

This was one of the easiest items to define with only two informants failing to provide any responses. The responses were of medium length (37 characters or 7 words on average). The defining vocabulary used was very simple – only 49 distinct types, yet mostly function words and few content words including *tool, nail(s), handle, secure, bang, walls* and the phrase *used to*. A high occurrence of the classic definition was detected – 78% of all definition tokens – which mostly appeared as a single strategy that evoked the hyperonym *tool* and one of its characteristics. The differentiating features quoted focused on its form (20%), function (79%), or both (1.6%). It might be assumed that some of the characteristics qualified as differentiae specificae would not accurately describe a hammer and would not lead to a correct interpretation of the definition. These were in definitions such as "Tool used for DIY" or similar. It appears that combinations including the words *nail* or *nails* would significantly increase the comprehension level of the responses. Overall, the responses could be classified as successful defining attempts. Conspicuously, the next most frequent strategy was the Descriptive (Story-telling) definition (17%), which either supported another strategy by adding some extra description of its appearance, or, when on its own, was a simplified form of a classic definition ("you use it to hit nails", "used to bash in nails", "used for banging nails into holes"). Interestingly, Extralinguistic information/ostension label was given in 3.9% of all definition tokens to the cases where onomatopoeias appeared ("Bang bang") or ges-

tures and banging movement imitations. The remaining strategies were extremely rare or did not appear. The vast majority of responses were simple (92%), with occurrences of complex (6.0%) and compound (2.0%) responses.

3.10.9. *a television*

The last target item was defined by all the respondents who did not seem to have any problems explaining the meaning of the word. The indefinite article suggested that the sense intended was the concrete "piece of electrical device" reading, and many subjects interpreted it that way. The responses for this lexical item were the longest (mean length 45 characters or 8 words) and used a comparably high number of different word types in the microcorpus (67). The definitions seemed to exhibit a high effectiveness potential. Some characteristic high-frequency content words included in the definitions were *watch, box, programmes, pictures, moving, shows, images, device, films, entertainment, electronic, sound(s).* It is interesting to note that in the era of flatscreen TVs, a television still evokes the image of a box in young people, as this word was frequently used as a hyperonym. The definition formats used to define *a television* were uniform and most often were of the classic type, which constituted 80% of all tokens appearing largely on their own, or in combination with extra description (Descriptive (Story-telling) definition). In fact, classic definition occurred more frequently only in the case of *an aquarium.* The Descriptive (Story-telling) format was the second most frequent strategy used to describe the meaning of *a television* (13%), which appeared on its own in about 50% cases. The descriptions of meaning of *a television* were based on its function (60%): watching, screening, entertainment; or function and form together (40%): "a box used to watch programmes on", etc. Interestingly, the third most common strategy employed in the definitions was Different POS (5.3%) as *a television* in which it was often defined using infinitival clauses such as "to watch". Extralinguistic strategy was extremely rare (1.5%) and all other formats were not used. The responses were largely composed of only one format (91%) or complex (8.0%). The occurrence of compound responses (2.0%) is insignificant and complex-compound structures did not occur at all.

3.11. Difficult cases

It must be stressed that in an unconstrained elicitation method applied in this study, the definitional material obtained in the form or responses is of variable quality. Many responses can be uninterpretable, incomprehensible and may not even qualify as definitions. Such responses can either be completely disregarded or they can be classified on the basis of whatever criteria available in the assumed classification framework may apply. In this work, due to its focus on the format of definition, all responses were taken into consideration as valid material. The responses are approached and referred to as either successful or unsuccessful defining attempts. A successful defining attempt is a response that is expected to lead to arriving at the correct interpretation and the right meaning. In other words, if such a response is given as a definition in a definition comprehension task, one might arrive on its basis at the word intended. Unsuccessful defining attempts are those responses that are considered ineffective. This means that although they might conform to a format and be classified, they leave the reader with no clue as to their interpretation. These will include paradoxical, strange responses or free associations. Interestingly, some responses that violate the truth value of a concept (‘sun is a planet’) can still be considered successful defining attempts.

This brings us to the question whether the effectiveness of a folk definition should be measured in spontaneous defining elicitation tasks. I believe it is another interesting aspect of responses that can and should be measured, given enough time and a proper method of measurement. One immediate way is obviously using intuition and peer-consultation. Clearly good, effective as well as clearly wrong responses are not difficult to classify as successful or unsuccessful defining attempts that carry high or no interpretation potential. Borderline cases are much more difficult to analyze. For such difficult cases, simple comprehension tests can be devised that will measure if a response is effective. Definitions be quoted without a definiendum and a group of subjects may be asked to supply it on the basis of the contents of the definiens. It is an interesting way of verifying how possibly strange and unorthodox defining methods can perform in meaning clarification. This is, however, outside the scope of this work.

Some interesting examples from the written database that posed classification problems are presented below:

(weather) stuff that comes out of the sky (Data: F61)

this response is unlikely to successfully define *weather;*

(education) to be put in a place where you're expected to remember everything you hear and see. (Data: AC108)

here the definition of *education* appears to be based on quite extreme views;

(education) when you learn (Data: AC115)

in all likelihood, this definition provides insufficient information in order to be correctly interpreted as *education;*

(the sun) opposite to the moon (Data: AZ9)

(the sun) hot, planet (Data: AZ29)

in this response it is likely that the informant meant "opposite of the moon" or had a geocentric model of space in mind, whereas "hot, planet" can also be interpreted as Mars. In any case, problems with interpretation might arise.

(an aquarium) where you admire fish (Data: FC12)

(an aquarium) something to get fish in (Data: FC7)

(an aquarium) fish, water, everywhere (Data: FC93)

Again, the information provided in all definitions of *an aquarium* can be insufficient for correct interpretation – one can admire fish in a pond, place fish in a jar or be in the middle of an ocean.

(a nation) where lots of people are (Data: GS61)

(a nation) like a country but bigger (Data: GS95)

(a nation) rules that you live with (Data: GS105)

(a nation) 6 play in a rugby competition, a country (Data: GS106)

this set of definitions of *a nation* are very reductive treatments of the concept. So are the following definitions of *a hammer* which are too general and the definition of *a television* which could be mistaken for a definition of *to view*.

(a hammer) tool, weapon (Data: II29)

(a hammer) bang, bang (Data: II88)

(a hammer) DIY related object (Data: II118)

(a television) watch programmes (Data: JF23)

As presented above, some responses, being too general, use unorthodox vocabulary or surprising associations; the responses given can be hard to interpret.

3.12. Length analysis (written data)

This section will report on the length of the defining responses elicited. All in all, the responses can be qualified as short. Despite fewer restrictions during the elicitation procedure compared to the spoken elicitation (more time, less personal supervision), the responses remained brief. On average it took about 6 to 8 words for any subject to define any of the target items, or between 24 and 45 characters as counted in the database cells. The mean length of the responses was 6 words or 35 characters. It must be remembered that length does not mean complexity and many longer responses were at the same time of the simple type. Conversely, a very short response could be classified as

complex, compound or compound-complex. The figures presented below will give a general idea of how length varied across items.

It can be seen that the shortest responses were given in definitions of *a glance* (4.6 words), *education* (5.0 words), *envy* (5.8 words), and *a nation* (6.0 words). Longer responses were given for *an aquarium* (7.2 words), *a hammer* (7.4 words), and *the sun* (7.9 words). Figure 4 shows the length given in ascending order.

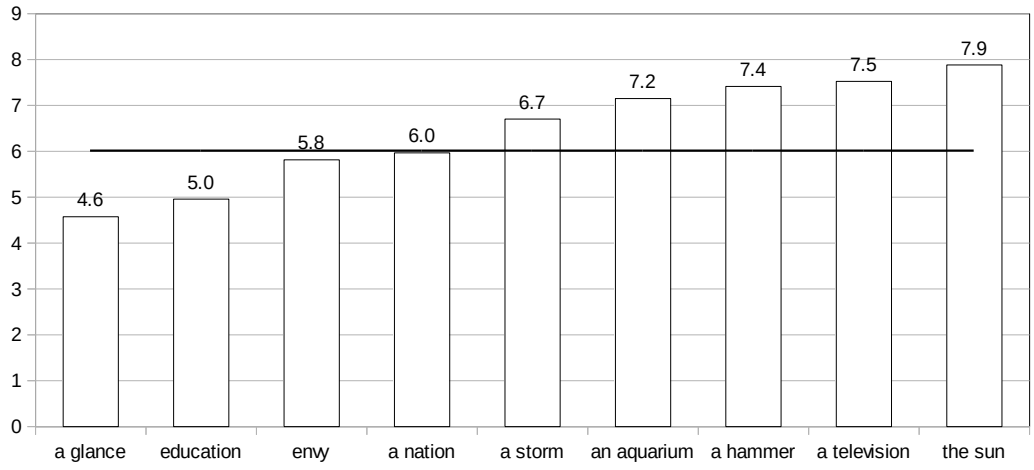


Figure 4 Mean definition length by item in words in ascending order (written)

There does seem to be some correlation between the abstract/concrete quality and length. The definitions of abstract nouns (*education, envy, a nation, a storm*) were shorter than those of concrete nouns. A look at length expressed in the number of characters (space occupied) in ascending order is presented in Figure 5.

In this view, the shortest responses were provided for *a glance, education, a nation* and *envy* whereas the longest ones in *an aquarium, a hammer, the sun, a storm* and *a television*. These results correspond to the results expressed in words. The mean length expressed in characters for an item divided by the mean length expressed in words for a given item gives a broad idea of the mean length of words used to define it.

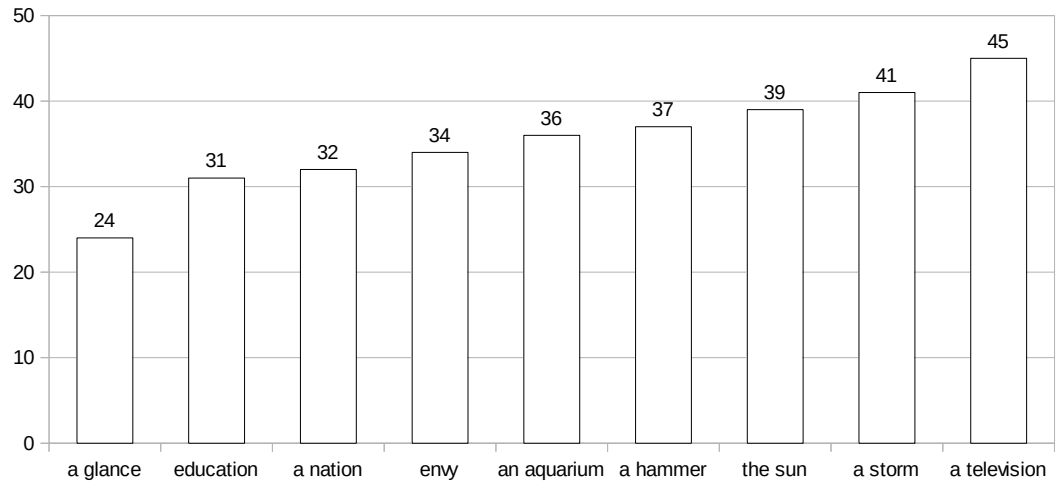


Figure 5 Mean definition length by item in characters in ascending order (written)

Finally, in Table 3 Minimum and maximum definition lengths (written) below, the minimum and maximum numbers of words and characters used are given for each target item. The ranges give a general idea how varied the responses were in terms of their length.

Length	a storm	education	the sun	envy	a glance	an aquarium	a nation	a hammer	a television
Characters	11-84	6-91	8-90	7-98	6-65	9-114	7-102	9-87	15-104
Words	1-16	1-16	2-18	1-15	2-10	3-19	1-17	2-18	2-17

Table 3 Minimum and maximum definition lengths (written)

3.13. Complexity analysis (written data)

A general look at the complexity of responses reveals that the vast majority of responses were of just one type (85%).

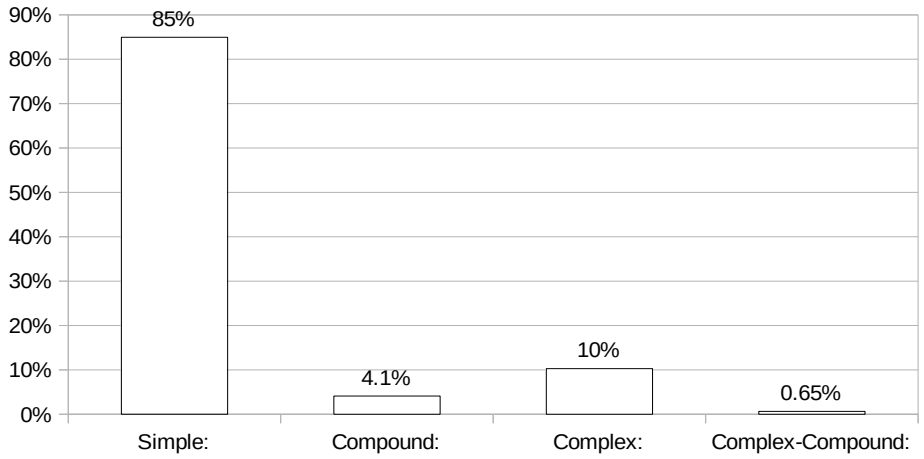


Figure 6 Complexity analysis (written)

It must be remembered, however, that a simple response does not always mean a short response. In the case of the noun *a storm* for example, for which definitions varied between 1 and 6 words (11-84 characters) in length, many simple responses were at the maximum end of the length scale. If compound responses are added to this, about 89% of all the responses submitted used one defining format. The percentage of compound responses is low and only 4.1% of the responses used more than one token of the same type. The maximum number of individual definition tokens in compound responses was three. The percentage of constructions that employed more than one type of definition was only 10%, which is very low since there existed likely additional strategies such as synonyms, hyponyms, and extra description. It was expected that in a written task like SDWT this percentage would be higher. The subjects tended to resort to just one strategy, which may be grounded by the economy of effort. Complex responses were usually composed of 2 (and a maximum of 3) different defining formats and at the same time a maximum of 3 definition tokens. Complex-compound responses were very rare as they exhibited a practically zero occurrence (0.65% which amounts to 7 instances throughout the written database). They were composed of a maximum of 4 definition tokens which is at the same time the highest number of distinct definition tokens that appeared in the database.

