

Theoretical Proposal of Hybrid Analysis of Lexical Unit: Light

Robert Boroch

Department of Intercultural Studies in Central-Eastern Europe
Faculty of Applied Linguistics
Warsaw University
Warsaw, Poland
rboroch@uw.edu.pl

Abstract — The main purpose of this paper is not to create another detailed lexical definition of *light* in accordance to the principles of *semantic primitives*' theory, but rather to examine the methodology as well as the way of defining the *light* as a lexical unit by scholars (Dobaczewski 1999a, 1999b, 2001a, 2001b; Dyszak 1999a, 1999b). I argue that a semantic deposit (SD) domain of lexical unit *light* could be understood only if supplemented with semantic units that possess a high-abstractive meaning value organized in Semantic Net structure (Semantic Net hereinafter referred to as SN). Therefore, lexical unit *light* cannot be defined as a property of semantic primitives' faculty.

Keywords - A unit, Qs system, semantic primitives, Semantic Deposit (SD), Semantic Net structure (SN).

I. INTRODUCTION

A *semantic primitives*' methodology introduced by A. Wierzbicka (Wierzbicka, 1972) as Natural Semantic Metalanguage (hereinafter referred to as NSM) investigates elementary explanation of terms that could be used to describe other more complex terms (also concepts). Still, the only stipulation is that the terms classified as *semantic primitives* cannot be elucidated by other terms. It means that *semantic primitives* on a particular level of semantic analysis are obscure units with the unknown sense in its stratum that I will call a semantic deposit (Semantic Deposit, hereinafter referred to as SD). SD is understood here as a meaning network phenomenon where meaning itself is dependable firstly on a relation between set of units¹ (marked here as A unit) and a particular semantic value that has been assigned to them and, secondly, on an interpretation process. In this case, SD value is an outcome of an interpretation process that is done inside of abstractive and dynamic system (marked here as Qs system) by its elements. Therefore, Qs system is a set of units with SD value. However, Qs system is an operational structure-fiction, with self-explanation modus where all statements are believed to have logical value of truth or falsity. According to the *semantic primitives*' theory defining *something* using indefinable units is highly misleading as individuals think about an object in terms of a category with precise meaning and indications of phonetic and written representation. This takes place because the process of thinking itself is restricted to a language as a device used to open the meaning value of SD. Obviously, SD semantic value is hidden due to the lack of

perfection of the language; however, it does not mean that phenomenon of A unit is entirely absent in Qs system. If the language is not able to demonstrate A unit semantic value, it is not a proof that the A unit phenomenon does not exist at all. Simply, individuals are not able to introduce it to the Qs system as A unit with SD value; still, a phenomenon of geometrical figures as; for example, a circle simply exists in biological and physical systems. Thus, if its representation could not be specified in the language then a set concept or term would not exist in the language representation at all. However, a circle is present as a phenomenon in biological, as well as, in physical systems. According to theoretical assumptions of *semantic primitives*, classifying a circle as an indefinable unit is flat denial of a communication process in a natural language since individuals are unable to think or to talk about *something* that is totally unknown due to lack of lexical representation in natural language. Even though individuals are not able to value SD verity it does not convince me; especially, as A. Wierzbicka suggests the needs for indefinable units.

One cannot define everything. To define anything (without direct or indirect circularity) we need some indefinables. If our indefinables, or primitives, are not intuitively intelligible and self-explanatory, then our definitions will explain nothing. As pointed out by Pascal (1667/1963, p. 350) three hundred years ago if we define light (*lumikre*) as "a luminary movement of luminous bodies" we have defined nothing at all, because the concepts 'luminary' and 'luminous' are neither clearer nor simpler than 'light' itself. (Wierzbicka, 1992: 541).

I suppose that the process of meaning formation itself in the language ought to be investigated as assumption made by scholars as A. Wierzbicka, A. Dobaczewski and A. Dyszak (Dobaczewski 1999a, 1999b, 2001a, 2001b; Dyszak 1999a, 1999b; A. Wierzbicka 1969, 1989) who refer to a *light* as a lexical unit. In *semantic primitives*' methodology, there is a rather simplified definition since it ignores the process of meaning formation. I am going to use a *light* lexical unit as an example of that process, where *light* is represented in the language as a sign in 1) written form and 2) a typical sound: [*lait*].²

¹ Unit is understood here as a lexical items *vel* a lexical unit.

