

ISBN 978-951-51-1901-8 UNIGRAFIA HELSINKI 2016

CONSTRUAL IN EXPRESSION AN INTERSUBJECTIVE APPROACH TO COGNITIVE GRAMMAR

TAPANI MÖTTÖNEN

Department of Finnish, Finno-Ugrian and Scandinavian Studies University of Helsinki Finland

CONSTRUAL IN EXPRESSION

AN INTERSUBJECTIVE APPROACH TO COGNITIVE GRAMMAR

Tapani Möttönen

ACADEMIC DISSERTATION

To be presented, with the permission of the Faculty of Arts of the University of Helsinki, for public examination in Auditorium XII, University Main Building, on 5 February 2016, at 12 noon.

Helsinki 2016

Supervisors:

Professor Tiina Onikki-Rantajääskö (University of Helsinki) University Lecturer, Docent Minna Jaakola (University of Helsinki)

Pre-examiners:

Professor Gábor Tolcsvai Nagy (Eötvös Loránd University) Professor Jordan Zlatev (University of Lund)

Opponent:

Professor Jordan Zlatev (University of Lund)

ISBN 978-951-51-1901-8 (pbk.) ISBN 978-951-51-1902-5 (PDF)

Helsinki 2016

ABSTRACT

This doctoral dissertation is a metatheoretical survey into the central semantic concepts of Cognitive Grammar (CG), a semantics-driven theoretical grammar developed by Ronald W. Langacker.

CG approaches language as a semiotic system inherently intertwined with and structured by certain cognition-general capacities, and it defends a usage-based conception of language, therefore denying the strict dichotomy between language and other realms of conceptualization and human experience. For CG, linguistic meaning is thus defined relative to our general cognitive and bodily disposition, as well as to the contents of experience the former structure. The cognitive and experiential aspects of meaning are described relative to so-called dimensions of construal.

In this study, I will provide a systematic critical account of the theoretical explanation CG provides for the dimensions of construal. My point of departure will be in social ontology of linguistic meaning developed and defended by Esa Itkonen, who has accordingly criticized CG for inconsistent psychologism. According to Itkonen, linguistic meaning is an object of common knowledge and cannot be reduced into an individual's conceptualization; the dimensions of construal capture experiential meaning that is part of language as a social semiotic resource. This entails that linguistic semantics assume as its object of description non-objective, perspectival meanings that are commonly known.

I argue that the usage-based nature of CG provides a way to release this tension between objective and non-objective aspects of meaning by explaining how perspectivity of semantics results from the acquisition and adjustment of meanings in actual discourse. This, however, necessitates an ontological revision of CG and rehabilitation of the sociality of a linguistic meaning, which is the topic of this study.

In addition to the work by Itkonen, prominent socially oriented cognitive linguists, such as Jordan Zlatev, have emphasized the necessary intersubjective basis of experiential meaning. Within the Fennistic studies, on the other hand, the intersubjective approach to CG and Cognitive Linguistics in general has taken the form of combining cognitive linguistic methodologies with Conversation Analysis. This study combines elements from both of these approaches in order to provide a comprehensive assessment of the notion of construal in CG. In so being, the main task of this study is to critically evaluate the cognition-based explanation for the dimensions of construal, provide a socially grounded alternative, and apply the alternative into analysis of construal in (written discourse).

The objectives of this study are:

- 1. clarification of the definitions, contents and analytical functions of the dimensions of construal
- 2. metatheoretical analysis of the theoretical justification of the dimensions of construal
- 3. description of the conceptual prerequisites necessary for a coherent conception of construal.

This study shows that the dimensions of construal are not dependent on the aspects of cognitive theory on the basis of which they are argue for. Instead, the notion of construal is shown to be inherently intersubjective and context-sensitive. Construal captures aspects of semantic organization that are correlates of intersubjective alignment between conceptualizing subjects in a given discursive context.

ACKNOWLEDGEMENTS

The process of writing a doctoral thesis is like a Necker cube with different, mutually inconsistent appearances. When still ongoing, the process tends to feel like fumbling around in the dark. In retrospect, every choice made seems either perfectly rational or rationally incomprehensible. Now that my own writing process of six years is coming to its end, an overwhelming, deceitful feel of mastery over "writing a thesis" has appeared. This feel could not be further from the truth.

In reality, writing a thesis is never mastered by an individual cognition, nor is it an unmotivated trajectory guided solely by arbitrary impulses, even though it certainly may assume either or both of these appearances. Rather, it is a process that one grows into and lives through as eloquently as one's mental fitness and the collective wisdom of academia together allow. It is indeed the intersubjectivity found in the lecture halls and hallways of University of Helsinki that has brought the present study to this point. While the possible weaknesses of the study are entirely on my responsibility, there is a serious debt of gratitude that I wish to amortize here even for a bit.

The first two people I need to thank are those whose linguistic intuition allowed me to begin this journey in the first place: my supervisors Tiina Onikki-Rantajääskö and Minna Jaakola. Tiina: it is your enormous expertise and steadfast insistence on linguistic grounding of my study that guided this book through the roughest patches of confusion and overwhelming, and obviously self-inflicted, abstraction. Minna: your steady support and empathy has been an irreplaceable source of strength both in times of self-doubt and success. I want to thank you both for the comradery that has lasted throughout these years.

On this same occasion, I would like to thank the two pre-examiners of this thesis, Gábor Stolcsvai Nagy and Jordan Zlatev, for lending me your thorough expertise and perspicacious advice.

Here it is also in place to thank Professor Emeritus Pentti Leino for guiding me to Tiina's door in autumn 2009. This transition also reintroduced to me to the hospitality of Department of Finnish, Finno-Ugrian and Scandinavian studies that I had only sensed from a distance as a busy Vantaa-based graduate student. I want to thank the department as a whole, as I wish to do also to Kone Foundation for being the undisputed main benefactor of my research. I also thank my home department, the Faculty of Arts and Alma Mater for all the financial and administrative support I have received.

There are two academic circles that made me feel like home from the very beginning when I started as a post-graduate student, and I want to begin with the more unconventional one. Team Norsu, a loose but warm network of administrative people and post-grads that tiptoed in their wool socks, slippers and sandals the hallways of Fabianinkatu 33: Hannamari Helander, Jukka

Hirvonen, Tanja Stepanova, Nico Wendelin, Saija Pyhäniemi, Tanja Asikainen-Kunnari, Hanna-Ilona Härmävaara, Niina Niskanen, Rigina Ajanki, Maria Fremer, Saša Tkalčan and Mari Siiroinen. You are the originals, and you are original. I am ever grateful for your company. At the same time, I wish to thank also the fresher assortment of administrative agents for the professional touch, so thank you Kaarina Walter and Tiina Kärki.

The second academic circle that made me feel home was one formed by my colleagues (in more strict sense) at the Department. The original team 5042: Mikko Virtanen, Mai Frick and Anna Vatanen: thank you for putting up with me in the same room, for your company and support. The beer connoisseurs that met at Seminaarikaljat: Tomi Visakko, Jarkko Niemi, Aino Koivisto, Riitta Juvonen, Antti Kanner, Lauri Haapanen, Heini Lehtonen, Elina Pallasvirta, Marjo Savijärvi, Heidi Vepsäläinen and Saija Merke. Thank you for letting me stay in the glow of your co-suffering and humor. You were the first to introduce me to the human aspect of Fennistic studies.

As Beerhouse Kaisla has now been selected for the setting, let us march in other connoisseurs: Tapani Kelomäki, Kimmo Svinhufvud, Tuomas Huumo and Markus Hamunen. For some reason, I wish to visualize you in a bar setting, so there you go. Thank you for your jolly company which made it a pleasure to absorb your expertise and historical trivia.

Back at the department, persons that I would surely have a drink with: Jaakko Leino, Markku Haakana and Jyrki Kalliokoski. In various situations (incl. Tvärminne), you have shown your great sensitivity and wisdom with regard to a post-graduate's mindset and different academic challenges. I am in debt for that. For the collegial support by the fifth floor photocopier, and in other less linguistic contexts, I wish to thank Toini Rahtu, Susanna Shore, Anne Mäntynen, Taru Nordlund and Sari Päivärinne. On the same occasion, l wish to show gratitude to the later inhabitants of room 5042. Maija Kallio, Jenni Viinikka, Jutta Salminen, Elina Vitikka and Lasse Hämäläinen: thank you for your company, for our conversations, and for being the least unpleasant aspect of spending long hours in that penthouse of ours.

This study took an intersubjective turn because of a hunch, and a group of extraordinary linguists helped that hunch to become a book. Huuhailijat: Laura Visapää, Marja Etelämäki, Ilona Herlin, Anni Jääskeläinen and Lea Laitinen. I invite you to celebrate with me, for if there is something good to this book, it belongs to you as much as much as it belongs to me. And Laura, bring Verónica (Muñoz Ledo), for she is responsible for each and every grammatical sentence in this book.

This book would not be without the groundbreaking work by Professor Emeritus Esa Itkonen, whom I wish to thank for all that work, inspiration and vision.

Finally, I wish to thank my friends and family for that extra-linguistic essence of life: love and friendship. Speaking of which, I need to address couple of persons I have already mentioned above. Mikko and Tomi: your friendship alone has made this trip worthwhile. I consider you two as dear as a friend can

be, and I intend to keep it that way, whether you like it or not. The same goes with the love of my life, Hannamari. Thank you for existing, and let us thank Alma Mater for introducing us to each other.

This book is dedicated to the loving memory of my mother, Kerttu Möttönen.

CONTENTS

A	bstract		3				
A	Acknowledgements5						
C	Contents8						
G	Glossing abbreviations11						
1	Introduction12						
2	2 Conceptualizer and the dimensions of construal						
	2.1	Outline	24				
	2.2	Semantics in Cognitive Grammar	24				
	2.2.1	Non-modularity of mind	25				
	2.2.2	Linguistic categorization	32				
	2.2.3	Encyclopedic meaning and its organization	36				
	2.3	Conceptualizer	40				
	2.3.1	Conceptualizer and time	40				
	2.3.2	Conceptualizer and ground	46				
	2.4	The dimensions of construal	54				
	2.4.1	Specificity	55				
	2.4.2	Focusing	61				
	2.4.3	Prominence	68				
	2.4.4	Perspective	74				
	2.5	Discussion	79				
3 Construal and imagery							
	3.1	Outline	83				
	3.2	Meaning in the head	84				
	3.2.1	Processing and physicalism	85				

3.2	Meaning as conceptualization	93
3.2	2.3 Ontological criticism	98
3.3	Imagery and construal	107
3.3	.1 The imagery debate	108
3.3	.2 Allusions to mental imagery	114
3.3	3.3 Linguistic vs. mental imagery	119
3.4	Discussion	126
4 The	e intersubjectivity of construal	128
4.1	Outline	132
4.2	Intersubjectivity as a phenomenological concept	133
4.2	2.1 Intentionality	133
4.2	2.2 Intersubjectivity	137
4.3	Intersubjectivity as an empirical concept	141
4.3	.1 Intersubjectivity in a developmental perspective	141
4.3	.2 Intersubjectivity in adults: enactivism	145
4.3	.3 Intersubjectivity and language	150
4.4	Construal and intersubjective experience	155
4.4	.1 Distinction between experience and meaning	157
4.4	.2 Experience and meaning-intending acts	160
4.4	.3 Inscription of experience into meaning	164
4.5	Discussion	167
5 Dyn	namics of construal and context	171
5.1	Outline	173
5.2	Specificity and contextual specification	173
5.3	Dynamics of background and profiling	181
5.4	Perspectival shift and the Finnish passive	190
5.5	Discussion	205

6	Synt	hesis: the nature of construal	207
	6.1	Summary of the results	208
	6.2	The nature of construal	213
	6.3	Discussion	. 221
7	7 Conclusion		
R	eference	s	.227

GLOSSING ABBREVIATIONS

1SG, 2PL first person singular, second person plural, etc.

ABL ablative case
ACC accusative case
ADE adessive case
ELA elative case
ESS essive case
GEN genitive
ILL illative

INE inessive case
INF infinitive
NEG negative verb
NMLZ nominalization

PASS passive
PST past tense
PTV partitive case
TRANSL translative case

1 INTRODUCTION

This study consists of a metatheoretical survey into the central semantic concepts of Cognitive Grammar, a semantics-driven theoretical grammar developed by Ronald W. Langacker (e.g. FCG-1¹, CIS², 1999a, CGBI³). Cognitive Grammar can be described as the most comprehensive grammatical theory that has emanated from Cognitive Linguistics.

Cognitive Linguistics (CL) is a non-unitary linguistic school, the representatives of which approach language as a semiotic system inherently intertwined with, and structured by, certain cognition-general capacities. While Cognitive Linguistics is now well-established as one of the main schools of current linguistics⁴, it is a commonplace that it was originally born out of a deep dissatisfaction with the strict formalistic agenda of generative linguistics. In contrast to the innatism of the latter, CL has steadfastly defended a usage-based constitution of language, therefore denying a strict dichotomy between language and other realms of conceptualization and human experience. For CL, the structure of natural language is largely determined by its semiotic function; linguistic meaning, in turn, is defined relative to our general cognitive and bodily disposition as well as to the contents of experience this disposition structures.

The three so-called founding fathers of CL, Langacker, George Lakoff, and Leonard Talmy all manifest this ethos differently. Conceptual Metaphor Theory, developed by Lakoff together with Mark Johnson (Lakoff & Johnson 1980, 1999; Johnson 1987; Lakoff 1987; also Lakoff & Turner 1989), has demonstrated the central role of figurative thought and language in the constitution and expression of abstract ideas. Leonard Talmy's (1978, 1988, 2000a, 2000b) Cognitive Semantics describes linguistic meaning as a distinct major cognitive system, which nonetheless overlaps and interacts with other major ones (e.g. perception, attention, and memory). Among the central figures of CL, one should also mention Gilles Fauconnier and Mark Turner, whose theory on mental spaces (Fauconnier 1994, 1997) and conceptual blending (Turner 1996; Fauconnier & Turner 2002) has significantly affected the description of conceptual structure and flexibility within CL. While the main theories of CL have all been developed on the soil of North America, Dirk

¹ I will apply abbreviations for the most central and frequently referred presentations on Cognitive Grammar, FCG-1 refers here to Foundations of Cognitive Grammar, volume 1: Theoretical Prerequisites (Langacker 1987).

² CIS: Concept, Image, and Symbol (Langacker 2002 [1991]).

³ CGBI: Cognitive Grammar: A Basic Introduction (Langacker 2008).

⁴ The textbook by Evans & Green (2006) and the handbook edited by Geeraerts & Guyckens (2007) are illustrative of the entrenchment of CL into mainstream modern linguistics and also provide an excellent general depiction of the scope and variety of cognitive linguistic research.

Geeraerts (e.g. 1988, see also Geeraerts 1985 [1981]) has intently pointed out the importance of European pre-structuralist semantics for CL.

Langacker's Cognitive Grammar is characterized by an economical and uniform description of language as a structured inventory of linguistic units, that is, symbolic pairings of form and meaning. Moreover, Cognitive Grammar extends this description in terms of symbolization from lexical items to grammatical units, which are analyzed as structural schemas conveying abstract meaning. Cognitive Grammar, in addition to other classical representatives of Cognitive Linguistics, can thus be associated with semiotically oriented functional linguistics at large (see Gonsálvez-García & Butler 2006: 42–43). However, Cognitive Grammar also promotes a view that language and meaning are primarily cognitive entities and thus need to be analyzed as such. This study concentrates on is this combination of the social and cognitive aspects of meaning, the inherent tension of which characterizes Cognitive Grammar as a whole.

Cognitive Grammar maintains that linguistic meaning is primarily defined by our cognitive make-up, which serves as scaffolding both for how we apprehend pre-linguistic experiences and for how we conceptualize them linguistically. Meaning is thus not an objective (truth-value) relation between the linguistic sign and external circumstances but consists of mental conceptual content that is construed according to the current communicative perspective. Thus, meaning can be defined as non-objective⁵, to coin a term, in that it always manifests some restricted and perspectivized take on the matters at hand.

This non-objectivity, or perspectivity, is systematically addressed in Cognitive Grammar by the so-called dimensions of construal (CGBI: 55–89), semantic parameters according to which the objectively same entity, situation or occurrence can be expressed linguistically in multiple different ways. For instance, I can refer to my dog having its meal not only as *my dog having its meal* but in a more specified manner as *my terrier gobbled ferociously its high-end kibble*, and, to background the temporality of the process, as the nominalization *that ferocious gobbling of the high-end kibble*. Hence, the dimensions of construal include parameters such as specificity, i.e. the level of detail of an explicit expression, and (temporal) dynamicity, i.e. how the temporality of the object of conceptualization is represented linguistically.

On a more technical side, construal is posited as a relationship between conceptual content and the so-called conceptualizer, (e.g. CGBI: 445–453), an abstract human position presumed by the perspectivity of the expression. In

⁵ I refrain, following CG, from describing this aspect of meaning as "subjective", for the term may be misinterpreted as an ontological statement (while the question is the on nature of semantic contents per se). A further reason is the specific descriptive function reserved for "subjectivity" in Cognitive Grammar (Langacker 1990, 1997; see chapters 2.4.4 & 4.5).

⁶ The semantic difference between referentially synonymous expressions lead already Frege (1949 [1892] to distinguish between sense and reference of expression.

other words, Cognitive Grammar correctly derives non-objective meaning from the logically necessary objective and subjective poles that are inscribed in an expression's meaning. Cognitive Grammar represents a (relatively) non-modular conception of cognition, in which linguistic phenomena are sought to be explained relative to cognition-general operating principles to as large an extent as possible. The linguistic construal relationship is consequently presented as structured by psychological principles that also structure perceptual experience (see e.g. FCG-1: 99–146).

In this study, I will provide a systematic critical account of the theoretical explanation Cognitive Grammar provides for the dimensions of construal. My point of departure will be social ontology of linguistic meaning developed and defended by Itkonen (1974, 1978, 1997), who has accordingly criticized Cognitive Grammar for inconsistent psychologism (Itkonen, 1997, 2008b, forthc.). Of particular interest is Itkonen's paper (1997) in which he points to a commonly known character of the dimensions of construal (or linguistic "imagery" in CIS: 5–12): the fact that their ability to be analyzed is dependent on the fact that they can be detected as a part of the expression's conventionalized meaning. At the same time, however, Itkonen's analysis implicitly admits the descriptive validity of the dimensions of construal: paradoxically, they correctly capture the non-objective properties of meaning that are part of an expression's socially shared (objective) contents.

This paradox is illusory, for the objectivity and non-objectivity in question pertain to distinct analytical levels. Whereas objectivity pertains here to the constitution and distribution of meanings as objects of common knowledge, non-objectivity pertains to the nature of the information the meanings consist of. As Cognitive Grammar points out, language does not simply present propositions that are either true or untrue but information of things and relations that are related according to certain canonical, conventionalized perspectives. As important as this observation is, it can be extended by pointing out that conventionalized perspectivity is not epiphenomenal but a functional feature of language, actively utilized in discourse to accommodate expression to the pragmatic context.

However, the fact that construal can be motivated functionally does not solve the ontological discrepancy pointed out by Itkonen but rather helps to specify it. If meaning is primarily social, as opposed to individual or cognitive, the description of its properties in terms of cognitive abilities is simply reductionist. But if the human cognitive or bodily disposition cannot be evoked as an explanatory factor, then how can we account for the non-objective meaning Cognitive Grammar seems to accurately describe?

The solution I provide in this study is that both social and experiential components are necessary for a comprehensive description of construal. The question is then how these components come to interact in the constitution of meaning. While the full scope of this question cannot be addressed within the confines of this work, the question can and will be approached in part through the *a priori* conditions for a socially grounded notion of construal. The main

task of this study is thus to critically evaluate the cognition-based explanation for the dimensions of construal, to provide a socially grounded alternative, and to apply the alternative to the analysis of construal in (written) discourse. Before going into the details of this multifaceted task, I will introduce the background and nature of the survey at hand.

1.1 BACKGROUND OF THE STUDY

This work is a part of a relatively new but well-established cognitive-linguistic tradition within Fennistic studies (see e.g. Herlin 1998; Huumo 1997, 2005, 2007, 2009; Jaakola 2004; Leino, J. 2003; Leino, P. 1988, 1989, 1993; Leino, P. & Onikki 1992; Leino, P. & Onikki, eds. 1994; Onikki-Rantajääskö 2001, 2006, 2010; Visapää 2008). Pentti Leino can be named as the first author to introduce CL – especially Cognitive Grammar – to Fennistic research (P. Leino 1988), while Huumo (see e.g. Huumo 1997) applied cognitive linguistic methodology, such as Fauconnier's mental spaces, to the analysis of Finnish locatives independently roughly at the same time.

Several Fennistic doctoral theses (Herlin 1998; Jaakola 2004; Jääskeläinen, A. 2013; Jääskeläinen, P. 2004; Leino, J. 2003; Ojutkangas 2001; Onikki-Rantajääkö 2001; Siiroinen 2001), a majority of them supervised by P. Leino, canonized CL as a major direction within the discipline. At the same time, many of these studies pioneered corpus-driven cognitive linguistic research, accommodating theory and methodology from CL to the eminently empirical tradition of Fennistics.