It is also interesting how complexity distributed across the target items (Figure 7)

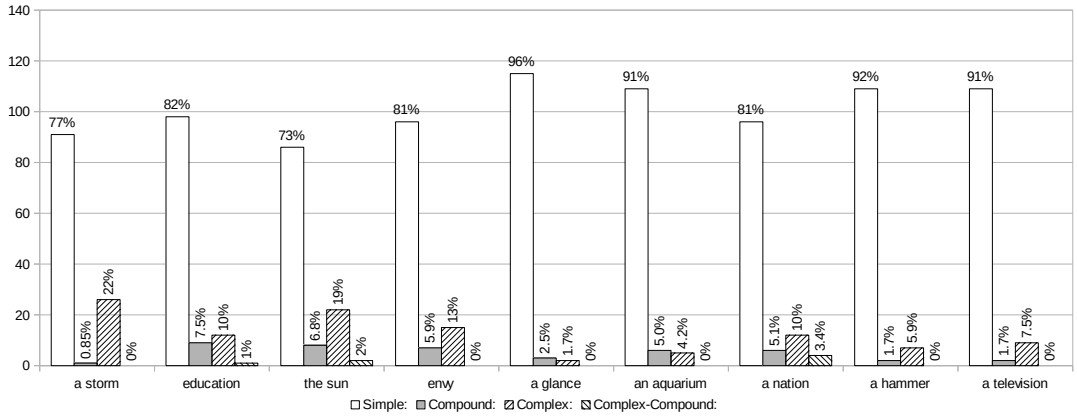


Figure 7 Complexity across items (written)

The graph clearly indicates that the highest number of simple responses were submitted in definitions of *a glance* (96%). It seems justified by the fact that the responses given for this item were also the shortest and the noun itself proved one of the simplest items to define. Another simple word defined – *a hammer* – also yielded a significant number of simple definitions (92%), but here the subjects did resort to additional strategies, as 5.9% of responses were complex for this item. The percentage of simple responses fell in definitions of *an aquarium* (91% in favour of 4.2% of complex responses, and 5.0% of compound responses), and *a television*, where 7.5% of subjects formed complex responses. Simple responses were less common in definitions of *education* (82%), *envy* (81%), *a nation* (81%), *a storm* (77%), and *the sun* (73%). Their falling rates in these items were largely in favour of complex constructions – *a storm* (22% of complex responses), *the sun* (19%), and *envy* (13%). As the nouns *a storm*, *education*, *envy*, *a nation* signify complex phenomena or emotions, supporting strategies employed in their definitions were to be expected. In the case of *the sun* the extra strategy used was frequently Descriptive (Story-telling) definition. Compound responses appeared in definitions of *education*, *the sun*, and *envy*. If only one-format responses were considered and simple and compound responses were analyzed jointly, the nouns *education*, *the sun*, *envy*, *a nation* would be considered the top one-strategy-only nouns.

3.14. Observations and conclusions from the written data

Although global conclusions had to be postponed until spoken results were obtained, several firm conclusions from the written data could be drawn. The results of the written task indicated that:

a) The classic definition format is by far the most common defining style in a spontaneous defining written task and it tends to be applied consistently to define most types of nouns.

b) If a folk defining strategy were to be judged by the frequency of its occurrence, the classic definition would have to be considered such. However, such a claim seems unreasonable in view of the fact that the group investigated had undergone many years of formal education in a system where the classic definition was developed and targeted as the model defining format.

c) Not many words are needed, on average, to provide a spontaneous written definition in an informal context. Although individual lengths varied from 0 (ostension) or 1 to 19 words, on average, the responses were between 6 and 8 words long, regardless of how complex a concept signified by a word was.

d) Indeed, the results pointed to the fact that abstract nouns evoke shorter definitions. However, one must not jump to conclusions and always take this fact for granted. This result might have been influenced by the fact that the subjects failed to fulfil their attempts at defining more complex, abstract phenomena successfully and shorter definitions were the effect of verbalization problems. Simpler concepts, on the other hand, were not only better known, more commonly experienced, but at the same time were easier to describe and thus the definitions produced were longer.

e) The use of ostension is possible in written responses, as when the subjects realize they define words, they can consciously devise and propose extralinguistic or paralinguistic methods of explaining their meaning.

f) Not much metalanguage is used in folk defining.

g) Even if not restricted by time limits, subjects tend to employ one strategy by producing simple definitions, even if many other aiding strategies are possible for a given word.

h) The results show that, in spite of heavy reliance on the classic definition format, some less expected patterns appear in folk definitions. Some of them have not been, to the best of my knowledge, identified in descriptions of folk definitions. The new labels adopted in this study included Componential definition (defining by means of enumeration of typical components) and, surprisingly, using a different part of speech genus (hence Different POS label).

i) Based on its frequency of occurrence, single-clause *when*-definitions cannot be considered a true folk defining strategy. Not only is its general occurrence very low in the written responses, but it also remains low in items which facilitate its use – abstract nouns.

j) The full-sentence definition cannot be considered a true folk defining strategy with reference to adult use. Its zero occurrence it items facilitating its use was surprising.

3.15. Spontaneous defining spoken task (SDST)

The second part of the experimental study was a replication of the methodology of the Spontaneous Defining Written Task in a more spontaneous, spoken context. The aim was to check how the results would vary if elicitation was conducted orally, at the same time leaving less opportunity or time for changes and corrections. As SDST is a complementation of the study, the goals of this part correspond to the global goals of the entire study.

3.16. Subjects (spoken elicitation)

In recruiting subjects for the Spontaneous Defining Spoken Task, the requirements were the same as for the written (SDWT) task. This means they had to form a uniform group

in terms of age and education. Again, subjects with no linguistic or lexicographic background were sought, i.e. naive users. Apart from that, it was crucial that the subjects were not practising teachers, who would find themselves in defining contexts on a regular basis. The subjects were university students recruited informally at the campus of the University of Liverpool in the United Kingdom between 1 and 5 March, 2012.

Altogether, 108 native speakers of British English participated in the spoken task (228 informants in the written+spoken tasks jointly): 63 female and 45 male informants. Again, all of them were aged between 19-24. The subjects participated in the study anonymously and the information on their age (bracket: 19-24, 25-30, 31+)[40], gender, education level (primary, secondary, college/university, higher, their field of education and any further remarks that might influence the results of the study was collected in the same way as in the case of SDWT – by filling information provided on a sheet that resembled the SDWT sheet (see Appendix A). The subjects had no prior knowledge regarding the purpose of the study and additionally they had to consent to being recorded by means of a voice-recording device.

3.17. Lexical items tested (spoken task)

Since the spoken task mirrored the written task, exactly the same items were tested as in the SDWT. Only this time, the items were read out loud from the SDWT sheet and defined orally.

3.18. Spontaneous Defining Spoken Task elicitation procedure

The elicitation procedure for this part of the study was as follows. One interviewer and one assistant approached potential informants in the street around the university campus with a request for participation in a study. If consent was given, a subject was asked to provide the basic personal details described above and had a minute or two to read the instructions of the task, but not the lexical items used in the study. The instructions and

[40] Subjects who indicated they were 25 years of age or older were not considered.

types of questions asked were exactly the same as in the written task. The subjects were asked to define the list of items. The word "define" was, again, never used in order not to impose a rigid definition framework. The items were then read out by the interviewer who then waited for a response and then continued to the next item. The average time of the interview was between one and two minutes, which is significantly shorter than in the case of the written elicitation. Due to that, a higher level of spontaneity was expected to be ensured. By being timed, the subjects had no chance to reflect upon their responses, although some corrections were introduced. It was understood that some other factors were at play that could stifle spontaneity: the presence of an interviewer/assistant and a voice recording device (Olympus ws-710m, a handheld digital voice recorder). At the end of each interview, a subject was informed of its lexicographic purpose, was invited to give his or her remarks on the study and was handed a note containing a clearer description of the study and contact information. The subjects admitted the stress the interview induced but otherwise no specific remarks that could influence the approach to the study were given.

3.19. Data storage, organization and processing (spoken data)

The spoken data were collected in the same type of database as the written data almost exactly in the same way. The database file is available on the CD accompanying this work. Also the original set of files with interviews are stored on the CD with full contents of the interviews conducted in the mp3 format. Only some modifications had to be introduced within the database. They included addition of the mp3 file names for faster identification and verification of data and, more importantly, the contents of the database cells under the "Definition" column were now interview transcripts. The interviews had been played back and transcribed by this author. The resulting transcripts were double checked and any difficult or inaudible fragments were examined again, analyzed and consulted with a native speaker of English. The cases in which identification of contents was impossible or words missing were marked either as "unfinished", "inaudible" (for longer passages) or "X" for individual words. Some discourse markers are also introduced such as "silence", "er", "erm" that the subjects used in order to prevent silence and buy thinking time. Original wording was retained. The analysis and

classification was more difficult than in the case of written elicitation, as no punctuation was indicated by the subjects, and the classification could not be based on it.

3.20. Spoken data analysis

The analysis of the data collected in the course of the spoken elicitation was performed in exactly the same way as in the case of the written elicitation. Three aspects of responses were analyzed:

a) their length expressed in the number of words and characters. In the spoken data, however, length expressed in the number of characters is less direct than in written responses, as here the responses were transcribed and extended by discourse markers which could slightly influence the length parameter;
b) their complexity;
c) definition type(s).

Again, definition tokens were identified within responses and the definition type labels were given. Length and complexity were automatically calculated. Any doubtful cases were discussed with the supervisor of this thesis in order to assign them to the most appropriate types.

3.21. Results and discussion (spoken data)

All in all, 108 informants who participated in the spoken task defined 9 target noun items, providing 963 responses. This means that only in 9 cases no responses were given. Just as in the case of the written task, item-by-item analysis will now be given.

3.22. A look at the definition types in the spoken data

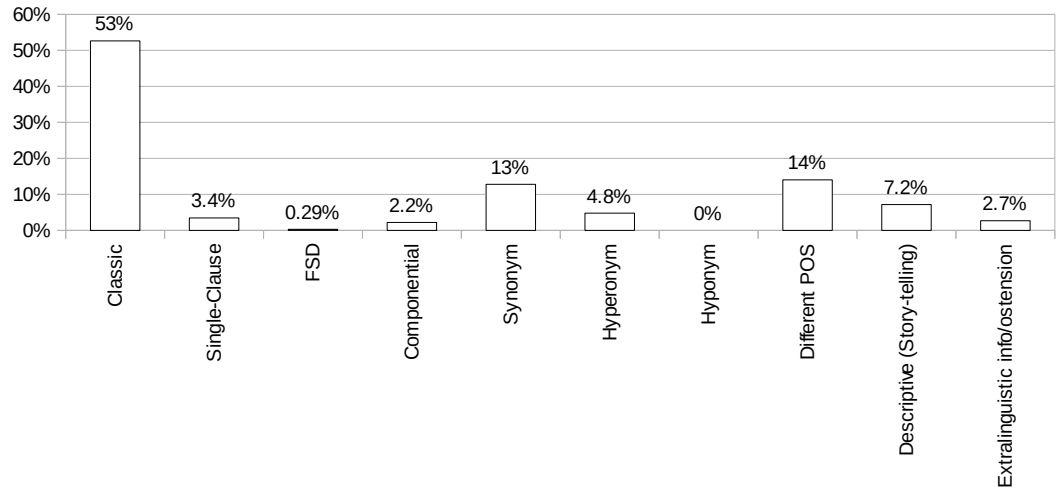


Figure 8 Distribution of definition formats (spoken)

Again, a summary is given of all definition types throughout the spoken database in Figure 8 which clearly shows that also in the spoken task the classic definition is the prevalent defining style, constituting 53% of all definition tokens, although its dominance is slightly smaller than in the case of the written task (60%). The seven-point difference between the dominance of the classic definition in the spoken and written data is distributed among other definition types in the results for the spoken elicitation. The classic definition appeared on its own in 93% of cases, almost exactly as in the written data. It dominated in 6 out of 9 original nouns and it reached its highest occurrence in *an aquarium* (85%) (much as in the written data), followed by *a television* (77%), *a hammer* (69%), and *the sun* (60%). These results indicate that the medium of elicitation of definitions did not influence the results considerably. A look at how the classic definition dominated the responses is given below for the spoken data collated with the written data. The percentages given signify the proportion of the classic definition tokens in relation to other tokens within a given noun item.

Spoken		Written	
1 an aquarium	85%	1 an aquarium	89%
2 a television	77%	2 a television	80%
3 a hammer	69%	3 a hammer	78%
4 the sun	60%	4 the sun	70%
5 a storm	57%	5 a storm	56%
6 a nation	52%	6 a nation	54%
7 a glance	36%	7 a glance	52%
8 education	32%	8 education	51%
9 envy	9.8%	9 envy	17%

Table 4 Proportion of the Classic definition in the 9 items (spoken and written)

It is clear that the classic definition dominated the items in the same order in the spoken and written tasks, and only individual percentages differ. Just as in the written elicitation, in the spoken task the dominance of the classic definition is decreased in such nouns as *envy* or *a glance*. A comparison of the spoken and written data with respect to the proportion of the various definition formats is given in Figure 9.

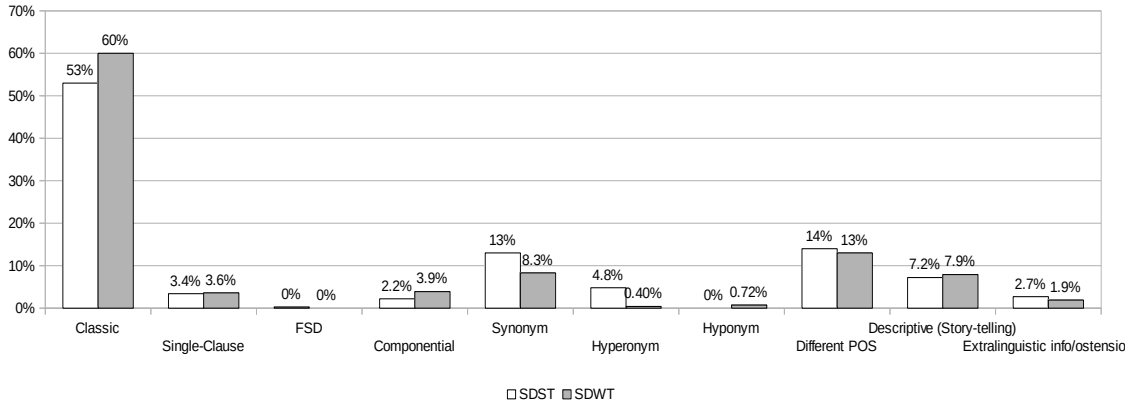


Figure 9 Distribution of definition formats (spoken and written)

An overview of definition strategies broken down by target items is given in Table 5.