² Phonetic as well as written faculty is not to be discussed in this thesis.

II. QS SYSTEM: PHENOMENON OF CONCEPT(S) AND TERM(S)

A. Light as a lexical unit in Qs system

Light unit itself has got a particular denotation hidden in a domain of SD which is organized in SN structure. This structure gives to the system the ability to expand formal meanings of light unit, as well as, to initiate new associated concepts. According to this, it has been presupposed that lexicon is a kind of knowledge base neither able to develop itself nor to create new elements as a part of the system. With this regard, lexicon is only an information storage area where a particular meaning is hidden in a deep SD domain and ought to be brought out from the superficial SD level.

Theorem [1]:

1. Let Q signify an abstractive and dynamic system (Qs system hereinafter referred to as Qs) as in the following schematic diagram (after Sonesson, 2010):

TABLE I. QS SYSTEM PHENOMENON

Perception	Signs	Signs system	Embodied signs
<i>episodic</i>	Mimetic	Mythic	Theoretic
	Pantomime gesture tool-making imitating	Language	Pictures writing theory
	Iconicity indexicality	Symbolicity	Iconicity indexicality

2. Let A signify particular Qs unit, in which A is a representation of abstractive category of c with a set of subcategories S ($s_1 \dots s_n$) with a particular SD value.
3. Let c be marked here as a *light*.

Formally, 1 – 3 points are set down as:

$$A \in Qs \exists c_{light\ unit} : S(s_1 \dots s_2) = SD;$$

Qs is treated here as a set of:

[perception → (signs → signs system → embodied signs)]

Perception is an external element of Qs system and it is not going to be questioned here; however, a process of perception itself is crucial for understanding formation phenomenon of concepts or terms. Therefore, it has been presupposed that perception in Qs system is semantically identical to SD value of the sentence: ‘to know/believe that something is’ as an imperative for Qs because ‘to talk about something’ means that ‘it’ has been detected by individual perception and designated to a concept or a term framework. For instance, lexical unit *light*, in Polish [światło], as a term does not implement into SD value any additional simple or compound meanings as it

happens with a *light coke*, a *light woman*, etc. Inversely, the *light* concept has got that exemplification in SD value, which is implemented into Qs by different lexical units: a *light coke* – [in Polish: *dietetyczna cola – the dietetic Coke*]; a *light woman* – [in Polish: *latawica, prostytutka – prostitute*]. The difference here is not semantic value of SD but phonetic, as well as, written form. Thus, mutual constant factor that is unchangeable in Qs is SD value of both concepts and terms. Below, in tables II–III the distinctive factors between concepts and terms phenomenon in Qs framework system are presented.

TABLE II. CONCEPTS VS. TERMS GENERAL DISTINCTION

Concepts	Terms
Deficiency of one typical phonetic representation.	Possess one typical phonetic representation.
Deficiency of one written form.	Possess one written form.

The particular A unit of Qs understood either as a concept (concept hereinafter referred to as C) or as a term (term hereinafter referred to as T) has identical SD value. According to table II a concept’s distinctive element is a deficiency of one typical phonetic representation, as well as, deficiency of one written form, whereas terms as Qs unit have: one typical phonetic representation and also one written form. Therefore, concepts are primary units of Qs while terms are secondary units. Both units have particular SD value organized in SN. The relations between those elements are marked here as:

$$(C_{SD} \equiv T_{SD}) = c_{Qs\ unit}$$

$$C_{light\ SD} + T_{(light\ phonetic + light\ written)\ light\ SD} \equiv c_{light\ Qs\ unit}$$

I argue here that particular A unit of Qs system has got SD value in C_{SD} and T_{SD} form with individual subcategories S for each of C and T. At this point, *light* as Qs unit marked here as $c_{light\ Qs\ unit}$ is understood as a set of SD consisting of $C_{light\ SD}$ and $T_{light\ SD}$ close semantic relations based on conceptual meaning systems, as well as a formal meaning system. The main distinctions of these two different, but complementary systems, conceptual and formal, are shown in table III, with reference to concepts as a domain of conceptual meaning system and terms as a domain of formal meaning system.

