

Članci – Articles - Artikel

UDC 81'37

Original scientific paper

Received on 27. 11. 2002.

Accepted for publication 29. 09. 2004.

Marija M. Brala

University of Trieste &

University of Rijeka

NSM within the cognitive linguistics movement: Bridging some gaps*

Ever since the Chomskyan views revolutionised the scientific study of language, we have been expecting to see groundbreaking results relative to the workings of the human language faculty. Unfortunately for the discipline, this has not been the case. This paper is structured around one one-word question: why? Departing from some general considerations about cognitive linguistics, and some specific considerations about the Natural Semantic Metalanguage (NSM), this paper attempts to: a. establish the common ground(s) shared by most approaches currently being developed within the cognitive linguistic paradigm; b. posit some key arguments supporting the thesis that semantic and conceptual universals should corroborate most if not all theses relative to linguistic conceptualisation; c. try and bridge some gaps between a number of conceptual theories of language, arguing that quite a few divergences between frameworks and interpretations are due to opacity of criteria, methodologies and even just terminology; d. suggest that NSM has much to offer to linguistics in terms of solving the above problems. It is argued that a more tightly knit paradigm would allow for a more efficient interpretation of data stemming from research in cognitive linguistics, and which is, as shown in the paper, already yielding quite a few consistent patterns.

Key words: Natural Semantic Metalanguage (NSM). Cognitive linguistic paradigm, semantic universals, conceptual primitives

* I wish to thank Keith Brown, Henriette Hendriks and Danijela Trenkic for many 'unorthodox' and stimulating conversations during which quite a few ideas expressed in this paper were shaped, challenged and rethought, as well as two anonymous reviewers for insightful comments and a number of helpful suggestions.

1. Introduction; The promising beginnings and the less promising developments

Over the last thirty to forty years, linguistics has attracted interest and achieved prestige that it had never dreamed of before. After brilliant scholars like Chomsky, Lashley, and Miller, to mention but a few Goliaths, dismantled the colossal doctrine of behaviourism, cognitive science – comprising also cognitive linguistics – started to rise as one of the main intellectual developments of the second half of the twentieth century¹.

The idea that mental processes could be thought of as operations over rich internal representations, and that both mental representations and operations could be thoroughly studied and faithfully modelled, attracted a myriad of scholars from very diverse disciplines, ranging from mathematics, electronics and computer science on the one hand, via psychology and neurobiology, to linguistics, philosophy, anthropology, and even literary criticism on the other hand. All cognitivists have been primarily concerned with mental representations, but, as Levinson (1998) points out, it soon became clear that linguists were blessed with an advantage over the others: no cognitive science apart from linguistics had ready access to one basic touchstone, namely deciding between human innate and acquired abilities.

Departing from Chomsky's (1957) hardly disputable observations relative to the creativity and productivity of children's language², and subsequent appealing interpretations, many linguists embraced his mathematically precise descriptions of language and ventured down the 'transformationalist' avenue, or down its derivatives, to find the 'innate' part of language. The search for the biologically determined principles underlying language has been underway for almost half a century now. And yet, there still seems to be serious lack of consensus among scholars about the proper characterisation of even the most fundamental linguistic phenomena.

Ever since the advent of Chomskyan views revolutionised the scientific study of language, we have been expecting to see groundbreaking results relative to the

¹ While it is true that when it comes to studies on language cognitive science has been influenced primarily by generative linguistics and by experimental psycholinguistics, and that many cognitive scientists are still only dimly aware of cognitive linguistics, it is also the case that, finding after finding, cognitive linguistics has been gaining support and prominence (the leading journal of the field is *Cognitive Linguistics*, and the movement is organised around the International Cognitive Linguistics Association).

² As is well known, Chomsky's argument refers to children's ability to derive structural regularities of their native language (i.e. grammatical rules) from the utterances of their parents, and then to extend them to create novel, original constructions, they have never heard before.

workings of the human brain, those that the consensus about the abandonment of behaviourism was perhaps somewhat naively but most certainly expected to yield. The consensus about some degree of language universality, representing a wide door into the workings of the human language faculty, was justifiably expected to bring about more and closer collaboration of the scientific community that had so enthusiastically embraced the idea of the innate basis of language. Unfortunately for the discipline, this has not been the case. This paper is structured around one one-word question: why?

Simultaneously with increasing linguistic data undermining elements in the Chomskyan extremely formal (and to many intelligible) apparatus, research in psychology on the nature of human categorisation (e.g. Rosch 1973) provided impetus for a birth of a new cognitive movement. Interestingly, this movement, which in the early 80-s still did not have a name, has in the last decade grown to become the most rapidly expanding linguistic paradigm, today known as Cognitive Linguistics.

As we shall see in more detail in Section 2 of this paper, the ‘new cognitivists’ depart from the premise that language is part of human cognition. Having given up on formal logic as an adequate way to represent conceptual systems, their new aim, and method, is to integrate discoveries about conceptual systems stemming from various sub-fields of cognitive science into the theory of language (which, ultimately, should grow into a theory of mind). Most cognitive linguists namely share the presupposition that mental representations, including the linguistic ones, can be studied and described structurally.

Once again, however, the acceptance of some new key ideas by an academic community failed to bring groundbreaking developments. The increasing interest in the conceptual organisation of linguistic knowledge rather than strengthening the new scientific movement became a point of proliferation for schools of thought, and thus soon a source of fuzziness relative to theories, criteria and methods. This paper has been written with the aim of pointing out to the fact that the number of sub-disciplines, theories, frameworks, methodologies and even jargon items in Cognitive Linguistics is probably far greater than would be useful, and thus needed, and that rather than bringing us closer to some answers, this proliferation of frameworks might actually be preventing us from collaborating more closely and serving the field more efficiently.

Departing from some general considerations regarding the discipline of Cognitive Linguistics, and the language – mind riddle - nowadays recognised by most scholars as the key linguistic issue - in this paper we shall take a look at one (borderline cognitive) theory about language, namely NSM, and then try to relate it to some other theories and my own findings within the cognitive linguistic framework. The ultimate goal is to try to show that there are a number of shared

ideas and elements which are, sadly and somewhat surprisingly, left to develop as two parallel lines, never bound to intersect.

The paper is structured in the following way: in the next section we review the common positions regarding the language - cognition interface shared by most scholars working within the cognitive paradigm. Next (section 3), I argue that Cognitive Linguistics has not addressed the issue of linguistic universals as centrally as it should have. To show what is meant by this, in section 4 I turn to a framework based on the notion of semantic and conceptual primitives, namely the Natural Semantic Metalanguage (NSM), and suggest that the criteria proposed as central to the NSM approach ('defining power', 'universality' and 'constitutive potential'), should not be ignored by anyone wishing to draw conclusive considerations relative to the cognitive basis of language. The paper ends with a few general remarks regarding the question: what makes a good (cognitive) theory. It is argued that a more tightly knit paradigm would allow for a more efficient interpretation of data stemming from research in Cognitive Linguistics, and which is, as I try to demonstrate below, already yielding quite a few consistent patterns.

2. The Cognitive Linguistic Paradigm: What we agree on, or almost

As we briefly mentioned, language is within the paradigm of Cognitive Linguistics considered and studied as an integral part of the human cognitive system. As such, it is expected to reflect – both through structure and functioning – other cognitive abilities. Albeit there being much disagreement to the modes and extent of the 'shared' between the 'language specific' and 'the rest' in the human brain, the cognitive view *is premised* on the study of language within the overall human cognitive system and does, as such, presuppose that at least to a minimal degree language should reflect and point to structural elements and operational principles that pertain to sub-systems of human cognition other than the language faculty.