What is characteristic of more recent cognitive Fennistic studies is the systematic expansion of CL from syntax and semantics to interaction and from clause-level analysis to wider pragmatic phenomena in actual discourse. This expansion has been associated with a corresponding refinement of cognitive linguistic theory and methodology. Etelämäki et al. (2009), Etelämäki and Jaakola (2009), as well as Etelämäki and Visapää (2014) have proposed and developed a combination of methods from Cognitive Grammar and Conversation Analysis to address the shortcomings of both paradigms. A distinct yet similar strand is the applied cognitive linguistic analysis of journalistic texts, exemplified by Jaakola (2014; see also Jaakola 2012a, 2012b). This strand seeks to combine analytical concepts and procedures from fields as diverse as cognitive linguistics, text-analysis and journalistic studies in order to develop a more holistic outlook on journalistic texts and their expressive means vis-à-vis the representative readers.

The present study is linked directly to these developments in Fennistic studies in that it focuses on the limitations of cognitive linguistic theory and analytical procedure. My approach differs from those mentioned above in that it has a pronounced metatheoretical emphasis. It is nevertheless fair to point out that the criticism of Cognitive Grammar I present has its parallels and predecessors in recent practically-minded Fennistics. It should also be borne

in mind that the very accommodation of CL to the Fennistic tradition has been accompanied by critical theoretical remarks from the beginning (e.g. Leino & Onikki 1992). In addition, the present analysis wishes to contribute not only to theoretical considerations but also to the on-going discussion on the boundaries and practical limits of Cognitive Grammar.

One particularly relevant part of this discussion is provided by Jaakola et al. (2014) who apply the dimensions of construal in the analysis of the reader's perspective and its linguistic inscription into magazine texts. While their study makes reference to narratological studies on the so-called implied reader (e.g. Eco 1979; Iser 1974; Rimmon-Kenan 1983), the approach of Jaakola et al. (2014) also shows an affinity to the Bakhtinian (1984 [1929]) account of polyphony, i.e. the presence of multiple "voices" or perspectives within a text. The method, roughly put, is to seek out for subtle semiotic mechanisms that lead systematically from lower-level expressive means to the construction of a perspectival position that can be attributed to the text as a whole. By applying cognitive linguistic methodology to achieve this, Jaakola et al. (ibid.) also associate themselves with cognitive poetic research, advanced *inter alia* by Stockwell (2002; see also Harrison et al., eds., 2014) and Tabakowska (1993).

This study considers the perspectivity of meaning from a different yet related point of view. Similarly to Jaakola et al., the present study approaches the dimensions of construal as a means to relate the different perspectives in a text to each other. The main point of interest, however, is the extent to which Cognitive Grammar is capable of explaining the existence of these perspectives in a consistent and comprehensive manner.

Given CG's emphasis on meaning as an individual's mental experience, different textual perspectives could be described, for example, as complex conceptual procedures that are carried out and apprehended by a solitary subject (who may entertain multiple different subjectivities as simulative constructs). If one accepts the social ontology of meaning envisaged by Itkonen (1997), this approach is nevertheless unsatisfactory. Given that the linguistic sign is social by definition, the different perspectives that a written or spoken discourse introduces also need to be seen as primarily social symbolic structures. It follows from this that discourse both represents multiple subjectivities symbolically and presumes a plural subjectivity as its own *a priori* condition. To account for these mutually embedded forms of subjectivity, Cognitive Grammar would need to systematically relate its theoretical assertions and descriptive concepts to level of analysis that is itself constituted by or between multiple subjects: intersubjectivity.

Currently a fashionable term in linguistics (Foolen et al., eds., 2012; Zlatev et al., eds., 2008), intersubjectivity has a brief but checkered history. Since its introduction in continental philosophy (Heidegger 1978 [1927]; Husserl 2001a [1900–1901]; Merleau-Ponty 2002 [1945]; Schütz 1972 [1932]; Zahavi 2001, 2003), it has been extended to fields of study as diverse as social sciences and anthropology (Garfinkel 1984 [1967]), infant psychology (Meltzoff & Moore 1977, 1994, 1997; Stern 1971, 1977, 1985; Trevarthen 1979, 1980; Vygotsky

1978), social psychology (e.g. Gillespie & Cornish 2010), and psychoanalysis (Atwood & Storolow 1984; Ogden 1994; Stolorow 1997, 2013; Storolow et al. 2002). Illustrative of the term's strong footing in Fennistic interactional linguistics is the work done in Finnish Centre of Excellence in Research on Intersubjectivity in Interaction at Helsinki University, with a publication list that boasts over 200 items.

However, intersubjectivity tends to be understood in multiple ways, whether this is stated explicitly or not, and is often present in linguistic analysis as an implicit presupposition rather than as an epistemological or ontological concept that needs to be scrutinized (cf. the volumes edited by Foolen et al. 2012 and Zlatev et al. 2008). In this study, I wish focus on the concept itself by analyzing the compatibility of the dimensions of construal with a chosen formulation of linguistic intersubjectivity, namely that by Zlatev (2005, 2007a, 2007b, 2008a, 2008b; see also Blomberg and Zlatev 2014; Zlatev et al. 2012). In other words, I aim at an intersubjective description of construal that simultaneously involves a re-evaluation of the analytical scope of construal in Cognitive Grammar.

This dual emphasis on theory and description is not an end in itself but has been chosen to serve both illustrative and argumentative needs. My consecutive analyses on the theoretical basis and practical use of the dimensions of construal show that the relationship between these two domains is anything but arbitrary. With careful analysis of their mutual interaction, I ultimately wish to contribute to the ongoing discussion of the relationship between cognitive and interactional linguistics. My analysis does not only agree on their compatibility, suggested by Etelämäki and Visapää (2014), but also aims to describe in detail the theoretical implications their compatibility puts forward.

Finally, with its metatheoretical emphasis, I hope that my study especially benefits a further cross-fertilization between Cognitive Grammar, text-linguistics and journalistic studies by mapping (a part of) their common intersubjective semiotic ground. Despite the obvious restrictions involved, I hope that a precise treatment of select analytical concepts may illustrate the general inseparability of linguistic conceptual tools and the theoretical preoccupations they are predicated upon.

1.2 NATURE, DATA, AND OBJECTIVES OF THE STUDY

This study is primarily concerned with the theoretical conditions under which the notion of construal can be rendered coherent, rather than with particular construal phenomena. These conditions, and the nature of construal in general, will nevertheless require that the conceptual analysis be informed by a careful consideration of what the customary analytical concepts reveal about construal in practice. This research is thus reinforced with text-linguistic analysis that applies distinct dimensions of construal. The method of

combining theoretical and linguistic analysis also opens the possibility of considering how far the scope of dimensions can be extended without compromising their descriptive integrity.

The metatheoretical criticism proposed here is not justified by the descriptive utility of the dimensions of construal alone. I argue that it is indeed the argumentative style and structure of Cognitive Grammar that motivate (and provide a basis for) a metatheoretical re-evaluation. That is, the very definition of construal as a relation between representative conceptualizer(s) and conceptual content, combined with a usage-based conception of language, suggests a view of semantics that cannot be reduced to, or explained by, cognitive processing. Rather, a usage-based approach to construal suggests that linguistically relevant cognitive capabilities conventionalize into conventional meanings as constants of linguistic usage-events, thus being intersubjective by their nature.

This links my analysis to what Zlatev (2010: 427) refers to as a "minority position" within cognitive linguistics, which includes himself, Itkonen (e.g. 2008b), Sinha (e.g. Sinha & Rodríguez 2008) and Verhagen (2005, 2007, 2008): a group of authors who underline the necessary social grounding of cognitive semantics. One specific merit of this minority position is the unveiling of the theoretical, methodological and historical debt that Cognitive Linguistics owes its forebears (see e.g. Sinha 2007). Zlatev (2010) in particular has pointed out the inconsistent but close relationship between Cognitive Linguistics and phenomenology, and has argued, in the same vein with Itkonen (2008a), for the indispensability of consciousness for both the emergence and the study of experiential meaning. This dependence, in turn, suggests that Cognitive Linguistic methodology presupposes an implicit phenomenological basis, despite the recurrent claims to the contrary (Zlatev 2010: 417).

This inconsistency is the starting point of my metatheoretical analysis of construal. My own conviction is that semantics is the study of linguistic representations and that a true representation consists of a consciously graspable stand-for relation vis-à-vis its object, referent or designatum (Zlatev 2007a, 2007b). The nature of language in turn necessitates that linguistic representations be publicly available. A viable semantic theory must therefore be able to account for consciously accessible, intersubjectively available, non-objective meanings. Since Cognitive Grammar actually fares well in this task, we can attribute its inconsistency to a lack of self-understanding with regard to theory's semantic research object. My treatment of Cognitive Grammar is therefore aimed at clarifying, instead of refuting, the theoretical structure Cognitive Grammar posits in order to justify the dimensions of construal.

The objectives of this study thus are:

⁷ Etelämäki, Herlin, Jaakola and Visapää (2009), among others, can be named as Fennistic representatives of this position.

- 1. to clarify the definitions, contents and analytical functions of the dimensions of construal, in particular relative to written discourse:
- 2. to describe in considerable detail the theoretical justification for the dimensions of construal, to discuss the relevant criticisms of said justification, and to provide a separate metatheoretical analysis of the notion of construal with regard to mental imagery; and
- 3. to provide an analysis of the conceptual prerequisites that are necessary for a coherent conception of construal, including the integration of the notion of construal within a chosen model of intersubjectivity.

Whereas the task is to clarify the theoretical basis of construal, the measure of clarification is actually the analytical use the dimensions of construal. The first step is therefore to gain a correct understanding of this content. This task is approached by an introduction to the dimensions of construal that involves discussion not only of their definitions but also of putative extension of their analytical scope.

After a coherent overall picture of the dimensions has been given, it is then possible to evaluate the consistency of their theoretical justification. Given Cognitive Grammar's commitment to the psychological validity of its claims, the reference it makes to the cognitive scientific literature is conspicuously scarce. A substantial part of this work is therefore devoted to mapping the reference Cognitive Grammar makes to its essential sources of theoretical influence. This mapping, however, is devised primarily to enable a parallel analysis of the argumentation that is based on said reference.

The critical analysis of Cognitive Grammar's argumentation lays the ground for our main objective, which is to evaluate the compatibility of Cognitive Grammatical semantics with an intersubjectively grounded conception of meaning. This task involves a rehabilitation of the phenomenological perspective on meaning, which is openly endorsed by Cognitive Grammar itself, as well as its incorporation into a phenomenologically informed conception of intersubjectivity. This part of the study involves an applied text-analysis in order to elaborate the assumed theoretical position as well as its practical linguistic corollaries.

The methodology of this study comprises a conceptual analysis as well as a semantic and pragmatic analysis. The data for the former consists of literature on Cognitive Grammar, whereas the data for the latter consist of selected Finnish magazine articles. These articles are from Mielenterveys magazine, the members' magazine of Mieli, the Finnish Association for Mental Health (volumes 2010–2011). As a recent participant of Media Concept development project (see e.g. Helle 2009; Helle & Töyry 2008), which is aimed at the improvement of both the editorial work process and the journalistic end product, Mielenterveys-magazine has served as the corpus for the Mallilukijaa tekemässä project, a multi-disciplinary collaboration between journalistic studies at Aalto University and Fennistic studies at University of Helsinki. The

present study has been carried out on the data of Mallilukijaa tekemässä in order to enable a close analytical exchange with the project.

1.3 GENERAL OUTLINE

Due to the metatheoretical purposes of the present study, a further introduction to Cognitive Grammar and the dimensions of construal is reserved for the remainder of this book, which is organized as follows.

Chapter 2, "Conceptualizer and the dimensions of construal", includes an introduction to Cognitive Grammar as a semantic theory (section. 2.2), a concise account of the notion of conceptualizer (section 2.3), and a separate treatment of each dimension of construal (section 2.4). The main function of this chapter is to describe the research object of this study comprehensively; it therefore includes not only definitions of relevant theoretical concepts and conceptions but also linguistic examples acquired from the data that illustrate the dimensions of construal.

Chapter 3, "Construal and imagery", consists of two parts. The first part (section 3.2) focuses on the ontology of Cognitive Grammar; it examines the justification the theory provides for its conceptualist outlook and summarizes the criticisms leveled by Itkonen (1997, see also 2008a, 2008b, forthc.) and Konstenius ([Kenttä] 2003). The second part (section 3.3) considers the problematic association Cognitive Grammar establishes between construal and an ambiguous notion of imagery in order to explain the notion of construal itself. The main implication of this chapter is necessary dissociation of construal from cognitive processing, which in turn underlines the need to ground construal in the sociality of language use.

Chapter 4, "The intersubjectivity of construal", addresses this need with a constructive revision of construal's theoretical grounding. What is needed for a coherent understanding of construal is understanding how conscious experience comes to define semantic content. This understanding is sought by embedding construal in phenomenologically informed, multi-leveled model of intersubjectivity in adults. The disposition of the chapter reflects the multifaceted nature of intersubjectivity as a subject of conceptual and empirical interest. The chapter includes an introduction to intersubjectivity as a phenomenological (section 4.2) as well as theoretical notion (section 4.3). After this preliminary work, the last main section of the chapter (4.4) concentrates on the formulation of intersubjective conception of construal.

After this multiphase theoretical treatment, chapter 5 applies the developed model of intersubjectivity into analysis of construal in linguistic data. The notion of construal is applied into analysis of series of construals observed in written discourse (on selection and sampling of data, see next chapter). The chapter is divided, in addition to outline (section 5.1) to three sections, each of which focuses on a series of construal based on certain

dimension, or dimensions, of construal: specificity (section 5.2), focusing and prominence (5.3), and perspective (5.4).

The linguistic analyses provided by chapter 5 confirm that a conception of construal that is both holistic and coherent requires an intersubjective definition both for conventional experiential meaning and pragmatic linguistic context. Chapter 6 recollects the main findings that led to this conclusion and provides a synthesis on the conceptual and linguistic analyses. Most importantly, however, it will offer a revised definition of construal as an intersubjective linguistic phenomenon.

Finally, chapter 7 provides the concluding remarks of the study, including the implications the present investigation suggests for the future research on construal.

2 CONCEPTUALIZER AND THE DIMENSIONS OF CONSTRUAL

Cognitive Grammar's conception of semantics is characterized by a symbolization relationship between phonological form and conceptual meaning (FCG-1: 77), on the one hand, and a construal relationship between conceptualizer and conceptualization, on the other (ibid: 130). The content requirement of Cognitive Grammar (ibid: 53–54) provides that only phonological, semantic and symbolic units are posited; also grammatical structures are thus describable as symbolic pairings of meaning and form.

The overall spectrum of symbolic complexity, leading from morphemes at the simple end to clausal schemas or constructions at the complex end, is depicted in terms of a structured inventory (FCG-1: 73–76), acquired through and adjusted by the actual use of the units by the speaker/hearer. Actual utterances constitute a process of selection and elaboration from this inventory. The inventory is structured according to host of semantic relations between the units (e.g. schematicity of one unit vis-à-vis another) that stem from the encyclopedic nature of the units' semantic poles (see below). As conventional, learned patterns of symbolization, the semantic pole of utterance does not just represent semantic content but organizes it according to its experiential prominence and communicative relevance.

The notion of construal (CGBI: 43–44) can be given a minimal definition relative to the inventory-nature of language. First of all, construal 1) pertains to selection⁸ among conventional semantic units that can be posited as referential synonyms but differ in the ways they organize their semantic content. Secondly, and resulting from the first point, construal 2) pertains to the way the selected unit (or combination of units) represents its referent non-objectively, i.e. according its conventional non-objective organization as contextually elaborated.

The abstract, non-actual, spoken-into-the-expression selector of linguistic units is the conceptualizer. The dimensions of construal (CGBI: 55–89) are semantic parameters according to which alternative expressions for same

⁸ Originally, selection has been presented in Cognitive Grammar as one of the dimensions of construal, or (as in this case) as a focal adjustment (FCG-1: 114–120) that covers the selection of cognitive domain, the variable scale of an expression (e.g. *next to my hand* vs. *next to Jupiter*) and its semantic scope (including profile/base-distinction). It has been left out of the most current classification of construal phenomena (CGBI: 55–89), however. This is a logical resolution in at least two respects: the proposed content of the dimension does not appear all that coherent and, most importantly, it is actually impossible to give any rational justification for any dimension of construal would not present a case of selection. If a dimension of construal is a continuum of alternative expressions for a situation that is objectively the same, construal by any actualized expression is a form of selection that has been carried out. Hence, in my analysis, I refer to selection as an omnipresent aspect of construal.

referents and states of affairs can be organized into continuums. Also, in some cases, the given dimension of construal maps the connection between multiple expressions that have same the conceptual content but differ in their conceptual profiles (CGBI: 67), the portion of semantic content that determines the referent of each symbolic unit. Both forms of semantic interconnectedness between expressions involve the same two properties of construal: selection and organization.

If every single linguistic expression is necessarily construed in some fashion, selection is a global property of language use. The concept of "someone" selecting something thus fails to give any additional information about construal: it is simply a way of illustrating Cognitive Grammar's conviction that there is no single right/objective way to describe a situation linguistically, but instead a spectrum of subjective points of view from which to choose. The linguistic relevance of construal lies in the specific 'hows' and 'whys' of semantic selection: how a specific type of construal organizes semantic content and why is this organization feasible within a certain context. The first one of these types of questions emphasizes the conventional construal value of the given semantic unit, while the latter presupposes the context of expression. Below (chapter 4), I will defend a notion of construal exactly as reflexive vis-à-vis context, which presupposes interdependence between the two. In fact, these two aspects pertain to a corresponding analytical distinction between semantics and pragmatics, specific nature of which is discussed shortly in relation to Cognitive Grammar.

Ultimately, each dimension of construal has to be described relative to a spoken-into-the-expression conceptualizer. That is, every dimension of construal underlines one or more ways in which way meaning is dependent on the conceptualizer. Conversely, the conceptualizer itself bears no substance other than its linguistic manifestation in the dimensions of construal. Conceptualizer and the dimensions of construal are thus mutually dependent. They are not inseparable, however, albeit their separation is a complex issue both methodologically and theoretically. Their separation might not be analytically trivial either. In this chapter, I will describe conceptualizer and each dimension of construal separately but my primary aim is to reach a better understanding of their inherent logical interconnectedness and their function in actual discourse.

As mentioned in the introduction, the data of my analysis consists of magazine texts sampled from volumes 2010 and 2011 of Mielenterveys-lehti. The choice of data is motivated by theoretical and expository reasons. First of all, the metatheoretical topic demands certain amount of clarity, which is best provided by well-edited written texts. Written format also allows for the restriction of contextual factors found in face-to-face interaction, enabling a more detailed analysis of semantic and pragmatic factors in chosen construal phenomena. The primary function of the data is to illustrate the scope and applicability of the dimensions of construal, a task that would only be

complicated by including the intricacies of spoken communication and its formal variation in the analysis.⁹

Moreover, the present analysis emphasizes the role of the dimensions of construal in semantic phenomena larger than clauses or sentences; these phenomena, while not exclusively textual, are best tracked within, and illustrated by, written discourse. A related methodological reason for analyzing magazine texts is that spoken data would not only require the use of a Conversation Analytical apparatus but also a methodological integration with Cognitive Grammar, a task what would also pre-suppose a comprehensive discussion of the theoretical bases of these two paradigms. ¹⁰ Considering these factors, it is clear that a critical reevaluation of the dimensions of construal is best served by a careful constriction of the empirical context. This principle is applied both in the introduction to construal in this chapter as well as in the later analyses of construal patterns in chapter 5.

2.1 OUTLINE

The course of this chapter is straightforward. I will begin with a general overview of semantics in Cognitive Grammar and how it gives rise to the notions of conceptualizer and dimensions of construal (section 2.2). I will then present the notion of conceptualizer, its analytical purposes and theoretical implications in section 2.3. Section 2.4 gives an overall account of the dimensions of construal in Cognitive Grammar, as well as their application to written discourse. Section 2.5 is a synthesis of the preceding themes as well as an analysis of the relationship between the conceptualizer and the dimensions of construal. The scope of this chapter is narrowed down to the presentation of construal in Cognitive Grammar, but when needed, other cognitive linguistic accounts of construal will be addressed as well (most notably Verhagen 2007; see also Croft and Cruse 2004; Talmy 1978, 1988, 2000a).

2.2 SEMANTICS IN COGNITIVE GRAMMAR

Some preliminary remarks on semantics in Cognitive Grammar have been made in the preceding introductory chapter. The topic has been covered quite

⁹ The application of the dimensions of construal to languages other than English is not entirely unproblematic. For illustration, see section 2.3.2 below, which touches upon the definitional hindrances associated with the sc. grounding elements (CGBI: 259–260) in the contexts of Finnish and Dutch.

¹⁰ Etelämäki et al. (2009), Etelämäki & Jaakola (2009), and Etelämäki & Visapää (2014) bring support to the synthesis of Cognitive Linguistics and Conversation Analysis both on theoretical and methodological grounds, thus providing an excellent start for this discussion.

extensively in the cognitive linguistics literature¹¹; I will therefore narrow the scope of the present introduction to those properties of Cognitive Grammar that are relevant to the current treatment of construal.

The emphasis in this section will be on the descriptive apparatus of Cognitive Grammar, whereas the theoretical foundations of this conception of semantics will be focused on in chapter 3. Some theoretical prerequisites still have to be addressed here to facilitate discussion. These include some of the most well-established theoretical traits of Cognitive Grammar: namely, the non-modular conception of cognition and language, the prototype- and schema-based conception of categorization, and the encyclopedic conception of semantic content. Each of these attributes is operationalized by Cognitive Grammar in accordance with the conviction that conceptual meaning is constituted and acquired via actual language use.

While the implications of the usage-based nature of Cognitive Grammar are discussed more extensively in section 4.4, its general significance needs to be acknowledged from the start. It is a necessary condition for a non-objective, experiential semantics that meaning is established as conventionalized use, including the (language-using) subject's perspective *vis-à-vis* the conceptualized object.

