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Natural Semantic Metalanguage as Terminology¹

*This paper is dedicated to the memory of Professora Teresa Lino (1947–2019),
dear friend and illustrious terminologist*

Abstract

In this paper I present the Natural Semantic Metalanguage approach (Goddard & Wierzbicka 2014; Goddard 2018; Wierzbicka 1996, 2013), arguing that it can be perceived as a terminological system, a terminology *sui generis*. NSM is a decompositional approach to semantics, based on the assumption that there are 65 basic concepts, known as *semantic primes*, and that all other concepts can be paraphrased in terms of elements taken from this set of 65. These elements are said to exist in all human languages – as words, phrases or morphemes – and they cannot be reduced any further. The system has been tested on more than 30 different languages so far and is considered one of the most comprehensive approaches to cross-linguistic semantics today. I want to shed light on the formal structure of NSM, and explain its most important theoretical concepts, such as *semantic primes* and *molecules*, *reductive paraphrase* and *semantic template*, in order to demonstrate its practical value across many domains. As an example of how NSM is used in practice, I will look at the meaning of one concrete and one abstract noun (*beach* and *comfort*, respectively).

Keywords: natural semantic metalanguage (NSM), semantic primes and molecules, reductive paraphrase, concrete and abstract nouns, terms, terminology, ontology

1. Introduction

According to Hacken (2015: 3), “[o]ne of the central concerns of Terminology is the proper definition of terms”. This is also the major concern of the Natural Semantic Metalanguage (henceforth: NSM) approach to semantics, which I want to present in this paper. My main objective is to demonstrate that this

¹ I would like to thank three anonymous reviewers whose insightful comments greatly helped to improve the final version of this article.

semantic tool with almost 50 years of history can be viewed as a terminological system, or terminology², *sui generis*. In the following parts I will shortly present the history and the current state of the NSM approach, its main concepts such as *semantic primes* and *molecules*, and its main theoretical assumptions. Based on the explications of one concrete and one abstract noun, *beach* and *comfort* respectively, I will explain what kind of structure a semantic explication written in NSM terms must have, what a *semantic template* is, and why meaning explications should be based on a *reductive paraphrase*. After having shown briefly the semantic and morphological structure of this terminological system, and its affinity with standard terminologies³, I want to demonstrate how it can be useful not only in linguistics, but also in neighbouring disciplines, such as human geography and healthcare communication.

2. NSM, a subset of natural language

The very first sketch of NSM theory was presented in Wierzbicka's seminal book, *Semantic Primitives* (1972). There Wierzbicka proposed the notion of *indefinables*, or *primitives*, which are like "bricks from which all human utterances are constructed, and as such they (...) must be known to everyone, including children" (Wierzbicka 1972: 15). The main assumption of this theory has remained the same ever since: there must be a small set of universally conceptualised meanings, which allow us to understand and explicate all words and structures that have ever existed in any human language (see Wierzbicka 1996, 2010)⁴. The idea of such a universal *mentalese* (Fodor 1975), or *lingua mentalis* (Wierzbicka 1980) may be traced back to the 17th century philosophers, especially to Gottfried Wilhelm Leibniz, who has been searching for *alphabetum cogitationum humanarum*, the alphabet of the human thought, all his life, trying to discover it by explaining complex concepts via simpler and simpler ones (see his *Tabulae definitionum* in Janus 1975).

NSM is like a subset of a natural language – its most basic semantic core (Wierzbicka 2010). As you can see in Figure 1 (below), taken from Goddard (2018: 156), NSM can be seen as the intersection of different languages. It is striking how much this figure resembles a graph presented in Cabré (1999: 82), where the author aims at picturing the relationship between lexicon, grammar and special language lexicons, see Figure 2. The resemblance of these two figures points to the fact that NSM, being at the intersection of all languages, can be regarded as a core "special language", a terminology *sui generis*. The Gen-

2 By *terminology* I mean here "the set of terms of a particular special subject", see Cabré (1999: 32). As Marie-Claude L'Homme and Gabriel Bernier-Colborne (2012: 5) rightly point out: "[t]erminology is in fact polysemous. It can refer to (1) a collection of terms related to a field of knowledge (...), (2) a theory about concepts and terms or (3) the activity of collecting, describing and organizing terms in a resource (...) (*terminography* and *terminology work* are sometimes used in the literature to refer to this third meaning)."