	Classic	Single-Clause	FSD	Componential	Synonym	Hyperonym	Hyponym	Different POS	Descr. (Story-tell.)	Extraling info/ost.	
a storm	57%	7.2%	0%	18%	8.8%	2.4%	0%	0%	4.8%	2.4%	100%
education	31%	4.7%	1.6%	0.79%	31%	0.79%	0%	27%	0%	2.4%	100%
the sun	60%	0%	0.79%	0%	7.1%	3.1%	0%	0%	25%	3.9%	100%
envy	9.8%	12%	0%	0%	15%	0.89%	0%	49%	13%	0.89%	100%
a glance	36%	6.3%	0%	0%	0.89%	7.1%	0%	46%	0%	3.6%	100%
an aquarium	85%	0%	0%	0%	8.3%	0.93%	0%	0%	4.6%	0.93%	100%
a nation	52%	0%	0%	0%	40%	4.4%	0%	0%	0.9%	2.6%	100%
a hammer	69%	0%	0%	0%	0%	19%	0%	0.9%	8.3%	2.8%	100%
a television	77%	0.88%	0%	0%	0.88%	5.3%	0%	4.4%	7.0%	4.4%	100%

Table 5 Detailed definition format distribution (spoken)

The classic definition is followed by the Different POS format, which reached 14% of all definition tokens. In fact, the same format occupied the second position in the written task. The Different POS option tended to appear unaccompanied and was very common in *envy*, *a glance* and *education*, but appeared also in other nouns such as *a television*. In fact, these results do not differ much from the results of the written task and they are another indication that the medium did not significantly influence the format used. The synonym definition was the third commonest strategy used, with 13% of all the spoken data definition tokens. It, too, appeared mostly as the single defining strategy: in 86% cases, which was a higher rate than in the written task, where the simple-complex distribution was more equal. This indicates that synonyms did not support any other strategy; this might have been due to time constraints, which, in a way, limited creativity by promoting brevity. In the spoken task synonyms dominated such nouns as *a nation*, *education*, and *envy.* They appeared less frequently as definitions of *a storm*, *an aquarium*, and *the sun.* The reasons for this fact are likely to be the same as in the written data: for some nouns it is easier to find and quote a synonym, although the defining effectiveness of some synonyms provided is questionable. The fourth most common defining strategy used was the Descriptive (Story-telling) definition, which constituted 7.2% of all definition tokens, 83% of those on its own. It is an interesting strategy because it is versatile and can be applied to describe many different referent types, thus can define different nouns. In the spoken task it did appear in most nouns,

notably in *the sun, envy, a hammer, a television* (Table 5 and Table 7 show its exact frequency). Similarly as in the written task, the remaining formats were rare. Hyperonyms constituted 4.8% of spoken definition tokens and appeared in the definitions of *a hammer* (19% of all the definition tokens for this item and as much as 42% of all its instances), *a glance* (7.1%, 16% across the spoken database), *a television.* SC definitions were the fourth most common strategy, however, their incidence was very low and amounted to just 36 instances across the whole database, that is 3.4% of all definition tokens, and only with one exception – alone. SCs defined *envy* (12% cases, 36% of all SC definitions); *a storm* (7.2%, 25% globally); surprisingly, *a glance* (6.3%, 19% globally); and *education* (4.7%, 17% globally). Interestingly, one single SC defined *a television.* Some occurrence of Extralinguistic information/Ostension was noted (2.7%), Componential definition (2.2%) and only a symbolic occurrence of FSD – 3 cases, 0.29%. No hyponyms were identified, though, they were a valid strategy for such items as *a nation*. Comparison between the spoken and written data in the ranking of definition format distribution is given in Table 6. In fact, the first four places in the ranking are occupied by the same definition types. Place 5 differs slightly, but then places 6 and 7 are again occupied by the same formats. Only the componential definition, which had some significance in the written task, is lower, but the percentage difference is practically insignificant.

	Spoken		Written	
1	Classic	53%	Classic	60%
2	Different POS	14%	Different POS	13%
3	Synonym	13%	Synonym	8.3%
4	Descriptive (Story-telling)	7.2%	Descriptive (Story-telling)	7.9%
5	Hyperonym	4.8%	Componential	3.9%
6	Single-Clause	3.4%	Single-Clause	3.6%
7	Extralinguistic information/ostension	2.7%	Extralinguistic information/ostension	1.9%
8	Componential	2.2%	Hyponym	0.72%
9	FSD	0.29%	Hyperonym	0.40%
10	Hyponym	0%	FSD	0%

Table 6 Definition ranking (spoken and written)

Finally, a vertically accumulative summary is presented in Table 7, which shows the distribution of different strategies across the spoken data. It shows how a given definition type was distributed among the target items.

	Classic	Single-Clause	FSD	Componential	Synonym	Hyperonym	Hyponym	Different POS	Descriptive (Story-telling)	Extralinguistic info/ostension
a storm	13%	25%	0%	96%	8.2%	6.0%	0%	0%	8.0%	11%
education	7.3%	17%	67%	4.3%	30%	2.0%	0%	23%	0%	11%
the sun	14%	0%	33%	0%	6.7%	8.0%	0%	0%	43%	18%
envy	2.0%	36%	0%	0%	13%	2.0%	0%	37%	19%	3.6%
a glance	7.3%	19%	0%	0%	0.75%	16%	0%	35%	0%	14%
an aquarium	17%	0%	0%	0%	6.7%	2.0%	0%	0%	6.7%	3.6%
a nation	11%	0%	0%	0%	34%	10%	0%	0%	1.3%	11%
a hammer	13%	0%	0%	0%	0%	42%	0%	0.7%	12%	11%
a television	16%	2.8%	0%	0%	0.75%	12%	0%	3.4%	11%	18%
	100%	100%	100%	100%	100%	100%	0%	100%	100%	100%

Table 7 Distribution of items within each definition type (spoken)

3.22.1. *a storm*

The informants did not find this item difficult to define, and responses were given in 107 out of 108 cases. The mean length of a response was 32 characters or 6 words, so the responses were slightly shorter than in the case of the written task for this item. The microcorpus of 600 words made up of the responses indicates that the most frequently used word to define this noun was, again, the hyperonym *weather*, which constituted slightly over 11% of all word tokens in the corpus (a result very similar to the written data). Other frequent content words included *rain, lightning, thunder, clouds*. The microcorpus itself contained a rather low number of distinct items (36 word types; compared to more than 50 different word types in the written data). This means that the responses were slightly simplified definitions when compared with the written answers. Due to their simplified structure, the content analysis indicated that the responses might be less successful defining attempts because of frequent overgeneralizations or associations: “a type of weather”, bad weather”, “wind”, or “just noise”, to name but a few.

The most common defining format used was the classic definition, with 57% of all definition tokens for this item were of this format. This result was very similar to the written data (56%), so the elicitation method did not have any influence over its proportion in this noun. When the classic definition occurred, it was usually the sole defining strategy (82%: more frequently than in the written data), and only in 18% cases was it accompanied by another strategy to support it (usually Componential definition). Classic definition tokens for this item constituted 13% of all classic definition tokens in the database. The next most common format employed was Componential definition, which constituted 18% of all definition tokens for this noun. The number is lower than for the written data (28%). Only in 50% cases did the componential definition occur on its own, and in the remaining cases it supported the classic definition. The third most common strategy was the synonym definition at 8.8%, occupying the place of SC in the written data. Some interpretable synonyms included "thunderstorm" or "thunder and lightning", but also many uninterpretable responses were given as synonyms. Closely behind synonyms came the SC format, 7.2%. It appeared in 9 responses, and in 8 of them – on its own. The remaining defining formats can be regarded marginal. Descriptive (Storytelling) definitions occurred in 4.8% cases, hyperonyms and Extralinguistic information/ostension in 2.4% each. FSD structures did not occur at all, although FSD definitions would have been possible for this noun (indicated by the appearance of SCs). The responses given were mostly simple (83%) or complex (15%), with practically no compound or complex-compound structures (1.0% each).

3.22.2. *education*

Two informants failed to provide definitions of *education*, and so 106 responses were given. The responses were shorter than in the case of the written database: 23 characters or just 4 words long on average (written: 31 characters/5 words). The small 413 word microcorpus of these responses contains 33 distinct words, which indicates that the responses used simple wording. The most common content words were *learning, learn* (16% of all tokens altogether), *school, taught, knowledge*. The vocabulary was somewhat less varied than in the written database. The definitional effectiveness of the responses was difficult to assess on the basis of intuition. The distribution of definition

formats was interesting here, as there were two dominant styles, each constituting 32% of all definition tokens for this item: the classic definition (7.3% of all classic definition tokens throughout the spoken database) and the synonym definition (30% of all synonym definition tokens throughout the spoken database) in which *education* was defined as "learning", "school", etc. This result strongly indicates that at least for some noun items, the incidence of the classic definition in the oral elicitation is far less than in the written elicitation, where the percentage of classic definitions was 51% (compared with 22% for synonym definitions in the written task). The classic definition appeared on its own in 84% of the responses which contained it. The next most common defining format for *education* was Different POS, which was more dominant than in the written task, and accounted for 27% of definition tokens in this item (cf. 15% in the written task). It appears that this strategy was fuelled by the fast pace at which the interview was conducted. Different POS definitions appeared mostly on their own and defined *education* by means of a phrase "to learn" or "to teach" etc. which probably makes them rather ineffective. Its occurrence in this item constituted 23% of all tokens of Different POS in the spoken database. Interestingly, 4.7% of definition tokens were SC definitions which occurred on their own in the form similar to "when you learn/are taught" etc. This percentage, however, is very low and constitutes 17% of all occurrences of SC in the database. All other formats were very rare or did not appear. 2.4% of definition tokens were those with Extralinguistic information/Ostenstion label. These included pointing directions. Also, there appeared two definition tokens of the FSD type – one on its own, where some context was given for the word. 80% of all the responses were simple, however, as many as 11% of compound responses appeared as definitions of this noun. 8.0% of the responses were complex and only 1.0% — complex-compound. In general, this mode of elicitation facilitated the use of other, simpler strategies as replacement for classic definitions.

3.22.3. *the sun*

All of the 108 informants provided folk definitions of *the sun*. The defining vocabulary used in the definitions formed a microcorpus of 596 words, but only about 35 different types (written: 53). The most common content words used were *sky, bright, big, light,*

thing, star. The responses were shorter than in the case of the written task and were on average composed of 26 characters or 6 words. The most dominant definition type was the classic definition: 60% of all definition tokens in this item that constituted 14% of all instances of this type of definition in the spoken database. The classic definition occurred as the single defining strategy in more than 91% cases. Interestingly, the next defining strategy used was Descriptive (Story-telling) definition, which constituted 25% of all definition tokens for this noun (18% of all definitions of this type), out of which 75% stood on its own. Many of these definitions included a sort of a simplified variant of differentiae specificae, rather like those found in the classic definition model. Unfortunately, much as the classic definitions provided could be regarded as successful defining attempts, sole descriptions could be considered not informative enough as they often contained just one word such as "bright", "hot", or short phrases such as "it's in the sky", which can refer to a wider range of objects. On the other hand, if descriptions accompanied other defining formats, they could be considered supportive in the interpretation of a definition. The third most common defining strategy was the use of synonyms (7.1% of all tokens for this noun, 6.7% globally). These mostly occurred on their own, but many of these synonyms were rather poor ("summer"). The remaining strategies were rare. It is worth noting that in spite of the fact that the study was conducted outdoors and ostension could have worked as at least a supporting strategy, it occurred only in 3.9% of cases, in which the sun was actually pointed at or instructions were given to point to it. 3.1% of the definition tokens for this noun were hyperonyms, and a single occurrence of FSD was identified. SC definitions did not occur, nor did any other definition types. The responses were mostly simple (84%), however, 8% of the responses were compound. This means that 92% of the responses were composed of one type of definition only, 6.0% of the responses were complex structures, and only around 2.0% were complex-compound.

3.22.4. *envy*

This abstract noun yielded 107 definitions, so only one informant failed to give a response. The responses could be considered very short – 26 characters or just 5 words, which is surprising in an abstract noun. The 509-word microcorpus lists only 35 distinct

word types, so the vocabulary used was not very sophisticated. Common content words included *jealousy, jealous, something, someone, want*, or various forms of the verb *to have*. The use of definition formats across the responses did not conform to the patterns followed by other nouns. The distribution mirrored that in the written task, and the most common defining format was Different POS (49% of all definition tokens, which accounted for 37% of all occurrences across the database), almost always appearing on its own, so, again, *envy* might have been interpreted as a verb. The second most frequent format was the use of synonyms, accounting for 15% of all definition tokens, 13% globally. Synonyms almost always appeared on their own, and the only synonym used was "jealousy", so a very close synonym. The next most common defining strategy was the Descriptive (story-telling) format, yielding 13% of definition tokens in this item and 19% globally. This strategy occurred only on its own and such definitions were composed of a single word such as "jealous", or associations like "green with envy". The percentage of SC definitions was fairly high as 12% (37% globally) of all definition tokens were unaccompanied SC definitions. This fact is understandable, considering the noun defined. The classic definition, otherwise dominant, was poorly represented in this noun, as only 9.8% of definition tokens were single classic definitions, making it the fifth format in the ranking. All the remaining formats exhibited a minimum or zero occurrence. In the case of *envy*, a very high percentage of responses (98%) were composed of just one format, as 92% of the responses were simple, 6.0% were compound and only around 2.0% were complex.

3.22.5. *a glance*

Two respondents failed to define this simple word. The responses given were among the shortest in the database, with mean length of just 21 characters or 4 words: once again slightly shorter than in the case of the written responses. The 453 word microcorpus contains only 16 word types, which attests to the simplicity of the defining vocabulary used. The most common content words were: *look, something, quick*, and *quickly*. Unlike in the written elicitation, here the classic definition was not dominant. Instead, Different POS definitions were the most frequent at 46% of all definition tokens for this item and 35% globally. This fact indicates that in this medium of elicitation this strategy

becomes even more dominant and the noun is readily defined as if it were a verb. Also, the Different POS type appeared unaccompanied. The second strategy was the classic definition, with 36% of all definition tokens provided (with 7.3% globally). Also, classic definitions appeared as a sole defining strategy within each response. 7.1% of definition tokens were expressed by means of (bare) hyperonyms and, notably, there were 7 occurrences of SC definitions (6.3% of all the tokens for this item and as much as 19% across the whole database). Some use of Extralinguistic definition/ostension was observed: 4 responses contained this strategy. All other formats were practically nonexistent, including FSDs or synonyms, which appeared in the written data. It appears that the simpler the concept or referent behind a word, the fewer strategies are used to define it, as in this case simple responses made up 94% of all definition tokens whereas compound ones just under 6.0%, and there were no complex or complex-compound structures.