2.2.1 NON-MODULARITY OF MIND

Modularity of mind, a view prevalent in Generative Linguistics and its heirs to date, is a cognition-theoretical stance whereby the global architecture of mind consists of distinct task-specific units, i.e. modules, which function relatively independently according to their own regularities. The successors of classic Generative Linguistics, including X-bar theory (Chomsky 1972, 1975), Government and Binding theory (Chomsky 1981), Principles and Parameters (Chomsky & Lasnik 1993), and finally, the minimalist program (Chomsky 1995), have aimed at specifying the language faculty's role *vis-à-vis* other cognitive systems. The basic tenet of discernible cognitive faculties, however, has remained the same.

The minimalist program, for instance, is a radical revision of Chomsky's earlier position in terms of the concepts and rules that characterize language as a mind-internal universal system. Minimalism gives language both a narrow and a broad sense; the former refers to an exclusively human computational capacity, and the latter covers this capacity together with the other cognitive subsystems it interacts with. Minimalistic theory, in other words, involves interfaces between distinct systems – thus presupposing the discernibility of these systems.

In cognitive science, there are multiple modularity hypotheses that vary in strength. The hypotheses differ, for example, according to how strongly

¹¹ E.g. Croft & Cruse 2004: pt. I, "A conceptual approach to linguistic analysis"; Evans & Green 2006: pt. II, "Cognitive Semantics"; Geeraerts & Guyckens eds. 2007: pt. I, "Basic Concepts".

posited modules are dissociated, or according to what extent cognition is discernible into task-specific units. Most of the posited modularity hypotheses include the following common denominators: modules are believed to have an innate basis and their existence is motivated by evolutionary advantages, they have both a neuronal and a cognitive constitution, and they are pivotal for explaining the functioning of at least some well-established cognitive subsystems.

Fodor (1983)¹² is the first one to present the (neuropsychological) concept of modularity. He, however, only argues for the modularity of certain "peripheral" systems, such as vision. Later, competing conceptions, such as so-called massive modularity, have extended this principle of cognitive organization to cover the mind as a whole (for discussion, see Barrett & Kurzban 2006; Gibbs & Van Orden 2010).

Cognitive linguistic enterprise is typically characterized by a strong rejection of the modular conception of mind. However, despite the centrality of the topic for both generative and cognitive enterprises alike, modularity has never been among the most discussed diverging points between the two paradigms. Modularity nevertheless boils down to a single term a set of mind-theoretical properties that all contribute to how linguistic meaning should be understood as such and relative to overall cognition.

It may be generalized that a modular view of cognition justifies a conception of language as a well-defined, autonomous object. The knowledge of this object constitutes the human linguistic capacity. Rohrer (2007: 25) assigns this view of language to an "objectivist tradition", most notably represented by generative linguistics, which originally translated its conception of semantics into so-called interpretive semantics (e.g. Katz & Fodor 1963). Albeit the interpretive semantics as such did not stand for long, it serves here to represent the form of semantics CL rose to oppose.

Interpretive semantics can be seen as an objectivist-conceptualist enterprise, in which semantic representations are derived from abstract formal syntactic relations. Meaning in this framework is equivalent to truth-conditions, by which abstract semantic symbols are related to objective states of affairs. In this sense, meaning is externalized from the subjective experience of the language user, but at the same time is supposed to be represented within cognition by symbolization; hence the framework is conceptualist and objectivist at the same time. This line of thinking requires an extent of discernibility of language processing vis-a-vis other cognitive systems, which is then provided by positing of a distinct language module.

Cognitive Linguistics is essentially a counter-movement against the discernibility of language and objectivity of meaning propagated by the

efficiency.

¹² Fodor's conception of modularity of mind is in line with the tradition of faculty psychology, but the concept of modularity itself is adopted from (especially evolutionary) biology, where it refers to an organism's ability to produce discrete functional units that promote its survival and reproductory

interpretive semantics and anteceding semantic models within generative framework. The original motivation for the cognitive linguistic enterprise has been an empirical and linguistic one: the view of meaning promoted by Generative Linguistics undervalues the semantic function of language, and does so by ignoring how meaning is related to, and arises from, human experience and actual interaction. The cognitive nature of Cognitive Linguistics, in turn, requires a conception of mind that is flexible enough to allow human perceptual experience to enter linguistic meaning. While there are multiple sources to which Cognitive Linguistics has turned to for theoretical justification (such as prototype-based theory of categorization, e.g. Rosch 1973, 1978; Rosch et al. 1976; Rosch et al. 1978), the Cognitive Linguistics' rejection of modularity can be highlighted as the most profound cognitive-architectural delineation of the movement. This general notion holds true for Cognitive Grammar as well.

Explicitly, Cognitive Grammar only advocates skepticism against Fodorian modularity or the existence of a specific language module (note also the reference to Saussure):

Language is an integral part of human cognition. An account of linguistic structure should therefore articulate with what is known about cognitive processing in general, regardless of whether one posits a special language "module" (Fodor 1983), or an innate *faculté de langage*. If such a faculty exists, it is nevertheless embedded in the general psychological matrix, for it represents the evolution and fixation of structures having a less specialized origin. Even if the blueprints for language are wired genetically into the human organism, their elaboration into a fully specified linguistic system during language acquisition, and their implementation in everyday language use, are clearly dependent on experiential factors and inextricably bound up with psychological phenomena that are not specifically linguistic in character. (FCG-1: 12–13, italics in the original.)

The stance thus presented does not strictly deny the existence of cognitive subdomains specified on certain tasks. Cognitive Grammar simply assumes that, regardless of the existence of these domains, language's most fundamental (cognitive) properties are not domain-specific. The argument has a phylogenetic and ontogenetic emphasis, but it nevertheless concerns a fully elaborated language system as adopted by an adult speaker. Somewhat paradoxically, it is typically linguistic data that is used by Cognitive Grammar to support cognitive-psychological arguments, not the other way around.

To see what this means in practice, let us take a look at the dimensions of construal and the notion of conceptual metaphor (Lakoff & Johnson 1980). A Cognitive Linguist would maintain that the semantic phenomena grasped by these concepts manifest fundamentally cognition-general abilities and aspects of mental life that speak against independent cognitive modules. At the general

level, there are two kinds of properties of linguistic meaning that can be taken as supporting a non-modular stance: 1) domain-general structural properties of information processing (such as those mentioned in FCG-1 chapter "Cognitive Abilities", p. 99–146) that result in schema-level semantic similarities between the tokens of the same construction type, and 2) domain-specific world knowledge.

It would be tempting to align these two types of meaning with grammatical and lexical levels of analysis, respectively. However, Cognitive Linguistics in general, and Cognitive Grammar in particular, refute a strict dichotomy between lexical and grammatical aspects of language, which constitutes a further manifestation of non-modularity. Constructions or grammatical schemas themselves are constituted by schematization via multiple instances of structurally similar expressions. They are therefore acquired as inherently meaningful structures, and they cannot be strictly distinguished from lexical items on semantic grounds. Instead, the more lexical and more grammatical semantic units are posited in Cognitive Grammar as a continuum of semantic schematicity (FCG-1: 449), as mentioned above. Furthermore, the units that populate different parts of this continuum combine systematically in actual expressions, but their joint semantic contribution cannot be reduced to the sum of distinct semantic components. Rather, Cognitive Grammar manifests only partial compositionality (ibid. 452-453) in the description of meaning, assuming a significant effect of non-linguistic knowledge and conceptual capacity on the constitution of meaning of a complex expression.

Take for example the different verbs that elaborate Finnish negative necessive construction with the modal verb *pitää* ('must'/'have to') and the subject marked by zero:

- 1. köyhyyd-en ei pidä anta-a laajentu-a [poverty-GEN NEG must let-INF expand-INF] 'one must not let the poverty expand'
- 2. Työvoima-n ei pidä anta-a heikenty-ä
 [workforce-GEN NEG must let-INF weaken-INF]
 'one must not let the workforce get weaker'
 (MT 6/2010: 10)

There is a multitude of syntactic/structural similarities between these two examples that correspond to similarities on the semantic level. These semantic similarities are schematic or abstract, and are associated with the organizational aspect of how the more specific aspects of meaning relate to each other. For instance, one type of similarity concerns the semantic relationships that hold between non-finite verb chains and their predicates (*ei pidä* 'must not') and between the predicates and the subject marked by zero. Most importantly, Cognitive Grammar assumes that actualized grammatical complexes such as 1 and 2 instantiate syntactic constructions or schemas. These involve conventionalized semantic substructures, or elaboration sites (CGBI: 198), such as the clause-initial genitival object, that bear schematic

meaning of their own. This meaning is then elaborated by the actual expressions that assume the explicit roles of different constituents.

Now, a further similarity between 1 and 2 can be found in the selection of infinitival complements for the predicate ei pidä 'must not': the verb combinations antaa laajentua 'let expand' and antaa heikentyä 'let weaken'. These manifest two different metaphorical mappings of the physical domain, namely its spatial and force-dynamical subdomains, onto the social domains of labor ('workforce') and wealth ('poverty'). Mapping refers to the matching of two cognitive domains, so that the schematic commonality between these two gives rise certain semantic attributes in the target domain of conceptualization. For example, the expansion in the spatial domain as 'gaining in the relevant attribute' maps onto the social domain, yielding the meaning 'gaining in poverty'. In order to be graspable, a conceptual metaphor such as this needs to rely on our everyday experiential understanding of the relevant physiological and social phenomena and their commonalities. It is therefore presumed that lexical meanings such as 'expand' and 'weaken' are structured by prototypical, concrete meanings, their metaphoric extensions and the interconnections between these different semantic nodes.

There might also be another conceptual metaphor in play in the examples above, manifested by the necessive predicate ei pidä, albeit this option would require the expansion of the term "metaphor" quite a lot. Pitää is an old, highly polysemic verb with meanings that range from the manual holding of objects and possession (via having meetings and other events) to necessive and epistemic-cognitive functions ('think x as y', Kielitoimiston sanakirja 2: L-R [Dictionary of modern Finnish], s.v. pitää). The concrete motor meaning is likely to be the oldest, and thus the starting point for the development of the modal use (Laitinen 1992: 137-143). Conceptual metaphor could motivate such a development via experiential or conceptual commonalities between the so-called source-domain (original, concrete 'hold') and the target domain ('must', 'have to'). Given the historical nature of the relationship between these semantic variants, however, it is quite difficult to judge whether an actual functioning metaphor can found in the use of ei pidä above. The mere possibility of such metaphor is nevertheless a further example of how the "grammatical" or "constructional" meaning of these clauses cannot be separated from the "lexical" one in any absolute manner.

There are, in other words, inherent limitations to dividing semantics into grammatical and lexical counterparts. Conceptual metaphors, to start with, are usually complex and hierarchically organized, and have also more grammatical instantiations, such as extensions of spatial cases in Finnish (on subjective directionality in Finnish locatives, see e.g. Huumo 2006; on metonymy in Finnish locatives of state, see Onikki-Rantajääskö 2006). So, what appears as a simple lexical choice is seen in the Cognitive Linguistic perspective as motivated by a complex conceptual network both with lexical and grammatical manifestations.

On the other hand, the interrelations of lexical-semantic units form a structural level of their own, e.g. the selection of a word within a set of options in terms of specificity suitable for the current communicative need. As a generalization, then, a Cognitive linguist/grammarian would say that 'lexical' tends to correlate with the more contentful aspects of meaning, whereas 'grammatical' tends to express the skeletal and structural properties of meaning (see e.g. Talmy 2000a: 21–22). In reality, the structural and more contentful aspects of meaning are intertwined and can be separated only by a deliberate change of analytical perspective.

The premise of non-modularity thus results in the conclusion that grammar and lexicon are both describable in uniform manner as categories of semantic units. Moreover, the prototypical levels of specificity for these categories reflect distinct stages in the process of grammaticalization, which is presumed to relate the categories to each other (see p. 28 above). The fuzziness of said categories (atemporal perspective) is thus associated with diffusion of units from one category to another (temporal perspective).

The various motivations for grammaticalization cannot be addressed here. The very presumption that this process is in part semantics-driven, however, affects the overall character of Cognitive Grammar in a way that is relevant for the present concerns.

To be specific, what should be considered is the combination of the following premises. 1) Grammar consists of pairings of form (phonology) and meaning (semantics); 2) both phonology and semantics pertain to cognitive categories (phonological space and semantic space); and 3) cognitive categories are fuzzy and interacting (atemporal and temporal perspective, respectively). The standard general conclusion derived from these presemises by cognitive linguists is that grammatical form is "motivated" (e.g. CGBI: 88), i.e. defined by factors external to the form itself. On the face of it, this contrasts directly with the structuralist (and generativist) notion of *l'arbitraire du signe*. It is thus somewhat paradoxical that Cognitive Grammar constantly emphasizes its own symbolicity, which literally entails an arbitrary meaning/form relationship. In contrast, the types of motivated meaning/form relationship, especially that of iconicity, are mentioned only seldom.

As Kleiber (1993: 105) and Langendonck (2007: 396–397) point out, however, this contradiction is mainly illusory. In fact, there can be found iconicity inherent to Cognitive Grammar that is relatively unpronounced for the very fact that it resides in the systematic correspondence between grammatical form and meaning¹³. That is, the content requirement of Cognitive Grammar, which necessitates the meaningfulness of grammatical structures, combines with experiential semantics so that grammatical form corresponds to a conceptual process, which in turn corresponds iconically to a way of perceiving an experiential scene from a certain perspective.

¹³ Langendonck (2007: 400, n. 5) represents the same observation.

This iconic correspondence needs to be defined carefully. There is a tendency within Cognitive Linguistics to associate linguistic meaning directly with experience, at least suggesting an imagic one-to-one correspondence (see sections 3.3.3 and 4.4, as well as Blomberg & Zlatev 2013, for a critical discussion). ¹⁴ In other words, the autonomous activation of semantic content for a language-using subject seems to gain its semiotic functionality from that the meaning resembles whatever the meaning is about. This may also in part explain the apparent attractiveness of imagery-based theoretization for Cognitive Grammar (see chap. 3).

The semantic entities posited by Cognitive Grammar, however, reflect experience in a restricted set of correspondences that are traditionally categorized as forms of diagrammatic iconicity (Peirce 1977; Haiman 1985). In diagrammatic iconicity, the relations between "parts" of an entity, or between entities in a constellation, are signified by corresponding relations in the iconic sign. The analogy between the sign and the signified is thus more scarse and less restricting than in the case of imagic icon (e.g. a photograph). This makes diagrammatic iconicity suitable for describing semantic features of a meaningful grammar.

For instance, Cognitive Grammar associates iconicity with sequential order (temporal iconicity, CGBI: 79), semantic complexity (ibid. 74), conceptual focusing (ibid. 209), grounding (ibid. 275, 302), and grammatical markedness in general (ibid. 376). What these phenomena have in common is that their formal characteristics reflect the conceptual semantics they prototypically convey; e.g. sequential order of two distinct motion expressions in *she walked through the hall and went upstairs* conveys the meaning of conceptualized order of these events. Furthermore, the meant state of affairs in the world is likely to be reflected iconically by the conceptualization. Likewise, frequent and communicatively relevant attributes of experience are likely to be reflected in conceptualization by non-selectional factors, that is, relatively fixed semantic properties inherent to grammatical structures. In other words, there

¹⁴ This is another way of saying that the approach of Cognitive Grammar denies, or at least seriously questions, the possibility of genuine synonymy in one language (see e.g. FCG-1: 378–379; see also Bolinger 1977). As perspectival effects are included in the domain of semantics and associated with different construals of a referentially same entity, a semantic difference between two structures is not only essential but necessary. In other words, one cannot express same thing in many ways. In this, Cognitive Grammar approximates the traditional structuralist principle of isomorphism, under which one meaning corresponds to one form and vice versa. The approximation is vague at best, however. First of all, isomorphism is typically accepted as a functional tendency rather than as a principle not only in Cognitive Grammar (ref.) but in structuralist approach as well (e.g. Goossens 1969). *Ceteris paribus*, synonymy is avoidable (and indeed avoided by small children, as noted by Langendonck 2007: 399) and isomorphism is desirable, under the consistency of the communication itself. Secondly, however, Cognitive Grammar accepts polysemy, another violation against isomorphism, as one of its key parameters. Tendency of isomorphism is therefore subordinate to other more cogent conceptual and pragmatic factors.

are iconic tendencies that characterize selection between different construals and the iconic tendency of a type of construal to duplicate, diagrammatically, an experiential constant or multiple such constants.

Iconicity is thus strongly, even if implicitly, present in Cognitive Grammar; this is a necessary consequence of combining experiential semantics with semantically motivated grammar. Note that this implies in fact two iconic correspondences that can be distinguished at least analytically: experiential semantics involves iconic correspondence between experience and meaning, whereas semantic grammar involves iconic correspondence between meaning and form. What is essential is that both of these steps of correspondence involve the possibility of interference by factors other than iconic representation itself. Cognitive Grammar is therefore not an "iconic grammar" but a grammar that includes iconicity in its list of meaning-constituting factors. It is representative of the theory that it makes repeated reference to work of Haiman (e.g. 1983, 1985) who presents iconicity as restricted by the contrasting tendencies of economy, generalization, and association in definition of grammatical structure.

It can be thus concluded that iconicity in Cognitive Grammar is primarily of diagrammatic variety and heavily constricted by conflicting conceptual and pragmatic motivations. Diagrammatic iconicity is nevertheless essential for the notion of construal, for both of these concepts are related to experiential meaning and both of them are subject to same external restrictions. It would even seem tempting to equal the iconicity of grammar with construal. This is not the case, as construal is restricted and constituted also by other meaning-constituting factors, as will be demonstrated later on. Diagrammatic iconicity will nevertheless be mentioned in passing when the experiential basis of construal is considered.

Despite their complexity, the examples above (with their metaphorically motivated selection of verbs) should help to illustrate the theoretical influence of partial non-modularity in the Cognitive-Linguistic and particularly Cognitive Grammatical description of meaning. In a conceptual-semantic framework, partial non-modularity allows for the description of meaning relative to general cognitive principles, which are also thought to organize domain specific knowledge of the world mediated by our experience. The nature of this knowledge, which is often referred to as encyclopedic, is related intimately to how we categorize our experience. One of the most significant non-linguistic theoretical sources of influence for Cognitive Grammar is provided by models of categorization based on schemas and prototypes.

2.2.2 LINGUISTIC CATEGORIZATION

While Cognitive Grammar makes relatively scarce reference to it, Eleanor Rosch's prototype-based Category Theory (e.g. Rosch 1978) is openly assumed as a part of Cognitive Grammar's theoretical basis (see e.g. FCG-1: 16–17). The notion of prototype in Cognitive Grammar is somewhat overshadowed by a

strong emphasis on schemas and principles of Gestalt psychology, such as figure/ground-segregation. Prototype theory nevertheless provides Cognitive Grammar with the principled view of how linguistic knowledge is acquired, stored and used. The question of linguistic categorization forms another demarcation line between Cognitive and Generative Linguistics similar to the question of modularity discussed above.

Rosch's prototype-based Category Theory, which was put forward in the mid 1970's, was a psychological antithesis to the classical view of categorization. This view had largely dominated western thought since Aristotle and was applied in generative paradigm and its semantics. The classical view of categorization has been depicted in length elsewhere; in this work it is sufficient to consider only its most general characteristics. Taylor (2003: 21), referring to Aristotle [Metaphysics 5.8.3. as translated in Aristotle 1933], mentions four of these. The first is that categories are defined by necessary and sufficient conditions, so that to qualify for a category, an entity needs to manifest a specific set of properties. The second is that these definitional properties are binary, so that the entity either has one or has not. The third characteristic, a logical conclusion of the first and second point, is that categories have clear boundaries, so that category membership demarcates the world clearly into those entities that have it and those that do not. Similarly, the fourth property of classical categories is that the members of each category are equal (relative to the category membership) and categories are thus inherently homogenous. The concept of 'man', for instance, may refer to men with a multitude of differing properties, but as the reference requires the fulfillment of certain defining properties (a 'two footed animal' for Aristotle, a 'featherless two-footed animal' for Plato), the differences are irrelevant from the outset.

The main conclusion of Rosch and colleagues is that the Aristotelian classical categories simply fail to reflect how categorization works among humans in everyday life. Instead, "prototypical categories" were shown to be involved at least in the classification of certain frequent perceptual objects and nouns. The basis of this form of classification lies in the tendency in human experience for certain experiential objects to stand out among others for qualitative or quantitative reasons, so that they become the standard of comparison in classification of new instances. In other words, they become prototypes for their categories.

For example, the experiments carried out by cons ([Rosch] 1971, 1972) showed that perceptual color space is organized according to so-called "focal colors" (originally established by Berlin and Kay, 1969) that work as cognitive reference points for their less central variants, so that the former are used to categorize the latter. This kind of categorization of color is inherently fuzzy and flexible. Indeed, relative to the four defining properties of classical categories, the natural taxonomy of things seems to exhibit exactly the opposite properties, as summarized by Lewandowska-Tomaszczyk (2007: 145; see also Geeraerts 1989).

In contrast to the first property of classical categories, prototype-based categories cannot be given an encompassing definition by necessary and sufficient conditions, for the classification of x as y is based on analogous similarity rather than digital one. As opposed to the second property of classical categories, the members of a prototypical category are connected by family resemblances rather than by binary either/or-features. Indeed, some members are linked by one set of attributes while others are linked by another, and these attributes themselves are gradual rather than binary. As a consequence of the first and second points, category membership itself is gradual property and therefore prototypical categories are inherently structured and heterogenous.