TABLE III: CONCEPTS VS. TERMS DETAILED DISTINCTION

Concepts	Terms
Dynamic and abstractive system compound unit.	Static and abstractive system unit.
Data possessing is based on semantically minimal lexical and non-lexical units.	Data possessing is based on semantically intricate lexical units.
Process of information development has got a limited impact factor on communication.	Process of information development has got a high impact factor on communication.
Arbitrary statements are developed on personal experience of particular individuals, referring to terms available in Qs system. Everyday experience, which is implemented into language. Subjective SD value.	Arbitrate statements are developed on terms representation frequently avoiding semantic value of SD of particular Qs – language, referring to personal experience of particular individuals. Language competence. Universal SD values.

B. Concept(s)

Concepts are meaningful units of Qs dynamic and abstractive system that are marked here as C. According to the theory of systems: it is a dynamic connote constant development and changes in the meaning framework; for instance: the particular A unit is a new object that has been registered by the system in a perception process. Property of Qs system is an ability to develop and explain itself using available units that are intact in Qs system. This data possessing is based on a number of different operations: pure language or none-language operations (empirical experience). For example, if a particular individual incorporates an object into the Qs system as a category of herbs; initially, it is denoted as H name. Due to an indication individual 'knows' that this particular object belongs to a category of *herbs*, but it is impossible to explain its use unless a number of empirical operation is done. With reference to empirical knowledge, H is 'a bush with small narrow leaves that smell sweet and are used in cooking as a herb' (*English Oxford Dictionary*, hereinafter EOD). To be able to formulate that definition it is essential to implement H concept, which is a *herb* concept, as a c category, into terms domain. Unfortunately, that definition does not provide any information about H flavor and even particular cooking usage. The herb that it has been discussed here is a *rosemary*, and it has been defined by EOD as:

- 1) A bush with small narrow leaves that smell sweet and are used in cooking as a herb.

Here, *rosemary* is a concept of herb category, but also it is a term in a different domain of knowledge, biology. Therefore, it is not going to be discussed here as biology belongs to the meta-knowledge domain. However, the process of term formation is extraordinarily complex, and the definition provided by Robert Allen in *The New Penguin Dictionary* (hereinafter NPD) or Adrian Room in *A Dictionary of True Etymologies* is not comprehensive.

- Middle English *rosmarine* from Latin *rosmarinus* from *ror-*, *ros* dew *marinus* of the sea, perhaps because of its small blue flowers The change in spelling came about by association with and the name Mary either from or giving rise to the legend that the Virgin Mary washed her robe and hung it on a rosemary bush to dry; the dye ran and *coloured* the flowers. (NPD)
- The name *rosemary* has nothing to do with the *rose* or the name *Mary*, but derives from the Latin name *rosmarinus*, which is from "dew" (*ros*) and "sea" (*marinus*), or 'dew of the sea'—apparently because it is frequently found growing near the sea. (Room, 1988: 150).

With reference to the contemporary SD value of *rosemary* it is obvious that it has a limited impact factor on a communication process, which is highly restricted to empirical experience of individuals. Therefore, *rosemary* is not only well known as a widespread herb used for cooking mostly in Mediterranean (or Mediterranean related) cultures, but also it is

known as a memory improving herb (medicine). Moreover, it is a cultural symbol of remembrance, e.g., weddings or funerals.