3 In this paper I treat NSM as terminology, but it may be more appropriate to speak of NSM as *ontology* or *ontoterminology*. *Ontology*, in terminological science, is "a formal specification of a shared conceptualization" (Borst & Akkermans 1997, quoted in Zemouchi-Ghomari & Ghomari 2012: 4), and *ontoterminology* is "a terminology whose conceptual system is a formal ontology relying on epistemological principles" (Roche 2012: 2628).

4 Apart from Anna Wierzbicka, the founder of the method, and Cliff Goddard, her main collaborator, there are many scholars for whom this semantic tool has proven helpful. NSM practitioners work on a big sample of languages: Chinese, Korean, Japanese, English, Spanish, Portuguese, French, Russian, Polish, East Cree, Manganaba Mbula, Koromu, and Pitjantjaara, among others.

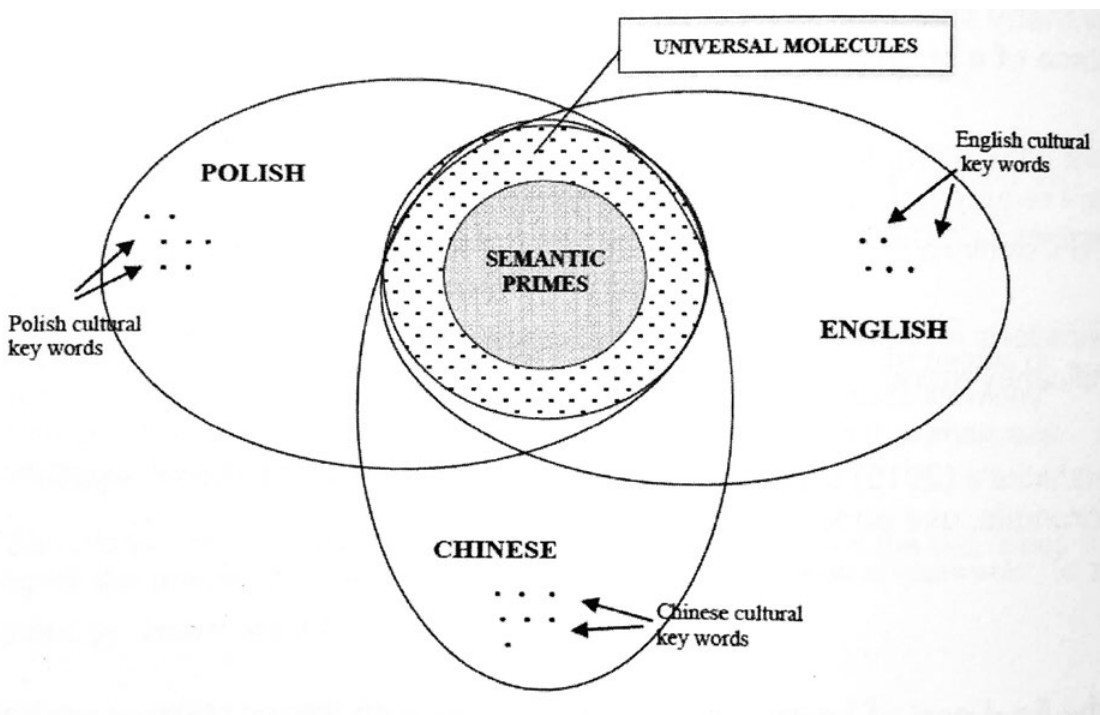


Figure 1. Schematic representation of the relationship between semantic primes, universal semantic molecules, cultural keywords, and the full lexicon of three languages; after Goddard (2018: 156).

eral Theory of Terminology (Wüster 1968) “postulates the priority of the *concept*⁵ over the designation (*term*⁶) and its universality independently of the diversity of languages” (Roche 2012: 2626; italics and footnotes are mine, ZBS). In a similar vein, the NSM approach posits universality of the primitive concepts which have different linguistic exponents (designations) in different languages, see e.g. Goddard & Wierzbicka (2014: 12).