Regardless of its scope being originally quite narrow, Prototype Theory made a substantial impact on the emerging paradigm of Cognitive Linguistics, which resulted in the further development of Prototype Theory for linguistic purposes (e.g. Lakoff 1987). We may only consider briefly the influence of this theory in Cognitive Grammar. On a general level, Cognitive Grammar, which approaches language as a learned set of units, expands the concept of fuzzy categories to the description of linguistic (including grammatical) categories in general. This requires, however, that linguistic classification is complemented with an additional process of schematization (which in Cognitive Grammar ultimately receives more attention), while still preserving the original flexibility of prototype-based categorization.

In brief (see e.g. FCG-1: 371–372), the categorization of a target T (a new conceptual entity) in terms of a standard S (an existing conceptual entity or prototype) constitutes of detecting the similarities between the two. These similarities in turn form the schema for the category now formed by S and T. A schema itself is dynamic and evasive, and it is not suggested that it would have any substance outside the categorization event itself. On the contrary, the concept that *fulfills* the role of schema in some categorization event indeed has substance of its own. For example, the fact that the entity 'fruit' is schematic and works as a schema with respect to 'banana' and 'apple' only in their categorization does not mean it would cease to exist as a concept outside that categorization. Instead, it implies the interconnectedness of lexical concepts, which in Cognitive Grammar is referred to as "schematic network" (FCG-1: 492), and is further developed in the analysis of grammatical units as well.

The process of schematization provides Cognitive Grammar with the theoretical momentum to explain the development of grammatical units from the lexicon through grammaticalization as schematization over time and the acquisition of grammatical units as schematization in exposure to their instantiations in actual speech. This also offers Cognitive Grammar a strong mandate for rejecting the innatism of language included in the generativist paradigm. Furthermore, this conception of categorization further encourages the dissipation of boundaries between different linguistic categories such as morphology, lexicon, and syntax, justifying the treatment of the whole spectrum of linguistic phenomena as inherently meaningful.

On this complex issue, we only state here that a uniform learning mechanism for all linguistic categories is assumed. In addition to the non-modular view of cognition, in which linguistic conceptualization exploits different areas of cognition in a holistic fashion, this implies that meaning is associated with all linguistic units, (excluding phonological units) from a level of analysis to another (more of this in the following section). Note also, that while phonological units as such are not meaningful, Cognitive Grammar nevertheless approaches them as a cognitive entities, positing "phonological space" (FCG-1: 76–77) as the cognitive domain of their instantiation; this domain is largely structured by the same conceptual categorization principles as its semantic counterpart.

The semantic uniformity of Cognitive Grammar has basically two dimensions: an inter-conceptual one and an intra-conceptual one. The former pertains to the categorization of linguistic units into schematic networks, which has some immediate descriptive advantages with regard to the actual pragmatic flexibility of speech. Organizing lexical concepts into natural taxonomies on based on experience means that they are acquired as interrelated part-synonyms. This reflects back to the use of these same concepts as mutual motivated interchangeability between concepts under certain restrictions. For instance, referring to a fruit may involve a whole spectrum of lexemes of variable schematicity, given the pragmatic circumstances: *granny smith*, *apple*, or *fruit* are all adequate titles for the same experiential object under certain circumstances. ¹⁵

On the other hand, a schematic network is advantageous as a descriptive concept because of its utility in analyzing the different senses of a polysemic word as distinct, yet interrelated, partly synonymous words of different levels of abstraction. In acquisition through actual use, it is obvious that we expose ourselves to a wide range of different uses of the lexical concept 'fruit'. In processing these different uses, e.g. for the aforementioned apple and banana, we are likely to end up judging some uses as more (proto-) typical either for quantitative or qualitative reasons. These uses again serve as a standard of comparison in the future instances. This again involves a schematization that produces schematic hierarchy. This implies that the meaning of a single polysemic concept is in fact organized as a schematic network in a manner similar to distinct, but interconnected, lexical items.

One dictum of Cognitive Grammar is that most lexemes can be analyzed as polysemic and can therefore be fitted in to description in terms of schematic networks. It still remains to be explained, how a distinct sense, or a node,

¹⁵ From a Roschian perspective, the choice is not totally pragmatic but subject to what is typically considered the so-called "basic level of categorization", which is basically the optimal level of categorization in terms of abstraction. The level of abstraction, or the amount of relatively fixed semantic features, amounts to the level of inclusiveness in categorization. Thus the basic level of categorization is defined so that the concept inhabiting it is semantically rich enough to distinguish the object of categorization from other objects with the least possible amount of cognitive effort (Rosch 1978).

within such network should be described. This requires additional concepts, such as cognitive domains and figure/ground segregation, which are presented in what follows. At the same time, we will consider what is implied by the synthesis of the non-modularity and the form of linguistic categorization presented above.

2.2.3 ENCYCLOPEDIC MEANING AND ITS ORGANIZATION

If linguistic meaning is learned, and moreover, learned by a non-modular cognitive system, its necessary property is that it cannot be distinguished by any strict criteria from other categories of human knowledge (FCG-1: 155–156).

For Cognitive Grammar, meaning equals conceptualization (CGBI: 30); conceptualization, in turn, may accommodate anything that is experientially associated with a concept through the contexts of its instantiation. This view of semantics is referred to as encyclopedic (for a comprehensive description, see FCG-1: 154–166). The meaning of a linguistic item cannot be condensed into a description in propositional form in the way of a dictionary item, or by feature matrices as in structural semantics; instead, meaning is seen as consisting of multiple nodes of information that are interconnected by, and organized hierarchically according to, their centrality for a given concept, its semantic variant or its specific instance.

Network model precludes definite boundaries of meaning: centrality is a gradient feature, a relative value of which may easily be overruled by contextual factors. Similarly, a usage-based grammar necessarily involves gradation from pragmatics to semantics (e.g. Langacker 1988: 57, CGBI: 39–42). A semantic unit acquires its unit status gradually through use but also continues to be elaborated and adjusted by the pragmatic contexts in which it is instantiated (FCG-1: 157). The result is that the boundary between conventional and non-conventional conceptual meaning is indeterminate both for a semantic change as a process, as well as for an encyclopedic meaning as a structure.

Langacker (CGBI: 40), however, denies the interpretation that the view of Cognitive Grammar would preclude the existence of pragmatics altogether. Rather, context-dependent or pragmatic meaning is the logically necessary prerequisite of conventional semantics. Semantics and pragmatics are thus presented in Cognitive Grammar as separate concepts, which, however, do not correspond to strictly separate ontological categories. Even from the perspective of Cognitive Grammar, one can point out phenomena that are clearly either semantic or pragmatic (ibid.). The mere existence of intermediate cases nevertheless entails that the categories these notions evoke are ontologically fluid.

The notion of gradation from pragmatics to semantics is a logical extension of Cognitive Grammar's theoretical premises. The specific formulation of this gradation has nevertheless certain weak points that need to be addressed. First

of all, as is extensively argued by Itkonen (e.g. 1978, 1981, 1997, 2003, 2008a, 2008b) sufficient linguistic communication requires that it is carried out under rules that are socially constituted and thus commonly known, therefore transcending the spatiotemporal scope of a single instance. Conversely, the knowledge of language is of normative character, i.e. it involves socially defined criteria of correctness. In so being, linguistic knowledge of speaker of a language is unfalsifiable *a priori* (Itkonen 1997: 58), and it cannot be reduced into a contingent fact about the context in which is instantiated. Furthermore, the correctness is typically a binary feature, which suggests a rather well-defined category of context-independent linguistic knowledge.

Now, the application of this social definition to knowledge of linguistic meaning is not totally straightforward (for discussion see Itkonen 1997, 2008a, forthc). The vagueness and flexibility of meaning-construction in actual discourse precludes any specific predictions about what a linguistic unit will mean on specific instance; just consider the unlimited human creativity in how we establish novel animal analogies in our attempt to insult our conspecifics. It can be argued, however, that such creativity supposes the conventional semantics, from which the mutually understandable insults are derived from. Pragmatic meaning can therefore be defined, at least to a substantial extent, as dependent on conventional meanings.

It thus seems necessary that semantics and pragmatics are posited as separate yet interacting ontological categories. On the other hand, an analytical distinction between semantics and pragmatics is necessary for any systematical description of meaning: any categorical judgment about a semantic regularity presupposes the exclusion or abstraction of contextual variables – or the detection of a contextual constant. The relevant question for a theory of encyclopedic semantics is how these two distinctions, the ontological and the analytical, should correspond to each other.

The most practical answer is prefaced by defining the ontological distinction as ideally definite but empirically indefinite. There can be no partially falsifiable knowledge, so any category constituted by unfalsifiable knowledge has to have quite precise boundaries ideally, whether the mapping of these boundaries is a possible task or not. This position, in turn, defines the nature of the analytical distinction. We cannot to distinguish in any absolute or comprehensive way between the categories of conventional and nonconventional meaning for a specific expression. Rather, we need to assume that the distinction exists and try to map out the parts of the boundary that are relevant for the present issue. As the semantic/pragmatic distinction is in any case operationalized by semantic analysis, the analytical distinction is best seen as systematic approximation of the ideal goal.

The analytical distinction between semantics and pragmatics is therefore best applied so that the latter refers to any part of meaning that is defined, elaborated or disambiguated by any part of the context. This approach makes the distinction largely perspectival.¹⁶ Any actual instance of a semantic unit involves both semantically and pragmatically defined content, and the conventional content itself may pertain to a semantic variant of a polysemic concept disambiguated by the context. Furthermore, Östman (2005) demonstrates how the pattern according to which a conventional semantic unit becomes specified from context may itself entrench into a conventional pattern of symbolization, that is, a "discourse construction" (ibid. 130). Given the abundance of potentially conventional discourse structures, it is safest to define the semantic/pragmatic distinction as an analytical tool, the specific import of which depends on the level of analysis vis-à-vis the organization of discourse.¹⁷

As faithful to its theoretical proclamations, Cognitive Grammar nevertheless avoids applying the distinction between semantics and pragmatics into its descriptive praxis. To prevent the concept of semantics from dissolving entirely, Cognitive Grammar must present a principled view of how different encyclopedic knowledge associated with a concept is organized in its acquisition and usage.

This view is based essentially on the concepts of figure/ground segregation and cognitive domain. Cognitive domain, in brief, is a function of a concept defined by Cognitive Grammar (FCG-1: 488) as a "coherent area of conceptualization relative to which semantic units may be characterized". The different pieces of information associated with a concept are described as cognitive domains or substructures within cognitive domains, which themselves are usually free-standing concepts of their own. The rationale is that, similar to the way in which different perceptual objects are categorized in comparison to other objects, the informational substructures of a concept are categorized in comparison to matching elements within different cognitive domains. For instance, the meaning of [BALLOON]¹⁸ is based on our experience with balloons, which can be decomposed into different realms of experience; for example, the shape, feel, typical color, function, physical behavior, cultural function etc., which all become meaningful as related to different cognitive domains (e.g. the basic domain of [SPACE] or the complex domain of [PARTY]).

Figure/ground segregation, in contrast, is a gestalt-psychological core principle, according to which the perception of an object always involves its demarcation out of whatever serves as a background (FCG-1: 120–122, CGBI: 58). Cognitive Grammar (following Talmy's Cognitive Semantics: 1972, 1978, 2000a: chap. 5) claims that this principle is active within conceptual structure

 $^{^{16}}$ This approach is further motivated by the sheer number of possible semantic/pragmatic interfaces (Turner 2009).

¹⁷ In my own analysis of discourse-level construal phenomena, the level of pragmatics is constituted primarily by intra-textual conceptual relations, especially those between co-referential expressions.

¹⁸ Concepts and cognitive domains are not only treated in a uniform manner by Cognitive Grammar, but they are also expressed using the same notation. Brackets stand for unit status, and capital letters mark semantic content.

as well. The linguistic manifestation of figure/ground segregation is referred to as profile/base-structure (FCG-1: 183–189). Put as simply as possible, a profile is an "entity designated by a semantic structure" (FCG-1: 491). CG's argument, however, is that profile is not enough to describe the semantic value of an expression. Rather, "[t]he semantic value of an expression [...] derives from the designation of a specific entity identified and characterized by its position within a larger whole" (FCG-1: 183). What this means in practice is that conceptual information is seen as inherently relational: the concept of a three-dimensional object consists of configuration or a region within a conceptual domain of three-dimensional space.

Thus, whereas the profile is the "entity designated by a semantic structure", the base is the requisite cognitive structure within which the profile delineates a sub-part. According to Langacker (FCG-1: 486), it is "[t]he cognitive structure against which the designatum of semantic structure is profiled". As in the case of [BALLOON], certain properties are more central to a concept's meaning either by default or under pragmatic conditions: the appearance and use of a balloon are relatively more salient within the conventional meaning of balloon than the knowledge of the balloon's capacity of being charged with static electricity, or the sound it makes when it deflates. The combination of the most salient properties stands out as the concepts profile, which is thereby delineated within the concept's semantic scope. Most concepts are complex enough to conflate information from different cognitive domains; the typical organization of a conceptual base is thus a combination of different cognitive domains, denoted by concept's matrix (CGBI: 44).

The definition of profile is straightforward, but it is obvious that its case-specific application does not yield an exhaustive description of the "entity designated by a semantic structure". The profile/base distinction rather introduces a principled way of describing the vagueness of meaning: what is profiled or un-profiled is not definitive or rigid, but (once again) subject to various pragmatic effects. This adds flexibility to the theory, making Cognitive Grammar able to describe the variability of lexical meaning in terms of an alteration of conventional organization within the matrix. The visual appearance of an inflated balloon, for instance, is thus quite peripheral to the meaning of *balloon* when the concept is entertained by a technician working at the balloon factory.

The profile/base distinction has yet one important function. It is the key-concept in Cognitive Grammar's effort to provide the main grammatical categories with a semantic description. What is profiled can be either a "thing" or a "relation". Whereas things are designated by a nominal predication (i.e. nouns), relations divide into processes (designated by verbs) and atemporal relations (designated, for example, by adjectives, adverbs and grammatical cases). Typically, most concepts involve in relationally organized information in their bases. The point Cognitive Grammar makes is that it is the profiled entity that distinguishes major conceptual classes from each other: a region in a conceptual space or a relation between multiple such regions.

Categorization based on schemas and prototypes, the encyclopedic conception of meaning and its organization into cognitive domains according to the figure/ground-organization are at the basis of semantics in Cognitive Grammar. This type of semantics blurs the distinction between perceptual and conceptual information both in positing cognitive mechanisms and properties shared by these two realms and in allowing experiential meaning to conventionalize into semantic units. This is further elaborated by the positing of so-called basic domains, which relate to distinct perceptually grounded or otherwise conceptually non-reducible types of information, e.g. the basic domain of [SPACE]. The most important analogy between perceptual and conceptual information posited by Cognitive Grammar, however, is the analogy between the expressive flexibility of natural language and the viewing or experiencing of a situation from different viewpoints or perspectives. This capability is explicated by the dimensions of construal, and I will return to it after discussing how these dimensions depend on a representative conceptualizer.

2.3 CONCEPTUALIZER

Though I have emphasized the inherent interdependence between the notion of conceptualizer and the dimensions of construal, Cognitive Grammar itself does not give much attention to the conceptualizer or this dependence relation. Rather, the conceptualizer is introduced in the theory as a logical necessity, on the one hand, and as a technical notion, on the other. Logically, since it is a relationship, construal presupposes at least two relata. Technically, the analysis of certain semantic phenomena seems to require explicit reference to a conceptualizing subject. I summarize two of these in the following two sections. Most notably, the conceptualizer is presented as a requisite structure in the description of temporality. The dual nature of temporality is then presented as the conceptual basis for yet another major conceptual segregation between processes, which are defined by their positive temporal profile (FCG-1: 244–248), and things and atemporal relations, which lack this type of profile.

2.3.1 CONCEPTUALIZER AND TIME

It seems obvious that, in our experience, perceptual objects and the processes they take part in have very different statuses relative to time. Prototypically, things exhibit (or are conceptualized as exhibiting) relative continuity through time: 'a rock' remains 'a rock'. Processes, in turn, are largely defined by their temporality both in experience and conceptualization: *the rock remained a rock* refers to no-change through time.

However, the conceptual flexibility provided by language allows us to transcend what is typical in our perceptual experience. For instance, the perceived process can be referred to by a nominal (*the throwing of the rock*) instead of a verb. This conceptual flexibility, the fact that the temporal properties of the target of conceptualization do not dictate the temporal properties of the expression, motivates the postulation of two distinct levels of temporality: processing time and conceived time (FCG-1: 167).¹⁹

Conceived time is simply the temporal property that constitutes a part of an expression's semantic content,²⁰ whereas processing time is the temporal extension of conceptualization as a process, which manifests in the different ways temporality is inscribed in the meaning of processes. Processing time is especially relevant to our current topic because of the role it has in the description of (the conceptual class of) processes.

It would be tempting to equate the distinction between the conceived and the processing time with the segregation between objective and subjective time, a naïve folk-epistemological distinction inscribed in the semantic structure of grammar. According to this construct, there is an assumed objective temporal evolution of things in the world, and then there is a subjective experience of time embedded in whatever we may experience.

This model does not apply to Cognitive Grammar, however. Cognitive Grammar maintains that both conceived and processing time are ultimately properties of conceptualization and therefore primarily cognitive. The point is that processes denoted by (finite) verb clauses require an extra level of conceptual temporality. This extra-level, in turn, necessitates a distinct form of processing, or an emergent structure within a processing chain, that enables detecting change or no-change between cognitive states. This form of processing is called sequential scanning. As opposed to summary scanning (a mode of processing associated *inter alia* with nouns that presents all the relevant information simultaneously), sequential scanning is "[t]he mode of cognitive processing in which a series of states are conceived through the successive transformation of one into another" (FCG-1: 493; for discussion on the processing types as applied in Fennistic studies, see Visapää 2008: 111–114).

Sequential scanning consists of comparing conceptual component states with each other in order to construe a temporal relationship between them. Note that we may, for example, think of a rock for a span of time, but this does not mean that we are evoking a conceptual type of process. To count as a process, the concept needs profile the relationship between the temporally

¹⁹ On a more general level, this is in line with Cognitive Grammar's habit of incorporating two distinct perspectives in to conceptual semantics: processing and phenomenological. This dual perspective is further discussed in chapter 3.

²⁰ Conceived time may be the prominent semantic content of the expression (e.g. as with temporal preposition such as *before*, *after*, etc.) but from an encyclopedic point of view it can be argued that almost any expression involves some kind of conceived temporality of lesser prominence (e.g. temporal continuity/discontinuity of physical objects such as *a car* vs. *a flash*).

distinct cognitive states that entertain the concept of rock. This again leads to the processual concept of a rock *being* a rock.

Profiling, to which we will return in section 2.4.3, refers to the selection of profile, the designating portion of a concept's semantic concept that was discussed above. In this section, however, it is sufficient to characterize profiling as the selection of conceptual structure that is most prominent in a given concept or conceptualization, and thus determines the type of gestalt the concept instantiates.

With respect scanning Langacker states that:

[b]ecause the scenes are viewed successively rather than simultaneously, recognition of disparity amounts to recognition of change. In contradistinction to summary scanning, the separate components (states) are conceived as neither coexistent nor simultaneously available; hence there is no judgment of inconsistency. (FCG-1: 145.)

Langacker's emphasis on change may be misleading, for imperfective verbs involve comparison that results in the recognition of similarity, i.e. no-change.²¹ The point is nevertheless well made: if we are to explain the exceptional semantic status of verbs relative to how our experience of the world is conceptually organized, our analysis has to account for the evolution of matters through a certain span of time.

This temporality cannot be brought back to objective states of affair in "the real world". Under the conceptual flexibility Cognitive Grammar advocates, a situation that is objectively the same may be construed either in a temporal or atemporal fashion. The most obvious examples of this in English are finite verb clauses and their gerund forms based on the present participle: *the man beat his dog* vs. *the beating of the dog*.

Temporality needs therefore to be brought back to the conceptualizing subject. This subjective account of temporality, in turn, is attained by the two modes of processing that have been posited. It should be kept in mind, however, that the logical necessity of a subjectively grounded distinction between two types of temporality does not by itself prove that different processing types do exist. As Visapää (2008: 118–119) has pointed out, Langacker himself appeals to the *intuitiveness* of a processing-based segregation of conceptualization (FCG-1: 253–254).

Of special relevance here is the specific way in which the conceptualizer is presented in cognitive processing.²² This is best approached by taking a closer look at sequential scanning and the how is formalized. As we have seen, it involves a scanning chain of multiple component states (demarcated below by large brackets), which are linked together by cognitive processes of

²¹ This aspectual factor is covered elsewhere in the theory, see FCG-1: chap. 7.2.

²² Temporality *per se* and its semantics in Cognitive Grammar are not of concern here. Cognitive linguistic semantics of time is addressed in detail in Möttönen (2009, forthcoming).

transformation of one component state into another (e.g. FCG-1: 145). This establishes correspondences between the sub-components of the component states, and detects difference as well as similarity through comparison. Conventional notation in Cognitive Grammar presents a scanning chain in the following manner (see e.g. FCG-1: 250):

$$\begin{pmatrix} R_{o}/t_{o} \\ C \end{pmatrix}_{T_{o}} \rightarrow \begin{pmatrix} R_{I}/t_{I} \\ C \end{pmatrix}_{T_{I}} \rightarrow \begin{pmatrix} R_{2}/t_{2} \\ C \end{pmatrix}_{T_{2}} \rightarrow \dots \rightarrow \begin{pmatrix} R_{n}/t_{n} \\ C \end{pmatrix}_{T_{n}}$$

In this formulation, R marks the relation in a given moment of conceived time, marked by t. The conceptualizer is marked by C and the moment of conceptualization (or processing time) is marked by capital T. The higher level in this formulation hence expresses the object of conceptualization, whereas the lower level can be described as the subjective level. The relation R is different in every component state. This particular scanning chain thus applies to perfective verbs.