This basic point of departure is reflected in a few common views on language and cognition advocated by most of those working within the cognitive paradigm. This consensus gives coherence to the framework, which otherwise, given the great diversity with respect to perspectives, criteria, methodologies and evaluation tools advocated by various cognitive linguists, we would hardly be justified tagging 'a paradigm'. In a nutshell, these common views - stemming from some basic findings - could be stated as follows:

- 1) language is part of human cognition, intimately linked with other cognitive domains and as such mirrors (the interplay between) various sub-domains of the human cognitive system. We can understand language only if we study it in the context of conceptualisation and mental processing, thus only in relation to the whole system, and this calls for interdisciplinary research;

- 2) linguistic structure depends on, and possibly to some degree influences, conceptualisation. Conceptualisation, filtered through perception, reflects the interaction of cultural, communicative, psychological, functional and neuro-physiological considerations. The language-cognition relation is to be investigated from both ends;
- 3) meaning is what drives language. Meaning is not constrained in the lexicon, but ranges through the linguistic spectrum. Furthermore, many (but not all) cognitive linguists view meaning as 'embodied', i.e. as having its 'roots' in the shared human experience of bodily existence.
'Access' to meaning involves access and manipulation of knowledge structures (labelled as 'scenes', 'cognitive models', 'conceptual domains', 'image schemas' etc.). The meaning of a linguistic unit is a conceptual structure associated with it. Furthermore, it is also argued that individual concepts are understood in the context of a complex structured experience (called the semantic frame³).
- 4) at the surface level of language, the linguistic spectrum (see point 3 above) is differently partitioned in or rather by different languages. We say that at the cross-linguistic level languages differ in terms of their categorisation patterns. This also means that large portions of cognitive linguistic research need to involve the cross-linguistic level, where most or rather all results should also be verified;
- 5) grammar is motivated by semantic considerations. This assumption is however to be understood within another, broader consideration, which can be asserted as follows: given the interaction between language and other domains of cognition, as well as the interaction among language subcomponents, the various autonomy theses proposed in the (traditional) linguistic literature have to be abandoned; a strict separation of syntax, morphology and lexicon is untenable. As pointed out in 3 above, *meaning* is at the basis of all linguistic phenomena. Grammar - a set of principles governing how the lexical elements can be combined - is viewed as establishing the basic signalling of the semantico-syntactic relationships

³ However, Frame semantics is not an atomistic theory of meaning in the way NSM is. Frames involve a specific choice of viewing a situation, i.e. they also a rather large slice of the surrounding culture, and are as such one level 'higher' than the atomistic level that we are focusing on in this paper. This does not mean that say Frame semantics and NSM (and other atomistic paradigms) are not compatible. We are simply talking about two different levels at which the human language faculty is realised: the atomistic level (the level of universality), and the level of patterning (schematisation, complex meaning structures), i.e. a (language specific) molecular level where universal elements are put to use in a language (possibly even also speaker) specific way (see also section 4.2.).

accomplished in a given language, i.e. as determining the typological profile of that language.

Data analyses and theoretical assumptions which to varying degrees reflect the above points can at present be found in proposals advocated by e.g. René Dirven, Gilles Fauconnier, Charles Fillmore, Mark Johnson, Ronald Langacker, George Lakoff, Leonard Talmy, Mark Turner, and Anna Wierzbicka, to mention just some of the leading researchers developing theories within the cognitive framework. The scholars just mentioned are at the forefront of the 'new cognitivist movement', currently establishing a research programme grounded in the premises stated above. Yet, albeit departing from the shared considerations spelled out in 1 through 5 above, work by the scholars we just mentioned swiftly starts drifting away from common grounds the moment these considerations are 'put into practice'. Is there any way this might need not be necessarily so?

3. In search of common grounds: Can the cognitive do without the universal?

The basic cognitivist assumption that there are things that are shared between the human language faculty and other subsystems of human cognition (for a thorough examination of this point cf. e.g. Talmy 2000) translates into the following two way equation: by examining language we should gain insight into the structure and operational principles of the mind, just as by examining multifaceted aspects of various cognitive processes taking place in the human brain we can gain insight into the meanings expressed by linguistic forms.

Most cognitive linguists and psycholinguists take the first road and try to search for answers about the language-mind riddle departing from language, i.e. linguistic data, and posing the following hypothesis: if the human language faculty is constrained in structural and operational terms (let us think about this as some kind of ontological knowledge, or 'pre-knowledge') then it is quite likely that this same ontology (or parts thereof) will be constraining other subsystems of human cognition as well.

Generally speaking, cognitive linguists work from data toward theories, and much more rarely in the other direction. This is not necessarily negative (else we just might run the risk of 'adjusting' our data so as to fit the theory), but it does have the fault of being simply descriptive, thus lacking the virtue that every 'serious' science should have: that of being predictive. Although some cognitive linguists (e.g. Janda, Croft) try to justify this weakness by the fact that in language we have too many variables, and that all the data is necessarily contaminated (and that thus cognitive linguistics cannot subscribe to a strictly dualistic understanding of the concepts 'predictable' vs. 'arbitrary', or 'objective science' vs. 'subjective inter-

pretation', cf. Janda 2000), this might just not be a promising scientific reply to well grounded criticism.

As specified in Section 2 above, cognitivists view meanings – the focal point of their scholarly efforts - as involving access to and manipulation of conceptual or knowledge structures. One immediate question follows: 'Over precisely what kind of information are computations in the brain carried out' (cf. Jackendoff 1992). The answer to the question might be found en-route to answers to another question: which subsystems of human cognition are easily comparable with language and what is universally shared between these systems and the way we talk about them. We shall return to this question below, and the answer to it shall provide one of the guiding principles for the suggestions put forward.

Now, since we are talking about the human brain, or, if one wishes, about its 'contents' i.e. the mind, we cannot dismiss the idea that there have to be some elements to language which will be shared not just between the human language faculty and other sub-systems of human cognition, but between all natural languages of the world. Or, to put it into 'historic' or 'developmental' terms, if Chomskyan cognitivist were after the syntactic universals, the new cognitivists, having recognised the primacy of meaning over all other manifestations of language, might perhaps be best off embarking on a search for semantic universals – the fundamental elements of linguistic meaning (and structure), which are common to all languages.

The idea is by no means new. The search for core meanings i.e. semantically primitive expressions which remain after a completely exhaustive semantic analysis has been carried out, and which cannot be defined any further, has been around, as an idea, since Old Greece. Methodologically, or empirically, it dates back to the seventeenth century, when Pascal, Descartes, Arnauld and Leibnitz all saw the need for semantic primitives.

I say it would be impossible to define every word. For in order to define a word it is necessary to use other words designating the idea we want to connect to the word being defined. And if we then wished to define the words used to explain that word, we would need still others, and so on to infinity. Consequently, we necessarily have to stop at primitive terms which are undefined. (Arnauld and Nicole 1996 [1662]: 64)

Leibnitz even undertook a programme of lexical investigation aimed at discovering not only the primitive elements underlying words, but also the rules of composition guiding the formation of complex notions and words (see review in Ishiguro 1972). His studies were premised on the idea that 'all expressions should be reduced to those that are absolutely necessary for expressing the thoughts in our minds' (Leibnitz, 1973 [1679]: 281), since 'if nothing is conceived and understood through itself, nothing could be conceived and understood at all' (ibid.: 430).

In modern times, the idea of semantic primitives (or ‘elementary meaning components’, ‘atomic concepts’, ‘semantic primes’, ‘simples’ etc.) has been advocated by many researchers (Sørensen 1958; Greimas 1966; Boguslawski 1965; Benedix 1966; Katz & Postal 1964, Fillmore 1971; McCawley 1968; Greenberg 1978, Lakoff 1970; Jackendoff 1983, 1990; Wierzbicka 1972, 1996, 1997; Goddard 1998, 2001; Goddard & Wierzbicka (eds.) 1994, (eds.) 2002; Talmy 1996, 2000 and many others).