Just as any terminology is based on *terminography*, i.e. “the activity of collecting, describing and organizing terms in a resource” (L’Homme & Bernier-Colborne 2012: 5), so is NSM. The constant effort of NSM scholars to systematize relations between words in different areas of vocabulary is prominent (see e.g. Goddard 2010, 2016; Goddard & Wierzbicka 2014; Ye 2017). Also, the exponents of *semantic primes* (see section 3.) can be seen as *terms*, each with a well-delineated, specific meaning (see Figure 3.). In a similar way to terminology, NSM is based on standardization of terms: its primes are simple and universal, every prime is a *lexical unit*, i.e. a pairing of one meaning with one lexical form (L’Homme & Bernier-Colborne 2012: 12; Goddard & Wierzbicka 2014: 12), and on the basis of primes, serving as “building blocks of meanings and the vehicles for describing them” (Ye 2017: 5), all other words can be

5 A *concept* “is the building block of ontology; it is defined as ‘unit of knowledge created by a unique combination of characteristics’ (ISO 1087-1, 2000)” (Zemouchi-Ghomari & Ghomari 2012: 3).

6 A *term*, according to ISO 1087-1 (2000) is defined as “verbal designation of a general concept in a specific subject field” (Zemouchi-Ghomari & Ghomari 2012: 4) but, as L’Homme and Bernier-Colborne (2012: 3) rightly note, it is not easy at all to say what a term actually is, and “even the most knowledgeable terminologist will probably hesitate before giving a straightforward answer.”

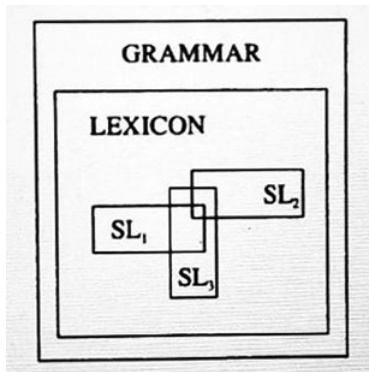


Figure 2. Relationship between grammar, the lexicon, and special language lexicons; after Cabré (1999: 82)

generated. It must be admitted, though, that NSM is a very specific kind of terminology. All terms in special languages, like that of law, sports, or chemistry, are normally explained via simpler natural language units. NSM terms however, are irreducible and primitive, they cannot be explained any further. They are treated as the bedrock of the human cognition, hence as being known to us *a priori* – there is no need of explanation, because supposedly all human beings *know* what these terms mean. So in this sense, NSM differs from other terminologies (it is, so to say, the most basic terminology which exists), as it sets boundaries to *regressus ad infinitum*, that we have to deal with while defining concepts. It is due to this property that NSM serves well the explication of meaning of *all* other terms⁷.

3. Semantic primes and molecules

The 1972 version of NSM consisted of fourteen elements only: *I, you, someone (being), something, world, this, want, don't want (diswant), feel, think of, imagine, say, become, be a part of* (Wierzbicka 1972: 15–16). This was far too few to describe the whole richness of human lexicon. So the system has been expanding ever since, changing from 14 to 36, than to 56, to finally reach its current status of 65 elements in 2013.

Figure 3. shows these 65 simple meanings, called *semantic primes* (an analogy to a *prime number* that can only be divided by one and by itself) in a table⁸. Primes are not lexemes, but meanings associated to words⁹, or phrasemes (and sometimes morphemes, depending on the language). Simple semantically, they can be complex morphologically, and have combinatorial variants, called *allolexes* (indicated with

7 Actually, as has been demonstrated by Fährdrich *et al.* (2014: 15), some NSM primes are already part of formal description languages, such as Web Ontology Language (OWL) or Planning Domain Definition Language (PDDL).

8 These sixty five elements can also be organised in the form of a chart (see: <https://intranet.secure.griffith.edu.au/schools-departments/natural-semantic-metalanguage/download> [date of access: 23.2.2021]). The chart is built to resemble the Mendeleev periodic table of elements (as primes are like elements in chemistry).