Note that the conceptualizer is placed inside the brackets. Though it is not necessarily a part of the explicit content (the figure) of the linguistic conceptualization, as an element of the ground, it is defined as belonging to the maximal semantic scope of expression. Processing time, on the contrary, is not part of the expression *per se*, but is defined by extra-linguistic factors. Indeed, conceptualization takes place whenever and to whatever extent that is required by conceptualizer to form a coherent linguistic gestalt.

Note also the correspondence between conceived ($t_o > \cdots > t_n$) and processing time ($T_o > \cdots > T_n$). It is clear that actual cases of absolute correspondence between these two is next to non-existent, so the formulation above (adopted as such from Langacker: FCG-1: 250) is best approached with caution. Rather than an absolute correspondence, the relationship between the two dimensions of temporality needs to be understood as a flexible type of iconicity. That is, there exists a partial and context-dependent iconic correlation between the processing time and conceived time for a linguistically construed process, a relationship which is necessarily subject to adjustment of temporal scale. Just consider the following: our galaxy has evolved over the last 13.7 billion years vs. electric cars have evolved over the past decade or so. It is unlikely at least that the two conceptualizations associated with evolved would reflect the objective temporal ratios (1 to 1.37 billion) in their processing.

The role the conceptualizer fulfills as an element of the ground in sequential scanning serves as a representative (while not exhaustive) illustration of the term's analytical value in Cognitive Grammar. Conceptualizer is presupposed by those semantic phenomena which cannot be rooted down to the properties of events and things in some sense that is

independent of a conceptualizing subject. The manners in which distinct phenomena make reference to the conceptualizer vary substantially, however.

Elsewhere in the theory, namely in its treatise of construal phenomena (CGBI: 55–89), Cognitive Grammar presents analytical functions for the notion of conceptualizer that are specific to each dimension of construal. Cognitive Grammar, however, lacks a unified theoretical account of the term's justification. Rather, it seems that a conceptualizer is presupposed by the ontological standpoint of the theory, in which meaning is necessarily evoked by an individual subject. Cognitive Grammar, for example, does not problematize the relationship between conceptualizer as an inherent element of component states and the scanning event, which chains the component states together to form a coherent concept. The theory also does not offer a detailed account of the relationship between conceptualizer and processing time.²³

The lack of explicitness in these matters does not pose a serious problem for CG. Instead, only some complementary analysis is needed. First of all, we may concur with Cognitive Grammar that a conceptualizer, as a semantic element within the maximal scope of conceptualization, is indeed a logical prerequisite of perspectival or subjective meaning. As a relational element dependent of the meaning of an expression, conceptualizer needs to be understood as an expression-dependent, non-ontological concept that has to be separated from the actual flesh-and-blood speaker/hearer, or from any analytical abstraction thereof. While Cognitive Grammar does not make this distinction itself, I consider it inevitable: the conceptualizer is the conceptualizer of the given expression, regardless of the identity of any actual interlocutor in a piece of discourse. Conceptualizer of an expression may also be given a hypothetical mental correlate, but inasmuch as the correlate is hypothesized on the basis of the expression itself, the conceptualizer cannot be reduced to the said correlate.

In so being, Cognitive Grammar cannot avoid positing a representative, semantically implemented conceptualizer.²⁴ This raises the question what to do with the conceived/processing distinction Cognitive Grammar implements on the temporality. How could a conceptualizer, as a mere semantic attribute dependent on other semantic attributes, be able to "process" anything? The conceptual divide between linguistic meaning (inherently social) and processing (inherently cognitive) seems unbridgeable.

I claim, however, that the problem only arises if processing time is understood literally in psychophysiological terms. Instead, if processing itself is understood as a semantic property of the expressions themselves (a semantic requirement or a convention), we simply end up with two distinct but interrelated types of socially encoded information. One type involves the

²³ See e.g. FCG-1: 167-168, CGBI: 79.

²⁴ This (intendedly favorable) interpretation places Cognitive Grammar on the long line of research on subjectivity and message-dependent meanings (e.g. Bühler 1990 [1934]; Jakobson 1971 [1957]).

position of the conceptualizer relative to whatever is conceptualized: that is, the temporal construal relationship between the conceptualizer and the conceived time. The other type pertains to the schematic conceptual model according to which the relationship is construed on the level of expression. For instance, a tense can be defined as an inflectional schema or construction, whose foremost semantic function is to determine how temporal information is related, profiled, and organized relative to other present semantic factors.

There obviously cannot be socially shared directions of how to cognitively process anything. In contrast, an expression represents information as construed in some socially specified sense, which may likely favor some non-specific processing pattern, latter of which is not, however, a determinant of a linguistic category. I may not know the specific way in which I myself or my fellow Finnish speaker processes a specific finite verb, but I may be positive that we share the expression's conventional semantic organization to a significant extent.

We may now turn back to conceptualizer and consider how it relates to the defined two types of temporality, on one hand, and to the two processing mechanisms posited by Cognitive Grammar, on the other.

From a psychologistic point of view, the different modes of processing and their relative independence from what is processed actually presuppose a conceptualizer (or "processor") that is distinct from the conceptualizer within the semantic scope of expression. This may seem dubious, but the claim follows quite rationally from the analysis Cognitive Grammar presents. Take for example the present tense of the Finnish copula in Tällä hetkellä olen *kuopan pohjalla* ('at the moment, **I am** at the bottom of the hole', MT 6/2010: 13). The conceptualizer of this expression is also responsible for the action marked with the first person. The interpretation of the expression as taking part in the moment of speaking (and extending over time without involving change) logically requires two states at a minimum; in both of these states the conceptualizer corresponds to the trajector²⁵ of the action of being at the bottom of a hole. The forming of a coherent gestalt of these states requires a comparison, a form of processing, for which the inscribed conceptualizer cannot be responsible. In order to describe the expression in processing terms, we are, in fact, forced to postulate "a conceiving conceptualizer", a perspectival position or a vantage-point within the semantic scope, and "a processing conceptualizer", that is responsible for evoking distinct component states and relating them mutually to form a temporal gestalt.

Because meaningful linguistic communication already presupposes the plurality of communicators, this analysis is quite redundant. Indeed, it is questionable whether the "processing conceptualizer" would offer any

²⁵ A trajector in Cognitive Grammar (CGBI: 70–73), refers to the most prominent participant in a semantic relationship. The trajector is not necessary a mover, but can be described as such metaphorically when the relationship in question involves change. For a more detailed description of the trajector and its relational counterpart, the landmark, see section 2.4.3.

analytical value — other than the fulfillment of a contingent theoretical requirement. In contrast, as a semantic conceptualizer can be posited as a logically necessary part of non-objective meaning, its dependence of a distinct conceptualizing subject is a necessary truth, similarly to the subject-dependence of any facet of experiential meaning. It can therefore be stated that the processing-based approach to the notion of conceptualizer is a potentially beneficial theoretical exercise from a psycholinguistic point of view, but it only causes unnecessary confusion when applied to semantic considerations.

Suffice it to say that the question of processing as the demarcation line between externalist and mentalist views of meaning. In Cognitive Grammar, the mind's online activity is deemed vital for sufficient semantic description. In contrast, I consider processing to be *prompted* or by *required* as the necessary psychophysiological basis of linguistic meaning, but this does not grant it any explanatory status vis-à-vis linguistic meaning itself. The reasons for this insufficiency are discussed in further detail in chapter 3. In any case, I consider the notion of conceptualizer to be separate from any specific mode of cognitive processing. Instead, it is primarily a feature of an overall semantic scope of any expression, and it is therefore shared, among the expressions themselves, by anyone who is capable of using them correctly. In so being, the notion of conceptualizer is closely tied to that of "ground".

2.3.2 CONCEPTUALIZER AND GROUND

It has been demonstrated above that a conceptualizer is a logically necessary part of construal. Consequently, if every possible linguistic expression involves construal of some kind, then the notion of conceptualizer is necessarily global as well. The question is whether the notion of conceptualizer has a positive analytical value in the distinction of different construal phenomena. Cognitive Grammar's customary description of a construal relationship does not answer this question but enables its specification:

"I will say that the speaker (or hearer), by choosing appropriate focal "settings" and structuring scene in a specific manner, establishes a **construal relationship** between himself and the scene so structured. The construal relationship therefore holds between the conceptualizer of a linguistic predication and the conceptualization that constitutes this predication." (FCG-1: 128, emphasis in the original.)

The conceptualizer is thus not posited merely as a necessary relatum but as representative constitutional force behind construal relationship, nature of which may be specified reciprocally from the relationship itself. What Cognitive Grammar does not explicate is if the conceptualizer may be specified only as a relatum or with semantic content of its own. A further question is whether the conceptualizer's status, as a part of a (schematic) interactional setting, is affected by the alternation of focal settings or *vice versa*.

The interactional setting is referred to in Cognitive Grammar by the concept of ground.²⁶ Langacker defines the term (CGBI: 78, emphasis in the original) somewhat peculiarly: "[t]he term **ground** is used for the speaker and hearer, the speech event in which they participate, and their immediate circumstances (e.g. the time and place of speaking)". In contrast, the way the term is used in semantic analysis (which, in Cognitive Grammar, is conducted almost entirely on coined examples) does not evoke some actual speech event and its participants, but the conventional semantics of the selected expression. However, as will be discussed below, the meaning of an individual expression is also shown to involve multiple conventional conceptualizer positions and the interrelationship between them.

A useful addition to this definition of ground comes from Verhagen (2005: 7) who suggests that the ground should also include whatever knowledge, implied by a linguistic expression, the participants may share. This forms the "common ground" (a version of which Langacker later includes in his treatment of construal as "Current Discourse Space", CDS. See CGBI: 59–60).

This extension allows for pragmatically constituted shared knowledge. As long as the conventional, context-independent meaning of an expression is chosen for the starting point of analysis, the ground must nevertheless be considered also as a semantically defined structure of knowledge. It should also be noted that the Langackerian analysis of the ground is quite compatible with the traditional description of deictic elements or indexicality (e.g. Benveniste 1966 [1956]; Bühler 1990 [1934]; Jakobson 1971 [1957]; for a comprehensive review, see Larjavaara 1990). Indeed, the ground only exceeds the traditional notion of deixis in scope (for discussion, see Etelämäki et al. 2009).

The best way to illustrate the notion of ground is by the Cognitive Grammar's concept of viewing arrangement. As we have seen, Cognitive Grammar assumes a close affinity between perception and conception in the human experiential realm. A viewing arrangement is defined as their shared base structure, as it is manifested in the domain of linguistic meaning (see e.g. CGBI: 73). It is a metaphorical way of describing an expression's overall semantic scope as structured according to a setting in which a subject views a separate visual object in a shared context. The viewing arrangement includes the most central semantic concepts of Cognitive Grammar discussed this far: the object of conceptualization, the conceptualizers, the ground that subsumes them and the construal relationship between the ground/conceptualizers and the object (of conceptualization). Verhagen (2007: 59) offers an illustration of the viewing arrangement, as it is originally presented in Cognitive Grammar (e.g. FCG-1: 129, Langacker 1993: 454).

47

²⁶ This is to be separated from the "ground" in figure-ground alignment.

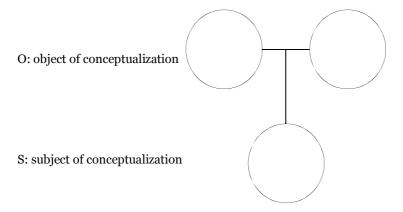


Figure 1

The interpretation of figure 1 is quite straightforward. What is essential is the division of the figures content into two levels: the upper level "O" denotes the object of conceptualization, or what is being "spoken" of, and the lower level "S" is the subject of conceptualization, that is, the conceptualizer. In the standard Cognitive Grammar formalization, circles represent things. In the upper level of figure 1, the depicted things are linked by a horizontal line, which represents a relationship. The simple constellation of the two upper nodes as a whole stands for some state of affairs. The vertical line that connects the conceptualizer to this state of affairs stands for the construal relationship.

It is not that surprising that the viewing arrangement fits quite well together with the constellation consisting of conceptualization, conceptualizer, and construal. We will see later how the viewing arrangement proves essential in describing different construal phenomena. At the moment, we are interested in the subjective level of the arrangement, the conceptualizer and the conceptualizer's relationship to other elements the subjective level may involve. Because the conceptualizer is a self-evident part of the ground, we will consider them together.

First of all it should be noted that Cognitive Grammar posits a symbolic class of so-called grounding elements (CGBI: 263), which serve to relate what is being said to the immediate situation of speech. The essential factor is that grounding is directed at other predicates that otherwise would remain generic and difficult to relate to for the interlocutors. Grounding elements divide into grammatically distinct groups such as articles, quantifiers and demonstratives (nominal grounding); and modal verbs and tenses (clausal grounding). The grounding function of these elements is directed at lexical items such as nouns and verbs, which, as an essential outcome of grounding, become clausal elements: nominals and finite clauses, respectively. In Cognitive Grammar, lexemes, i.e. linguistic types, serve classificatory function (cf. section. 2.2.2 above on categorization); whereas nominal and finite clauses, i.e. instances,

are referential (CGBI: 264). Grounding is essentially a form of linguistic instantiation, leading from types to instances (ibid. 266–269).

Grounding elements are opposed to those predicates which explicitly profile some substructure of the ground, for example the demonstrative pronoun *I*, which profiles the conceptualizer. This exclusion may appear curious, but it is in fact well-founded. From a logical point of view, a predicate that profiles a substructure of the ground cannot serve the grounding function, for instead of relating subjective and objective levels of conceptualization, it raises some structure from the former to the latter. In other words, these predicates are connected to the ground and indirectly serve to connect other elements as well, but this is not their foremost semantic function.

An interesting case in this respect is the person inflection in Finnish (see e.g. Laury 2002). The Finnish suffixes, e.g. the first-person -n in mä hoida-n 'I deliver', are in the spoken variant typically accompanied by a personal pronoun which serves as an explicit clausal subject; but the suffixes may also be the only subject-specifying structure, especially in written texts. Nevertheless, the semantic content of these suffixes is non-referential: they are not free-standing conceptual structures that as such evoke the subject, but are conceptually dependent on verb clauses, the content of which they help to specify relative to the ground. In other words, these suffixes make eligible candidate for grounding elements as defined in Cognitive Grammar.

Langacker's insight is that a great proportion of so-called grammatical meaning is exactly about relating the expressed state of affairs to the speech situation. As we will see in sections 2.4.1–2.4.4, this pragmatic/semantic function happens to be at the core of construal phenomena as well. The focus of interest here is nevertheless is how both grounding (through grounding elements) and the objectifying of the ground (through mentioning some subpart of the ground explicitly) involves not only relating the conceptualizer to the object of conceptualization but also relating both the object of conceptualization and the conceptualizer to the other subparts of the ground. Most importantly, both Verhagen (2007) and Langacker's (CGBI) analyses involve multiple conceptualizers. The ultimate question, however, is whether this in any way affects what is understood by conceptualizer.

Verhagen (2007: 60) asserts that the ground involves not only the time and place of speech but also other participants in the speech situation, and Langacker's updated analysis (CGBI: 261–262) involves both the speaker (S) and the hearer (H). As Verhagen notes, this situation is best described simply by expanding the diagrammatic presentation of the viewing arrangement (cf. fig 1.) by one additional node on the subjective level²⁷:

²⁷ Verhagen's diagram is favored here not only because of its relative clarity but also because of Verhagen's treatment of multiple conceptualizers to be discussed in the following.

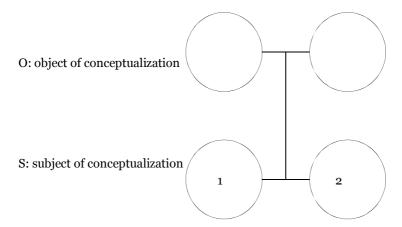


Figure 2

In figure 2, the right node (1) on the S-level stands for "the speaker" and the node on the left (2) stands for "the hearer". This makes the diagram non-symmetrical on the horizontal axis. Verhagen states that the more rudimentary diagram (with one subjective node) is indeed representative for some restricted cases, but that most semantic compositions involve this more complex arrangement (Verhagen 2007: 60).

What linguistic expressions do is that they profile different parts of the two-level configuration. For example, maximally objective expressions, with minimal or zero reference to the ground, would involve profiling simply the upper level of the configuration, but these would make quite artificial examples, such as non-clausal lexemes (*dog*). Nominal grounding with a definite article (*the dog*) would involve in this description profiling the subjective-objective axis depicted as a vertical line in the diagram.

Let us consider nominal grounding more closely. Neither definiteness nor indefiniteness *per se* profiles the subjective level of the viewing arrangement, but the subjective-objective axis. The profiling of the subjective-objective axis, however, is not independent of the specifics of the subjective level: this profiling happens through conventional semantic structures (e.g. articles in English), but is always reactive with regard to the exact composition to the ground. In other words, definiteness is naturally a matter of linguistic convention of English, but one of its main functions is to underline the common pragmatic availability of the referent in question. Thus, semantic description of certain predicates requires a complex ground while it does not profile any of the ground's substructures.

The notion of ground in Cognitive Grammar is attractive exactly because it incorporates the communicative need of profiling different aspects of epistemic sharedness (or non-sharedness) into the description of conventional semantics. However, the delineation of grounding elements proves

problematic when we shift our focus from English to other languages: the problem lies in the criteria for grounding elements, which seem to lack in the sensitivity required by cross-linguistic application.

To understand the fuzziness of the category of grounding, I will consider examples of ground-related phenomena that challenge the original delineation of grounding elements and that also help to underline the close relationship between grounding and construal. Finnish, for example, lacks articles and would be expected to lack overt marking for definiteness in general. Therefore, the nominal grounding in Finnish is fulfilled by the very instantiation of the noun in its grammatical, semantic and discursive context (on instantiation, see CGBI: 266–269).

On the other hand, it seems that demonstrative pronouns in Finnish have partially adopted the function of articles of expressing definiteness in spoken discourse (see Laury 1997 on development of Finnish demonstrative *se* 'it' into a definite article). The pronouns also have a wide variety of other, non-referential functions in organizing interaction *vis-à-vis* the ground (see e.g. Etelämäki 2009). As the demonstrative pronouns are already included in the category of grounding elements, this does not challenge the notion of grounding as such. Rather, the wide applicability of demonstrative pronouns suggests that a grounding function may be secondary to referentially meaningful structures and the category of grounding thus might not be given precise boundaries.

Verhagen (2007: 63), in turn, discusses simple locatives, such as the ballroom is below, in which the proximal, non-profiled location of both interlocutors, or of the addressee, is by default interpreted as the landmark, the entity according to which the ballroom is located²⁸, for the adverb below. In the case of so-called specific grounding, on the other hand, Verhagen (ibid. 65–66; referring to Janssen 2002) demonstrates how the division between distal and proximal demonstratives, such as this and that, has in fact more to do with the relative mental accessibility of the object to the interlocutors than with the actual location of the referent. Demonstratives, in other words, profile the construal relationship vis-à-vis different subparts within the complex ground. Yet another instance of construal that requires a complex ground involves what Verhagen calls the "process of coordinating cognition" or "coordination of perspectives" (ibid. 66). Certain grammatical structures, such as clausal negation and complement-taking mental predicates, have to do with relating interlocutors' different views and epistemic stances to each other. Similar to clausal negation are verbs of inherent negation (Horn 2001: 521-

²⁸ Landmark has a specific technical definition and use in Cognitive Grammar (e.g. CGBI: 70–73), albeit here a non-technical reading of the term is sufficient. In an expression constituting a relationship, the landmark is the entity of secondary focus. The entity of primary focus, i.e. the trajector (ibid.) is characterized by the relational expression (e.g. transitive clause), which relates it to the landmark. For a more detailed description of trajector/landmark relationship, see section 2.4.3.

524), such as Finnish välttää ('avoid'). These verbs refer to the non-occurrence of a form of activity specified by the verb's complement:

1. Dosentti Maili Pörhölä [...] välttä-ä käyttä-mä-stä sana-a kiusaaja [docent Maili Pörhölä [...] avoid-3SG use-INF-ELA word-PTV bully] 'Docent Maili Pörhölä [...] avoids using the word bully'

(MT 1/2010: 21)

Verbs of inherent negation are more specific than negative verbs proper in that they specify the cause that leads from the non-existent state of affairs to the existent state of affairs, e.g. avoidance in the subject's behavior (*avoid*), epistemic stance (*deny*), or will and authority (*forbid*, *prohibit*). Yet these verbs and "simple" negation are alike in that they evoke and mutually relate two opposite situations and thus are inherently contrastive in their semantics.

These contrasting states, again, need to be related to some kind of epistemic agents, i.e. conceptualizers. The third-person use of these verbs, such as *välttää* ('avoid') in example 3, somewhat complicates the situation relative to the conceptualizer, as it involves not only the perspective of the agent, but also that of the person referring to that agent. We may nevertheless dismiss the extra level of conceptualization here and concentrate on the semantics of the verb as it relates the actual situation (avoidance) to a possible situation (the avoided action).

The activity of avoiding in example 3, carried out by the grammatical subject and referred to by the author of the interview-based magazine-text, is necessarily contrastive relative to an expectation that the avoided action would likely occur under normal conditions. It would be reasonable to expect that the person, talking about bullying, uses the term 'bully'. The predicate verb thus evokes a complex ground, which includes the relationship between the 'avoider' and the 'expecter' (of the action that is actually avoided), and the relationship between the complex ground and the object of conceptualization. It could be argued that a verb such as *välttää* profiles a mental predicate or an attitude that is essentially a substructure of the ground, which excludes the verb from the category of grounding elements. I maintain, however, that the verb refers primarily to refraining as actual ongoing behavior that evokes the ground implicitly (i.e. without profiling the ground or any of its substructures).