Some of them work within the cognitive paradigm, others do not. Most, if not all of them, have however been developing their own version of ‘semantic primitiveness’, contributing to the creation of some sense of paradigmatic inconsistency within (cognitive) linguistics. Yet, one of the proponents of semantic universality stands out. Anna Wierzbicka, the main developer of the Natural Semantic Metalanguage (NSM) has for the past thirty years been working on an ‘irreducible semantic core’, a ‘mini-language’ of the form of simple and further indefinable meanings that can be found in every natural language of the world. Departing from the idea that semantic primitives should correspond to actual words in all natural languages, together with her collaborators she has developed what is one of the most exhaustive and yet simplest⁴ sets of semantic universals around. Yet, albeit being positioned around the universals that have been empirically attested in most if not all natural languages, Wierzbicka’s proposals have never gained centre stage within the cognitive linguistic movement. The reasons underlying the fact that NSM has not been adopted more enthusiastically by the cognitive linguistic community are at least twofold. One reason lies in the fact that many cognitive linguists are still wedded to the notion that meaning is ‘fuzzy’ and cannot be pinned down in discrete propositional terms (for some counterarguments see Section 4.1. below). Secondly, the fact that in her writings Wierzbicka uses the terms ‘semantic’ and ‘conceptual’ more or less interchangeably - the idea being that semantic primitives represent atomic elements of linguistic conceptualisation⁵ - is seen as highly objectionable by some critics (see e.g. Croft 1998). Some scholars insist that independent psycholinguistic evidence is required before one can make any conceptual deductions from purely semantic analysis. Counterintuitive though it may sound, this latter objection becomes, under the view advocated in this paper, a strong argument in support of NSM. It is namely argued here that no (psycho)linguistic paradigm has arguments against the validity of NSM’s data (primitives) and that, more importantly, work by Wierzbicka and her colleagues⁶

⁴ Here, consider Lyons’ positions that ‘every formalism is parasitic upon the ordinary everyday use of language, in that it must be understood intuitively on the basis of ordinary language’ (Lyons 1977: 12).

⁵ This position is premised on the view (first advocated by Leibnitz) that semantic analysis is by its nature a conceptual inquiry, because meanings are not external entities but, so to speak, creations of the mind.

⁶ Anna Wierzbicka and her closest collaborator Cliff Goddard are part of a larger NSM research community. NSM researchers work on diverse crosslinguistic projects which cover

represents sound empirical basis for anyone wishing to speculate ‘deeper’ into the theory of mind. Proposals relative to the workings of the human language faculty (intended as part of the human cognitive system) simply CANNOT disregard the surface elements attested in ALL natural languages, be it relative to form (i.e. functional properties), or meaning (or, best, both, as most probably the two share an interface and interact).

Notwithstanding the above criticisms, it would be mistaken to think that NSM is altogether marginal within the cognitive linguistic paradigm. Many scholars already cited in this paper have recognised the merits of NSM as a valued trend within cognitive linguistics. What is being advocated here is not recognition, but rather a more extended and fruitful integration of NSM within the cognitive linguistic movement. The call is prompted by the following considerations:

- a) NSM has much in common with many cognitive proposals that have been put forward much after the advent of Wierzbicka’s efforts (without this fact being duly recognised), and
- b) NSM has much to offer to anyone wanting to see more light and coherence within the cognitive movement itself.

Let us see what exactly is meant by these two claims, and what are the arguments that could validate them.

4. NSM: The simple story, the rich parallelisms, and the far reaching implications

As we have seen in section 3, many contemporary linguists are proposing that there must be a set of universal semantic primitives underlying language. One of the most persistent proponents advocating and searching for semantic atoms is Wierzbicka, whose thirty years of research life have been devoted to the quest for universal meanings which, according to her, must be embodied or rather realised in surface expressions, most probably words (Wierzbicka 1972, 1996, Goddard 1998; Goddard and Wierzbicka (eds.) 1994, (eds.) 2002).

Departing from a programme of trial and error investigations aimed at explicating meanings of diverse types in several languages, Wierzbicka (e.g. 1972) formed a hypothesis about a set of primitive concepts. The main criteria guiding the empirical evidence were ‘defining power’ (what role does a concept play in defining other concepts), and ‘universality’ (the range of languages in which a given concept

not just a wide number of languages, but also a variety of research topics (for an overview of the programme and a substantial bibliography see the NSM Homepage at the following URL: www.une.edu.au/arts/LCL/disciplines/linguistics/nsmoage.htm).

has been lexicalised). These two independent criteria yielded over time a set of semantic primes which, at present, looks as follows:

Substantives:	I, YOU, SOMEONE, PEOPLE/PERSON, (SOME)THING, BODY
Mental predicates:	THINK, KNOW, WANT, FEEL, SEE, HEAR
Speech:	SAY, WORD, TRUE
Actions, events:	DO, HAPPEN, MOVE
Existence:	THERE IS, HAVE
Life:	LIVE, DIE
Determiners:	THIS, THE SAME, OTHER
Quantifiers:	ONE, TWO, SOME, ALL, MANY/MUCH
Evaluators:	GOOD, BAD
Descriptors:	BIG, SMALL, (LONG)
Time:	WHEN/TIME, NOW, BEFORE, AFTER, A LONG TIME, A SHORT TIME, FOR SOME TIME, MOMENT
Space:	WHERE/PLACE, HERE, ABOVE, BELOW, FAR, NEAR, SIDE, INSIDE, (TOUCHING)
Interclausal linkers:	BECAUSE, IF
Clause operators:	NOT, MAYBE
Metapredicate:	CAN
Intensifiers:	VERY, MORE
Taxonomy:	KIND OF, PART OF
Similarity:	LIKE

Table 1. Proposed semantic primitives (after Goddard and Wierzbicka 2002)

These primes, seen as being inherent in every human language, are interesting for a myriad of reasons. Scholars working within the narrow NSM framework view them as important because they are extremely useful and versatile in framing explications and, on the other hand, are themselves resistant to (non-circular) explications. Furthermore, the fact that these elements have a counterpart i.e. an exact translation – either in the form of bound morphemes or fixed phrases - in most if not all human languages, adds weight to the proposal.

As already pointed out, NSM research stops at the surface level, and does not venture into speculations about the deep structure of the primes (simply equated with concepts⁷), nor does it try to draw parallels between the proposed primitives and elements that have been singled out as structural items in disciplines studying other cognitive sub-domains (vision, hearing, motor control, manipulation of haptic information etc). From the cognitive perspective, this is at least surprising, not to say unacceptable, and has probably contributed to confining NSM research within the

⁷ Although Wierzbicka (1993) states: ‘It is clear that if we are to find truly universal human concepts, we must look for them not in the world around us but in our own minds’ (ibid: 8).

cognitive linguistics movement. Given this, it might be natural to wonder how is it that a paper aimed at bridging some gaps within the Cognitive Linguistics paradigm, has as its point of departure a framework with some such obvious weaknesses as far as cognitive science is concerned.

The answer is quite straightforward: NSM was chosen not because there are some indisputable arguments that would assert its primacy over other theories i.e. cognitive accounts of language. As a matter of fact, proposals by e.g. Croft, Fillmore, Fauconnier, Johnson, Langacker, Lakoff, or Talmy, to mention but the most influential developers of cognitive theories about language, have been much more central to the development and the current status of the Cognitive movement than NSM. There are, however, two aspects of NSM that single it out with respect to all current cognitive frameworks, and make its findings of particular interest for cognitive science. We are talking about the simplicity of the NSM machinery, and, much more importantly, about the basis (of ‘self-definability’ and ‘universality’) that the approach is grounded in. Let us take a look at each of these two arguments.

4.1. Simplicity and conceptual primitiveness of NSM

Language, including also language about language, exists first and foremost to be understood. True, weary of pressures from exact sciences like physics or mathematics, linguists (especially the MIT branch) have worked hard on developing complex symbolic devices and formalisms. Unfortunately, these machineries ended up making the theories underlying them quite intelligible and accessible to just the few specialist, without, and here lies the catch, providing much gain at the explanatory level. None of the codes so far developed in linguistic science managed to do much more than rendering what is being said – opaque. This is not what a language, even less ‘language about language’, should be about.