3.22.6. *an aquarium*

All but one subject defined this item. The responses given were relatively short: 25 characters or 5 words on average and shorter than in the written task (36 characters or 7 words), indicating that they were simpler than in written responses. In fact, the spoken microcorpus for *an aquarium* lists only 38 distinct word types in a 565-word corpus (written: 58). The most common words were *fish, place, tank*, with few sophisticated words. The classic definition was the most dominant defining style for *an aquarium*. It is in this noun that it was the most dominant, accounting for 85% of all definition tokens or 17% in the entire database. With just two exceptions, classic definitions appeared on their own, so its clear dominance in this noun reflected the results of the written task. The only other noteworthy defining strategy employed was synonyms (8.3% of all definition tokens or 6.7% globally). However, the synonyms used were rather misleading and uninformative associations (“fish”, “sealife”). In the written task the second place was occupied by the Descriptive (Story-telling) format, which for the spoken data was the third most common strategy, yet rare (4.6%). The remaining strategies were extremely rare or nonexistent. 97% of all the responses were simple. Together with compound responses, single-type responses constituted 98%, with only 2.0% of hybrids.

3.22.7. *a nation*

Only one informant of 108 failed to provide a definition for this item. On average, folk definitions of this noun were short: 25 characters or just 5 words in length. The 523-word microcorpus of responses lists only 33 different word types and, unlike in the written corpus, the responses provided used rather simple defining vocabulary and had low defining efficiency. Most frequently used content words were *country, people,* and *group*. *A nation* was dominated by two defining strategies: the classic definition, with 52% of the definition tokens for this noun item and 11% of all the tokens across the database. Classic definitions were contained mostly in simple responses that used such hyperonyms as "group", "people" or "collection". The second most common strategy closely following the classic definition was the synonym definition. This type constituted 40% of the definition tokens for this item and 34% of their occurrences in the spoken database. The vast majority of synonyms appeared on their own, and usually used the word *a country*. The only other defining formats that appeared were hyperonym definitions, Extralinguistic information/Ostenstion and Descriptive (Story-telling) definition, but they were very rare. The responses given were largely simple (89%), and, together with compound responses (6.0%) the responses using only one strategy constituted nearly 95% of all the responses given. The remaining responses were complex.

3.22.8. *a hammer*

This item proved fairly easy to define: 107 of 108 informants provided definitions for it. The collected folk definitions of this noun were of moderate length, at 26 characters or 6 words. They formed a corpus of 343 words and just 19 distinct tokens, so the responses were fairly simple with dominant content words such as *tool, something, nail(s),* and practically no high-difficulty words. In this regard, the treatment of this noun was even simpler than in the written task. The responses were dominated by two defining formats. The classic definition accounted for 69% of all the definition tokens for this noun (13% throughout the spoken database). Its frequency was lower than in the case of the written task. The classic definition occurred practically always on its own, and used hyperonyms such as: "tool", "object", "something" or "what". The second strategy opted for

was the hyperonym definition, which acted as a simplified version of the classic definition, appeared on its own and used the hyperonym "tool" only. It has to be noted that it practically did not appear in the written data, so in the spoken data it appeared somehow at the cost of the classic definition. This strategy appeared in 19% of all cases in this noun and as much as 42% of all its cases in the spoken database, which was the highest percentage of all items. Although the classic definitions could be considered successful and interpretable defining attempts, hyperonyms may be too general to define this word, even though a hammer is the most basic tool, frequently evoked and probably symbolic of a prototypical tool. As to other defining formats – the Descriptive (Story-telling) strategy was the remaining significant strategy used (8.3% for this noun and 12% globally) and the descriptions provided resembled the differentiae specificae of the classic definitions or were simple associations. Interestingly, three cases of Extralinguistic information/ostension were noted (2.8%), which confirmed that in folk defining even simple, concrete nouns signifying physical objects can be defined with the use of gestures, pointing or onomatopoeia. The descriptions of the meaning of *a hammer* mostly focused on the tool's function (93%) and much less on form (2.0%) or both (4.0%). Notably, *a hammer* is the noun for which the highest number of simple responses occurred: all but one (99%), with only one complex response. This means that the subjects treated this noun as a simple one, signifying an easy and well known object that did not require special focus or defining accuracy.

3.22.9. *a television*

The last noun defined did not prove difficult as all the informants provided responses. The responses could be classified as short/medium-length with mean length of 30 characters or just 5 words. It must be said that their defining effectiveness was difficult to assess, as although they were fairly easy to understand, they tended to be too general. In a corpus of 602 words only 37 distinct word types were identified, mostly simple content words such as *watch, something, programmes*, much less frequently *pictures, screen, images*, and the hyperonym *device* was not frequently used which might indicate the informants interpreted this noun differently and defined the medium/company/institution sense. The descriptions of the referent were mostly based on its

function (68%), followed by function and form (23%), and form alone (9.0%). By far the most dominant defining strategy was the classic definition (77% of the definition tokens used and 16% across the database), and it mostly appeared unaccompanied. The classic definitions used simple genuses such as "a box", "something", "a screen", and less frequently "a device" or "an appliance". All other formats occurred rarely: the Descriptive (story-telling) format constituted 7% of all the tokens (11% across the database), and in about 50% cases it was a supporting strategy. Some other formats included hyperonyms (5.3%), which were words such as "screen" or "box"; Different POS, which defined *a television* as "to watch (X)" (4.4%); or Extralinguistic information/ostension (4.4%), where subjects drew a box in the air or advised gestures would be the best defining strategy. Other formats occurred extremely rarely or not at all. Most responses were of the simple type (95%) with some complex (4%) and complex-compound structures (1%).

3.23. Difficult cases (spoken data)

Just as in the case of the written task, this section aims to present and discuss some of the more problematic cases of definitions found in the spoken database. Some failed attempts at defining *a storm* include

> *Erm, just noise* (SDST Data: G37)
>
> *rainy day* (SDST Data: G62)
>
> *dense rain* (SDST Data: G109)
>
> *a cloud or...I don't even know how to define a storm* (SDST Data: G6)

Although these responses have been classified because their syntactic form allows them to be assigned to one of the formats, their defining potential is very questionable. In the case of *education*, some interesting responses include:

Education...erm. I'd probably show them my empty wallet. I'd probably show them a book. (SDST Data: AD35)

I'd point to the uni (SDST Data: AD92)

get skilful (SDST Data: AD76)

They contain personal reflections on education, reflections on how to define the word or use non-typical defining strategies. In all cases, their interpretation potential is doubtful. A similar situation is found in a definition of *envy*, in which a subject provides their personal reflection on formulating a definition:

Envy..erm. I'd probably, yeah, again just like dramatically try and, you know, make a situation with some object and take something, I don't know like... (SDST Data: BX35)

whereas in this case

flaky people (SDST Data: BX46)

the response does not seem to be a proper definition at all. The following response is a single occurrence of a definition by repetition in the whole spoken (SDST) database, but for this response only, the category was not created.

green with envy (SDST Data: BX54)

Some unorthodox definitions of *a glance* included

hey! (SDST Data: DN46)

just point (SDST Data: DN37)

which can be considered failed defining attempts, although they, too, were classified, as they were accompanied by physical gestures or were instructions on how to define the item.

3.24. Length analysis (spoken data)

In the spoken task the length of the responses might have been influenced by stricter time limits and closer supervision. Nonetheless, the responses provided were not much different in terms of length compared with the written data. Spoken responses were only slightly shorter and on average it took between 4 and 6 words for any informant to define any noun. The mean length of a response was 5 words (written: 6) or 26 characters (written: 35 characters). Mean lengths expressed in words for each item are presented in Figure 10.

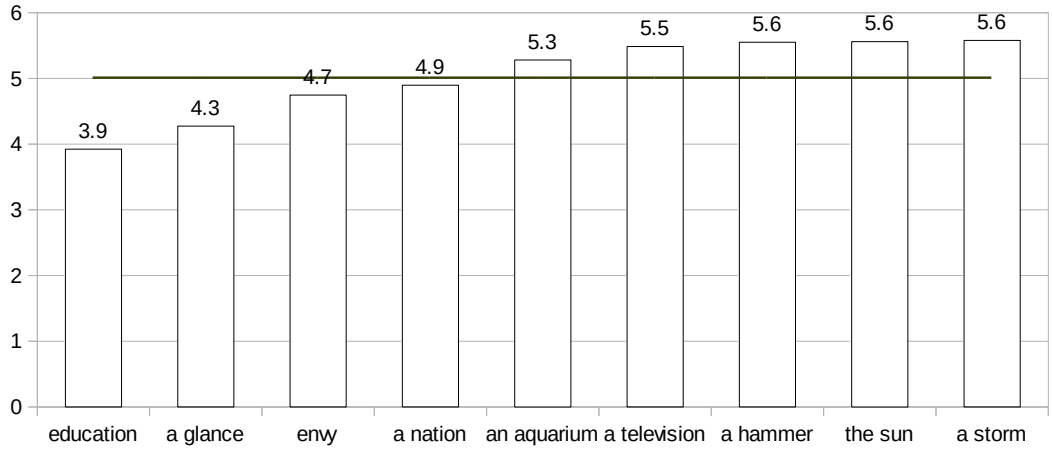


Figure 10 Mean definition length in words in ascending order (spoken)

The shortest responses were provided for definitions of *education* (3.9 words), *a glance* (4.3 words), and *envy* (4.7 words). Slightly longer responses were given to define *an aquarium*, *a television*, *the sun*, *a storm*, and *a hammer*. Word length comparison between the spoken (SDST) and written (SDWT) elicitation is given in Figure 11.

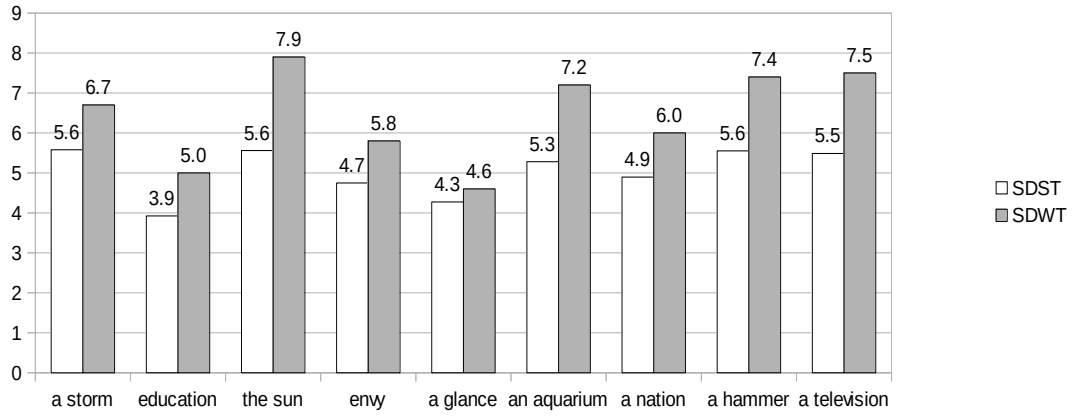


Figure 11 Definition length in words (spoken vs. written)

It is clear from the graph in Figure 11 that in all cases the mean lengths of responses given in the spoken task are shorter than in the written task, although these differences are sometimes practically insignificant (*a glance*). Lengths expressed in the number of characters are given in Figure 12 (mean length: 26 characters).

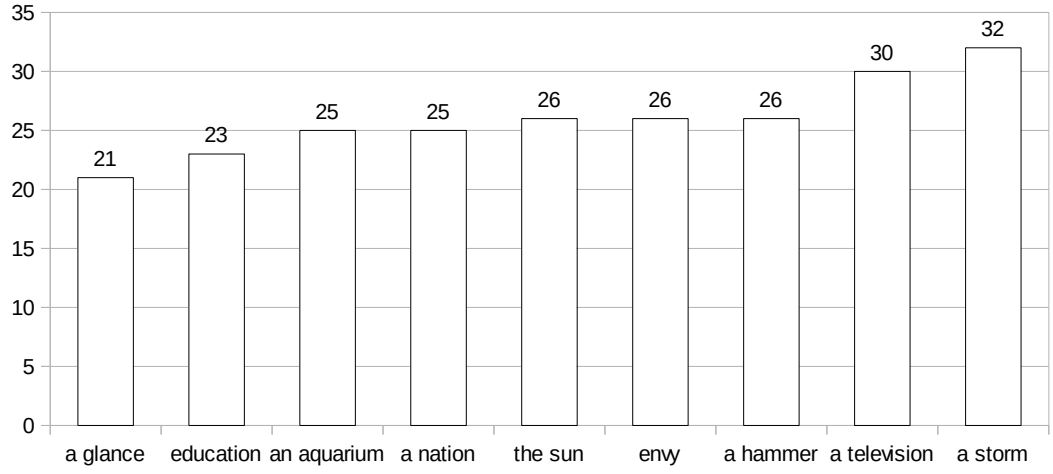


Figure 12 Mean definition length in characters in ascending order (spoken)

Table 8 shows the range of definition lengths in characters and words for all target nouns.

Length	a storm	education	the sun	envy	a glance	an aquarium	a nation	a hammer	a television
Characters	3-110	5-87	3-65	3-153	4-63	4-89	6-74	4-83	4-121
Words	1-21	1-15	1-14	1-25	1-14	1-16	1-13	1-18	1-22

Table 8 Minimum and maximum definition lengths (spoken)

3.25. Complexity analysis (spoken data)

Similarly to the written data, the vast majority of responses contained only one defining format. The percentage of simple responses was even higher with 91% simple answers (written: 85%).

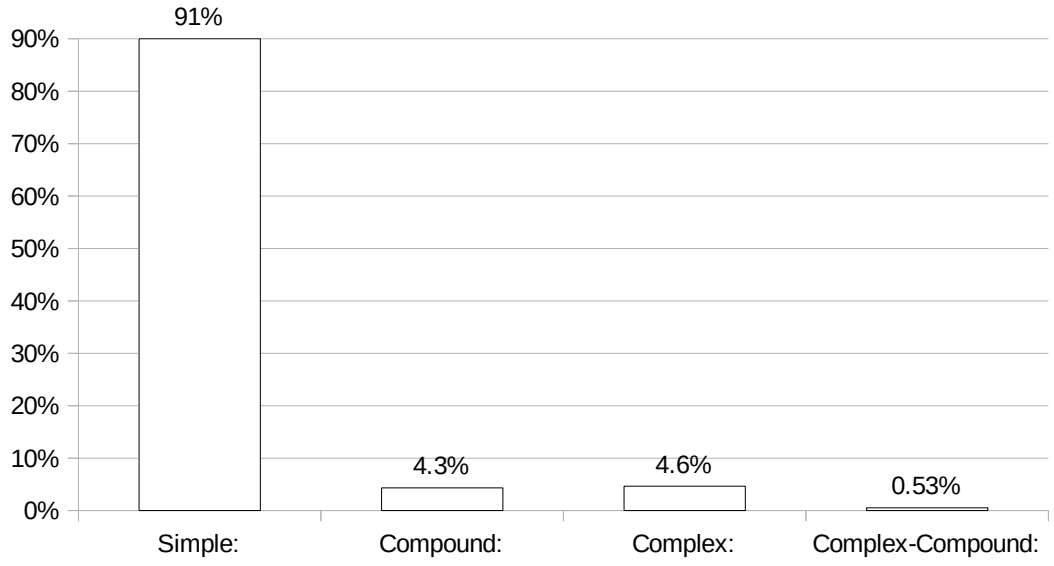


Figure 13 Complexity analysis (spoken)

The difference might have been influenced by stricter time constraints and closer supervision. The remaining responses were almost equally distributed between the compound and complex types: 4.3% and 4.6% respectively. This means that in nearly 95% cases the responses used only one defining format and the number of hybrid responses was half of that in the written database (10%). Complex-compound responses were extremely rare: 5 occurrences in the whole spoken database. The maximum number of defini-

tion tokens in a response was 3. The maximum number of definition types was also 3. The complexity for individual items is presented in Figure 14.