9 That again shows that NSM could be treated as ontology, as it consists of meanings, which are equivalent to concepts in ontologies. There are many properties shared by both NSM and ontologies (. both NSM and ontology development is an iterative process, see Noy & McGuinness 2001: 4), but this is a subject for future research.

“~” in Fig. 3.)¹⁰. There is no space to describe all the primes here, but I would like to have a closer look at some elements of this semantic repertoire.

I~ME, YOU, SOMEONE, SOMETHING~THING, PEOPLE, BODY	Substantives
KIND, PARTS	Relational substantives
THIS, THE SAME, OTHER~ELSE	Determiners
ONE, TWO, MUCH~MANY, LITTLE~FEW, SOME, ALL	Quantifiers
GOOD, BAD, BIG, SMALL	Evaluators, descriptors
THINK, KNOW, WANT, DON'T WANT, FEEL, SEE, HEAR	Mental predicates
SAY, WORDS, TRUE	Speech
DO, HAPPEN, MOVE	Actions, events, movement
BE (SOMEWHERE), THERE IS, BE (SOMEONE/SOMETHING), BE (MINE/SOMEONE'S)	Location, existence, specification, possession
LIVE, DIE	Life and death
WHEN~TIME, NOW, BEFORE, AFTER, A LONG TIME, A SHORT TIME, FOR SOME TIME, MOMENT	Time
WHERE~PLACE, HERE, ABOVE, BELOW, FAR, NEAR, SIDE, INSIDE, TOUCH	Space
NOT, MAYBE, CAN, BECAUSE, IF, VERY, MORE, LIKE~AS	Logical concepts

Figure 3. Semantic primes (English exponents) (Goddard & Wierzbicka 2014; Wierzbicka 2013)

The “Substantives” group contains six primes: I, YOU, SOMEONE, SOMETHING, BODY and PEOPLE. I and YOU are very plausible candidates for linguistic universals: it seems intuitive that in every language the speaker must have some means to refer to himself and to the addressee. The fact that all entities that exist in the world are either human or non-human is pictured in SOMEONE – SOMETHING opposition. The prime (SOME)THING is necessary to talk about the world, being at the top of every taxonomy (see Fährdrich *et al.* 2014: 5). There is also a distinction between one person, SOMEONE, and a group of persons, PEOPLE. The prime PEOPLE is useful not only in the description of social life, while defining concepts such as *family*, *community*, or *language*, but also in the description of ‘things made by people’, such as *cups*, *bicycles* and *armchairs* (see Wierzbicka 1996: 40), and human places, such as *beach* or Australian *bush* (Bromhead 2018). The last prime in this group, BODY, pictures the cognitive linguistics postulate of the conceptual *embodiment* of meaning, the claim that the way we perceive and categorise the world is strongly based on our physical bodily experience (see *e.g.* Lakoff 1987).

¹⁰ The existence of allomorphs in NSM is akin to the presence of more than one form to express the same meaning in terminologies (see L’Homme & Bernier-Colborne 2012: 16).

Another part of NSM is the group of the so-called *mental predicates*: THINK, KNOW, WANT, DON'T WANT, FEEL, SEE and HEAR. These elements refer to human-unique abilities of THINKING and KNOWING, and also basic cognitive activities, such as SEEING, HEARING, FEELING and WANTING. They all combine with I, YOU, SOMEONE and PEOPLE (e.g. 'I want something'). And they all play an important role in grammar. In many languages, FEEL, for example, forms the basis of terms of endearment and exclamatory interjections and WANT is responsible for the imperative constructions.

Every prime has well-specified syntactic, grammatical properties which allow to create sentences and texts (NSM is like any human language, but in miniature). These properties, which "govern how the primes can be combined into phrases and sentences" (Goddard 2010: 76), are also claimed to be universal (Goddard & Wierzbicka 2014: 13). Let us have a look at the three syntactic frames of THINK:

- a. *someone thinks about something* (TOPIC),
- b. *someone thinks something (good/bad) about something* (TOPIC WITH COMPLEMENT),
- c. *someone thinks like this: "..."* (QUASIQUOTATIONAL COMPLEMENT)¹¹.