Construal as selection is thus closely linked to the ground formed by multiple (representative) interlocutors, whose specifications are nevertheless linguistically rooted. A valid question is whether construal is always based on non-trivial specifications of the ground. This question is further explored in chapter 4. Another point is that conceptualizers in this perspective seem to be semantically empty and contentful at the same time. The conceptualizer does not carry meaning other than that available from any given expression, but this is meaning nonetheless. The primary conceptualizer thinks, knows, or

expects a state of affairs, whereas the secondary conceptualizer agrees, disagrees or is admitted to the piece of knowledge.

Another challenging case for the category of grounding is provided by Nuyts (2002), who discusses the Dutch system of epistemic expressions. These are shown to fit poorly in Cognitive Grammar's definition of grounding because of their (relatively) low level of grammaticalization. As Nuyts points out, accepting the exclusion of the said epistemic expressions from grounding elements would result in a situation, in which the grounding function of a vast variety of Dutch modal expression types would be refuted. The concept of grounding thus seems to be in need of revision.

A technical solution could be achieved by loosening the criterion of grammaticality for the grounding predicates. From Nuyts' perspective, however, this would ultimately be unsatisfactory, because it is actually the theoretical justification of the ground that is in need of revision. The theoretical argument Nuyts defends is that semantics needs to be divided into conceptual and linguistic counterparts (ibid. 436–437), and that epistemic modality, *inter alia*, is primarily a "conceptual dimension" (ibid. 456). Conceptual semantics involves pragmatically available information and so-called world knowledge; these then need to be construed according to the communicative situation with the restricted conceptual tools provided by conventional linguistic semantics. In other words, there are two separate cognitive levels that are necessarily involved in linguistic conceptualization and, according to Nuyts, these levels are presupposed by the rhetoric of Cognitive Grammar (e.g. Langacker 2010: 3) as well. A similar observation is made by Itkonen on the notion of construal (forthc.).

The main implication of Nuyts' analysis is that grounding should be considered first and foremost a phenomenon of conceptual domain, rather than of linguistic semantics. This interpretation is derived from the fact that conscious experience necessarily relates information (e.g. sensory data) into the spatial, temporal, and epistemic here-and-now of self, which again results in "full, qualificational system" (Nuyts 2002: 456) within the conceptual sphere. Grounding is then about filling this system with values and relating information to the "moment of consciousness [...] of the "conceptualizing subject"" (ibid., referring to Chafe 1994). The expressive repertoire of natural language is largely isomorphic relative to this holistic system but it is also instrumental by its ontological nature, which hinders a precise linguistic description in conceptualist terms.

The more practical linguistic point Nuyts argues for is the true appreciation of the grounding function of Dutch epistemic expressions. Nuyts' conceptual approach implies a substantially more flexible category of linguistic grounding than that of Cognitive Grammar. Nuyts, for instance, discusses the difficulty of separating grounding-related linguistic phenomena from construal as a possible source of confusion in combining cognitive and functional linguistic perspectives (ibid. 438). Viewed from Nuyts' perspective, construal could be depicted exactly as forging elements of conceptual semantics according to the

restrictions of linguistic convention and demands of the communicative situation. On this general level, construal resembles grounding in that both are processes leading from conceptual to linguistic semantics.

We will return to the relationship between conceptual and linguistic semantics, on the one hand, and the relationship between grounding and construal, on the other, in chapters 4 and 5. Here I simply agree with Nuyts' observation of the close interrelation between grounding and construal. Furthermore, I accept Nuyts' criticism of Cognitive Grammar's delineation of grounding predicates, as its application to languages other than English may exclude semantic units that clearly relate not just to the ground but to grounding as a non-profiling manner of evoking the ground. The analysis of construal below nevertheless makes reference to the ground as it is presented in Cognitive Grammar, whereas the question of grounding is left aside for economic reasons.

This discussion on the notion of ground has been devised to illustrate two mutually related issues. First of all, the ground that consists of multiple conceptualizers and their shared knowledge is a necessary part of the describing of construal in full; the more elaborate the conception of this subjective pole is, the more nuanced construal phenomena can be detected. Second, different languages make reference to the ground by different means that may vary in their degree of grammaticalization. This makes a sharply demarcated category of grounding elements a rather unfeasible theoretical objective. On the other hand, this is only expected, inasmuch as the general spirit of Cognitive Grammar is considered: there is no reason why the continuity of linguistic categories and meaning with other domains of human experience would not manifest in the reference to the ground as well.

I therefore conclude that the overall notion of ground involving multiple conceptualizers (FCG-1: 91, CGBI: 256; Verhagen 2005; 6–7, 2007) is both necessary and sound, but that its linguistic manifestations in explicit construal cannot be given precise formal or conceptual criteria *a priori*. This relative unpredictability of the grounding phenomena can be translated into a (partially) pragmatic nature of construal: if construal is largely a matter of relating an expression to the ground, and this process is not (at least entirely) semantically predefined but conceptually flexible, we are to expect a variety of manners in which construal depends on, and is motivated by, its context. In fact, this is apparent in the relationships between alternate co-referential construals, to which we turn in the following sections.

2.4 THE DIMENSIONS OF CONSTRUAL

This summary of the dimensions of construal in Cognitive Grammar is based on Langacker's most up-to-date presentation on the topic, that is, the presentation given in Langacker (2008 = CGBI: 55–89). When needed, I will also make reference to previous work on construal by Langacker, as well as to

other authors that have theorized on the matter from a Cognitive Linguistic point of view (e.g. Croft and Cruse 2004; Talmy 1978, 1988, 2000; Verhagen 2005, 2007).

I have stated above that construal is about semantic features ascribable to the relationship between the subject and the object of conceptualization, rather than to the object as such. Each dimension of construal specifies certain of these features. On the other hand, this relational nature defines construal as the plurality of ways according to which the same object of conceptualization can be accessed or expressed. The existence of such plurality is an important part of the Cognitive Grammar as such; more relevant for the present purposes, however, is the question of how a specific construal is motivated, at least ideally. One of the pivotal analytical functions of construal is thus to capture the nuanced regularities according to which the object of conceptualization is made accessible for the interlocutors in a given context.

In the following sections, I will present the different dimensions of construal via co-referential construal patterns found in the data of this study. By restricting the analytic scope to co-referential expressions, one is able to scrutinize simultaneously the specific dimension as a continuum of interrelated expressions and the effect of the co-reference itself to the choice of a specific construal.

The following sections are organized according to the complexity of the dimensions they describe²⁹: I begin with specificity (2.4.1), the most unitary of the dimensions. I then move on to the closely interrelated dimensions of focusing (2.4.2) and prominence (2.4.3), and end with a discussion on perspective (2.4.4), a complex dimension, which overlaps with many aspects inherent to the previously mentioned dimensions. After discussing each dimension separately, I will return to the overall linguistic notion of construal and present a brief synthesis on Cognitive Grammar's variation of the theme.

2.4.1 SPECIFICITY

Specificity, or conversely, schematicity, is an undisputable basic property of any semantic unit. No expression is able to represent an entity, or a state of affairs, in its entire pre-linguistic richness. Instead, an expression specifies linguistically some features of the intended entity while leaving others aside or to be otherwise completed. As the semantic completion of an expression cannot be restricted *a priori*, specificity is best understood as the conventional specificity of a single semantic unit or a semantic composite structure.

This context-independent specificity, on the other hand, is necessarily an ideal construct, as is the separation of semantic from pragmatics in general (see above). We may determine the context-independent specificity of an expression only relationally and imprecisely. Furthermore, the possibility of

²⁹ The dimensions of construal also are presented in this order in their most recent general description (CGBI: 55–89).

such analytical maneuver does not entail that the semantic and pragmatic aspects of an expression's specificity would be ontologically separate in actual discourse. The separation needs to be done, however, if one is to consider the motivation for a particular instance of construal.

The specificity of an expression may correlate (and often does correlate) iconically with the complexity of the matters expressed.³⁰ This correlation is nevertheless tendential by nature. As a significant source of expressive flexibility, specificity is also utilized to accommodate expression according to the access the different conceptualizers have to the object of conceptualization or the knowledge thereof. Being acquired from use, semantic units are organized, or organizable when needed, into hierarchies of potentially coreferential expressions according to their relative specificity. These hierarchies may involve lexical and idiomatic items, but more complex and less conventional semantic structures can also be organized as schematic hierarchies, at least when the expressive needs of a specific pragmatic situation is considered.

In the analysis of construal, specificity is "the level of precision and detail at which a situation is characterized" (CGBI: 55). The first aspect of this is the selection of linguistic units according to their specificity. What is altered between different construals for the same entity or state of affairs is the choice among semantic units of variable schematicity: consider, for instance, 'rodent' vs. 'mouse'. For convenience, I refer to this aspect of specificity simply as "naming". The second aspect of specificity can be referred to as the "syntagmatic elaboration" of the described entity or state of affairs. This is essentially a function of the amount of semantic units relative to some experiential dimension of the conceptualized entity. The speaker, when conceptualizing a motor event (the performance of a gymnast, for instance), is able to choose the extent of elaboration relative to the temporal length and internal complexity of the event as experienced.

In the following examples, I will analyze the dimension of specificity relative to three partially synonymous expressions that refer to a particular Finnish social benefit. The first three examples illustrate especially the aspect of naming but they also exemplify the significance of modification for the dimension of specificity.

³⁰ The extent to which language imposes its own delimitations on thought, or simply reflects the limitations of thought itself, is one of the major non-empirical dilemmas related with any conceptualist account of meaning. The persisting debate on the linguistic relativity unfortunately cannot be discussed at length here (for discussion, see Levinson 1996; Lucy 1992, 1996). What should be emphasised is that the level of abstraction in what "enters the mind" should not be interpreted in any naïve-realistic way. Perception and perceptual objects are results of object-environment interaction and conceptual unification of data provided by multiple cognitive systems. This is subsumed under the theoretical prerequisites of CL (e.g. Lakoff and Johnson 1999) and acknowledged in the present treatment. On the invalidity of naïve realism and the conception-dependence of perception, see Konstenius (2014: 100).

- 4. *Toki* **kotihoido-n tue-ssa** on monia hyviä puolia [surely homecare-GEN support-INE be-3SG many good side-PL] 'surely **the homecare allowance** has many pros'
- 5. Mutta suomalaise-n tue-n ongelma on [...] [but finnish-GEN allowance-GEN problem be-3SG] 'But the problem with the finnish allowance is [...]'
- 6. **Piene-llä** raha-lla äiti makse-ta-an pois työ-elämä-stä [...] [small-ADE money-ADE mother pay-PASS away working-life-ELA] 'With a small amount of money, the mother is paid out from the working life'

(MT 6/2010: 12)

These examples are found (in the same order) within a small excerpt from an article on Finnish welfare policy; the textual context is omitted here for expository economy. All three examples refer to the same form of welfare, i.e. the Finnish homecare allowance, and discuss the amount of the allowance and its effects.

The noun phrase found in example 4, *kotihoidon tuessa* ('the homecare allowance') is an official term, and is thus specified, to a relatively high degree, by its position within the larger juridical domain of welfare. In contrast, *suomalaisen tuen* ('the Finnish allowance'), in example 5, refers to the same thing by replacing the specification of juridical status ('homecare') with the specification of national context. It should be noted that this context is already both evident and specified repeatedly earlier in the omitted part of the text. Finally, *Pienellä rahalla* ('a small amount of money'), in example 6, manages to avoid making explicit reference to welfare entirely. Instead, the expression is quite schematic as a whole, relative to the modifier and the head alike. The context nevertheless prompts a co-referential interpretation, through which example 6 manages to specify the size and form (that is, format) of the benefit in question.

In examples 4–6, we thus have various construals of the same entity present in actual discourse. As these construals differ in their specificity, they differ in two separate yet mutually correlating functions: semantic and pragmatic. The semantic function pertains to the amount of information an expression defines. The pragmatic function pertains to the extent to which the expression restricts the scope of possible interpretations. As these functions co-align, examples 4–6 constitute a pattern of decreasing specificity on the level of conceptual profiles (note the arrows marking the direction of categorization):

'the homecare allowance' \leftarrow 'the Finnish allowance' \leftarrow 'a small amount of money'

Note that this is a pattern of conventional semantic units and their profiles and, in examples 4–6, the pattern pertains primarily to the heads of the noun phrases. The profile of 'allowance' refers to an entity explicitly defined by a vast juridical discourse. In contrast, the profile of 'money' refers to the instrument of exchange on a quite schematic level.

The specificity of these expressions in their actual context is a more complex issue however. As 'money' in example 6 is interpreted as being coreferential with the expressions in examples 4 and 5, it yields actually a more specified conception of an allowance – social benefits can also be admitted as commodities and financial obligations as well. The analysis is further complicated when we consider the modifiers as well. It is true that, in their very general meanings, *suomalaisen* 'Finnish' is less specific than *kotihoidon* 'homecare', and *pienellä* 'small' is less specific than 'Finnish'. One may also (reasonably) presume that an allowance is primarily a monetary benefit; then 'a small amount of money' can be analyzed as the least specific expression in the quality of the commodity ('amount' / 'money' vs. 'allowance'). However, even in this case, the expression in example 6 is the most specific one in terms of quantity ('small' vs. null). Furthermore, if the context of welfare is taken for granted, the mention of nationality may also be considered a restriction of scope within the domain of welfare in general.

The development of specificity in examples 4–6 is thus not linear, but this is actually a predictable characteristic of discourse. Even the simplest verbal exchange involves a variety of semantic relations, many of which can be captured at least partially in terms of the specificity of the relata. In examples above, we thus have at least three distinct, yet interrelated, developments of specificity: the development of the heads, the development of the modifiers, and, finally, the development of the common ground, relative to which the first two developments can be motivated.

Once certain specifications of the topic are given through a relatively precise categorization (e.g. the socio-juridical status of *the homecare allowance*), the specifications can be assumed as easily accessible parts of the interlocutor's common ground. In so being, a less specific profile may suffice in communicating these specifications, for the profile's semantic background, i.e. base, is completed with the specifications from the common ground. However, this enables the profiling of other kind of specifications (the monetary value of given allowance) in a way that does not, for example, demand for professional mastery of the Finnish healthcare system.

Hence, the central motivator of the construals in examples 4–6 is the cumulative, pragmatically constituted common ground, within which the observed co-referential pattern constitutes a prominent sub-structure. The order in which the different concepts are presented is based on what is profiled by the concepts: the previous profiles constitute the conceptual background, within which the new profile is located. As the discourse advances, the common ground cumulates, becomes richer and, one would argue, becomes more specific.

Every expression belonging to a pragmatic (yet linearly constituted) paradigm of co-referential expressions updates the paradigm, making the each subsequent expression more specific (see pp. 25–26). For instance, 'a small amount of money' acquires as its conceptual base the knowledge of the monetary welfare discussed in connection with allowance earlier in the text. We thus have a pattern of negatively correlating specificities of conceptual base and profile. It does actually make sense that when the pragmatic knowledge between the interlocutors is specified, the need of expressive precision is reduced. The negative correlation in specificity between profile and base is therefore quite prevalent in discourse.

Let us look at the same phenomenon in an example of variable syntagmatic elaboration. Examples 7 and 8 are from an article that discusses various sleep disorders and their treatment. The noun phrases in the examples differ grammatically in that example 7 involves a simple noun as the head of complex noun phrase (including a lengthy infinitival modifier), whereas the noun phrase in example 8 consists of a single compound noun.

7. Liian vähän ja liian paljon nukkujilla on vaara kuolla keskivertonukkujia hieman aiemmin.

'Those sleeping too much or too little have the risk of dying slightly earlier than the average sleeper'

8. [Continuing] Kuolleisuusriski lisääntyi [...] 'the mortality risk increased'

(MT 6/2010: 22)

The appearance of the noun phrases in a quick succession in the article confirms their co-referentiality. The 'risk' mentioned in example 8 is not just a risk of dying but the aforementioned risk of early death. The noun phrase in example 8 can therefore be analyzed as (semantically but not grammatically) elliptical relative to the noun phrase in example 7. *Ceteris paribus*, the construal shift from example 7 to example 8 consists of reduction of the infinitival modifier. A significant part of it is omitted entirely (*keskivertonukkujia hieman aiemmin* 'slightly earlier than the average sleeper'), while the infinitival verb itself is re-construed as the noun adjunct of the compound noun in example 8: *kuolla* 'of dying' \rightarrow *kuolleisuus*-'mortality'. In general, the shift from example 7 to example 8 thus involves reduction in syntagmatic elaboration of the expression. A previously profiled thing is reprofiled, but the relation (earliness) specifying the thing is left to be retrieved from the context.

While the specificity is reduced on the level of the profiles, the new expression is not more generic or ambiguous, however. This results from the fact that the less specific profile is demarcated as a substructure in a complex domain that itself is more specific than before. That is, it is due to the updated

common ground that the 'mortality risk' is not just the risk of dying in general, but the probability as profiled within the complex domain consisting of the population with sleeping disorders and the corresponding propensity to an early death. Similarly to examples 4–6, also the expressions in examples 7–8 manifest the negative correlation between the specificity of their profiles and the specificity of their bases.

It is in place to consider how this phenomenon may be related to the theoretical basis of specificity in Cognitive Grammar, that is, to specificity as a property and result of linguistic categorization. As described above, Cognitive Grammar assumes a schema-based approach to language use, acquisition and categorization, which is a linguistic extension of the conceptual category theory advanced by Rosch (1978). As the linguistic categories supposedly develop as a result of comparison between existing and new conceptual entities, the categories capture the schematic commonalities between categorized entities — schemas are therefore inherent in the categorizing relationship.

As commonality is a continuous parameter, the schema-based categorization in Cognitive Grammar is itself continuous from the outset, as is well known (see e.g. Taylor 2003). The category membership in a schema-based system is therefore also a continuous property. As the categorization is fluid, so are the schemas: any concept may serve as a schema for another, more specific concept, which then elaborates or instantiates the schema, and on the other hand, may serve as a schema for another, and so on. As a result from this conceptual flexibility, a schematic hierarchy needn't be a conventional-semantic structure but may also be a pragmatic construct, to which the apparent interconnectedness between expressions 4–6 testify.

In so being, linguistic categorization, or the cognitive processes presumed behind it, is not only a matter of an expression gaining a status of a conventionalized linguistic unit. Indeed, Cognitive grammar applies the notion of categorization to various phenomena; the interaction between a syntactic schema and its elaborations in the formulation of a semantic composite structure is but a prominent example. However, what Cognitive Grammar does not scrutinize, is the emergent category-like structures consisting of co-referential (and other semantic) relations within an actual discourse (see however CGBI: 457–459, 489).

Above, I have presented two examples of such structures or patterns. The first pattern pertains to the naming of the referred entity, whereas the second involves what I called syntagmatic elaboration, amount of explicated facets of the conceptualized entity or state of affairs. What I have tried to demonstrate is that both of these patterns can be explained, at least partially, by the interrelations of the expressions involved. This points to the pragmatic, discourse-related nature of construal. While the analysis started from the conventional specificity of the expressions, especially the specificity of their profiles, the analysis also demonstrated that the context-independent meanings do not simply define the level of specificity. Rather, the profiles of

these expressions can be analyzed as an accommodation to the specificity of the common ground in the discourse. This reactivity of construal can be witnessed in other dimensions of construal as well.

2.4.2 FOCUSING

The dimension of focusing is about conceptual selection: placing one's conceptual attention on certain selected facets of a multifaceted situation, and arranging these facets relative to what Langacker (CGBI: 57) metaphorically calls the foreground and background of attention. The metaphor in question is based on the assumption of an analogy between semantic organization and the phenomenon of figure/ground alignment in perception. As there are inherent limitations to the human processing capacity, perception must work selectively, delimiting itself to the manipulation of only a few outlined objects at a time. In visual perception, for example, this would be analogous to the visual attraction of a flickering light (figure) in an otherwise complete darkness (the ground).

The dimension of focusing comprises of three components: 1) the organization of expression's semantic content according to the foreground/background asymmetry; 2) the semantic scope of the expression; and 3) the composition, i.e. the nature and extent of a complex expression's dependence of its composite structures. For the sake of economy, I will concentrate on the first one, but I will also present the latter two in brief at the end of this section. Once again, I will begin the analysis from the conventional meanings of the selected co-referential expressions in the data, and I will then move on to consider the contextual factors motivating the selected expressions as a construal pattern.

The best starting point for discussion on foreground/background asymmetry is the case in which the base of a semantic unit is constituted by multiple domains (CGBI: 57). These domains as whole constitute the background relative to their substructures that are profiled as parts of the profile as a whole. On the other hand, the domains and their profiled substructures are organized hierarchically so that they rank in likelihood of activation, or their centrality (ibid.). The relative centrality of cognitive domains is a part of a linguistic unit's conventional meaning, but the hierarchy is easily overridden by pragmatic factors. For example, the meanings of a polysemic concept (allegedly, most lexical concepts are polysemic) in different discursive or overall contexts can be explained by the foregrounding of different domains.

The first two examples illustrate this phenomenon as manifested on the syntagmatic plane of discourse. The examples are excerpted from an article discussing sleep disorders (MT 6/2010: 22–25). In this article, the Finnish noun *uni* ('sleep') is mentioned for 29 times, most of which are instantiations of the prototypical semantic variants *nomen actionis* and *nomen acti*: 'sleep₁' as an activity or as 'sleep₂' a result of activity. The analytical challenge is that

both types evoke similar semantic content. This is due to the fact that the activity and its result are not easily distinguished on experiential basis: we sleep to get some sleep. The separation is therefore about foregrounding different elements within the evoked conceptual content. Consider examples 9 and 10.