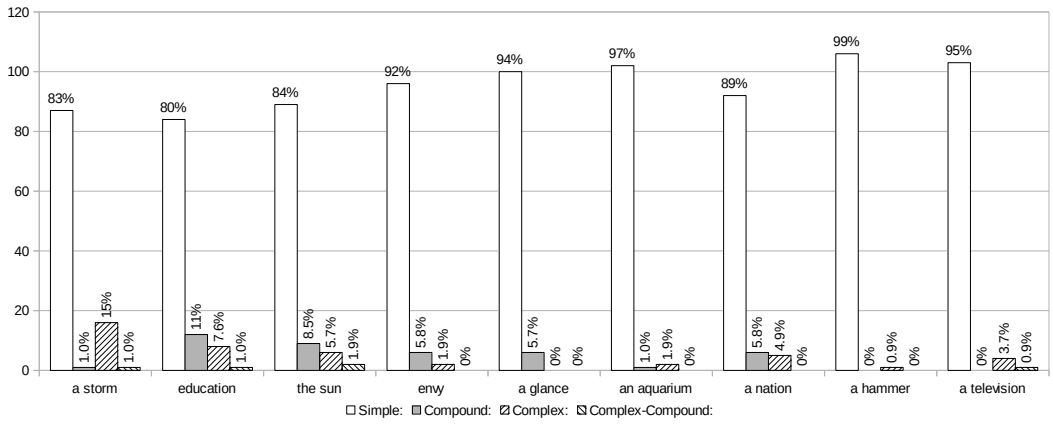


Figure 14 Complexity across items (spoken)

Strikingly, more than 99% of the simple responses were provided as definitions of *a hammer*, which had the highest simple-response percentage. Closely following were *an aquarium* (97%), *a television* (95%). A fairly high percentage of compound responses was observed in *education* (11%) which means that jointly with simple responses, nearly 91% of the responses used one format only. Some compound responses were also identified in: *the sun*, *envy*, *a glance* and *a nation.* As far as complex responses are concerned, they occurred substantially in *a storm* (15%), *education* (7.6%), *the sun* (5.7%), *a nation* (4.9%). This might indicate that these nouns were considered more difficult, so more defining formats were used to provide extra clarification.

Lastly, a comparative look between the spoken (SDST) and written (SDWT) data is given.

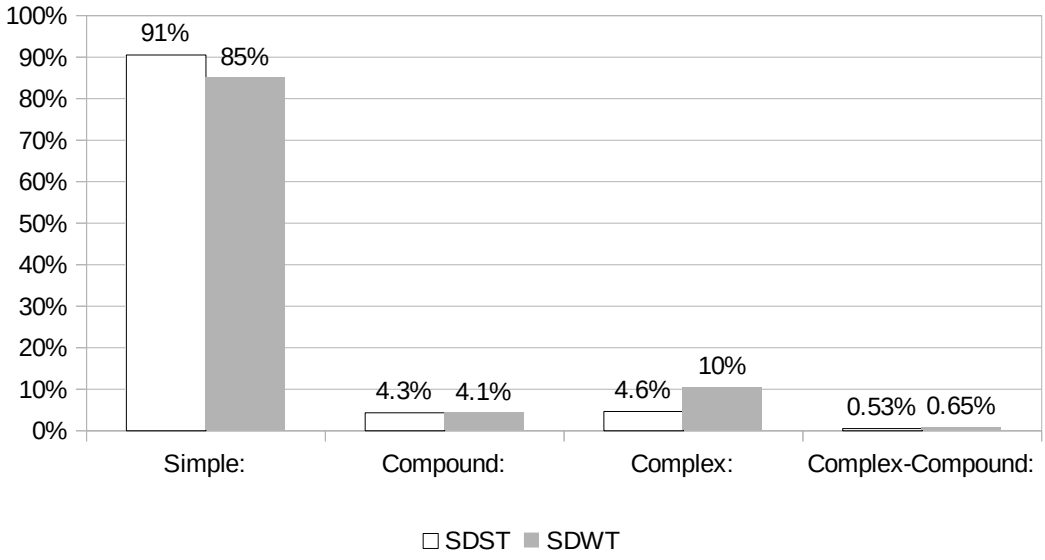


Figure 15 Complexity analysis (spoken vs. written)

3.26. Observations and conclusions from the spoken data

The spoken task brought very similar results to the written one and the possible differences identified are not practically significant. The conclusions that emerge after studying the results of the spoken task are:

a) The spoken definitions tended to be shorter than the written ones, usually 4-6 words were sufficient, although individual responses were between 1 and 25 words long.

b) The spoken responses were nearly always poorer in terms of their defining vocabulary, as indicated by the number of distinct word types in the microcorpora.

c) The classic definition is the most dominant and universal defining format in the spoken elicitation, constituting more than 50% of all definition tokens. At the same time, it is arguable whether this format can be regarded as a folk defining strategy.

d) Unfortunately, the remaining notable strategies can be considered obscure from the point of view of a lexicographer and it remains to be veri-

fied whether they carry any defining effectiveness potential; the use of Different POS strategy can hinder POS identification, the use of Different POS, synonyms or hyperonyms on their own is a reductive approach carrying too little information and leading to overgeneralization. Similarly, the use of Descriptive (Story-telling) can be risky, too, as it carries the danger of quoting accidental, unimportant characteristics of a referent. Although synonyms in dictionaries can work as a supportive strategy, the synonyms used in the spoken task were sometime hardly interpretable. This, in turn, again raises the issue of defining effectiveness and monitoring it in studies of this type. Some of the uninterpretable responses could probably have been avoided if the methodology of the study had been different, but that might have come at the cost of limiting spontaneity.

e) Many responses in the spoken (and written) task could not be considered definitions in the lexicographic sense because, especially in the case of synonyms or hyperonyms, they were free associations produced by the subjects, and were probably of low defining effectiveness, though this would have to be verified in a reception task.
f) Although potentially possible, not much ostension or demonstration was employed in the spoken task. The same applied to metalanguage.
g) The subjects exhibited an even higher tendency than in written responses to use one defining strategy at a time only.
h) It was expected that additional defining formats would emerge from the responses which would not fall within any of the ten predefined categories. This was not really the case, apart from the fact that for certain difficult cases one new defining format could be considered: defining by association. It would be a typically folk defining strategy, however, it might be difficult to apply in dictionaries as it is doubtful whether association can be called a definition at all. Also, association is a very broad notion.
i) SC definitions cannot be called a folk defining strategy on the basis of the finding of this study due to its very low frequency in nouns where it might have been expected to occur (*envy*, *a storm*). It might, however, still be tested whether its frequency would rise if more opportunities for

its formulation were given: more nouns signifying emotions, events or other parts of speech.

j) FSDs exhibited near-zero occurrence, which indicates that they, too, cannot be considered folk defining strategy. Indeed, they are not a valid strategy in this study at all. Perhaps they should be sought in other situations or contexts: their incidence might increase in mother/father-to-child utterances (caretakerese), or teacher-to-pupil definitions. However, their use in these context would mean they are more limited and, especially in a school context, it is doubtful whether they can be considered naive definitions.

3.27. Summary of the spontaneous defining written and spoken tasks

If results for both modes of elicitation are summarized and presented jointly, the following figures emerge. The general distribution of definition types is presented in the graph in Figure 16.

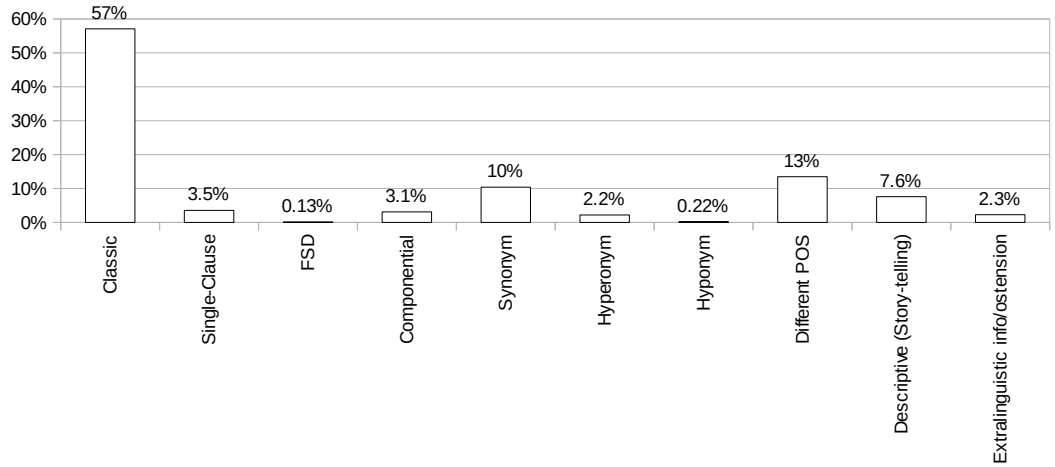


Figure 16 Distribution of definition formats (spoken and written jointly)

The joint results broken down by item are given below, analyzed in terms of frequency against other strategies within one target item (Table 9) as well as in terms of the overall occurrence in the written and spoken databases (Table 10), followed by a joint complexity analysis.

	Classic	Single-Clause	FSD	Componential	Synonym	Hyperonym	Hyponym	Different POS	Descr. (Story-tell.)	Extraling info/ost.	
a storm	56%	8.1%	0%	23%	5.9%	1.5%	0%	0%	3.0%	1.8%	100%
education	42%	5.2%	0.74%	1.1%	27%	0.37%	0%	21%	2.6%	1.1%	100%
the sun	65%	0.35%	0.35%	0.35%	4.6%	2.5%	0%	0.35%	21%	5.0%	100%
envy	14%	12%	0%	0%	13%	0.40%	0%	53%	7.1%	0.79%	100%
a glance	44%	5.1%	0%	0%	1.3%	3.4%	0%	44%	0%	1.7%	100%
an aquarium	87%	0%	0%	1.3%	3.8%	0.42%	0%	0%	6.7%	0.42%	100%
a nation	53%	0%	0%	0.38%	34%	1.9%	3.4%	0%	3.4%	3.1%	100%
a hammer	74%	0%	0%	0%	0.43%	9.4%	0%	0.43%	13%	3.4%	100%
a television	79%	0.41%	0%	0%	0.41%	2.4%	0%	4.9%	10%	2.9%	100%

Table 9 Distribution of definition types within each item (spoken and written jointly)

	Classic	Single-Clause	FSD	Componential	Synonym	Hyperonym	Hyponym	Different POS	Descriptive (Story-telling)	Extralinguistic info/ostension
a storm	12%	27%	0%	89%	6.8%	7.3%	0%	0%	5%	9.6%
education	8.7%	17%	67%	4.2%	30%	1.8%	0%	18%	4%	5.8%
the sun	14%	1.2%	33%	1.4%	5.5%	13%	0%	0%	35%	27%
envy	2.7%	38%	0%	0%	14%	1.8%	0%	43%	10%	3.8%
a glance	8.1%	15%	0%	0%	1.3%	15%	0%	34%	0%	7.7%
an aquarium	16%	0%	0%	4.2%	3.8%	1.8%	0%	0%	9.2%	1.9%
a nation	11%	0%	0%	1.4%	38%	9.1%	100%	0%	5.2%	15%
a hammer	13%	0%	0%	0%	0.42%	40%	0%	0.32%	17%	15%
a television	15%	1.2%	0%	0%	0.42%	11%	0%	3.9%	14%	13%
	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

Table 10 Distribution of items within each definition type (spoken and written jointly)

The ranking of definition types (Table 6) was not affected. The classic definition is dominant, followed by Different POS, synonyms and Descriptive (Story-telling) definitions. Also, in terms of complexity, the majority of the responses remain simple, followed by (far less frequent) complex and compound. Out of more than 2000 different

responses, only 154 were complex, 85 were compound, and complex-compound hybrids were extremely rare, with only 12 occurrences. Mean length of the responses jointly was 31 characters or 5.8 words. A detailed look at lengths in the written and spoken tasks jointly is given in Figure 17 and in Figure 18 in ascending order.

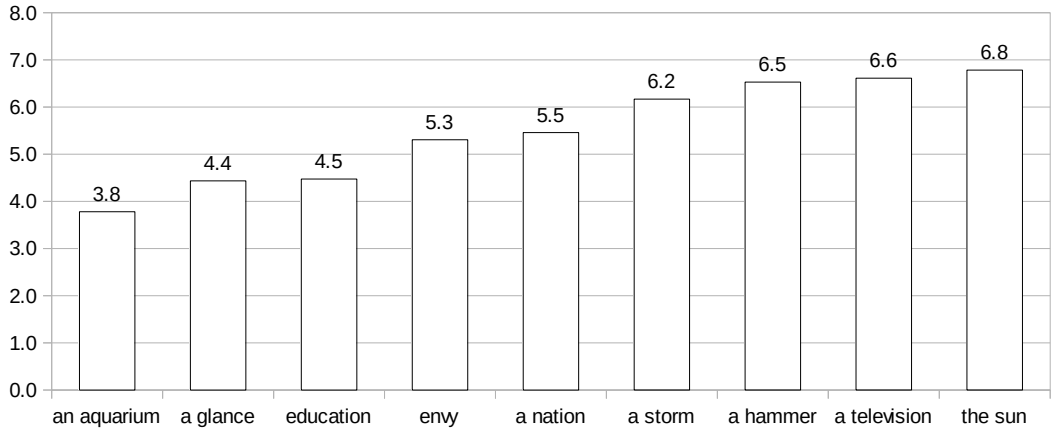


Figure 17 Mean definition length in words in ascending order (spoken and written jointly)

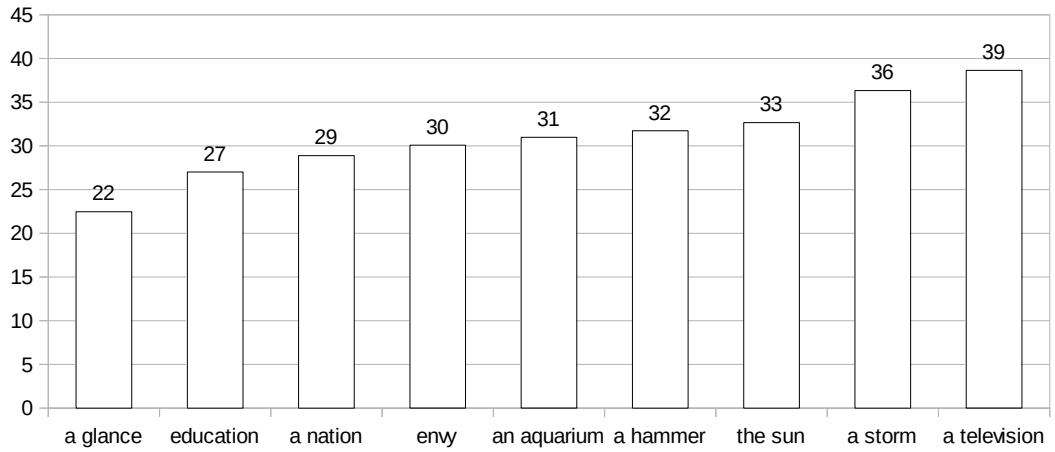


Figure 18 Mean length in characters in ascending order (spoken and written jointly)

Overall, judging by the mean number of words used in the folk defining experiment, the shortest responses were provided for *an aquarium* (just under 4 words), *a glance* and *education*, whereas the longest ones for *a hammer*, *a television* and *the sun*. Supposedly, fairly simple words can evoke long definitions and this may be caused by the fact that the subjects had something to say about these commonly known words – the definitions were easier to formulate.