Just as it has been said before, all the 65 terms are hypothesized to be universal and irreducible. That is why they are called *semantic primes* or *semantic atoms*, being the most basic building blocks of meaning. But in NSM approach there is also a place for bigger chunks of lexical knowledge, called *semantic molecules* (marked with [m] in explications, see section 5.), which are nothing but configurations of semantic atoms (Wierzbicka 2010) that "function as intermediate-level units in the structure of complex meanings" (Goddard 2010: 123). Some of the semantic molecules, such as *men* and *women*, are hypothesized to be universal, many molecules though are considered language-specific. What is important about semantic molecules, is that they are necessary in the description of many other concepts. One must also stress that semantic molecules exist on different levels, some being more basic than the others. Level 1 molecules are based on the semantic primes only, level 2 molecules contain semantic primes and level 1 molecules, level 3 molecules can contain level 1 and level 2 molecules plus semantic primes, and so on and so forth (Goddard 2018: 131–132). To quote Wierzbicka:

Many semantic domains – for example, those of emotions and speech acts – are analysed directly in terms of primes, without any recourse to any molecules at all. Generally speaking, molecules are not introduced for the semanticist's convenience, but have to justify themselves as psychologically real parts of many words' meaning (as is clearly the case with 'rain' as a component in the meaning of *umbrella*, or 'water', in the meaning of *rain*). (Wierzbicka 2009: 854)

Therefore, the semantic structure of many concepts is *embedded* and all meaning explications should picture this hierarchy of concepts¹². If *children*, as level 1 molecule, are explicated via the configuration of semantic primes only (roughly as 'people who have lived for a short time and for whom other people have to do good things'), no other elements but primes are allowed in their definition. *Women*, level 2 molecule, are defined via *children*, in other words women are 'people of one kind, in whose body there can be a living body of a child for some time'. *Men*, defined as 'people having bodies of other kind, not like women', are therefore level 3 molecule.

11 As we can see, NSM allows for some valency options of (English) THINK, but not all of them: *someone thinks that ...* is not allowed, as it is not attested universally.

12 This hierarchical organisation of concepts is another common point between NSM and terminologies (and ontologies, as a matter of fact). See L'Homme & Bernier-Colborne (2012: 19) and Zemouchi-Ghomari & Ghomari (2012: 9).

4. Reductive paraphrase as a means of avoiding vicious circles

Before passing to the analysis of two semantic explications phrased with the NSM primes and molecules, let us explain what *reductive paraphrase* is. All the NSM explications are texts composed in a minimal subset of an ordinary language, and they are based on *reductive paraphrase*, i.e. “the principle that any analysis of the meaning of a word or other linguistic expression should be composed of terms that are clearer and easier to understand than the original” (Goddard 2016: 13). Thus, describing the complex concepts in terms of the simple ones, NSM scholars *paraphrase* their meaning, *reducing* it to its most basic components¹³. Reductive paraphrase allows scholars to avoid circularity – because they always “go down” to what is simpler, until they reach the level of semantic primes. They do not define *ignotum per ignotum*, as in the NSM explications only primes and molecules are used (and the latter, as we have just seen, are defined via primes). In this way, NSM “reduces the amount of arbitrariness in the lexicon by setting up relations of dependency between different words” (Riemer 2006: 376). This reduction of concepts to simple ones “helps to create equivalence classes among concepts” (Fähndrich *et al.* 2014: 2), and can be used “to create structured ontologies” (Fähndrich *et al.* 2014: 15). It may be pertinent to acknowledge here that the NSM principle of reductive paraphrase has been subject to criticism. Riemer (2006: 367), for example, stresses that the NSM paraphrase, based on ethnocentric and culture-specific descriptions of the phenomena in question, is very subjective, and its formulation always depends on the individual investigator. Blumczyński (2013: 272) points out the “reductive” character of the paraphrase, meaning that the NSM explications’ defining power is limited, as they “focus only on selected aspects of the given concept (...) but can never exhaust its complete semantic potential.” In spite of these shortcomings, NSM capacity of meaning representation is very high as I hope to show in the following sections.