As Lyons (1977: 12) has put it:

It is ... a matter of considerable philosophical controversy whether we should take ordinary language, with all its richness, complexities and alleged inconsistencies as something basic and irreducible, or think of it as being, in some sense, derived (or derivable) from a ... kind of language with properties similar to those embodied in formal languages.

Wierzbicka’s (1993: 36) position on the matter is quite clear:

Whether or not words such a *person*, *this*, *think*, *say*, *want* or *do* are absolutely universal, they do have semantic equivalents in countless languages of the world, and they differ in this respect from words such as *animate*, *deictic*, *cognition*, *locutionary*, *deontic* and *agency*. Whether or not we can find a set of concepts which would be truly clear, truly simple, and truly universal, if we want to understand and explain

what people say, and what they mean, we must establish a set of words which would be maximally clear, maximally simple, and maximally universal.

I here argue against formalisms and for maximal simplicity in the context of cognitive linguistics for two straightforward reasons. First, and this is quite a general remark, simplicity of the NSM machinery is good in terms of its accessibility for cognitive linguists working in other frameworks, who, as we shall below, in the case of NSM can very easily attest whether the semantic and/or conceptual elements they are proposing in their theories are ‘self-explanatory’ (which artificial elements never are), and whether they are universal (which cognitively grounded elements cannot but be). Secondly, and in this case perhaps more crucially, simple descriptions of language are very valuable in terms of their high accessibility for people who are not trained linguists - which is of highest importance for interdisciplinary work. And, as has already been pointed out in Section 2, interdisciplinary studies are at the core of cognitive science.

The other aspect of NSM which I wish to draw attention to, since I see it of paramount relevance to the key premises of the Cognitive movement, relates to the basis of the framework, i.e. the main criteria on which NSM corroborates empirical evidence: ‘defining power’ of the semantic primes, and their ‘universality’. The importance of these two parameters for cognitivists could be asserted as follows:

- a) we cannot talk about the cognitive without talking about the primitive, self-explanatory. In this context it should be noted that NSM’s ‘defining power’ is intrinsically linked to the ‘inherent in our cognitive systems’, to the ‘innate’, and to the ‘bodily basis of language’ i.e. the ‘embodied meaning’ advocated by many cognitivists, such as Lakoff and Johnson, who maintain that meaning, thus language, is grounded in our shared human experience of bodily existence⁸;
- b) we cannot talk about the cognitive without talking about the cross-linguistically universal. If there are some cognitive bases to language, they have to be typical of the human species, and such they should be reflected in all human languages. We could take this point a step further and ask whether all the semantic features that have been proposed by cognitive linguists could - in one way or another - be reduced (at the atomistic, language universal level) to Wierzbicka’s semantic primitives.

⁸ This experience is, of course, filtered through perception, so we cannot expect concepts to faithfully mirror all aspects of the real world. The idea is to explore and describe ways in which meaning, largely based on the ‘embodiment’, is motivated by human perceptual and conceptual capacities. It is because of this interplay between perception and conception that Talmy (1996) coined ‘ception’ as an umbrella term.

NSM is premised on the notions of ‘defining power’ and ‘universality’, these are two basic criteria guiding empirical evidence within the framework. Thus, albeit not making any claims about the mental structures of the concepts proposed as primitives, NSM *cannot* be excluded from the analyses within the cognitive framework. Neglecting evidence stemming from 30 years of empirical research on semantic primitives and universals would not be just a terrible waste, but potentially fatal for any conclusions which, without the assurance of representing the ‘atomic level of language and human (linguistic) thought’, might be concealing the real scientific truths. Namely if a only single semantic ‘molecule’ is left unanalysed and is allowed to pass for a semantic ‘atom’, the relations between this ‘molecule’ and most, if not all other lexical items – and thus the language web - will be necessarily left unexplained. (cf. Wierzbicka 1992)

Notwithstanding all the insufficiencies of NSM with respect to the cognitive paradigm, I think that all the above clearly explicates some of its merits, which are of potentially paramount importance for all the scholars researching cognition. Furthermore, some of these merits (simplicity, defining power, universality, primitiveness) might be said to be dangerously absent, at least in part or to a degree, from many other linguistic frameworks and theories currently being developed within the cognitive paradigm.

Another virtue of NSM is that it readily lends itself to comparisons with findings stemming from research carried out under the premises of various linguistic approaches and sub-fields. This point is taken up in the next sub-section.

4.2. What is shared between NSM and some current (cognitive) linguistic findings

In order to show what the abovementioned merits of NSM with respect to the cognitive paradigm mean in practice, I shall now try and draw some parallels between the primitive semantic elements representing the backbone of NSM’s findings (see Table 1 above), and some frequently cited findings, interpretations and proposals drawn here from some other frameworks that are very popular within Cognitive Linguistics, as well as between NSM and finding from my own research on language and space.

If we take a closer look at Table 1, i.e. at the concepts there posited as being semantically primitive, we can observe that all elements in the table strikingly reflect one or more aspects of language previously individuated as being some of the defining aspects of (human) language. As we shall see below, Wierzbicka’s primitives impressively mirror many linguistic ‘roles and rules’, well known from other cognitive and/or traditional analyses.

Taking things one at the time, we shall start with some intuitive but very immediate observations. Let us consider the first line of items in the table, i.e. the substantives. *I* and *you* clearly reflect the distinction between ‘speaker’ and ‘addressee’, and *someone* can be seen as the primitive ‘justifying’ e.g. the markedness of the 3rd person singular in English. Next, *people* vs. *person*, but also the quantifiers *one* vs. *two* reflect the ‘primitiveness’ of the distinction between the ‘singular’ and the ‘plural’. In the group of quantifiers (*one*, *two*, and *all* vs. *some*), we also find further support for the posited primitiveness of the notion of ‘definiteness’ (unique identifiability) vs. ‘indefiniteness’, usually expressed in languages either with the system of definitive vs. indefinite articles, demonstratives or others (cf. Lyons 1999, Trenkic 2001). *Some* and *part of* clearly tie into the primitiveness of what is in the linguistic jargon known as ‘partitivity’ (as case or construction), and *like*, *more*, *very* and *the same* bear strong relation to ‘comparativeness’ (as construction and inflection) in language. Other traditional syntactic and pragmatic notions such as ‘modality’ (*can*, *maybe*), tenses (*before*, *now*, *after*), and ‘durativity’ (*for short/long time*) also find ‘conceptual’ support in NSM.

These and other ‘parallels’⁹ have, of course, been noted by NSM researchers. It has, in fact, been argued that every semantic primitive is found as part of a grammaticalised meaning in some of the world’s languages (cf. Goddard 1998: Ch. 11; Goddard and Wierzbicka 2002). A thorough analysis of the relationship between semantic primes and typological categories can be found in Goddard (1998), and Wierzbicka (2002).

It might be sensibly remarked at this point that the parallels drawn above are not much other than intuitive and arbitrary observations; they might look sensible, but offer little else from the cognitive perspective. My first reply is that the parallels might be (somewhat) intuitive, but they are not arbitrary, in that all NSM primitives can in some way be ‘reduced to the bodily’ i.e. to the our most essential experiences of bodily beings living in and interacting with the real world surrounding us, perceived via different senses (hearing, vision, motor control, force dynamics, sense of touch etc¹⁰). We shall return to this point below.

⁹ Other grammatical phenomena and the primitives they involve include: switch reference and obviation (THE SAME and OTHER), passives (HAPPEN and TO DO), imperatives (WANT, YOU, DO), interrogatives (WANT, NOT, KNOW), adversative constructions (HAPPEN, BAD), benefactives (HAPPEN, DO, GOOD).