In terms of complexity across items, *a hammer* received the highest number of simple responses, and *a storm* – the highest percentage of complex ones. A detailed summary is given in Table 11.

	Simple Definitions			Complex Definitions		
	SDWT	SDST	SDWT+SDST	SDWT	SDST	SDWT+SDST
1	a glance	a hammer	a hammer	a storm	a storm	a storm
2	a hammer	an aquarium	a glance	the sun	education	the sun
3	an aquarium	a television	an aquarium	envy	the sun	education
4	a television	a glance	a television	a nation/education	a nation	a nation, envy

Table 11 Highest percentages of simple/complex responses in target nouns

If the figures are analyzed jointly, the spoken task (SDST) influenced the overall complexity results slightly as when the results are analyzed jointly (SDWT+SDST), the highest percentage of simple responses is just like in the spoken (SDST) task, whereas in complex responses, *a storm* confirmed its tendency for high complex responses.

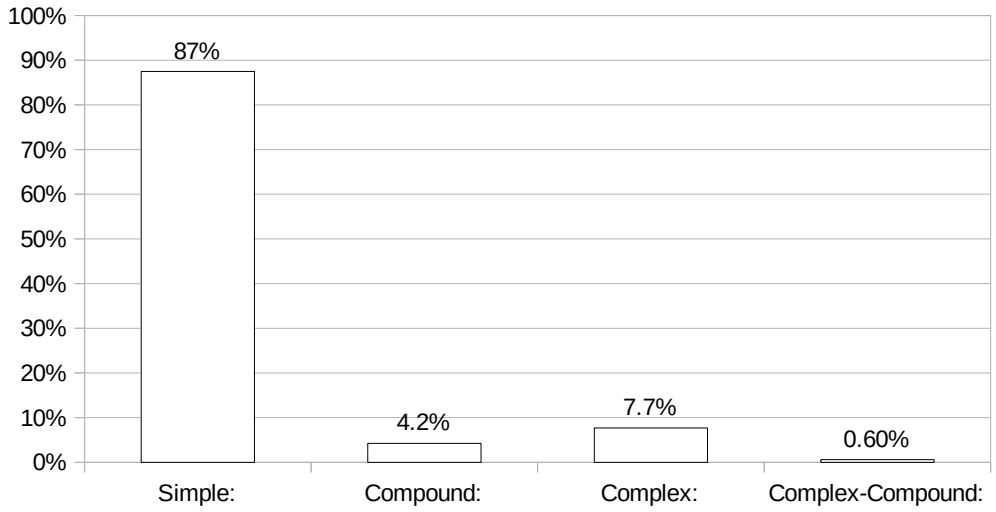


Figure 19 Complexity analysis (spoken and written jointly)

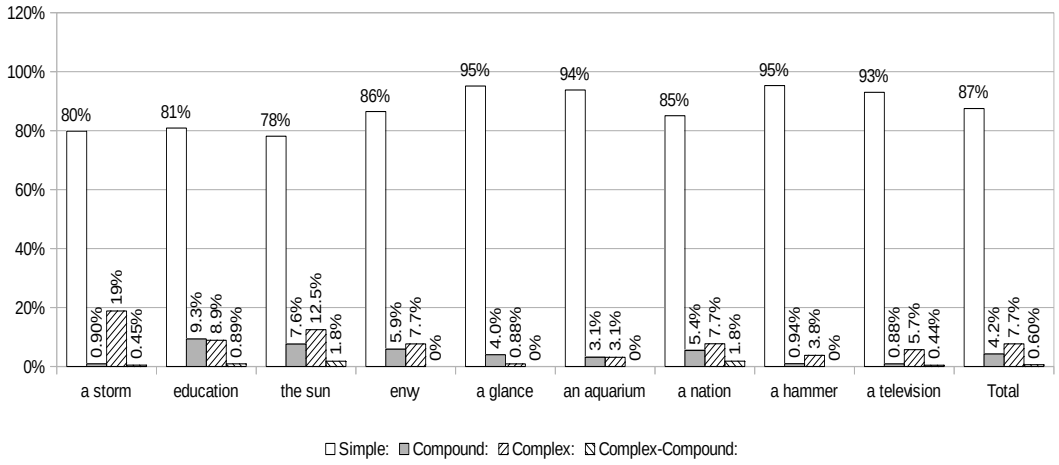


Figure 20 Complexity across items (spoken and written jointly)

3.28. Analysis of dictionary definitions

The third part of the study involved an analysis of definitions of the target nouns used in the written and spoken tasks found in monolingual learners' dictionaries and comparison of the findings with the results of the folk defining study. As signalled in the background to the study (section 3.1.), the so-called Big Five – the most popular and world-leading dictionaries for advanced learners – were scrutinized. The analysis was performed exactly along the same lines as in the case of the written task, and the three aspects of definitions were considered. For the analysis of dictionary definitions, a similar database was used in which the definitions were entered. The database is also available on the accompanying CD-ROM. For the sake of convenience, the dictionary titles have been repeated in Table 12:

Dictionary	Code
Oxford Advanced Learner's Dictionary	OALD7
Macmillan Dictionary for Advanced Learners	MEDAL2
Cambridge Advanced Learner's Dictionary	CALD3
Collins Cobuild Advanced Dictionary	COBUILD6
Longman Dictionary of Contemporary English	LDOCE5

Table 12 Analyzed MLDs

The entries for each target noun were checked and the definitions of all the senses and subsenses under each entry found were entered into the database. Run-on entries

that contained definitions of parts of speech other than nouns were disregarded. The dictionaries listed up to five senses and subsenses under each entry and these can be found in the file along with the dictionary code and an analysis performed in the same way as in the written (or spoken) task. 9 entries were analyzed in 5 dictionaries, which yielded 103 responses[41].

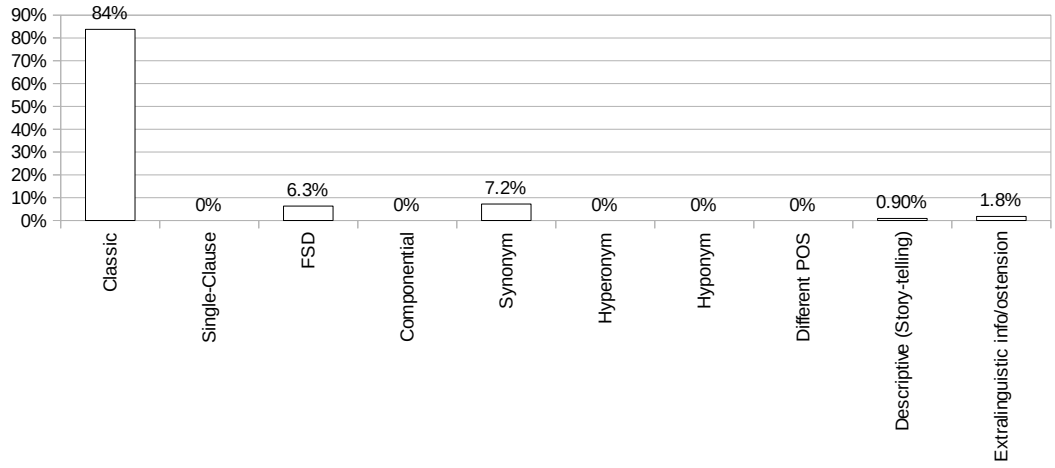


Figure 21 Distribution of dictionary definition formats

The dominant defining format in the dictionaries analyzed was, predictably, the classic definition, accounting for 84% of all definition tokens found, which means this format was more dominant than in the spontaneous defining task (57%; written: 60%, spoken: 53%). Classic definitions occurred unaccompanied in most cases.

The next most commonly, though far less frequently used dictionary defining strategy was the synonym definition (7.2% of all definition tokens). In the folk defining task, the percentage of synonyms was higher than in the dictionaries (10%, or separately: written: 8.3%, spoken: 13%) Understandably, not for each sense or subsense of the noun items tested could a synonym be found. In dictionaries, the synonyms were found right next to a definition and were given a special label. This kind of metalanguage practically did not occur in the folk defining language in the study and if it did, it was usually marked as Extralinguistic information in the database. For several senses, synonyms that were provided in the folk defining study could serve as valid synonyms in dictionaries, and these were: *envy* (synonym: "jealousy", a synonym actually found in the dictionary definitions), *a glance* (synonym: "a peek", not found in the dictionary

[41] By responses dictionary definitions found under one single sense or subsense are meant. These, in turn, could contain one or more definition tokens.

definitions), *the sun* (in the sense of "sunshine", actually found in the dictionary definitions), *a storm* (synonyms: "thunderstorm" – not found in the dictionary definitions, or in the sense of emotions - "roar" – found). Furthermore, the incidence of synonyms could possibly be higher in dictionaries under entries for nouns which have more easily identifiable synonyms if a more extensive range of nouns had been analyzed.

In 103 responses, 7 FSD definition tokens were found (6.2%), but their application was limited to COBUILD6 only, although it was possible even for COBUILD6 to apply the strategy more frequently[42] and use its full potential by presenting more contextual information or collocations. This result, although higher than in the spontaneous defining task, can still be considered low.

The dictionaries did use Extralinguistic information/Ostension within their definitions, although naturally dictionaries have a wider scope for presentation of information in their entries and this type of information would normally be found in usage labels. The information included was a comment on the humorous use of a word and the application of the strategy was very rare (1.8%), although again such information could have been included in FSDs, for example.

A single case (0.90%) of the Descriptive (Story-telling) category was identified, which extended a classic definition within the same sense by providing extra information in the form of a neat description and characterization. In the folk defining task, the strategy was more frequently applied (over 7% of definition tokens).

The remaining five categories were not utilized at all in any of the dictionaries, or were given not as bare definitions but accompanied other definition formats. The lack of SCs may seem surprising at first, but it must be remembered that only a small sample of nouns was tested, and not too many responses were provided in comparison with the folk defining task. The lack of Componential definition is understandable as this was a self-created category in the study. Some traces of it could be identified, however, within classic definitions that followed such words as "including" or "involving" and then listing some characteristic components. Hyperonyms were not identified and this fact can be explained by their low information potential and the overgeneralizations they ensue. Hyperonyms were only to be identified as part of classic definitions. As dictionaries have more various means for information inclusion, it can be assumed that hyponyms

[42] Fake FSDs in which the definiendum is separated from the definiens by the copular verb "to be" were disregarded.

could normally be found in usage examples, rather than definitions. Finally, the Different POS strategy, being a rather exotic choice[43] for a dictionary, did not occur.

As far as the length of the responses is concerned, dictionaries tend to provide a lot longer definitions. The mean length of a definition was nearly 63.5 characters (written: 35, spoken: 26; jointly: 31), or 15 words (written: 6.0, spoken: 5.0, jointly: 5.8). This makes dictionary definitions 2-3 times longer than the folk responses elicited in this study.

This is certainly due to the fact that dictionaries must strive to reach a higher level of accuracy and use simple defining vocabulary in a controlled way, which expands the definitions noticeably. The subjects in the folk defining study were not constrained by artificially imposed vocabulary expectations. The graphs below present item-per-item analysis of length.

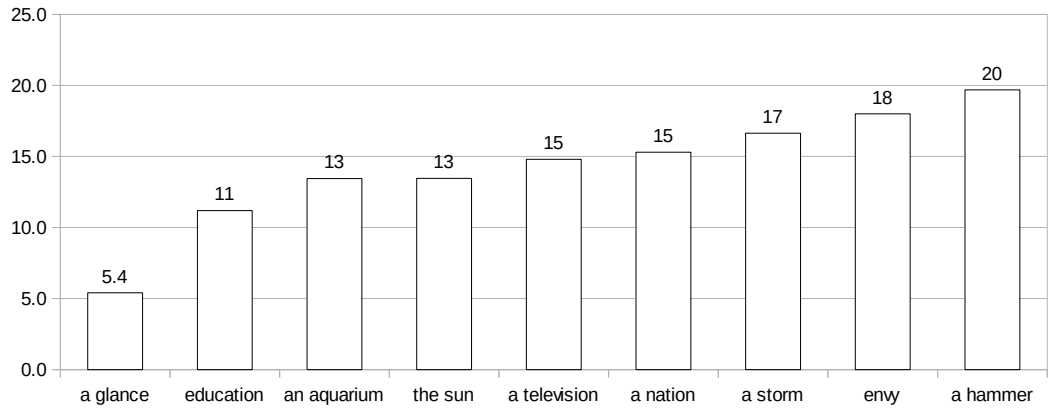


Figure 22 Mean length (in words) of dictionary definitions, in ascending order

[43] Technically, the SC definition bears some resemblance to the Different POS type when it defines nouns, as it also employs a different part of speech.