5. Semantic structure of concrete and abstract nouns

John Locke in his *Essay Concerning Human Understanding* points to the difference between “simple ideas”, that name things existing in the real world, such as *statue* or *rainbow*, and abstract ideas (“mixed modes”, as he calls them), such as *parricide* or *resurrection*, which are created by the mind (Locke 1843: 328). And he draws the reader’s attention to the arbitrariness of names for abstract ideas:

Thus the mind in mixed modes arbitrarily unites into complex ideas such as it finds convenient; whilst others that have altogether as much union in nature, are left loose, and never combined into one idea, because they have no need of one name. (Locke 1843: 328)

People create abstract words whenever they need them. These words save “time and make conversation about complex and abstract matters feasible” (Goddard & Wierzbicka 2014: 230–231). But it should be made explicit that the semantic structure of *abstract* nouns is very different from the semantic structure of *concrete* nouns. Concrete nouns, such as *tree* or *cup*, refer to a pre-existing, “independent of discourse” categories (Goddard & Wierzbicka 2014: 221). Abstract nouns, such as *death* or *love*, on the

13 One may infer that this reduction of meaning entails ignoring contextual or pragmatic aspects of meaning. Nevertheless, in the NSM approach these aspects are represented with *cultural scripts*, which I will not be dealing with here due to space restrictions. An interested reader is referred to Wierzbicka 2003 or Goddard 2018.

contrary, do not refer to a real-life entity, but in a sense *create* this entity giving it a name. They often refer to a scenario involving people doing certain things. They can refer to people who *can die* (as in *death*) or who *feel something very good towards other people* (as in *love*), or who *don't feel anything bad in their body and can do many things as they want* (as in *comfort*). See also Bulat Silva (2020: 24–25).

What may come as a surprise, concrete nouns, such as names of natural kinds: *apple*, *mouse*, or *daffodil*, or “things made by people”, such as *bicycles*, *cups* and *armchairs*, are much more difficult to define than abstract nouns, such as *love*, *death* or *comfort*. The most important NSM book devoted to the analysis of concrete nouns is Wierzbicka's 1985 *Lexicography and Conceptual Analysis*. It is in this book that she introduces the term *semantic template*¹⁴, which refers to “a structured set of component types shared by words of a particular semantic class” (Goddard 2012: 725). To give just one example, the semantic template for ‘objects made by people to drink’, such as *cups*, *mugs*, or *glasses*, consists of: Category, Purpose, Material, Appearance and Size. We may say that a *cup* is, roughly, ‘something of one kind made by people’ [CATEGORY], ‘to drink [m] from it’ [PURPOSE]. It is usually ‘made from porcelain [m]’ [MATERIAL], ‘it is round [m] and short [m]’ [APPEARANCE], and, obviously (as bucket is not a cup), ‘it is small, people can hold it in one hand [m]’ [SIZE] (for a complete definition see Wierzbicka 1985: 33).

5.1. Beach

Let us now examine an NSM explication of a concrete noun of natural kind, a noun that names a place people like to go to in the summer, *i.e. beach*. According to the *Longman Dictionary of Contemporary English* (LDOCE 2009) a *beach* is ‘an area of sand or small stones at the edge of the sea or a lake’, and although this definition is quite simple and short, it does not picture well the concept of ‘the beach’. What is missing is the human perspective: *beach* is not *any* area of sand at the sea, it is a social place where people get together to do some things, especially during holidays. According to British National Corpus (BNC) *beach* collocates, among others, with *hotel*, *bar*, *club*, *resort*, *boys*, *pleasure*, *holidays* and *California*¹⁵.

Bromhead (2018: 97), while describing *beach* in her book on landscape terms, says: “(...) ‘the beach’ is now, for the most part, a place where people have fun. On ‘the beach’ the pleasures are of the body: swimming, sunbathing, surfing, and playing.” She then goes on to define *beach* (in British English) as:

beach

- | | |
|-------------------------------------------------------------------------------------|------------|
| a. a place of one kind | [CATEGORY] |
| b. this place is near the sea [m] | |
| c. on one side of this place is the sea [m] | [LOCATION] |
| d. the ground [m] in this place is not like the ground [m] in places of other kinds | |
| e. there can be sand [m] in this place | |
| f. there can be a lot of small hard [m] things on the ground [m] in this place | [MATERIAL] |
| g. when someone is in this place, this someone can see the sea [m] | |

14 The term is later borrowed and translated as *faseta* into Polish, and used widely by Bartmiński and the Polish Ethnolinguistic School in their *cognitive definitions* (see, *e.g.* Bartmiński 2009).