¹⁰ The least physical items in Table 1 are the evaluators *good* and *bad*. Yet, if we think of these two lexical items in evolutionary terms, in terms of the coevolution of language and brain, we quickly realise that differentiating between e.g. sources of danger (bad) vs. non-dangerous (good), or sources of food (good) vs. non-edible (bad) was of primary importance and necessity, and if there was ever a need to talk, it was in order to differentiate between these things (cf. Deacon, 1997).

Should this still not be enough to serve as ‘hard evidence’ or at least as convincing argument in support of the importance of NSM findings and methods within the cognitive paradigm, let us move the next series of remarks which are supposed to show that the parallels can be much less naïve, and much more scientifically orthodox than the ones drawn above.

Let us begin by recalling a very influential paper by Landau & Jackendoff (1993), in which the authors posit a clear distinction of the way our minds organise conceptual content relative to (names of) object vs. that relative to their location, i.e. between the ‘what’ and the ‘where’ cognitive domains. The subcategorisation in NSM between ‘substantives’ and ‘space’ (*where/place*), nicely mirrors this proposal. Furthermore, if we concentrate on ‘space’, an old time favourite of cognitive science, we note that ‘NSM evidence’ for many elements that have been proposed (by Lakoff, Langacker, Talmy and many others) as primitive conceptual features, e.g. ‘boundedness’, ‘directionality’, ‘volume’ (interior), ‘surface’ or ‘orientation’ (cf. in Table 1: *above* vs. *below*, *inside*, *side* etc.). Other ‘basic spatial elements’ such as e.g. ‘circle’, frequently proposed as conceptually primitive (cf. Bowerman 1996: 401, Clark, 2001: 387-389), find no relation to any of the elements proposed as primitives in NSM. This can either mean that NSM has not taken it into account as a potential primitive (and which, given the evidence from other frameworks, should be done), or other analyses have not been exhaustive enough, and have, in the case of ‘circle’, stopped at a level higher than that of atomic meanings. Maybe, after all, a ‘circle’ is just a ‘line’ with not ‘boundedness’.

The example of ‘circle’ just mentioned is interesting for two more reasons. First, it is very curious to note that size seems to be quite prominent in NSM (*big* vs. *small* feature as primitives), whereas shape does not. This is surprising because many current psycholinguistic findings seem to suggest that both size and shape are encoded across languages, having both also been shown to influence performance in non - verbal categorisation tasks (cf. e.g. Levinson 1992; Bloom et al. *passim*). Furthermore, in my own work (Brala 2000) the concept of ‘circle’ has been crucial for explicating some categories of (crosslinguistic) usage of the spatial prepositions ‘in’ and ‘on’ (cf. also Brala 2002). Absence of any relevance of the notion of ‘circularity’ in NSM might be a warning sign indication reconsideration of some aspects in either NSM of our own studies.

What has just been said with respect to ‘circle’ applies to a large degree to ‘contact’ (in the literature also referred to as ‘touching’). ‘Contact’ is another element that has frequently been proposed as basic (primitive, atomic) both in lexical (cf. Lindstromberg 1998) as well as in psycholinguistic studies (Bowerman 1996: 386, 393-398). However, since the 1970’s when the first NSM inventory of primitives was compiled, until just very recently, ‘contact’ was - from the NSM perspective - viewed as consisting of the co-location of parts. Yet, this turned out to be unsatisfactory for a number of situations (cf. Goddard 2002a: 306-307), and finally today ‘contact’ - termed ‘TOUCH’ (or ‘BE TOUCHING’) - is being

considered as a possible NSM prime. Goddard (2002 a) writes: ‘Whether or not this notion proves to be directly expressible in all languages awaits comprehensive testing, but initial indications are positive’ (ibid.: 307). These ‘initial indications’ would be even more positive if we also considered the fact that crosslinguistic analyses of prepositional systems (covering a total of 36 languages – see review in Brala 2000) have shown that the notion of ‘contact’ is a (conceptual) basis of lexicalisation of prepositional meanings in *all* languages (which exploit this lexical category), and, even more importantly, that in a number of languages presence/absence of contact and even the ‘quality of contact’ can define lexical changes from one preposition to another (and even changes between grammatical categories - for a thorough treatment of these problems and of the primitive ‘contact’ from the perspective of prepositional systems cross-linguistically see Brala 2002). It is interesting to note that the main arguments put forward in support of the inclusion of ‘TOUCHING’ in the list of NSM primes are found in a recent analysis of the English preposition ‘on’ by Goddard (2002b). It is however also important to note that Goddard’s arguments would benefit a great deal from a grounding in a more integrated framework of cognitive studies and theories (where the opposite view holds as well, i.e. the inclusion of ‘touching’ into the list of NSM primes offers further support to all those who have proposed ‘contact’ as a conceptual and/or lexical primitive).

Finally, I would like to spend a few more words on ‘causativity’, known to be a characteristic of linguistic expression and mirrored within NSM in the interclausal linkers *because* and *if*, and in the particular distinction within the action/events items (*do*, *happen*, *move*). While the interclausal linkers directly point to the ‘cause’, the group of three verbs in the action/event category is particularly interesting, much more so than might appear at the first glance. First, we note that the ‘ threesome’ *do*, *move*, and *happen* bears a particularly impressive relation to much work done on space (both location and motion) within the cognitive paradigm (cf. Bloom et al. 1996, *passim*), and as such reinforces our conviction that more collaboration and integration is needed between various frameworks. Even more interestingly and more concretely, the distinction between *do*, *happen* and *move* becomes particularly striking if one relates it to some recent psycholinguistic findings by e.g. Choi and Bowerman (1991, cf. also Bowerman 1996). Choi and Bowerman (1991) have shown that Korean makes a rigid distinction between the verbs for caused and spontaneous motion (*do* + *move* vs. *happen* + *move*). It has furthermore been shown that children show a very early sensitivity to this language specific trait, categorising instances of caused and spontaneous motion according to their language specific patterns as early as 17 months. Now, this latter finding is perfectly representative of an important trend that has come to the fore within (psycho)linguistic studies over the past decade - the emphasis on more language specific and even relativistic models of linguistics, and linguistic semantics in particular (cf. Gumperz & Levinson 1996, *passim*). Some might see this trend as being incompatible with NSM. But this is a misguided conclusion. Language specificity and language universality are incompatible only when observed, studied and interpreted at one and

the same level (i.e. as belonging to the same level of analysis). The moment we start viewing language universality (thus also NSM) at the deep, atomistic level of linguistic analysis, and study language specificity at the surface level of linguistic (lexical) patterning (some sort of ‘molecular’ level or Slobin’s (1996) on-line, ‘thinking for speaking’ level which sees the contents of our minds encountered in a language specific way the moment they are being put to (linguistic) use), the two apparently mutually exclusive views of language-universality vs. language-specificity are bridged and become part of a single, but level-structured human language faculty.

Before concluding this sub-section, two final things need to be addressed. First, it should be noted that cognitivists ought to pay special attention to the semantico-syntactic interface. As we have seen in Section 2 (point 3) of this paper, most cognitive linguists agree on the primacy of meaning, but as many approaches currently under development seem to suggest (see e.g. Langacker), that grammar i.e. the regularities of syntax might simply be a reflection of meaning components (and should also always be related to the working of the whole human cognitive system). This is a complex and potentially far-reaching observation, which should not be excluded from any serious dwellings on the human language faculty and, ultimately, on the theory of mind.

On a related note, let us also observe here that it is, of course, not just entirely possible but also quite likely, that in addition to a universal set of elementary concepts there are also certain universal principles underlying and guiding the (language specific) combination of semantic primes into more complex (syntactically higher?) lexical units (cf. Brala in press). These atoms (cognitive structural elements) and combinatorial principles would possibly form a closed set and the basis for the ‘word-molecule’ formulae, also facilitating the acquisition of language. Speculations about this point are, however, outside the scope and reach of this paper.