III. LIGHT CONCEPT(S)

Explanation of SD value of *light* unit given by Dobaczewski and Dyszak (see Dobaczewski 1999a, 1999b, 2001a, 2001b; Dyszak 1999a, 1999b) within the framework of *semantic primitives*' methodology omits extended denotation, which is the *ability of seeing/sight*. SD of *ability of seeing/sight* unit is an inseparable factor (as a part) of SN of *light*, which implements into Qs system a number of random abstractive operations leading to a concept or net(s) of concepts, here SN. Therefore, it is crucial to approach *light* unit and *ability of seeing/sight* unit as paired units, which are universal in all linguistic systems. Thus, major difference between *light* and *ability of seeing/sight* that ought to be mentioned here refers to the source of *light* as the factor enabling *process of seeing* and; in consequence, process of meaning formation itself. Figure 1 presents meronymys' relation between a *source of light*, *process of seeing* and *ability of seeing/sight*.

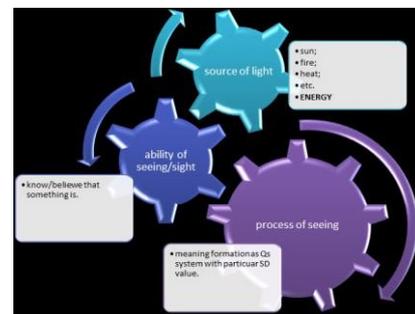


Figure 1. Meronymys' relation of *source of light*, *process of seeing* and *ability of seeing/sight*.

Those three elements are meronymys of *light* concept that consist of *light* as a term of Qs system with SD value, and they depend on:

- *Source of light*, which interpreting SD value of *presses of seeing/sight* and *ability of seeing/sight*;

Here, *source of light* implements into SD of *light* concept new semantic elements, which are autonomous units of Qs. Moreover, the source of *light* is also a factor that enables random abstractive operation, for instance, *foreseeing*: event, things and artifacts in a particular cultural context as interpretational issues (see Garbacz, 2006). According to this, *light* concept depends on the sources of something that permits *seeing*. In that case, *to see* has SD value of *to know/to believe*, which are identical to the full extent.

- *To see* \equiv *to know/to believe* that something exist.

In conclusion, *light* concept refers to the *sources* that make *sight* possible. Furthermore, other A units of Qs system are introduced as *sun*, *heat*, *fire*, etc., which are also meronymys of *light*. Elements of Qs system as *sun*, *heat*, *fire*, etc., are able to

(as concepts) produce secondary meanings in Qs system; moreover, they are able to generate different concepts itself, extending *light* SN in Qs.

A. Term(s) and Concept(s) as Hybrid Units of Qs System

Terms are units of static and abstractive system, and that means that static connotes constant SD value based on knowledge of a particular division stored in terms' network. Thus, if we set terms against concepts, which are units of dynamic-abstractive system that connote variability of SD value, we would discover that a process of concept formation is based on incomplex (?) explicate terms. When the distinctive features are registered in the operational area (interface), and general idea of concept is formed, self-effacing processes are started. This lead to terms process formation, in which concepts are obliterated and transformed by Qs systems rules into terms that no longer inform that particular A unit is a concept of something. This obliteration allows treating natural language as a hybrid Qs system in order to comprehend general idea of particular SD semantic value. Thus, terms are seen as a set of particular knowledge gathered during phenomenon of empirical experience of individual. This knowledge that has been stored in SN of Qs is a ground for a further inference. For instance, the above mentioned example of H unit as 'a bush with small narrow leaves that smell sweet and are used in cooking as a herb', refers to an 'herb', which is a term in the concept of the *rosemary* domain. Similarly to this, *light* unit has got own bunch of terms as 'sun', 'fire' and 'heat' that leads to a general term of 'energy', which is a comprehensive part of the *light*. According to this, mutual factor of T and C are distinctive elements that could be associated with the particular knowledge of artifacts. Moreover, knowledge could be valued in categories of 1) *truth – false* or 2) 'to believe to be truth' – 'to believe to be false'. Therefore, *light* unit is only the tip of the iceberg of complex semantic structures that ought to be questioned.

B. Primary Model of Meaning Formation in Qs Hybrid System

The distinctive factor between C_{SD} and T_{SD} is an operational component of meaning generating. Table IV presents the basic framework of Meaning Formation leading to a *light* tag.