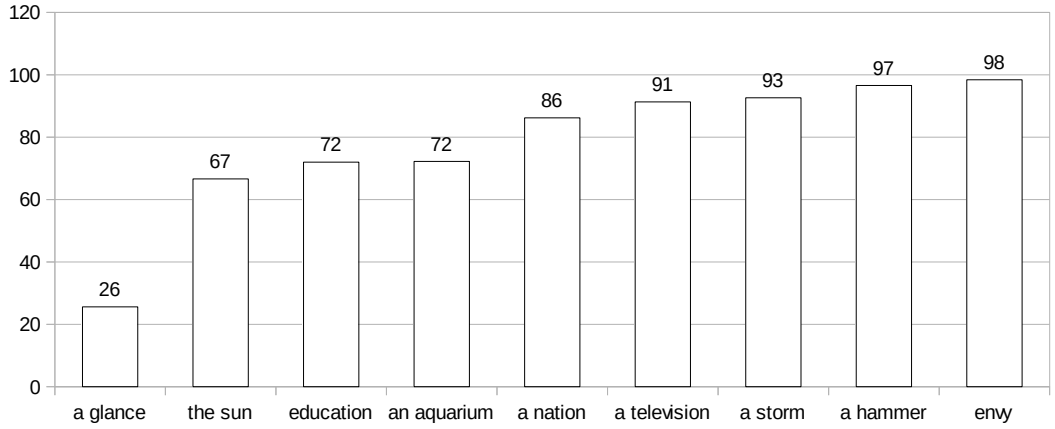


Figure 23 Mean length (in characters) of dictionary definitions, in ascending order

The item with the highest mean length in words was *a hammer*, for which the responses were nearly 20 words long (6 words in the spontaneous defining task). This high value might seem surprising in the case of a noun with a simple meaning. However, the dictionaries listed as many as 5 different senses of *a hammer*, including technical ones referring to sports equipment, part of the ear, part in the piano, and part of a gun, next to the most common tool sense. Although the defining vocabulary was restricted and easy to understand, some sophisticated words like technical terms were to be found, e.g. "malleus". Using simple words to explain such more difficult terms resulted in longer definitions: between 5 and 46 words. Similarly, for *envy* rather long definitions were provided. These ranged from 9 to 25 words, with a mean length of 18 words. However, just one sense was listed in all five dictionaries and used quite simple vocabulary. Definitions of *a storm* and *a nation* were shorter, but they could still be considered long, using, on average, 17 and 15 words, respectively. For *a storm* the definitions ranged from 10 to 27 words, and usually listed one or two additional senses next to the basic weather sense. The additional senses referred to emotions, uproar or noise. The remaining dictionary definitions were shorter. They included *a television*, *the sun*, *an aquarium* or *education*. The only exception was *a glance*, which had very short definitions compared to other nouns (between 3 and 10, mean: 5.4 words). They were also the simplest definitions given in terms of the vocabulary used.

The dictionary entries analyzed were less varied in terms of complexity. 87% of all the responses were simple. Only three responses were compound, one response could be classified as complex-compound (in *envy*) and in two nouns (*a glance*, *an*

aquarium) only simple responses were identified. Complex constructions made up a bit over 9%. These facts indicate that dictionaries tend to have long definitions, but they remain fairly simple structures logically. A more detailed look is provided in Figure 24 and Figure 25.

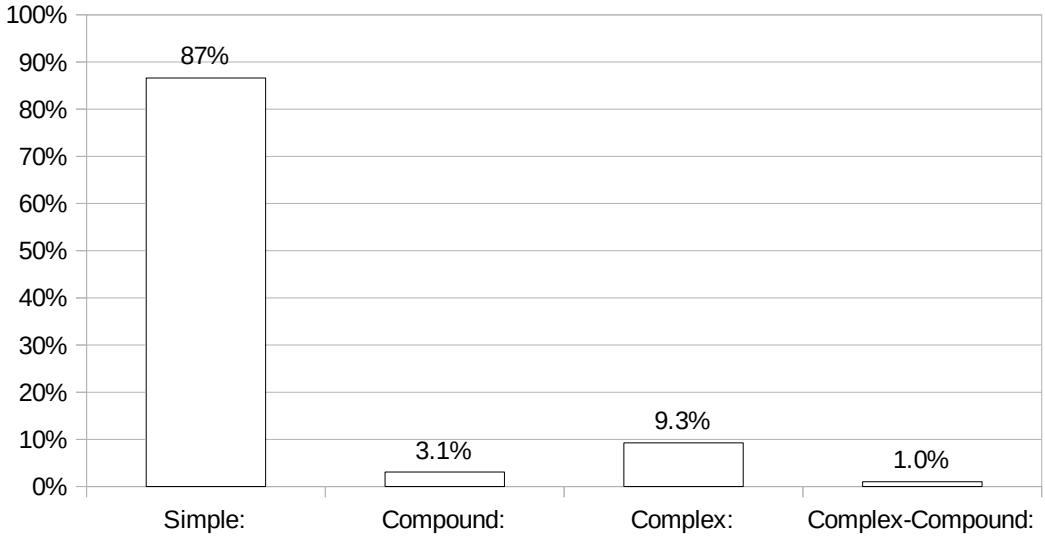


Figure 24 Dictionary complexity analysis

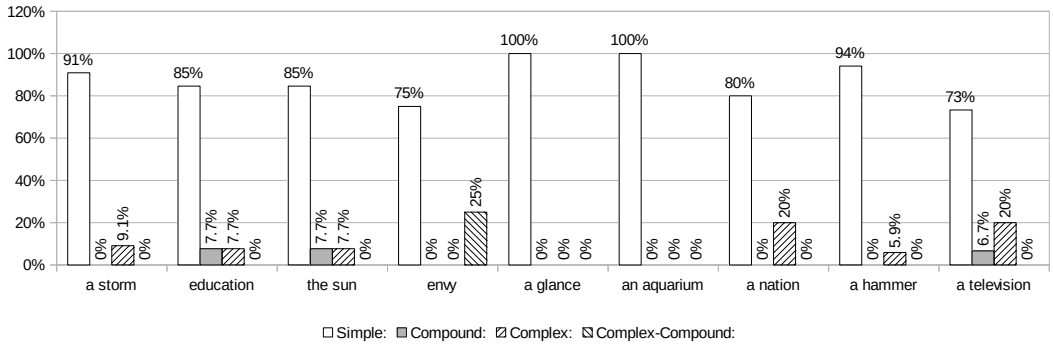


Figure 25 Dictionary complexity across items

Finally, a comparative look between how the dictionaries and subjects of the folk defining study define is given below. Types of definitions, lengths and complexity levels are compared.

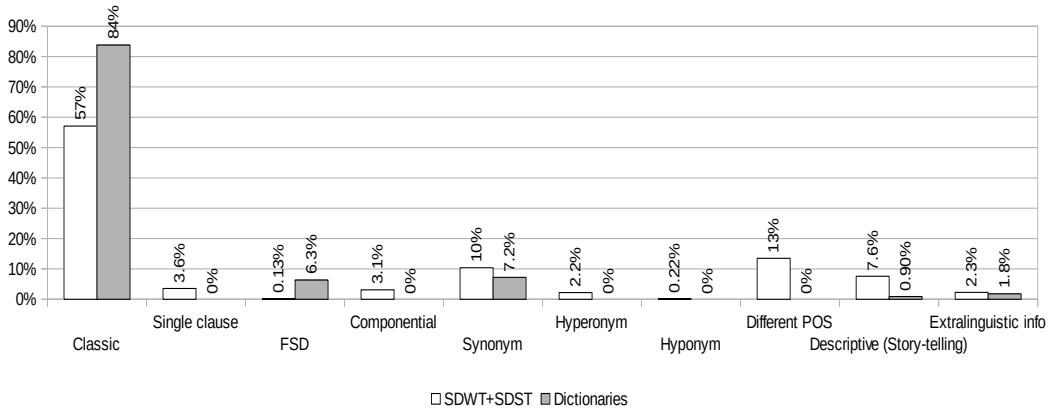


Figure 26 Definition types from spontaneous defining and in dictionaries compared

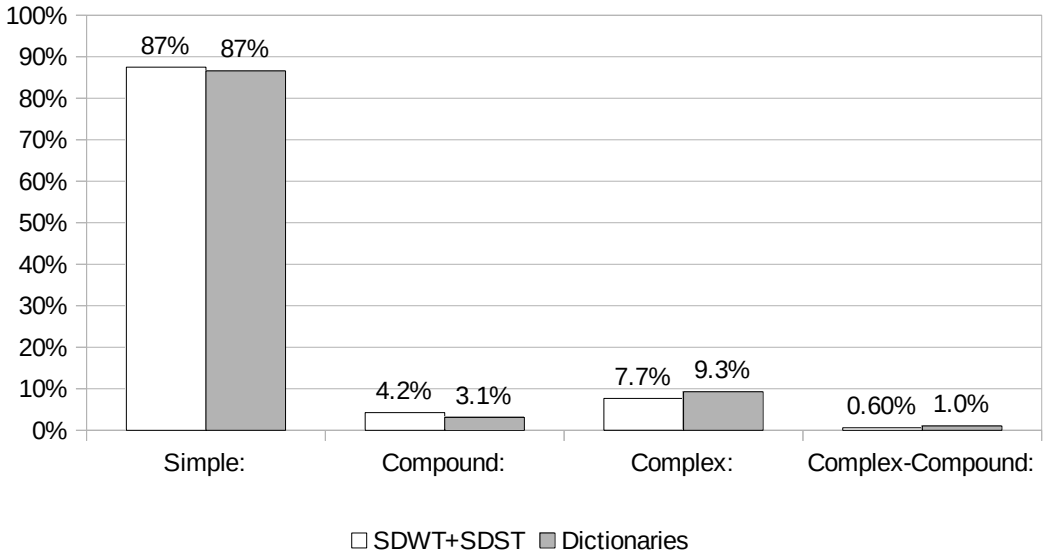


Figure 27 Definition complexity in spontaneous defining and in dictionaries compared

Discussion and conclusions

The study was mainly an investigation of folk defining patterns and dominant formats in folk defining by English native speakers. The investigation has brought simple, but firm conclusions which will be summarized here. First of all, it appears that for educated adults the classic, Aristotelian definition is the most readily applied defining format which is often a default, first-choice format in general contexts, which may be further enriched by another supportive strategy. Its massive use must have been influenced by years of formal education received by the subjects, including use of dictionaries, which exhibit a tendency for an even more widespread application of this format. The results of this study are close to those obtained in the study that could be considered a basis for this one – Fabiszewski-Jaworski and Kryspowicka (2008), in which the dominance of the classic definition was also detected with reference to speakers of Polish. In the written part of the 2008 study, classic definition responses constituted 84% of all the responses, and in the oral mode – 65%, and jointly – 74%, which is close to the results of the current study; some divergences may stem from differences in methodologies in the calculation of results[44]. Similar results were obtained in Richards and Taylor (1992) described above. The present study shows that for English speakers this format remains dominant as well. On the basis of this study it cannot be claimed with certainty that the classic definition will be so promptly used in other contexts, for instance, in front of children, younger pupils or by adults with lower education. For these reasons, it would be premature to call this defining strategy a genuine *folk* defining strategy; but the data also indicate that none of the remaining strategies could be so called without reserva-

[44] In Fabiszewski-Jaworski and Kryspowicka (2008) the results are given for classic definition appearing in simple responses only.

tion, especially that it is hard to decide how dominant in terms of its incidence a format should be in order to call it a (dominant) folk defining strategy. Instead, I would propose the existence of folk defining tendencies, which, on closer examination could be described, characterized and named. By closer examination I mean especially verification whether these newly appearing strategies will occur in definitions of other noun types and on a larger scale to check whether they have any true defining potential. This defining potential must definitely be verified in a receptive task as well. Emerging folk defining tendencies would suggest examining the Componential definition, description (Descriptive Story-telling definition) and Different POS.

The componential definition did occur consistently in nouns in which some perceivable, not necessarily logically grounded components were identified by the subjects. Descriptions of sequences of events or procedures could also be seen as specific types of chronological components (seen in folk definitions of *education* described as a sequence of schools one attends from the primary school to university). Seeing whether this strategy would be reapplied in folk definitions of other, similar nouns would be worthwhile. In terms of its lexicographic application, it is understandable that it cannot be claimed a fully autonomous defining strategy. However, it can be nested inside classic definitions, which finds confirmation in dictionary definitions that used it after such phrases as “including”, “involving”, or “which involves”.

The use of description by some subjects is a strategy that is applied in dictionaries. It is especially evident when included in a separate sentence accompanying a definition under a given sense in the entry. Descriptions of meaning resemble encyclopaedic information in their form, and this strategy could be more frequently applied as well as extension of a formal definition to respond to the folk tendencies emerging from this study. The Descriptive (Story-telling) strategy can be combined with inclusion of extralinguistic information or metalinguistic data on the use of a word which, in my view, could render the whole entry more user-friendly and would ease the burden of decoding different usage labels. In fact, if dictionaries were to draw on folk defining strategies, wider use of this strategy should be postulated. In this additional sentence a commentary could be included on how naive speakers actually describe the meaning of a given word, what associations they have in their everyday use of it, and an additional sentence containing description can safely accompany a formal, classic definition. In addition,

these description can bear some resemblance to the type of definition Anna Wierzbicka would propose in that they could mimic introspection.

The surprising occurrence of Different POS format that cannot be simply ascribed to a design flaw in the study actually indicates that the subjects tend to focus on the meaning of a concept rather than on its grammatical manifestation such as part of speech. One might venture a statement that folk definitions "define meaning, not grammar of a word". This finding is similar to what was discovered in a receptive/productive task in Fabiszewski-Jaworski and Grochocka (2010). Perhaps defining one part of speech using strategies more typical of another is a valid defining strategy after all, not only using single clauses introduced by *when* or *if*, but also infinitival clauses.

Synonyms are used in dictionaries and the folk defining study data show that they are also employed by naive users. It is reasonable to include a list of synonyms at the end of an entry where possible, even though true synonymy does not exist. One must not forget, however, that definitions themselves will never be 100% accurate due to, for instance, limitations to defining vocabulary. To remove the problem of interpretation of a synonym or a synonymic set, synonyms can be accompanied by easy-to-interpret qualifiers such as "similar to" which can help to interpret the synonym or relations between a group of synonyms given.

Interestingly, full-sentence definitions and single-clause *when*-definitions were so rare in the folk defining study that, if judging by this study only, they not only cannot be called folk definitions, but a claim can also be ventured that they are really marginal strategies. The frequency of occurrence of SCs match the results of the previously conducted studies: 3.5% in the present study vs. 5% in Fabiszewski-Jaworski and Kryspowicka (2008), so among English native speakers SCs are about as (un)popular as among Polish speakers, and they tend to be restricted to similar noun items (*envy*). Therefore, claims of the central status of FSD and SC in folk defining, which under the policy of the COBUILD dictionaries, appear to be exaggerated. Certainly, an interesting matter requiring more practical investigation would be to see whether such strategies appear in folk responses of language users belonging to different age cohorts, especially young, pre-primary school children, older individuals, or individuals with basic education only.