4.3. Some implications and suggestions for further developments

One of the goals of NSM is to build some sort of metalanguage, which would be maximally universal, maximally self-explanatory and intuitively intelligible. On its own, this cannot be said to be a satisfactory goal of any cognitive linguistic framework, but it most certainly more than a useful tool on our way toward a theory of the human language faculty. As I have tried to show above, NSM can be useful for our cognitive explications of both the compositional elements of language (semantics, pragmatics), as well as that of its combinatorial principles i.e. rules (syntax, pragmatics).

As already stated, this latter, explicative goal is hardly even set out, let alone achieved by NSM. Interestingly, Wierzbicka does at some points in her writing (e.g.

1993: 39), make claims that in her cross-linguistic work she is comparing *conceptual systems*. This statement, I think, is a bit far fetched, since what is currently being done within NSM is the comparison of languages i.e. lexicons. No attempt has been made to posit anything specific about the deep, conceptual structure of NSM universals. How are they encoded and accessed, and how are they related to other parts of language, as well as other sub-systems of human cognition? This remark is not meant to be a criticism of the framework, but rather a pointer to the need of empirically buttressing the existence of all proposed language universals by making a rigorous comparison of these universals with respect to what is known about the ‘conceptual systems’ embodied in other sub-domains of the human cognitive system. This can, starting from within the linguistic science, be done in at least the following four ways:

- 1) *Probe the primitives against evidence from language acquisition, particularly first, but possibly also second*¹¹. As far as one can tell from the current literature, most of the proposed semantic primitives appear to be attested in early child speech, and most certainly all appear to be well in evidence by the age of five (cf. Bloom 1991; Carey 1985; Clancy 1985, Clark & Clark 1977, Ervin-Tripp 1970, Slobin 1985, Johnston 1985, Peterson 1990, Wierzbicka 1996). Much less is known about the status of these universals with respect to findings stemming from second language acquisition research.
- 2) *Combine the research on semantic universality with research on syntactic universality, i.e. extensively and systematically address the issue of universals in relation to the semantico-syntactic interface*. It needs to be pointed out that the research into the universal syntactic properties of primes is already under way (cf. Goddard and Wierzbicka 2002), and that the initial findings suggest that the notion of a semantically – based universal grammar is not just plausible, but also that the NSM approach seems very productive for characterising syntactic universality in language. Namely, a number of descriptive-analytical projects about universal syntactic properties of NSM primes have shown that the meanings of language-specific grammatical categories and constructions can be stated in clear and testable formulations using the same machinery that ‘works’ for lexical meanings (ibid., passim.). As Wierzbicka (1993, 1996) points out, the criteria of ‘defining power’ and ‘universality’ should, in a thorough cognitive linguistic analysis be complemented with that of the ‘building blocks’ (after Leibnitz). This means that the simples should not be just clear, indefinable and universally attested in all human languages, but should also be demonstrably active as ‘building blocks’ in the construction of other concepts. What is interesting here, is the ability of the primitives to generate other concepts and

¹¹ The ‘unlearnability’ of certain linguistic traits of the first language (and the ‘learnability’ of others) is particularly interesting in this context. We always wish to ask ‘why’, and universals might provide at least a few ‘because’.

constructions¹². It is exactly this aspect of the ‘potential’ of the primitives that should thoroughly be investigated at the level of the semantico-syntactic interface. In this context, it is particularly interesting to observe what happens when a primitive is ‘shifted’ from one to another syntactic category. What is the effect of the addition and removal of a certain concept from within a lexical item. How does meaning change? Does a lexical item change syntactic properties after addition/subtraction of a universal (cf. Levin & Pinker 1991)? A framework such as NSM, that is crosslinguistically valid and intuitively intelligible, submits itself to a very high standard of semantico-syntactic verifiability (‘higher than any rival methods’ – cf. Goddard & Wierzbicka 2002: 11), and would as such appear ideal for testing the universality of linguistic elements with respect to the semantico-syntactic interface.

- 3) *Systematically probe universals at the interdisciplinary level.* Some areas that represent good points of departure, that especially psycholinguistic have already worked at quite notably, are (language of) space and (language of) motion. Findings (about universals) stemming from studies in these fields should be compared with those resulting from research on e.g. vision, manipulation of objects, motor control and outputs of other subsystems of human cognition.
- 4) *Verify whether NSM can account for and explain (possibly also predict?) various pluralism within the cognitive linguistic paradigm.* Language is a bridge between the individual (cognitive) and the social. As such, it would appear to be an ideal tool for investigating and explicating the variability that (can) occur between conceptualisation and culture. Exploring linguistic issues such as polysemy and metaphor within the NSM framework might shed new light on problems relative to the relationship between the cognitive and the cultural (e.g. the issue of linguistic relativity, to mention but one example). It needs to be said here that the NSM research programme has already undertaken some substantial steps in the direction of the social, by exploring cultural scripts, i.e. descriptions of cultural norms in terms of semantic primes, which, in turn, serve as building block for a culturally grounded theory of inferential pragmatics (cf. Ameka 1999; Goddard 2000; Peeters 2000; Wierzbicka 1998).

To sum up this part of the treaty, let us just note that what has been proposed above has as its main scope one clear objective; that of suggesting that NSM might really be the ideal method for showing that conceiving, and talking about the conceived, might be closer than long years of dismissal of the (relativism¹³ of the) language-mind binomial had us believe.

¹² Of particular interest here is the NSM notion of ‘compound valency’ (cf. Goddard 2002a: 310-312).

¹³ Of course, I am here referring to the Sapir-Whorf hypothesis.

5. Conclusion: What makes a good (cognitive) theory

The discussion proposed in this paper has been motivated by some critical aspects of the (incoherent) state of the art within the cognitive linguistics movement. But how do we rate what is a good hypothesis, method or theoretical construct? How do we judge if one is better than another? Albeit there not being a straightforward answer, we are probably not mistaking if we state that linguistic premises and tools are best evaluated in the light of the results they produce in actually describing and explaining language, and predicting both language learning and acquisition (supposing one allows that the two differ, else just the acquisition phenomenon). And if language is essentially a vehicle for expressing meaning, than it is the nature of meaning that should be the primary focus of our attention, and the successfulness of its description and prediction the primary focus of our evaluation efforts.

Within the cognitive paradigm, the problem of meaning translates into the issue of the mapping between concepts and lexical forms. For each cognitive subdiscipline this means focusing on a different aspect of the language-mind binomial: psycholinguists focus on child language and language impairment, syntacticians on universals in grammatical structures, semanticists on cross-linguistically recurrent units of meaning etc. What is inherently common to all the approaches is the 'universality'. As I have tried to emphasise throughout this paper, the human mind cannot be studied and understood without constantly drawing into the pool of 'universality'. Having posited a potential set, all of the sub-specialists should then unify findings in order to try and jointly verify the lexical and, ultimately, conceptual primitiveness of the elements being considered.

In order for the cognitive linguistic paradigm to prove successful, this means that linguistic universality needs to be attested at both the linguistic (surface or E-level) and conceptual (deep or I-level). It is exactly around this problem that most controversies arise, partly because linguists do not agree on the interpretation of findings, but partly also because there is no consensus about many things that should have by now been quite clearly attested by enough evidence. This has not been the case simply because quite a lot of this evidence has not come together, mainly due to methodological and terminological divides. Another serious and related problem is clearly identified by Wierzbicka's (1993: 24), who writes:

It is particularly important that the preeminence of English in the profession does not result in a unified framework based on unconscious Anglocentric assumptions. ... What we need is a framework in which both the language specific and the language independent aspects of meaning can be adequately described.

Much more is shared between various proposals currently being developed within the cognitive linguistic framework than meets the eye. This is due to the opacity of the many methodological, terminological and even criterial divides that separate the various theories. This is harmful to the discipline and more should be

done to try and bridge the unnecessary and even worse artificial gaps that have been created among the various theories by virtue of lack of or insufficient cooperation between the proponents of the various views.