15 These examples are chosen from the first twenty-five nouns shown by BNC as the most frequent collocates of *beach*. See <https://www.english-corpora.org/bnc/> [date of access: 23.2.2021].

- h. often when it is warm [m] in places where many people live, people want to be in this place [PURPOSE]
- i. often people do things of many kinds in this place, because they want to feel something good in their bodies

(Bromhead 2018: 97)

Bromhead's definition is based on semantic primes and three environmental and two physical quality semantic molecules: *sea*, *ground*, *sand* and *hard*, *warm*, respectively¹⁶. On the right there are the putative names of semantic components, that could have been ascribed to the explication: Category, Location, Material and Purpose¹⁷. They account for the structure of this explication of 'a place of one kind': where it is located, what it is "made of", and what purpose it serves (maybe the last component should rather be rephrased as WHAT PEOPLE DO IN THIS PLACE). It is the last part of the definition (g.-i.) that shows neatly the human perspective, so important to the meaning of 'the beach'.

5.2. Comfort

Before proceeding to the example of an abstract noun which names a fictitious entity that is of high value in the English culture (but not necessarily in the Polish one, see Bułat Silva 2020), i.e. *comfort*, let us examine the frame that Goddard & Wierzbicka (2014: 226) proposed for abstract nouns representing "reified discourse topics" (such as *love*, *death* or *comfort*):

- a. something
- b. people can say what this something is with the word *X*
- c. someone can say something about something with this word when this someone thinks like this:
- d. "it can be like this: ..."

This "top level structure" contains a reference to a particular word: 'people can say what this something is with the word *love*, *death* or *comfort*' respectively, and then there is a prototypical scenario to which this abstract noun alludes: 'it can be like this'. What is interesting, as we will see in the definition of *comfort* presented below, very often, the "topic substantive" is *someone* or *people*. It is because most abstract nouns are about people (Goddard & Wierzbicka 2014: 222).

According to LDOCE (2009), the noun *comfort* has 7 different meanings. For reasons of space, here we will only examine *comfort* in its first meaning, namely, 'feeling of being physically relaxed and satisfied, so that nothing is hurting you, making you feel too hot or cold' (LDOCE 2009).

Here is what I proposed as the explication of *comfort* in its first meaning:
comfort (as in: *relax in the comfort of one's home*)

- a. something
- b. people can say what this something is with the word *comfort*,
- c. someone can say something with this word when this someone thinks like this:
- d. it can be like this:

¹⁶ It may be easily deduced that the molecule *sea* cannot be a level 1 molecule, as it is certainly based on a more basic molecule, i.e. *water*.

¹⁷ These templates have not appeared in the original definition by Bromhead (2018: 97).

- e. when someone is in a place, they can feel something good because of this, like someone can feel when they think like this:
- f. when I am in this place, I don't feel anything bad in my body because of this,
- g. I can do many things as I want,
- h. I feel something good because of this,
- i. this is good (Bulat Silva 2020: 27)

Comfort provided by a place is certainly connected to 'feeling something good' (see line h.). This well-being results from (1.) the lack of discomfort, as there are no unpleasant odours, noises, or views, present (line f.), and (2.) from a certain kind of ease you may enjoy at a place where 'you can do many things as you want' (line g.). In English culture, this kind of homely comfort is perceived as 'something good', a value (see line i.). For a more detailed description of *comfort*, see Bulat Silva (2020: 28).