TABLE IV: PRIMARY MODEL OF MEANING FORMATION

Final introduction of terms in Qs subsequent to Terms Formation Process forces different perception mechanism based on an inversion: perception process of T_{SD} load different semantic information referring to C_{SD}. Firstly, all data processing is made on terms as a part of abstractive-static system; what is more, terms are treated as a fastidious device used for opening the T_{SD} value. Secondly, this particular process is highly misleading due to random A units delivered from a large number of different areas of knowledge. Figure 2 presents mechanism of knowledge association with *light* unit.

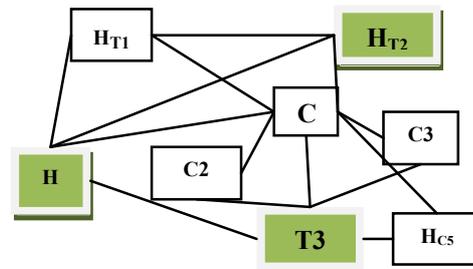


Figure 2. SD of *Light* Unit in a SN – Model I (*light*)

- H_{T1} – Hybrid: *sun* term : heat ⊢ light ⊢ to see ⊢ ENERGY
- H_{T2} – Hybrid: *fire* term : sun ⊢ heat ⊢ light ⊢ to see ⊢ ENERGY
- T₃ – *light* term;
- C₁ – concept of *light* perception; *light* term formation;
- C₂ – concept 'to see';
- C₃ – concept 'to know that something is';
- H_{C4} – Hybrid: 'to see artifact using senses' concept; empirical experience;
- H_{C5} – Hybrid: 'to know that artifacts are' concept; deduction and induction.

Concepts are marked here as C, terms as T, whereas hybrids as H with: a) concept dominant H_T, and b) term dominant H_C. All elements of the Figure 2 are indispensable to the *light* SD value. They are also simultaneously introduced by a mechanism of meaning formation and cannot be omitted during the term formation process. C₁ is a significant factor of meaning formation process as it represents a concept of *light* perception.

Relations presented in Figure 2 are *f* function:

$$f: [(H_{T1}, H_{T2}) (H_{C4}, H_{C5})] \rightarrow T_3 \text{ where } (C_1, C_2) \notin f: [(H_{T1}, H_{T2}) (H_{C4}, H_{C5})] \text{ as } (C_1, C_2) \text{ are external elements of the Qs system.}$$

This assumption implicates reflection SD value of none-*light* units that has been shown in Figure 3.

Step 1: C _{SD} value	Step 2: Term Formation Process	Step 3: T _{SD} value
[perception] of something <i>Something = (gives) the ability to know/believe that something is.</i> ↓ <i>Light</i> Concept (So-called 'sentences' domain)	[signs] [signs system] [embodied signs] ↓ Signs generating domain (Meaning assignment domain based on convention)	[<i>light</i>]: typical phonetic representation. <i>Light</i> : one written form. ↓ <i>Light</i> Term (Lexical units domain)

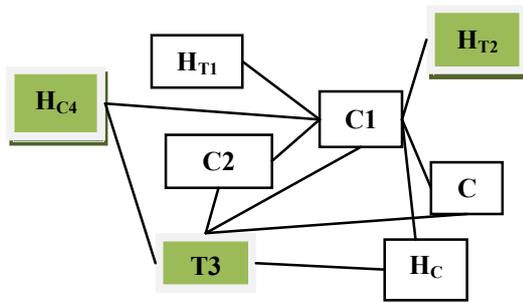


Figure 3. SD of *Light* Unit in a Semantic Network – Model II (none-light)

none-light ($\neg p$)

H_{T1} – Hybrid: none-light term: $f(\text{sun moon}) : \vdash \text{light} \vdash \text{to see} \vdash \text{ENERGY}$

H_{T2} – Hybrid: *fire* term : $\text{fire} \vdash \text{heat} \vdash \text{light} \vdash \text{to see} \vdash \text{ENERGY}$

$T3$ – light term;

$C1$ – light concept;

$C2$ – ‘to see’ concept;

$C3$ – ‘to know that something is’ concept;

H_{C4} – Hybrid: ‘to see artifact using senses’ concept; empirical experience;

H_{C5} – Hybrid: ‘to know that artifacts are’ concept; deduction and induction.