Although hyperonyms occurred as a defining strategy of naive users, their frequency was low, and to postulate that they be used as a sole defining (or even support-

ive) strategy would be unwise, because of the risk of overgeneralization. Studying hyperonyms can be beneficial from a different point of view, however. Rather than using them as a defining format, attention to the type of hyperonym used in folk defining should be paid. The kind of hyperonym used can reveal a lot about the way folk knowledge of meaning of words is organized into classes and subclasses. This study has revealed that sometimes it tends to be chaotically organized, as many overly general hyperonyms were used. Interestingly, hyperonyms were most prevalent in the same items as in Fabiszewski-Jaworski and Kryspowicka (2008). Hyponyms, on the other hand, can sometimes be embedded in definitions of nouns for which clear hyponym words exist, apart from other places where hyponyms can be found, such as usage examples.

Folk definitions are typically shorter than the analyzed dictionary definitions. In the study, although some individual responses did approach dictionary definitions in length, an average folk response was as much as three times shorter than a definition found under a dictionary entry. This finding stands in contradiction to Stock (1988), who claimed that folk definitions would be longer due to fewer length constraints. This divergence might have been caused by the fact that Stock (1998) was referring to definitions created in traditional dictionaries, which unlike those found in learners' dictionaries are more compact because they use sophisticated vocabulary. In MLDs, definitions are longer due to the simpler vocabulary used. This fact, possibly combined with the respondents' sloppiness in their responses, resulted in such a difference. Another factor influencing folk definition length was the relative difficulty that the informants exhibited in their defining efforts, so that many responses were incomplete, and thus shorter. As the target items were common and known words, shorter responses may have been caused by difficulties with verbalizing one's thoughts, rather than dictated by a consciously adopted strategy. This problem was identified in Mikołajczak-Matyja (1998: 107), and in this study some confirmation of this tendency was found in the spoken data, as there were hesitations, periods of silence actually recorded in the informants' responses, which attested to such difficulties.

Some of the common characteristics of folk definitions mentioned at the beginning of Chapter Two must be discussed in relation to the findings of this study. One of these was the assumption that folk definitions have no prescriptive colouring. This was

in fact corroborated by the study. Metalinguistic information was very rare and even if it did appear, there was not a single case of invoking "proper" word use.

Judging by the appearance of such a label as Descriptive (Story-telling) definitions in many responses, we can say that the folk definitions in the study were very subjective and self-referential. One must remember that when describing the meaning of a whole range of words, e.g. signifying emotions, describing political or world views or religious beliefs, one cannot assume objectivism, and these beliefs can permeate folk definitions, thus their objectivity is in doubt. In classroom use, folk definitions can still take on a different form. It is, in the end, the world seen through the subjective eyes of language users that is sought from folk definitions.

Most definitions elicited in the study, with the exception of those in the classic definition, hyperonym and synonym categories, were not substitutable. This was especially true of Different POS, but also of Descriptive (Story-telling) category. The responses deviated from the classic form; however, the deviation was moderate and far from dominant. Less reliance on the classic format (than in dictionaries), and use of alternative techniques was observed. These alternative techniques did include defining by function, though not quite in the way expected. Pure definitions by function did not appear and this focus was only seen within other definition structures. For reasons described above, there was little exemplification employed. Synonyms were used to some extent, but (perhaps due to the selection of the target items) they were not particularly common. In addition, folk definitions can contain words regarded as synonyms, but which are not true synonyms or near-synonyms at all. Other expected features were not seen for a number of reasons. Very little register information was included, very few descriptive strategies (defining by description), and some strategies exhibited almost zero incidence (defining by repetition, demonstration/ostension). Use of negation was not observed, but with the selection of target items used this was not surprising.

The majority of the responses employed one defining strategy only, and that is an indication that folk definitions are generally simple in their structure. At the same time, dictionaries display a similar level of simplicity. This finding can be indicative of a preference of naive language users for a simple definition structure composed of one format only, and it is with this expectation that users may approach dictionary definitions, rather than multiple attempts at defining the same word. In fact, this belief was also partly expressed in Bańko (2001: 109).

A more general problem of folk defining emerges from the examination of the folk responses in the study, which was already hinted above. A considerable number of responses were felt to be of low defining potential. They were often difficult to interpret, illogical or contained too little information. In this regard they could rather be referred to as folk associations or folk perceptions, and a boundary between them and genuinely effective definitions is fluid. Yet, as the format of a response was focused on, they were assigned to one of the definition categories in spite of the fact that they would not normally be able to serve as effective definitions. Some of these low-quality responses may be ascribed to sloppiness in their production. A major part of the study was a street task with a low level of formality. More importantly, however, this fact shows that naive users are not as good at creating spontaneous definitions as one might have expected and even definitions of simple concepts require reflection. Very often, the first defining attempt may be utterly ineffective and may require clarification in the form of a follow-up utterance containing a paraphrase and a different strategy. In this way, folk definitions are more interactive than dictionary definitions. It should not be forgotten that they are created in real-life contexts and often two parties will participate in the communication, a definer and a "definee". Therefore, they will often be shorter at first than dictionary definitions. Although it is possible, in a specific context, to understand even the most general definition correctly, if it is not successful, requests for explanation may be made by the definee, or by the definer as well, which was often the case in the study when the respondents tried to ensure it is the right sense that they were asked to define. Dictionaries can cater for such interaction to a limited extent, for example using special signposts before each sense. One might ask whether (electronic/online) dictionaries can go further and be even more interactive, by making sure that the user has correctly understood a definition given. Perhaps special tools measuring the effectiveness of dictionary definitions on-the-fly can be developed and, in cases of low effectiveness, a dictionary could provide a different reading of the same definition. Also, measuring the quality of folk definitions collected in similar spontaneous defining tasks should be called for in order to screen out completely nonsensical responses.

Admittedly, the study was not free of design and execution flaws, and these must be touched upon. The first problem identified was connected with target item selection and the influence of the noun *envy* on the occurrence of the Different POS format. Certainly this problem could have been avoided if even more careful approach to selecting

target items was taken and an item with a clearly nominal morphology had been selected. On a general note, it indicates how careful one must be when selecting target items for such a study, as the nature of subsequent problems is varied and hard to predict. Another lesson learned from this is the number of target items used. Although the number used in this study was not small, it appears that for a proper analysis of occurrence of the defining formats proposed in the categories, more different nouns should be used, such that would at least provide opportunities of elicitation of some of the minor defining formats. More abstract nouns, more concrete, accessible and common objects that can be pointed at, more words with clear synonyms, hyponyms or even idiomatic phrases. It is not claimed, however, that all these should necessarily be packed into a single study. Several smaller studies with more focus on different noun subtypes should be conducted. This is true of other parts of speech for which folk definitions should also be investigated as even more new patterns may emerge.

Another important issue is that the quality of the responses should be analyzed more thoroughly in order to avoid problems with classification, avoid collecting free folk associations rather than definition material. This is certainly what this study lacks. Perhaps a new category of an unsuccessful defining attempt should be introduced. In this way, not only would it be easier to classify responses into defining formats, but also the definition material itself could be analyzed more thoroughly in terms of its content and semantic relations.

Future investigation of folk defining patterns could include speakers of languages other than European in order to see whether the influence of non-western culture can be observed in defining formats. New studies could use similar but improved methodology, and possibly analyze more target items of the same type, or at least subcategories of nouns (for example: abstract nouns only, concrete nouns signifying physical objects), or different parts of speech. More attention should be given to performance in receptive tasks based on the results of this and similar productive tasks. More control over the quality of responses is required and to that end also the analysis of the content of definitions can be performed. Some more specific research questions for future research might be to check whether complex definitions can perform better than simple ones, whether subjective associations provided by informants can be utilized in the creation of dictionary definitions, and how speakers in different cultures perceive and define

words describing their subjective views or beliefs, as folk definitions can supply a whole range of information types.

Streszczenie

Celem rozprawy jest zbadanie spontanicznego definiowania rzeczowników przez rodzimych użytkowników języka angielskiego. Definicje słownikowe uważa się za jeden z najważniejszych elementów artykułu hasłowego, służący nie tylko wyjaśnianiu znaczenia wyrazu, ale często, w słownikach pedagogicznych, znajdujący zastosowania pokrewne, takie jak nauka słownictwa czy też praktyczne użycie jednostki leksykalnej podczas tworzenia zdań. Z tych i wielu innych względów badanie nad definiowaniem, definicją i jej efektywnością jest uzasadnione. W badaniu definicji często do głosu dochodzi przeświadczenie, że obraz świata widziany przez tzw. użytkowników naiwnych jest ważnym elementem wiedzy o znaczeniu wyrazu, który jako model powinien przynajmniej częściowo wpływać na kształt definicji słownikowych. Wykorzystanie definicji spontanicznych, tworzonych przez użytkowników naiwnych, jako wzoru zostało już częściowo zrealizowane w niektórych jednojęzycznych słownikach pedagogicznych języka angielskiego, które zaadaptowały swoje formaty definiowania do wyżej wymienionych modeli. Badanie spontanicznych definicji nabiera dodatkowego znaczenia w kontekście słowników kierowanych do społeczności międzynarodowej, złożonej z użytkowników będących członkami różnych kultur, dla których format i zawartość definicji może być czynnikiem decydującym o jej zrozumieniu. Wszystko to sprawia, że definicje spontaniczne są ciekawym materiałem do analizy, który może przynieść przydatne wnioski dla leksykografii i praktycznego pisania definicji słownikowych.

Wiele aspektów definicji spontanicznych można poddać analizie, a przede wszystkim ich treść, zależności semantyczne oraz ich strukturę syntaktyczną. To właśnie struktura definicji spontanicznej, jej format, jest głównym punktem badania

empirycznego opisanego w niniejszej pracy. Badanie to obejmowało rodzimych użytkowników języka angielskiego, bez przygotowania językoznawczego czy też leksykograficznego, którzy zostali poproszeni o zdefiniowanie grupy wyrazów. Rozdział pierwszy rozprawy skupia się na teorii definiowania, z naciskiem na definiowanie w językoznawstwie i leksykografii. Opisane tu zostały różne rodzaje definicji oraz najpopularniejsze strategie definiowania słownikowego, wraz z ich zaletami i wadami. Opisano również czynniki wpływające na zrozumiałość i efektywność definicji.

Rozdział drugi traktuje o definiowaniu spontanicznym i porównuje je z definiowaniem w leksykografii. Ujęto w nim omówienie cech charakterystycznych definicji spontanicznych na podstawie dostępnej literatury, a także porównanie definicji naiwnych z definicjami słownikowymi. Zawarta również została krytyka definicji słownikowych pisanych na wzór definicji naiwnych. Ponadto, rozdział zawiera przegląd literatury opisującej badania nad definiowaniem spontanicznym od lat sześćdziesiątych XX wieku do dnia dzisiejszego. Prace te prezentują różne metodologie i podejścia do badania tego rodzaju definicji. Niektóre z opisanych w przeglądzie literatury prac miały znaczny wpływ na kształt opisanego w tej rozprawie badania, m.in. Mikołajczak-Matyja (1998) czy Lew i Dziemianko (2006a, b). Przegląd opisuje również wcześniejsze badania autora tej rozprawy. Rozdział kończy się opisaniem zasadności przeprowadzenia następnego badania eksperymentalnego.

Rozdział trzeci jest szczegółowym opisem badania empirycznego obejmującego zebranie definicji spontanicznych dziewięciu rzeczowników. Opis badania poza danymi podstawowymi zawiera dokładne wyjaśnienie zasadności zastosowanej metodologii, opis badania pilotażowego, sposób pozyskiwania danych, użyte jednostki leksykalne, charakterystykę grup badawczych, procedurę uzyskiwania odpowiedzi i analizę danych. Dwie metody uzyskiwania materiału definicyjnego wyznaczają dwie odrębne części badania: pisemną i ustną. Ważnym elementem rozdziału jest opis kategoryzacji odpowiedzi uzyskiwanych przez respondentów. Dane w tym rozdziale są analizowane całościowo, jak i z podziałem na poszczególne badane jednostki rzeczownikowe, a pod uwagę w analizie brane są trzy główne aspekty: format wypowiedzi (rodzaj definicji), długość wypowiedzi oraz złożoność wypowiedzi. Opis wyników uzupełniają szczegółowe wykresy. Oddzielna sekcja zawiera opis wypowiedzi trudnych do analizy i klasyfikacji, a cały rozdział kończy się porównaniem wyników badania

eksperymentalnego z wynikami uzyskanymi po analizie analogicznych haseł w jednojęzycznych słownikach języka angielskiego.

Podsumowujący rozdział czwarty zawiera dyskusję na temat wyników badania uwzględniając różnice uzyskanych wyników w obu trybach uzyskiwania danych i biorąc pod uwagę wyniki analizy definicji słownikowych. W rozdziale tym następuje odwołanie wyników badania do cech definicji spontanicznych postulowanych w rozdziale drugim. Wyniki badania porównuje się z wynikami uzyskanymi uprzednio i opisanych w części teoretycznej pracy. Autor wyciąga wnioski dotyczące natury definicji spontanicznych w tradycji anglosaskiej, jak i wpływającego na ich kształt formalnego wykształcenia. Proponuje wstępne pomysły i rozwiązania wiążące wyniki badania z praktycznym pisaniem definicji i formułuje postulaty dotyczące kontynuacji podobnych badań, z uwzględnieniem modyfikacji, w tym również tych, które powinny zostać wprowadzone po wyeliminowaniu pewnych niedociągnięć odkrytych przy przeprowadzaniu niniejszego badania.

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Appendix A

(*intended for native speakers of English only*)
Please provide the following information:
Age: □ 19-24, □ 25-30, □ 31+
Education: □ Primary, □ Secondary, □ College/University, □ Higher
Gender: □ Female, □ Male
Field of education (please specify): ……
Remarks: ……..

Instructions*: Imagine that someone (such as a foreigner) does not understand the meaning of a word and asks you to explain the meaning of the items below. Please write the short and quick answers you would give them if asked the following questions in the street:* ***What does*** *...* ***mean****?* ***Explain the meaning of****.... The content you provide remains fully anonymous.*

1.	**to kick**	
2.	**a storm**	
3.	**black**	
4.	**enchanted**	
5.	**education**	
6.	**to be nervous**	
7.	**to dream**	
8.	**beautiful**	
9.	**to lie**	
10.	**the sun**	
11.	**envy**	
12.	**to sneeze**	
13.	**a glance**	
14.	**to play**	
15.	**brilliant**	
16.	**an aquarium**	
17.	**a nation**	
18.	**wicked**	
19.	**a hammer**	
20.	**a television**	

Thank you very much for your input in the study. On completing the form you should be informed of its purpose. If you are interested in obtaining more information on the study, please visit www.langaid.eu/the_study. If you have any further comments, please feel free to contact me at mfjaworski@ifa.amu.edu.pl

Mateusz Fabiszewski-Jaworski
Department of Lexicology and Lexicography
School of English
Adam Mickiewicz University
al. Niepodległości 4
61-874 Poznań, Poland