Language production is one of the most complex cognitive linguistic and motor skills¹⁴. Still, the mechanics of language is not what concerns us when we are involved in communication. What we are conscious of, and very careful about, is meaning; selecting information, planning utterances and packaging the whole according to language specific principles. Having mastered the 'simple' bit, i.e. the mechanics of language production (speech), time has come for linguists to face their 'responsibilities in full', i.e. tackle the more complex but also more revealing part of studying language: its deep, mental mechanisms. Put in more straightforward terms we might wish to conclude by saying that having understood the physiology of language, linguists are now faced with its psychology or, rather, neurology. This paper is an attempt to try and bridge some gaps between researchers working in this latter vein, whose work has been intelligible or just uninteresting outside their own 'currents' mainly, in my view, due to disagreement regarding criteria and, even more absurdly, terminology. This is very dangerous for the discipline since, as Blake (1994: 68) remarks, for as long as we disagree about criteria, we cannot hope to have consensus on the universal inventory of language.

My goal in this paper has been to point to quite a number of obvious convergences between some leading, but distinct and distant schools of linguistic thought, all in the light of hope that convergence will bring about increased scope for dialogue and collaboration, thus bringing us closer to some conclusive answers regarding the structural elements and organisational principles of the human language faculty, within the overall context of the human cognitive system. Speculations about this point, as I have tried to show above, cannot disregard criteria of 'defining power', 'universality' and 'combinatorial potential', all advocated within NSM. Departing from these criteria and the set of semantic primitives proposed within NSM it might be interesting to see whether all the semantic features that cognitive linguists have come up with so far can be reduced to Wierzbicka's semantic primitives.

It is true that interpretations of data in science vary, as they should. The dynamism of our different readings of evidence is after all what propels our thoughts and our understanding on the road toward new discoveries. Yet, it is important to draw a distinction between healthy divergences and discussions on the one hand, and redundant proliferation of (autistic) frameworks on the other. It seems to me that Cognitive Linguistics is off to a very promising start, but that lack of collaboration within the paradigm might be threatening to weaken, and eventually kill it, as has

¹⁴ If we consider speaking, we note that we make around fifteen speech sounds per second, producing two or three words (Levelt, 1989, preface and p.2), and involving the co-ordinate use of around a hundred muscles (ibid., p. 413).

been the case with a number of scientific movements before. This must not happen in a field where data seems to continue yielding some consistent patterns, as I have tried to indicate in this paper. What is being advocated here is not a static framework, but a coherent one, or rather coherence among many, within a tightly knit, clear and promising discipline of Cognitive Linguistics.

Author's address:

Nikole Tesle 15
HR-51000 Rijeka
Croatia

References

- Ameka, Felix (1994). Areal conversational routines and cross-cultural communication in a multilingual society. *Intercultural Communication*, ed. by H. Purschel, 441-469. Bern: Peter Lang.
- Arnould, Antoine & Nicole, Pierre. (1996) [1662]. *Logic or the Art of Thinking*. Transl. by V. Buroker. Cambridge: Cambridge University Press.
- Benedix, Edward H. (1966). *Componential Analysis of General Vocabulary*. Bloomington: Indiana University Press.
- Blake, Barry (1994). *Case*. Cambridge: Cambridge University Press.
- Bloom, Louis (1991). *Language Development from Two to Three*. Cambridge: Cambridge University Press.
- Bloom, Paul, Mary A. Peterson, Lynn Nadel, & Merrill F. Garrett, eds. (1996). *Language and Space*. Cambridge, MA: MIT Press.
- Bowerman, Melissa (1996). Learning how to structure space for language. *Language and Space*, ed. by Paul Bloom, Mary A. Peterson, Lynn Nadel, Lynn. & Merrill F. Garrett, 385-436. Cambridge, MA: MIT Press.
- Bowerman, Melissa & Levinson, Stephen C. (eds.) (2001). *Language Acquisition and Conceptual Development*. Cambridge: Cambridge University Press.
- Brala, Marija M. (2000). *English, Croatian and Italian prepositions from a cognitive perspective. When 'at' is 'on' and 'on' is 'in'*. Unpublished Ph.D. dissertation, University of Cambridge, U.K.
- Brala, Marija M. (2002). Prepositions in UK Monolingual Learners' Dictionaries: Expanding on Lindstromberg's Problems and Solutions. *Applied Linguistics* 23.1: 134-140.
- Brala, Marija M. (in press). Understanding language specificity – causes and consequences. *Psychology of Language and Communication*. Warsaw: Energeia Publishers.
- Boguslawski, Andrzej (1965). *Semantyczne pojecie licebnika*. Warsaw: Ossolineum.
- Carey, Susan (1985). *Conceptual Change in Childhood*. Cambridge, MA: The MIT Press.

- Carruthers, Peter (2002). The cognitive functions of language. *Behavioral and Brain Sciences* 25: 657-726.
- Choi, Sonja & Melissa Bowerman (1991). Learning to express motion events in English and Korean: The influence of language-specific lexicalization patterns. *Cognition* 41: 83-121.
- Chomsky, Noam (1957). *Syntactic Structures*. The Hague: Mouton.
- Clancy, Patricia (1985). The acquisition of Japanese. *The Cross-Linguistic Study of Language Acquisition, Vol. I: The Data*, ed. by Dan Slobin, 373-524. Hillsdale, NJ: Lawrence Erlbaum.
- Clark, Eve (2001). Emergent categories in first language acquisition. *Language Acquisition and Conceptual Development*, ed. by Bowerman, Melissa & Stephen C. Levinson, 379-405. Cambridge: Cambridge University Press.
- Clark, Herbert & Clark, Eve (1977). *Psychology and Language. An Introduction to Psycholinguistics*. Orlando: HBC Press.
- Croft, William (1998). Linguistic evidence and mental representations. *Cognitive Linguistics* 9.2: 151-173.
- Deacon, Terrence (1997). *The Symbolic Species*. London: The Penguin Press.
- Ervin-Tripp, Susan (1970). Discourse agreement: How children answer questions. *Cognition and the Development of Language*, ed. by J.R. Hayes, 79-107. New York: Wiley.
- Fillmore, Charles (1971). Types of lexical information. *Semantics: An Interdisciplinary Reader in Philosophy, Linguistics and Psychology*, ed. by Danny Steinberg & Leon A. Jakobovits, 370-392. Cambridge: Cambridge University Press.
- Goddard, Cliff (1998). *Semantic Analysis. A practical Introduction*. Oxford: Oxford University Press.
- Goddard, Cliff (2000). Communicative style and cultural values. *Cultural scripts of Malay. Anthropological Linguistics* 42.1: 81-106.
- Goddard, Cliff (2001). Lexico-semantic universals: A critical overview. *Linguistic Typology* 5.1: 1-66.
- Goddard, Cliff (2002a). The on-going developments of the NSM research program. *Meaning and Universal Grammar: Theory and Empirical Findings. Vol II.*, ed. by Cliff Goddard & Anna Wierzbicka, 301-321. Amsterdam: John Benjamins.
- Goddard, Cliff (2002 b). On and on: Verbal explications for a polysemic network. *Cognitive Linguistics* 13.3: 277-294.
- Goddard, Cliff & Anna Wierzbicka, eds. (1994). *Semantic and Lexical Universals: Theory and Empirical Findings*. Amsterdam: John Benjamins.
- Goddard, Cliff & Anna Wierzbicka, eds. (2002). *Meaning and Universal Grammar: Theory and Empirical Findings. Vol I & Vol II*. Amsterdam: John Benjamins.
- Greenberg, John H. (1978). *Universals in Human Language*. Stanford: Stanford University Press.
- Greimas, Algirdas Julien (1966). *Semantique Structurale*. Paris: Larousse. Transl. as *Structural Semantics: An Attempt at a Method*. (1983) Lincoln: University of Nebraska Press.
- Gumperz, John J. & Stephen Levinson, eds. (1986). *Rethinking Linguistic Relativity*. Cambridge, MA: Cambridge University Press.
- Ishiguro, Hide (1972). *Leibniz's Philosophy of Logic and Language*. London: Duckwort.