SN of *light* comprises *light* and *none-light* units, and it is marked as a function $f(p, \neg p)$:

$f(p, \neg p)$ where $p = \text{light unit}$ and $\neg p = \text{none-light unit}$;

Arguments p is a set of:

$f(p)$: $[(H_{T1}, H_{T2}) \dashv (H_{C4}, H_{C5})] \rightarrow T3$ where $\{(C1, C2, C3) \notin [(H_{T1}, H_{T2}) (H_{C4}, H_{C5})]\}$ as (H_{C4}, H_{C5}) is independent category of perception;

Argument $\neg p$ is a set of:

$f(\neg p)$: $[(H_{T1}) \dashv (H_{C4}, H_{C5}) H_{T2} \notin \neg p (H_{T1})] \rightarrow T3$ where $\{(C1, C2, C3) \notin [(H_{T1}) (H_{C4}, H_{C5})]\}$ as (H_{C4}, H_{C5}) is independent category of perception;

Both arguments p and $\neg p$ are simultaneous in the process of perception, with different relations between its elements $p (H_{T1}, H_{T2})$, which are semantically related in SD value. Still, $\neg p (H_{T1}, H_{T2})$ are not related $H_{T2} \notin \neg p (H_{T1})$, and because of that a new factor is implemented into $C1$ semantic value: *moon* as an external and natural object enabling process of seeing; thus, H_{T2} has SD value as:

p : [*sun* (enabling seeing, heat), *fire* (enabling seeing, heat) + directional quantifier];

$\neg p$: none-*sun* vs. [*moon* (enabling seeing, none-heat), *fire* (enabling seeing, heat) + directional quantifier].

When H_{T2} transformation from natural into artificial man-made object is completed, the new semantic elements are introduced immediately into the Qs system as secondary units with a different meaning; here *fire* unit belongs to p , as well as,

$\neg p$ as a close reflection of two different universes. Therefore, analyzing terms of *light* domain as a set of lexical units in order to examine its SD value leads to erroneous conclusions due to questioning the secondary Qs units instead of primary one. *Light* as a term of Qs slipping implication: ‘**device** that makes possible **to see** things which are there’. This problem refers not to the term, but to the concept of ‘**device**’ as well as ‘**to see**’, that is marked in this paper as follows:

- *Light* = ‘**device**’ + ‘**to see**’, where ‘**to see**’ \equiv to know/to believe + directional quantifier.

According to these inferences *light* unit, as well as, *to see* unit is not a property of *semantics primitives*’ domain since it is possible to indicate other components in the term set as ‘**device**’. Moreover, ‘**to see**’ unit is a set of [(to know/to believe) + (directional quantifier)]. Frankly, SD elementary value of $c_{\text{light unit}}$ is:

- 1) Something (**device**) that makes vision possible (**to see**) by stimulating the sense of sight; (NPD)
- 2) Something (**device**) that brings about the ability of seeing objects (**to see**) which are there (**directional quantifier**); (see Dobaczewski 1999a, 1999b, 2001a, 2001b; Dyszak 1999a, 1999b)
- 3) It is the energy (**device**) from the sun, a lamp, etc. That makes it possible to see (**to see**) things. (Longman Dictionary of Contemporary English; Collins Cobuild English Language Dictionary, EOD)

Sentence (3) comprises uncategorized element of SD marked as *energy*, which is understood as a *device*. However, here it is necessary to talk about sets of *devices* as a result of mankind interference into biological and physical systems or natural activity itself that could be noticed by individuals. SN that has been showed in Figure 2 and 3 refer to the simultaneity of the process of perception light as a set of $f(p, \neg p)$ where p is a *device that makes vision possible*, while $\neg p$ is a *lack of devices that makes vision possible*. What is more, *process of seeing* is inseparable from the *process of knowing that something is*, both of them are also simultaneous. Therefore, it is claimed that:

Theorem [2]:

1. Let X be a set of arguments enabling *process of seeing*.
2. Let Y be a set of arguments enabling *process of knowing that something is*.