9. **unen** merkitystä tulisi korostaa erityisesti lapsille ja nuorille. Nukkumisen hyvinvointia edistävät vaikutukset ovat yhtä merkittäviä kuin ravinnon ja liikunnan.

'the significance of **sleep** should be emphasized to children and youngsters. The health-promoting effects of sleeping are as significant as those of nutrition and exercise.'

10. perinteisten unilääkkeiden [...] avulla saatu uni ei vastaa luonnollista unta. 'The sleep acquired with the traditional sleeping medications is not equivalent to natural sleep'

(MT 6/2010: 24)

In example 9, sleep is addressed in connection with the "sleepers" who are capable agents and thus responsible for doing the right thing: to sleep regularly for a correct amount of time. The interpretation of this as *nomen actionis* is further reinforced by the use of the participle nominal derivative *nukkuminen*, which in this case is best translated to the English gerund form 'sleeping'. In contrast, in example 10, sleep is treated as a medically induced physiological state. As can be derived from its status as the object for the II passive participle *saatu* 'acquired', the 'sleep' in question serves primarily as the goal for the goal-directed action, not as a type of the action itself. Yet the actual activity of sleeping is present in both of the cases. As the profiles of 'sleep' in example 9 and 'sleep' in 10 are largely co-extensive (both expressions can be used to refer to the same entity), it is logical to consider their semantic difference as a matter of focusing: it is what stands in the conceptual foreground that makes the difference between the two expressions.

The foreground/background asymmetry is also relevant for the manner in which the so-called encyclopedic or world knowledge is organized conventionally or contextually by a given instantiation of a concept. Even a common everyday term such as *sleep* may be related to multiple, more or less exclusive, realms of knowledge. While 'sleep' in examples 9 and 10 is discussed as a practical necessity shared by all human beings, the article does not focus on a layman's experience. Instead, the text is characterized by a constant emphasis on issues related to public health, including the avoidable problems (*häiritsevistä tekijöistä* [...] 'about factors that disrupt sleep', MT 6/2010: 22) and the eligible benefits (*unen pidentämisen* [...] 'lengthening of sleep', ibid.).

On the one hand, 'sleep' is discussed on a generic or representative level: the given facts about sleep pertain to public and general level of healtheducation. On the other hand, 'sleep' is presented within the domain of human psychophysiology; the article elaborates the concept primarily in terms of its functions and effects on humans as medical and psychological subjects. This dual emphasis obviously distinguishes the meaning of 'sleep' from any casual mention of *good night sleep*.

Cognitive Grammar would describe the overriding of the meaning of 'sleep' by context in the following manner. The cognitive domain of health, which normally would be relatively peripheral to the meaning of *uni* 'sleep', is in this piece of discourse foregrounded by the discourse itself. The domain of psychophysiological well-being is central not only to the article in question but also to the Mielenterveys magazine as a whole. The domain may be considered an instantiation of a case in which a publication with a specified audience defines a rather stable complex matrix as the background of interpretation. This background then serves to elaborate, but also to rearrange, the semantic content of even the most everyday concepts. When uni 'sleep' is introduced into this context, the conventional organization of semantic content is (partially) overruled. The part of its matrix that matches with the foregrounded discourse-specific domain is foregrounded by this matching itself. As Cognitive Grammar presumes, the activation of a cognitive domain as such increases the probability of its re-activation, and this translates into the relative centrality of a domain within a concept's matrix.

This contextually re-organized semantic variant of *uni* 'sleep' is, by definition, a paradigmatic construal alternative of the prototypical 'uni' *in absentia*. Quite unsurprisingly, syntagmatic patterns of this kind of reorganization can also be found. These patterns tend to involve complex interaction with surrounding discourse. An example of this phenomenon can be found in the following excerpt:

11. Kun Ursula Salo oli nuorena Teatterikorkeakoulun näyttelijäopiskelijana Sveitsissä, siellä oli vanha korealainen opettaja, joka siveli itseään ja sanoi: "Keho on teidän hevosenne, jolla te ratsastatte läpi elämänne. Pitäkää siitä hyvää huolta." Ajatus omasta kehosta hevosena, johon on oltava hyvässä kontaktissa ja josta on pidettävä hyvää huolta, jäi Salon, entisen hevostytön, mieleen. "Keho on viisas, ja oman kehon viestien kuunteleminen on tärkeätä"

'When Ursula Salo, as a young actress student, was visiting Switzerland, there was an old, Korean teacher, who stroked himself and said: "the body is your horse you ride through your life. Take good care of it. "The idea of one's own body as a horse, with which one has to have good contact and of which one has to take good care, stuck in the mind of Salo, a former horse girl. "The body is wise, and it is important to pay attention to the signs the body shows.'

(MT 1/2011)

Mielenterveys magazine publishes profiles of public figures who relate to the field of mental health either by their profession or by their own experience. In this excerpt, a Finnish actress discusses her former teacher who emphasized the importance of bodily self-care by a peculiar metaphor. The metaphor is introduced first in the form of an equative clause *Keho on teidän hevosenne* 'the body is your horse'. The import of this metaphor is the mapping of animacy, instrumentality, and possibly independent consciousness as well, to human body. The metaphor also contributes to distinguishing body from self, so it can be conceptualized as a distinct object of action.

The next paragraph reiterates the metaphor as a nominal *omasta kehosta hevosena* 'one's own body as a horse', which itself serves to modify another noun (*ajatus* 'idea'). The reiteration, however, involves further elaboration of the metaphor by a subordinate clause ('to which one has to have a good contact'). This elaboration explicates certain implications of the metaphor. The first instance establishes the basic structure of the conceptual metaphor, which involves separateness of self and body. In contrast, the second expression specifies the desirable relationship between self and the body, so that the source domain of the metaphor emphasizes the delicate interaction involved.

Finally, in the last sentence, the body is characterized in terms of an animate, conscious entity (*Keho on viisas* [...] 'the body is wise [...]'), although without mentioning the original source domain of the metaphor. Albeit the expression involves only the other participant of the relationship, the specification of this participant comes to specify the relationship as a whole: if the body is not just distinct and animate but cognizant as well, the relationship may construed as involving bi-directional interaction, which requires receptivity from the human participant as well.

The excerpt can thus be analyzed as a series of focal shifts relative to a general structure of a conceptual metaphor. The focal shifts, respectively, bear upon the semantics of each instance of *keho* 'body'. In the first instance, the body introduces the target domain of the metaphor and thus refers to the (generic) human body as such. In the second instance, the metaphor is already in place, and while the metaphor's basic structure is re-instantiated (the reference to 'a horse' as a modifier), the status of the body as the target of the conceptual metaphor can be taken as pre-given. Finally, the third instance makes no explicit reference to the source domain at all, but the body itself is defined as a conscious entity and thus dependent of the metaphoric conceptualization.

This pattern suggests a constant subtle reorganization of the semantic content of the distinct instances of *keho* 'body'. The expressions in which the 'body' is situated focus on different parts of the conceptual metaphor. Consequently, 'body' profiles the same entity in a constant manner, but comes to include different parts of the metaphoric structure as its semantic content. Simply put, what is originally presented as a part of context for a noun phrase becomes a part of the noun phrase's content.

Once again, the construal pattern in question seems to be dependent on the general unfolding of the discourse, studied under the heading of information structure (see e.g. Chafe 1994; Shore 2008). Cognitive Grammar provides also concepts applicable to or explicitly devised for analysis of discourse. As discussed above in section 2.3.2, Verhagen (2007) suggests that the notion of common ground should cover all of the information shared by the interlocutors. In fact, as a part of the dimension of focusing, Cognitive Grammar presents a so-called Current Discourse Space (CGBI: 59, henceforth CDS), the "mental space comprising everything presumed to be shared by the speaker and hearer as the basis for discourse at a given moment" (ibid.). Here it will be understood as an analytical abstraction of those cognitive domains that are contextually most likely to be activated. In so being, CDS preserves the character of a complex matrix as a hierarchically organized, yet flexibly reorganizable, radial category.

The relevance of CDS for focusing-related construal phenomena becomes apparent when we re-consider example 11 relative to what is established by the excerpt as the pre-given background of interpretation. In example 11, the first component of the CDS is the discourse-dependent complex domain of psychophysiological well-being, introduced already with the previous example. With this part of CDS in place, the actress' lengthy discussion on the body becomes integrated to the CDS so that the bodily part of body-mind unity is focused on as a participant in a binary relationship. This maneuver both elaborates the schematic CDS attributable to the publication as a whole, while the focus shifts onto the specific substructure of CDS, reassessing the conventional centrality hierarchy of the domains within CDS. Finally, the novel horse-metaphor further elaborates the body while also specifying the relation between the body and self through a cross-domain mapping. The metaphor, in turn, becomes a relatively stable part of the CDS. This stabilization enables the shifting of focus within the metaphoric structure without the reiteration of the structure as a whole.

While not definitive, this analysis should demonstrate how focusing is concerned with the manifestation of figure/ground alignment both in the inherent organization of separate concepts, as well as in the syntagmatic organization of an unfolding discourse. In a word, what has been established in the preceding discourse is a necessary prerequisite and central motivator for any novel construal. This holds true also for the sub-dimension of focusing called scope.

Scope is used in Cognitive Grammar to refer to the amount of information that is activated in each cognitive domain that contributes to the overall meaning of an expression. For example, the scope of *flickering light* in spatio-visual domain subsumes not just the *light* itself but also enough space to the *light* to be contained and conceptualized as an independent entity. If a given concept is based on a complex matrix, scope is instantiated separately in each domain thereof. Scope is divided into so-called immediate and maximal scope within a domain or a matrix. Immediate scope pertains to the minimal

semantic background enabling conceptualization whereas maximal scope is "the full coverage [of an expression]" (CGBI: 65).

The customary example of scope is provided by the hierarchy of the concepts for body parts: concept of 'body' works as the maximal scope for any concept for a body part, whereas immediate scope is prototypically the concept hierarchically next to the foregrounded entity. "body > arm > hand > finger" (ibid. 64) is one possible organization, so that the immediate scope enabling the conceptualization of 'finger' is formed by the concept 'hand'.

One linguistic manifestation of this hierarchic order is the restriction concerning the selection of a reference point (CGBI: 83, Langacker 1993a; on application on Finnish genitive, see Jaakola 2004). A reference point provides the interlocutor with access to a subsequent concept. This requires that the reference point manages to disambiguate whatever it is the reference point of. The restriction is manifested in the infelicity of the following example: *my right arm's index finger. The anomaly of this construction shows how only the central domain that is within the immediate scope of the expression can serve as an explicit reference point. In some cases, this restriction could be explained based on sheer interactional relevance: a concept that does not help to provide useful information about another is simply redundant. However, the anomalous expression in example 10 actually manages to convey information, despite its obscurity: we are able to infer what specific finger the expression is about. In other words, there needs to be a more specific explanation for the expression's unnaturalness.

According to Cognitive Grammar (CGBI: 64–65), the profile/base segregation of the semantic unit explains the infelicity of certain lexical combinations. When a noun phrase is re-construed as a compound, it is required that the profile of the adjunct is compatible not just with the profile of the head but with its conceptual base as well. The compatibility, in turn, requires that the adjunct's' profile can be categorized by a schematic structure within the conceptual base of the head. Another necessary condition is that there are no significant intervening structures between the profile of the head and the schematic structure that categorizes the adjunct. Otherwise the conceptual linkage between the adjunct and the head may be cancelled, as in the case of *my right arm's index finger.³¹

In addition to the syntactic reference-point constructions, the notion of scope can be applied to patterns of semantic patterns at the discourse-level as

nevertheless holds: in either case the immediate scope of 'finger' is profiled the most immediate whole to which the concept belongs: it is only the scope of this whole that varies.

 $^{^{31}}$ It should be noted that the arranging of experience into part-whole-relationships is not a universal constant but varies from one language to another. This concerns also experientially constant entities, such as body parts. The Finnish noun $k\ddot{a}si$, for example, can refer both to the hand and to the whole upper limb, which makes the genitival construction $oikean\ k\ddot{a}den\ etusormi$ ambiguous between the interpretations 'right hand's index finger' and 'right upper limbs index finger'. The generalization

well. In example 12, the scope of an expression is defined by the directly preceding segment.

12. Virikkeitä siis oli muttei ylettömästi. Järvisen mukaan osastolla pyritään yksinkertaiseen elämään säännöllisine uni- ja päivärytmeineen. Potilaiden elämäntilanne pyritään saamaan mahdollisimman tasaiseksi ja impulssit kuriin. "Tarkoitus on, että ihminen kohtaa oman tilanteensa [...]"

'So there were activities but not excessively. According to Järvinen, the goal that is strived for at the ward is simple daily living with regular sleep and day rhythms. The conditions of the patients are kept as constant as possible, and patients' impulses are controlled. "The **purpose** is that the person faces her/his situation [...]"

(MT 4/2010: 15)

While the excerpt in example 12 does not involve scope-related semantic restrictions on an explicit level, it nevertheless illustrates how the semantic scope of a lexical concept serves as a source of cohesion. *Tarkoitus* 'purpose' is a concept that is directly dependent of its reference point: a purpose is always *the* purpose of something or someone, which is readily describable as a schematic entity within the concept's immediate scope. This makes the noun and the corresponding noun phrase reactive with regard to its immediate discursive context. In example 12, purpose refers back to the summarized activity carried out in the mental ward. As a form of professional healthcare, this activity is intentional, goal-oriented and hence purposeful. Therefore, the subsequent mention of 'purpose' is a form of focusing within the overall scheme of the described activity. Conversely, all the positive semantic content of 'purpose' is given in the preceding description, which elaborates the schematic reference point within the concept's scope.

There is still one sub-dimension within dimension of focusing: composition (FCG-1: 448–460, CGBI: 60–62), which subsumes the associated notions of compositionality (e.g. CGBI: 167–170) and analyzability (e.g. CGBI: 170, 351–352). Compositionality refers to the aspect of a complex expression's meaning that is based on the combination of the independent meanings of its parts and on the possible different hierarchical levels of constituency that are formed by the expression's components (CGBI: 167).

Composition relates closely to the novelty of a given expression. Novelty or non-conventionality determines to a certain extent to which the relationship between an expression's component and its composite meanings contribute to the semantics of the expression as a whole. This influence of composition is referred to in Cognitive Grammar as analyzability (e.g. FCG-1: 292–298).

Different expressions may be referentially synonymous but differ semantically relative to their analyzability, that is, to the effect and traceability of their compositional paths (CGBI: 61) within the overall conceptualization. It is important to acknowledge that while Cognitive Grammar allows for compositional structures in its description of semantics, the theory explicitly rejects universal compositionality (ibid.). Even an entirely novel expression incorporates much more linguistic as well as extra-linguistic information than can be derived from the components and their composition alone. Similar to other aspects of focusing, composition also makes a gradual phenomenon. The different parts of a composite structure are foregrounded to different degree, a matter which is directed by linguistic convention as well as adjusted by the concurrent pragmatic needs.

In conclusion, focusing is a dimension of semantic asymmetry that includes the selection of conceptual content and its arrangement into foreground and background. The selection and arrangement of conceptual content *vis-à-vis* foreground/background distinction is extended to the analysis of discourse by implementing the concept of CDS. As with specificity, the dimension of focusing is applicable both to the description of an individual utterance as well as to analysis of textual phenomena. Next, we will turn to another case of semantic asymmetry, the dimension of prominence.

2.4.3 PROMINENCE

The third dimension of construal is prominence (or "salience", CGBI: 68–73), a highly abstract parameter that encompasses a wide range of different semantic asymmetries. These asymmetries are related to the general accessibility of concepts, sub-conceptual structures, and inter-conceptual relations within actual linguistic expressions. For example, Langacker presents focusing as one of the "dimensions of prominence" (ibid. 68). Focusing "fits comfortably under this rubric, since everything selected is rendered prominent relative to what is unselected, and a foreground is salient relative to its background" (ibid.). Langacker, however, presents other two conceptual asymmetries that are exclusive to prominence: profiling and trajector/landmark alignment.³² This section assesses the applicability of profiling and trajector/landmark alignment to written discourse.

Profiling refers to the duality of a semantic unit's inherent structure. As discussed above (pp. 25–26), Cognitive Grammar divides a semantic unit into its profile and base, which is a linguistic application of the general figure/ground alignment (see pp. 25–26). A concept's base is defined as its overall semantic scope within all the domains that constitute its semantic content; the base can be further elaborated by dividing it into the concept's immediate and maximal scope (CGBI: 63–65). Profile is the most prominent substructure within a concept's base, the focus of conceptualization, which stands for the referential object of an expression. To return to the body part example, the concepts 'head', 'leg', and 'arm' evoke as their conceptual base

³² To make things less consistent, it should be noted that both profiling and the trajector/landmark alignment can be described as linguistic manifestations of foregrounding or figure/ground organization summarized above.

the domain of human body; none of them would have any meaning without a conception of the human corporeal existence. In other words, they have, to some extent, similar semantic content: 'head' evokes 'body', which includes 'leg', and so forth. From this perspective, any objectivist notion that these concepts would simply refer to distinct objects would not suffice to capture the combination of their semantic distinction and interrelatedness. One has to differentiate concepts that refer to the parts of the same entirety by resorting to the relative prominence of the substructures ('head', 'leg', etc.) against the global structure ('body'), and the most prominent substructure is, of course, the profile.

Profile is the foregrounded entity at the intersection of the cognitive domains that make the concept's conceptual background. Logically, the notion of profile is required by the fact that a conceptual description of an expression's meaning involves semantic content that does not pertain to the referent itself. Descriptively, profile is required by the fact that the nature of the profiled (conceptual) entity is presumed by Cognitive Grammar to correspond to the grammatical class of the resulting expression.

Semantic units are taken as profiling conceptual entities of two kinds, things and relationships. A thing refers to a conceptual entity that has an autonomous being (expressed by a noun), in that it is not construed as a relation between two entities. In contrast, relationships are conceptual entities that relate other entities (such as verbs expressing e.g. interaction of two entities) and are therefore conceptually dependent.

Profiling thus defines the most prominent substructure within a cognitive domain, and the nature of this substructure defines the conceptualization either as autonomous or relational. As complementary forms of selective focusing [sic], things and relationships are useful conceptual archetypes for construing the same semantic content in alternative ways. The customary example by Langacker (CGBI: 67) involves *wheel* and its parts; *hub*, *spoke*, and *rim*. These all evoke the same semantic content that includes the other structures just named but profile only one among them. This involves the dimension of specificity as well, which, however, cannot be applied here as the explanatory concept, since *hub*, *spoke*, *and rim* are predicates of comparable value on this dimension.

On the other hand, profiling pertains also to evoking same conceptual content relative to substructures of a different kind. The selected substructure can be either a conceptually autonomous thing or a dependent relationship. For instance, the same state of affairs may be referred to very differently, i.e. either by a verb clause or by a nominalization. This has the apparent conceptual advantage that the switching of the profile type enables different types of elaboration. Conversely, certain patterns of discourse would not be possible without the syntagmatic flexibility offered by the alternate profiling. This can be observed in the following examples 13 and 14. These have been excerpted from a magazine article that covers a psychoanalytical survey carried out on sibling relationships.

13. "Olen ollut erityisen kiinnostunut, miten vanhempi lapsi on kokenut ja mitä muistaa siitä, kun äiti hoitaa nuorempaa lasta ja kun nuorempi sisarus saa olla äidin sylissä", Malmberg kertoo.

"I have been especially interested in how the older child has experienced and what she remembers about how her mother nurtures the younger child and how the younger sibling gets to be in mother's lap", Malmberg says.'

14. *Tätä tilannetta hän kutsuu Madonna-konstellaatioksi* [...] 'It is **this situation** that she calls a **Madonna-constellation** [...]'

(MT 4/2010: 34)

In example 13, the interviewee describes her foremost academic focus of interest: *Olen ollut erityisen kiinnostunut* 'I have been especially interested in'. However, what is of interest here is the complement structure, which starts a construal pattern continued by the later noun phrases.

The complement is a complex relative wh-clause, which starts with *miten* 'how' and describes the past experience of a non-specific subject remembering her childhood. The access to the past experience is described with two mental predicates (*on kokenut* 'has experienced' and *muistaa* 'remembers'). The predicates are mutually co-ordinated, but the semantics of the verbs and the applied tenses³³ prompt the interpretation of the process of 'experiencing' as the object of 'remembering'. The remembered experience is described in the subsequent embedded wh-clause, starting with *kun* 'when'. This wh-clause involves the interaction between mother and the younger sibling, both of whom are construed as grammatical subjects: *äiti hoitaa*, 'mother nurtures' and *nuorempi sisarus saa olla*, 'the younger sibling gets to be'. This complex of agents and their mutual relationhips can be expressed formulaically as follows:

$$O_r \rightarrow (O_e \rightarrow (M_n \leftrightarrow Y_g))$$
,

in which O is the 'older child', M is 'mother', and Y is the 'younger child'. The processes these subjects instantiate are given in the subscript, so that r stands for 'remembering', e for 'experiencing', n for 'nurturing' and g for 'getting' (to be in mother's lap).

As we may witness in example 14, a complex of temporally extended activities is quite easy to condense into a single noun phrase. In general, various nominalizations and event nouns (such as the noun *tapahtuma* 'event' itself) are frequently applied to this kind of semantic condensation. In this case, the set of relations is referred back to as a recurrent state of affairs by the

³³ I.e. the present perfect on kokenut 'has experienced' and present muistaa 'remembers'.

noun phrase *tätä tilannetta* ('this situation'), which is immediately renamed by a technical title *Madonna-konstellaatioksi* ('Madonna constellation').