- Jackendoff, Ray (1983). *Semantics and Cognition*. Cambridge, MA: The MIT Press.
- Jackendoff, Ray (1990). *Semantic Structures*. Cambridge, MA: The MIT Press.
- Jackendoff, Ray (1992). *Languages of the Mind. Essays on Mental Representations*. Cambridge, MA: The MIT Press.
- Janda, Laura (2000). *Cognitive Linguistics*. Paper presented at the SLING2K Workshop.
- Johnson, Mark (1987). *The body in the mind*. Chicago: The University of Chicago Press
- Johnston, Judith (1985). Cognitive prerequisites. The evidence from children learning English. *The Cross-linguistic Study of Language Acquisition, Vol. II: Theoretical Issues*, ed. by Dan Slobin, 961–1004. Hillsdale, NJ: Lawrence Erlbaum.
- Katz, Jerrold, Paul M. Postal (1964). *An Integrated Theory of Linguistic Descriptions*. Cambridge, MA: The MIT Press.
- Lakoff, George (1970). *Irregularity in Syntax*. New York: Holt, Reinhart & Winston.
- Lakoff, G. 1987. *Women, Fire and Dangerous Things. What Categories Reveal about the Mind*. Chicago: University of Chicago Press.
- Landau, Barbara, Ray Jackendoff (1993). ‘What’ and ‘where’ in spatial language and spatial cognition. *Behavioral and Brain Sciences* 16: 217-265.
- Langacker, Ronald W. (1987). *Foundations of Cognitive Grammar*. Vol I: Theoretical Prerequisites. Stanford, California: Stanford University Press.
- Leibnitz, Gottfried Wilhelm (1973). *Leibnitz: Philosophical Writings*. ed. by G.H.R. Parkinson. London: Dent.
- Levelt, W. (1989). *Speaking: From Intention to Articulation*. Cambridge, MA: MIT Press.
- Levin, Beth, Steve Pinker (1991). *Lexical & Conceptual Semantics*. Amsterdam: Elsevier Science Publisher.
- Levinson, Stephen C. (1992). *Language and Cognition: The cognitive consequences of Spatial description in Guugu Yimithirr*. Cognitive Anthropology research group at the Max Planck Institute for Psycholinguistics, Working Paper No. 13.
- Levinson, Stephen C. (1998). Studying spatial conceptualisation across cultures: Anthropology and cognitive science. *Ethos* 26.1: 1-12.
- Lindstromberg, Seth (1998). *English Prepositions Explained*. Amsterdam: John Benjamins.
- Lyons, Chris (1999). *Definiteness*. Cambridge: Cambridge University Press.
- Lyons, John (1977). *Semantics*. Vol I and II. Cambridge: Cambridge University Press.
- McCawley, James (1968). The role of semantics in grammar. *Universals in Linguistic Theory*, ed. by Emmon Bach & Robert Harms, 129-169. New York: Holt, Rinehart & Winston.
- Peeters, Bert (2002). ‘S’engager’ vs. ‘to show restraint’: Linguistic and cultural relativity in discourse management. *Evidence for Linguistic Relativity*, ed. by Susanne Niemeier and René Dirven, 193-222. Amsterdam: John Benjamins.
- Peterson, Carole (1990). The who, when and where in early narrative. *Journal of Child Language* 17: 433-455.
- Rosch, Eleanor (1973). Natural categories. *Cognitive psychology* 4: 328-50.
- Rudzka-Ostyn, Brygida, ed. (1993). *Topics in Cognitive Linguistics*. Amsterdam: John Benjamins.

- Slobin, Dan (1985). Crosslinguistic evidence for the language-making capacity. *The Cross-linguistic Study of Language Acquisition, Vol. II: Theoretical Issues*, ed. by Dan Slobin, 1157-1256. Hillsdale, NJ: Lawrence Erlbaum.
- Slobin, Dan (1996). From 'thought and language' to 'thinking for speaking'. *Rethinking Linguistic Relativity*, ed. by John J. Gumperz & Stephen C. Levinson, 70-96. Cambridge, MA: Cambridge University Press.
- Sørensen, Holger Steen (1958). *Word-Classes in Modern English*. Copenhagen: Gad.
- Talmy, Leonard (1996). Fictive motion in language and 'ception'. *Language and Space*, ed. by Paul Bloom, Mary A. Peterson, Lynn Nadel, & Merrill F. Garrett, 211-276. Cambridge: Cambridge University Press.
- Talmy, Leonard (2000). *Toward a Cognitive Semantics*. Vol I: Concept Structuring System, & Vol. II: Typology and Process in Concept Structuring. Cambridge, MA: MIT Press.
- Trenkic, Danijela (2001). Establishing the definiteness status of referents in dialogue. *Working Papers in English and Applied Linguistics* 6, Cambridge: Research Centre for English and Applied Linguistics, University of Cambridge.
- Wierzbicka, Anna (1972). *Semantic Primitives*. Transl. by Anna Wierzbicka & J. Basemeres. Frankfurt am Main: Athenäum.
- Wierzbicka, Anna (1993). The alphabet of human thought. *Conceptualization and Mental Processing in Language*, ed. by Geiger, Richard A. & Brygida Rudzka-Ostyn, 23-51. Berlin: Mouton de Gruyter.
- Wierzbicka, Anna (1996). *Semantics - primes and universals*. Oxford: Oxford University Press.
- Wierzbicka, Anna (1997). *Understanding Cultures Through Their Key Words*. New York: Oxford University Press.
- Wierzbicka, Anna (2002). Semantic primes and linguistic typology. *Meaning and Universal Grammar: Theory and Empirical Findings*. Vol. I & Vol. II, ed. by Cliff Goddard & Anna Wierzbicka, 257-300. Amsterdam: John Benjamins.
- Wierzbicka, Anna (1998). German 'cultural scripts'. Public signs as a key to social attitudes and cultural values. *Discourse and Society* 9.2: 241-282.

NSM (PRIRODNI SEMANTIČKI METAJEZIK)
UNUTAR OKVIRA KOGNITIVNE LINGVISTIKE:
KAKO PREMOSTITI RAZLIKE

Otkada su postavke Noama Chomskog revolucionirale znanstveno istraživanje jezika, u iščekivanju smo otkrića i zaključaka koji bi rezultirali iz mentalističkog pristupa jeziku, odnosno odgovora koja bi konačno pojasnili funkcioniranje ljudske jezične sposobnosti. Na žalost, to se još nije dogodilo. Središnje pitanje ovog rada jest: zašto tog odgovora još nema? U članku se najprije osvrćemo na neke osnovne i opće postavke paradigme kognitivne lingvistike, a zatim i na konkretne postavke pristupa semantičkoj analizi koji je poznat kao NSM (Natural Semantic Metalanguage odnosno *prirodni semantički metajezik*). Cilj je

utvrditi koje su postavke zajedničke NSM-u i ostalim pristupima (paradigmama) koje teoretičari širom svijeta trenutno razvijaju unutar općeg okvira poznatog pod nazivom kognitivna lingvistika. Dvije su osnovne teze zastupane u članku: a) ideja semantičkih univerzalija kakvu razvijaju teoretičari NSM-a može doprinijeti boljoj povezanosti i boljem razvoju čitave grane kognitivne lingvistike, b) upravo je problem pretjerane proliferacije i netransparentnosti između pojedinih paradigmi s kognitivno lingvističkim predznakom, jedan od osnovnih razloga koji su doveli do usporavanja razvoja kognitivnog pristupa istraživanju jezika odnosno ljudske jezične sposobnosti.

Ključne riječi: NSM (prirodni semantički metajezik), kognitivna lingvistika, semantičke univerzalije, konceptualni primitivni