Therefore: $[X \text{ (to make visible)} \equiv Y \text{ (to know/believe that something is)}] + \Omega$ directional quantifier);

3. $f : X \rightarrow Y$ is a function iff $\neg p \in Y$ because $p \in X$.

IV. CONCLUDING REMARKS

It has been assumed that *semantic primitives*' methodology constitutes an ideal semantic model; lexical unit *light* SD value is subordinate to the context, which depends on the Qs systems that are intact during the period of historical continuance of cultural development. According to *semantic primitives*' supposition it is noticeable that a unit as a basic term does not refer to semantic simplicity itself, because *light* as a component of Qs system possesses the ability to develop and multiply secondary meaning; therefore, the reductive approach towards the basic terms ought to be questioned.

V. REFERENCES

- [1] Collins Cobuild English Language Dictionary. Retrieved from <http://dictionary.reverso.net/english-cobuild>.
- [2] A. Dobaczewski, "Światło. Próba analizy semantycznej," in *Beiträge der Europäischen Slavistischen Linguistik (POLYSLAV)*, K. Böttger, M. Giger, B. Wiemer, Eds., band 2, München: Verlag Otto Sagner, 1999a, pp. 93-99.
- [3] A. Dobaczewski, "Próba opisu znaczeń leksemów jasny/jasno/jasne," *Prace Językoznawcze UWM*, no 1, pp. 17-26, 1999b.
- [4] A. Dobaczewski, "O czasownikach świecić i świecić się," *Acta Universitatis Nicolai Copernici. Filologia Polska*, no 55, pp. 53-60, 2001a.
- [5] A. Dobaczewski, "Czy widzieć jest semantycznie proste?," in *Studies on the Syntax and Semantics of Slavonic Languages. Papers in Honour of Andrzej Bogusławski on the Occasion of his 70th Birthday*, V. S. Chrakovskij, M. Grochowski, G. Hentschel, Eds., Oldenburg: Bibliotheks- und Informationssystem der Universität, 2001b, pp. 121-132.
- [6] A. Dyszak, "Językowy obraz światła w Księdze Rodzaju a współczesne znaczenie rzeczownika „światło”," in *Język. Teoria. Dydaktyka. Materiały 21 konferencji językoznawczej zorganizowanej w Trzcince k. Jasła w dniach 27-29 maja 1998 roku*, B. Greszczuk, Ed., Rzeszów: Wydawnictwo Wyższej Szkoły Pedagogicznej, 1999a, pp. 197-205.
- [7] A. Dyszak, *Językowe wyrażenia zjawisk emisji światła*. Bydgoszcz: Wydawnictwo Uczelniane Wyższej Szkoły Pedagogicznej, 1999b.
- [8] *English Oxford Dictionary*. Retrieved from <http://public.oed.com/subscriber-services/lookup-tools>.
- [9] P. Garbacz, *Logika i artefakty*. Lublin: Wydawnictwo KUL, 2006.
- [10] *Longman Dictionary of Contemporary English*. Retrieved from <http://www.ldoceonline.com>.
- [11] *The New Penguin Dictionary*, R. Allen, Ed., London: Penguin Books, 2000.
- [12] A. Room, *A Dictionary of True Etymologies*. Taylor and Francis, 1988.
- [13] G. Sonesson, "Semiosis and the Elusive Final Interpretant of Understanding," *Semiotica*, vol. 179, pp. 145-258, 2010.
- [14] A. Wierzbicka, *Dociekania semantyczne*. Wrocław: Zakład narodowy im. Ossolińskich, 1969.
- [15] A. Wierzbicka, *Semantic Primitives*. Frankfurt a. M.: Athenäum-Verl, 1972.
- [16] A. Wierzbicka, "Semantic primitives and lexical universals," *Quaderni di Semantica*, no 1, pp. 103-121, 1989.
- [17] A. Wierzbicka, "Defining Emotion Concepts," *Cognitive Science*, no 16, pp. 539-581, 1992. Retrieved from <http://csjarchive.cogsci.rpi.edu/1992v16/i04/p0539p0581/MAIN.PDF>.