As you can see, this definition contains not a single molecule. Because it is based on semantic primes only, the definition of *comfort* is much simpler conceptually than the definition of *beach*, even though they are of comparable length. To understand what *beach* is we have to know what *sea*, *ground*, *sand*, *hard* and *warm* mean, whereas to capture the meaning of *comfort* we can rely solely on 65 elements that are assumed to be known to every human being *a priori*. So it will be easier to explain what *comfort* is than what *beach* is to someone who doesn't not speak English, but *e.g.* Xârâcùù (a Melanesian language of New Caledonia). And, thanks to this *tertium comparationis* of NSM, we can easily spot similarities between *beach* and *comfort*. Both nouns refer to 'feeling something good', and to 'feeling – or not feeling – something in the body'. And both are about *people* (or *someone*), and this human perspective is an important component of their meaning. Looking at the two definitions together we can see that their semantic components clearly point towards what we intuitively know: that both *beach* and *comfort* refer to 'people feeling something good in their bodies in a place.'

6. Concluding remarks

Having presented the NSM analyses of two English nouns, one referring to a place and the other one to well-being, I hope to have demonstrated the NSM defining potential. Having in mind that not only linguists but also human geographers and healthcare specialists may be interested in what *beach* and *comfort*, respectively, mean, it seems that NSM can really become a useful tool, a terminology valid for many sub-branches of social science. It can help to define "a common vocabulary for researchers who need to share information in a domain" (Noy & McGuinness 2001: 1; see also Roche 2012: 2627), *e.g.* by explaining what *beach* means in order to facilitate communication between human geographers and ecologists, or to make explicit domain assumptions (Zemouchi-Ghomari & Ghomari 2012: 7), *e.g.* by operationalizing a concept of *comfort* in nursing. As Wierzbicka rightly points out:

This is where NSM semantics can make a difference, not only in the broader context of the human sciences but in the context of science in general. (...) talking to the rest of the world in English, whether in so-called plain English or in its many scientifically adulterated variants, is not necessarily the best road towards optimal communication. (Wierzbicka, in: Marini 2020)

There is one reason, however, why treating NSM as a terminological system may be put into question. Terminologists say that terms represent *specialists' knowledge* (Ligara 2017: 30), and it is obviously not true in case of NSM. Its 65 atomic terms are simple, and they represent the *knowledge of an ordinary man*, not of a specialist. There is also a problem of defining a *term* (see footnote 6), many scholars claim that the difference between a term and a lexical unit belonging to a natural language lies only in its use. Terms usually have a very specific meaning that can be restricted or modified by a specialist (Grochowski 2017: 14), and NSM conforms to this requirement¹⁸.

Apart from these doubts, however, I hope to have proven that NSM can and should be regarded as the most basic terminological system *sui generis*. It not only allows us to avoid vicious circles and defining *ignotum per ignotum* in our semantic and lexicographical endeavours. It also puts an end to *regressus ad infinitum*, and makes definitions accessible to all people, no matter what their linguistic or cultural background is (which, I think, is a great advantage). And it can serve as a perfect *tertium comparationis* while comparing seemingly equivalent terms coming from different languages and cultures (see e.g. Bulat Silva 2020 on 'comfort' in Polish, Portuguese and English).

As Geeraerts (2015: xix) said in his "Foreword" to *Handbook of Terminology*, "[t]hese are exciting times for the study of terminology". In the quickly changing, globalised world, there are many challenges that terminological studies have to face, and closer cooperation with theoretical semantics seems inevitable. Even though "the importance of lexical semantics is increasing in terminology work" (Faber & L'Homme 2014: 144) and at least several meaning-based linguistic frameworks, such as Frame Semantics (Fillmore 1977) or Meaning-text Theory (Mel'čuk *et al.* 1984–1999), have been applied in terminology and ontology development since the 1990s (see Faber & L'Homme 2014; L'Homme 2014), there are still many areas in terminology science that "can benefit from the semantic analysis of linguistic concepts, based on sound theoretical principles" (Faber & L'Homme 2014: 144). With this paper, I would like to encourage all terminology scholars "to rethink their descriptive procedures" (Geeraerts 2015: xix), and "to think about ways in which new models of description can be incorporated" (Geeraerts 2015: xviii). NSM can be one of these models.

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¹⁸ We must not forget, however, that a term does not necessarily belong to a natural language, e.g. there is a linguistic term *kulturom*, 'cultural keyword', which does not belong to everyday Polish language. Meanwhile, all NSM terms are lexical units from an ordinary language, with no neologisms or technical notations of plus, minus or brackets allowed.

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