The present construal phenomenon, in brief, pertains to the re-profiling of multiple conceptual relations in example 13 as a single, conceptually autonomous thing in example 14. The change between examples 13 and 14 involves evidently a significant amount of schematization, as the number of distinct profiles is reduced to one. The most important change, however, is the change in grammatical status from embedded wh-clauses to a noun phrase.

The expressions in examples 13 (starting from *miten* 'how') and 14 are essentially co-referential: the very function of anaphoric demonstrative *tätä* 'this' is to explicate this referential synonymy. Yet they differ in that the network of relations established in example 13 constitutes the implicit conceptual base relative to which the profiles in example 14 are demarcated. Note, however, that the profiles of 'this situation' or 'Madonna-constellation' cannot be reduced to a substructure of the profile of the wh-clauses in example 13. Rather, the novel profiles in example 14 schematize the overall semantic structure constituted by the clauses in example 13 and re-construe this structure into an autonomous conceptual entity.

Finally, example 14 involves yet another case of re-construal. The technical compound Madonna-konstellaatio 'Madonna constellation', maintains the construal of tätä tilannetta 'this situation' as a thing. The use of the specific biblical proper name as the adjunct adds another layer to the construal, however: the adjunct evokes metonymically a well-entrenched piece of Christian imagery, thus emphasizing the mother/child dyad within the overall triadic setting. The metonymic reference leaves this dyad (as well as the triad the dvad is a part of) un-profiled: it profiles a type of interpersonal experience of an informant as a whole by a combination of a salient substructure ('Madonna') and an expression that refers to the whole itself ('constellation'). Given the imagic background and the very motivation of the metonymy, it is nevertheless safe to assume that the expression organizes the different substructures of the overall 'constellation' so that the dyad is more prominent than the triad. The selection of profile thus affects the internal organization of the expression's conceptual base as well. This effect cannot be scrutinized here further, but it serves to illustrate that profiling should not be interpreted as a simplistic notion of reference rephrased in cognitivist terms.

Whereas prominence in the form of profiling corresponds to an asymmetry within predicate, the so-called trajector/landmark alignment captures prominence as a comparative property of separate and individually expressed concepts. The trajector is the more prominent of the two, whereas the landmark, which is often optional, is a concept used to specify some property of the trajector. The most obvious example is provided by spatial expressions, which also provide the metaphoric motivation for these analytical concepts. As far as pragmatic constraints are excluded, we may refer to the same spatial setting of two objects in two different ways by evoking the same conceptual content but choosing the most prominent object differently: *the lamp above*

the table vs. the table below the lamp (e.g. CGBI: 71). What is different between these examples, aside from the preposition, is the choice of entity that is localized relative to another. The first noun phase refers to the lamp, whereas the second noun phrase refers to the table: the expressions are "about" different objects and place the focal prominence accordingly.

The essential nature of trajector/landmark alignment is proven by the fact that there exist concepts that not only share a common conceptual base, but also have the same profile and still differ semantically from each other. Thus, distinct relational concepts may interconnect the same two entities, still differing in the so-called directionality of the relationship. For example, to slightly alter the kinship-based example favored by Langacker (CGBI: 72), we may have two expressions that evoke the same relationship, given that also the entities involved in this relationship are maintained the same: *She has an aunt* vs. *She has a niece*. In the case of verb clauses such as these, the subject is the trajector, while the object is the landmark, which exhibits secondary focal prominence.

The application of the conceptual trajector/landmark dichotomy is not without exceptions or without difficult borderline cases. The analysis of Helasvuo and Huumo (2010), for example, shows that the selection of trajector and subject both depend in Finnish on clausal construction types and cannot be given construction-independent semantic definition applicable to all cases. The most prominent constituent within a construction is not necessarily the clausal subject syntactically, or vice versa. This is especially true for constructions with only focal participant, such as those discussed next. In Finnish, there are one-argument verbs referring to mental or physiological states that form pairs of conceptual reversals with regard to the source of activity (see Siiroinen 2001, 2005). One subset of these involves verbs of emotive expression (such as nauraa 'laugh') and their causative counterparts (such as naurattaa 'be made to laugh by \emptyset '). It is not uncommon to find such emotive reversals in quick succession within the same piece of discourse, such as the article from which the following examples have been excerpted.

```
15. Jo pienenä häntä nauratti [already small-ESS s/he-PTV cause.laugh-PST] 'Already as a small child, she [was made to laugh by Ø]'
```

```
16. Miksi Saara nauroi
[why Saara laugh-PST]
'Why did Saara laugh'
```

(MT 5/2010: 5)

The expressions refer to the positive demeanor of the subject of the article, Saara. While example 15 describes her tendency to spontaneous laughter, the interrogative in example 16 ponders her reasons for this behavior. The relevant difference, however, concerns the predicate verbs and the arrangement between the verb and its primary constituent. Whereas *nauraa* 'laugh', in

example 15, assumes a prototypical, agentive subject, its counterpart, the emotive causative verb *naurattaa* 'make laugh by' in example 16, requires a partitive-case object that "goes through" laughter caused by some external or internal factor.³⁴ Note that this latter option could also include an actual subject, for instance:

Jo pienenä häntä nauratti eräs vanha vitsi 'already when she was a small child, an old joke made her laugh.

These expressions, in any case, refer to the objectively same situation, evoke the same relationship, and profile the same focal participant in the relationship. They construe the relationship differently, however. This is due to a change of causal direction that is analogous to that with the case of *having an aunt* vs. *having a niece* above, except the examples such as 15 and 16 only have a single focal participant.

In example 15 with causative, the partitive demonstrative *häntä* 'she' is construed as the object and therefore corresponds to the definition of the secondary focus within a relationship (CGBI: 71), except that it is indeed the only possible focal point within the construction. In contrast, in example 16, *Saara* is presented as the subject, i.e. the primary focus or the trajector. Now, the absence of the other participant in the examples makes the construals impossible to distinguish by the amount of prominence alone. However, the possibility of clausal subject in example 15, and its respective impossibility in example 16, illustrates the character of a prominence-based hierarchy as a metaphorical depiction of conceptual asymmetry that correlates with syntactic positions. Moreover, the interchangeable status of the constituent as either trajector or landmark demonstrates that even a causal directionality may overruled by means of construal.

The co-existence of complete trajector/landmark reversals such as *having* an aunt and *having* a niece within the same piece of discourse is not very common. The change of status of a conceptual entity with regard to trajector/landmark status is nevertheless a source of conceptual flexibility, which also has concrete syntagmatic manifestations. Furthermore, if a reversal for an expression can be envisaged *in absentia*, we may consider the expression a motivated instance of a trajector/landmark construal. In written discourse, a particular trajector/landmark alignment is likely to be motivated, in part, by the immediate textual context, which makes the distinction directly relevant for syntagmatic discourse relations.

In sum, the dimension of prominence poses a generalization over a vast variety of semantic asymmetries. Its sub-dimensions, i.e. profiling and trajector/landmark alignment, can be applied to semantic characterization of

³⁴ The example is less than optimal, for *naurattaa* has also the semantic variant of 'urging to laugh' that is, urge that can either be repressed or given in to. In this case however, I consider it to express actual laughter.

the basic grammatical and syntactic categories (such as those of major constituents). As a result, the syntactic choices within a discourse can be described as conceptual choices motivated by, *inter alia*, the immediate pragmatic context. In this section, the possible contextual motivations for the analyzed construals were only discussed in brief, but the context-dependence of construal will be treated in depth in chapter 4. The next section, in turn, will present one more dimension of construal.

2.4.4 PERSPECTIVE

Perspective is "the way the scene is viewed" (FCG-1: 591), that is, the dimension of construal that is most clearly dependent on the metaphorical viewing arrangement discussed above (pp. 34–35). Perspective includes two major components: the viewing arrangement and temporal dynamicity (CGBI: 73). Since Cognitive Grammar's account of temporality has already been presented alongside the conceptualizer above (section 2.3.1), this section will concentrate on the viewing arrangement and its inherent dimensionality referred to as subjectivity.

As mentioned above (section 2.3.2), the viewing arrangement can be simplified as the relation of the subject and the object of conceptualization or "viewers" and "the scene being viewed"³⁵. The "viewers" refer to the speaker and hearer, whereas the "scene" is the semantic content of some expression (CGBI: 55). As opposed to the general characterization of dimensions, the elements of viewing arrangement evoke the viewing relationship rather than the participants of the relationship or some properties pertaining to them. For example, tense has only a relational temporal meaning: it specifies (perhaps utilizing a temporal reference point) the temporal relation between the subject and the object of conceptualization, not some absolute property of the former or the latter.

Though not modality-specific in any sense, the viewing arrangement certainly puts a strong emphasis on the expressive potential of the spatio-visual metaphor. The linguistic phenomena considered with the viewing arrangement often involve the expression of spatio-visual orientation and its metaphorical extensions. The classic example is provided by the contrasting prepositions 'behind' and 'in front of' (CGBI: 76). Yet again, these provide the speaker with alternate construals for the objectively same setting: 'the rock behind that tree' \approx 'the tree behind that rock'. However, in contrast with the earlier example of 'above' and 'below', the correctness and the mutual interchangeability of these prepositions hinges on what Langacker metaphorically calls the vantage point (ibid. 75) of the conceptualizer. Here, the prerequisite for "the rock" to be behind "the tree" is that the two entities in

³⁵ It is not straightforward task to distinguish the definition of viewing arrangement from that of perspective in general. Langacker himself states that "perspective is the viewing arrangement" (2008:73) just before including dynamicity in the scope of perspective.

question are aligned not just relative to each other but relative to the conceptualizer as well; the property of 'being behind' is dependent on the conceptualizer's location within the overall spatial setting. The speaker's location is the default vantage point, but she may assume some fictive vantage point as well (e.g. when giving directions to someone by phone: behind the building in front of you), or she might be forced, or at least prompted, by linguistic convention to choose a canonical vantage point (e.g. a building with a distinct façade: behind the house).

The vantage point, or perspective in general, is not limited to spatial domain, however. For example, tense relates the activity described by verbs to the temporal vantage point, which either is, or is related to, the moment of speaking (CGBI: 76–77). Another important property of perspective is the wide metaphorical use of spatial directionality. For instance, the metaphorical use of motion verbs for expressing changes in one's experience and mental state is extremely common. Expressions akin to example 17 may thus not strike as metaphorical in the first place.

17. Läsnäolo antaa rohkeutta kohdata asioita, joita elämä **tuo** eteen. [...] Joskus jännitystä ja vitkastelua **voi tuoda** se, että ei pysty soittamaan jotakin tärkeätä puhelua.

'Presence gives courage to face the things life **brings** before you. [...] Sometimes anxiety and avoidance **can be brought on** by the inability to make an important call.

(MT 6/2010: 5)

Emotional states and life experiences are not physical entities that move in space. Instead, they fluctuate between existence and non-existence in one's mental life. However, this fluctuation is analogous to the movement of physical objects (in our experience) with regard its inherent temporality and the type of change involved: a change that involves object's presence in the subject's experience. This motivates the metaphorical 'coming' and 'going' of feelings and experiences. Such conceptualizations mandatorily assume the vantage point of the experiencer, regardless of the utterer's identity. There can be no coherent metaphorical extension in which an experience would 'go to' the experiencer as observed from a distal location. However, the very existence of a subjective vantage point is crucial: when using a spatial metaphor, one is forced to assume a subjective perspective.

Cognitive Grammar defines perspective as a fundamental property of any conceptual meaning. This stance is illustrated and motivated by the notion of default arrangement (CGBI: 74), which we have touched upon in the discussion of ground. The default arrangement pertains to a setting in which "the interlocutors are together in a fixed location, from which they observe and describe actual occurrences in the world around them" (ibid.). The default setting manifests linguistically as a simple declarative form and "the absence

of special marking" (ibid.). On the other hand, Langacker recognizes "how much of a special case the default arrangement really is" (ibid.), as is demonstrated by the sheer ubiquity of modal expressions, virtual entities and abstract concepts in actual discourse. These include many elements that serve either to ground or to profile some of ground's substructures, thus objectifying them. Moreover, the distinction between the interlocutors and the objects of conceptualization is not at all that clear, and it should be considered a scalar property. This property is analyzed under the rubric of subjectivity, a concept which has a specific linguistic meaning in Cognitive Grammar.

Subjectivity refers to the extent to which the subject (or the viewer) of conceptualization is included in the conceptualization (the scene being viewed). In the default arrangement, where the separation between the subject and the object of conceptualization is maximized, the subject does not enter the conceptualization at all. In this case, the subject is said to represent maximal subjectivity, whereas the object, i.e. the conceptualized scene, represents maximal objectivity. This constellation correlates with "the absence of special marking" (CGBI: 74), as manifested in simple declarative clauses that do not refer directly to the ground or make use of it by profiling the speaker-hearer interaction (e.g. imperatives and interrogatives).

Regardless of the relative rarity of so-called simple declaratives, Langacker considers the default arrangement represented by them an "essential part of the conceptual substrate" (CGBI: 74) that enables the variety of different construals. Moreover, the default arrangement serves expository needs: a maximal subjective/objective asymmetry constitutes the logical starting point for the description of the construal phenomena that reduce this asymmetry. A noteworthy example is the special marking of non-existence in language: the use of modal verbs and adverbs relates the conceptualized issue to the beliefs, urges, and convictions of the utterer – and imposes these entities on the hearer.

A relevant conceptual distinction prevails between the so-called grounding elements (e.g. CGBI: 259–264; see section 2.3.2 above) and the expressions that profile parts of the ground. Consider the following examples, which are excerpted from a column on the teacher's educative role vis-à-vis growing teenagers. The author of the column is a teacher herself.

```
18. Nuorilla pitää olla mahdollisuus kokeilla omia rajojaan [...]
'The young have to have the possibility to try their boundaries [...]'
19. Oppilaiden ei kuulukaan pitää hänestä
'The pupils are not meant to like her [the teacher]'
20. Hänen ikävä velvollisuutensa on edustaa pysyvyyttä [...]
'Her [the teacher] unpleasant duty is to stand for stability [...]'
(MT 6/2010: 37)
```

The common denominator of the expressions in examples 18–19 is that neither of them describes actual action or a realized state of affairs in the objective world. In contrast, the expression in 20 does so by profiling an existing moral obligation (*velvollisuutensa on* 'duty is'). Still, all three expressions convey similar deontic information of a moral necessity while leaving the source of this necessity un-profiled.

Examples 18–20 thus involve subjectively construed moral authority but evoke this subjective entity in rather different ways. The modal verb chains pitää olla ('have to have') and ei kuulukaan pitää ('are not meant to like') serve a grounding function (see pp. 36) by bringing a moral/practical necessity from the subjective level of the utterer—hearer or writer—reader to the objective level without profiling an element of the ground. They situate "the profiled relationship with respect to the speaker's current conception of reality" (CGBI: 259). In contrast, what the nominal Hänen ikävä velvollisuutensa ('Her unpleasant duty') does is that it profiles such element: instead of grounding a concept other than itself, 'duty' explicates (as a free-standing nominal) a facet of the ground, a part of a moral belief-system to which the person in question succumbs.

The status of the concept 'duty' as part of the common ground may seem questionable, but with a correct understanding of the pragmatic factors involved it appears quite credible. First of all, the very nature of 'duty' concerns socially shared obligations that lead from moral justification to overt behavior: 'duty' therefore relates subjects to their actions as a causal factor. Accordingly, it can be analyzed by default as a ground-related concept: this is also justified by the fact that an actual grounding element, such as the deontic modal pitää ('have to'), can be used to refer to the very same obligation. This leads to the second point that the schematic concept 'duty' is elaborated through the discourse (excerpts 18 and 19 as well as some other points in the text) and by our common knowledge of what kind of obligations come with the teacher's profession. Thus, 'duty' becomes a repeatedly updated part of Current Discourse Space. In sum, the whole paragraph, where a teacher (the writer herself) discusses her profession, serves to explicate the (largely implicit) moral obligations that guide her concrete day-to-day work. The initially implicit and exclusive knowledge thus becomes the shared and objectified knowledge of the writer and the reader. Modal verbs ground the action (e.g. kokeilla omia rajojaan 'try their boundaries') to this shared knowledge, and the nominal velvollisuutensa 'her duty' objectifies a substructure of the ground.

These are different ways in which the meaning of explicit expressions relates to what is implicitly shared by the interlocutors, that is the ground. In actual discourse, the ground is continuously updated, which in Cognitive Grammar is explained with recourse to CDS. Anything uttered will contribute to the updating of the ground and in doing so will enable new kinds of construals based on the CDS. The ways of referring to necessity in examples

18 to 20 show that multiple constructions that involve grounding elements will at least make the profiling of a substructure of the ground natural. This will add to the cohesion of the text while structural redundancy is avoided.

It can be argued that every expression relates, in some manner or other, to the ground, and that it is therefore analyzable relative to the dimension of subjectivity. This, and the fact that subjectivity-related phenomena are seldom strictly separable from other dimensions of construal, makes it difficult to give an encompassing and clear-cut picture of the distinct patterns of subjectivity within discourse (consider CDS, which is categorized under the rubric of focusing). Let us therefore consider one more pattern of subjectivity that incorporates elements from other dimensions as well: that is, fictive dynamicity (or "fictive motion", Talmy 2000a: 99–175; for several treatments on fictive dynamicity in Finnish, see Huumo 2005, 2007, 2009) and the related notion of mental scanning (e.g. CGBI: 82).

Fictive dynamicity pertains to a construal in terms of a dynamic change of a state of affairs that objectively does not involve change. Mental scanning, on the other hand, refers to the conceptual operation that is used in Cognitive Grammar to explain fictive dynamicity: instead of conceptualizing an actual event of change, we mentally shift through different parts of a static structure, which yields a change in our focal attention. Typical examples in Cognitive Grammar involve spatial constellations (e.g. *The hill gently rises from the bank of the river*, CGBI: 82), but the scope of the concept is wider. Consider the following excerpt, which is from a commentary article that discusses the moral issues involved in the coercive care of patients with mental health problems:

21. Ydinkysymykseksi **nousee** kysymys vastuusta: kuka kantaa lopullisen vastuun 'The core question is the question of responsibility: who has the final responsibility'

(MT 5/2010: 39)

The point of interest here is the predicate verb *nousee* ('rises'). The verb's standard spatial use involves a change in the location of the grammatical subject. In example 21, the grammatical subject is elaborated the noun phrase *kysymys vastuusta* 'question of responsibility', whereas the translative case predicative adverbial *Ydinkysymykseksi* expresses a result of the change the agent expressed by the subject goes through. Note that the translative, the modern use of which involves spatial relations only peripherally, gears the interpretation toward a non-locational, inherent change. Thus, it would seem that the 'rising' in example 21 refers to an actual change, either in the conceptualized matter itself or in its public observability.

A closer inspection reveals this interpretation to be insufficient, however: instead, there is a projection of change on an actually static state of affairs. This seemingly counter-intuitive interpretation requires some background

information. The beginning of the commentary, omitted here, describes on a generic level the health and social capacities of a person who has come down with a (severe) mental health problem. What the excerpt in example 21 describes, is a permanent property of such a situation: a serious, debilitating mental health issue is always a question of responsibility for the practitioner making the decisions about the care of the patient. Of course, an unexpected moral dilemma might emerge, but this not the question in example 21. What motivates the choice of the predicate verb *nousee* 'rises' is the shifting of one's focus within the overall scheme of matters. The verb corresponds to the fact that conceptualizer mentally focuses on the part of the CDS that is formed by the previous text and thus produces conceptual change *vis-à-vis* an unchanged conceptual structure.

The fictive dynamicity thus described is not an unrelated sub-dimension of construal. On the contrary, it involves a simultaneous dynamic change in the conceptualizer's perspective, "a focal adjustment", in the restricted sense of shifting one's conceptual focus and profiling (with the predicate verb) a result of the processing activity as a temporally extended relation (a process).

This is only a cursory overview of the vast range of phenomena related to perspective. Dynamicity itself encompasses a considerable amount of complex semantic phenomena. I have aimed to illustrate certain core properties of perspective and to show that it in fact cannot be separated in any clear-cut manner from other dimensions of construal.

2.5 DISCUSSION

In the previous sections, I have sketched an overall characterization of the conceptualizer and the dimensions of construal, while emphasizing certain points that are relevant for the up-coming discussion. Instead of describing these analytical concepts in full, I have aimed to illustrate their interconnectedness and their applicability to analysis of actual (in this case, written) discourse. The interconnectedness of the dimensions of construal has been amply discussed in previous literature. For example, Verhagen (2007: 53–58) discusses the different classifications for construal in the Cognitive Linguistic literature. These classifications, as I have mentioned, vary even within Cognitive Grammar, and other authors, such as Talmy (1988, 2000a), as well as Croft and Cruse (2004), have presented their own taxonomies of construal phenomena.

Croft and Cruse, who aim to synthesize Talmy and Langacker's classification systems, point also to the inevitable amount of arbitrariness in any given segmentation of construal phenomena (Croft & Cruse 2004: 43–46). Verhagen (2007), on the other hand, points out how the increase in linguistic coverage attained by Croft and Cruse's system seem to increase also its arbitrariness, making it difficult to see how the posited categories are

motivated by underlying conceptual operations; motivation which nevertheless is necessitated by the cognitive commitment.

Verhagen (2007: 57) brings this difficulty back to the double nature of construal: its structure is based on putative conceptual operations, but it actually classifies linguistic units, which are in constant change. It is thus expected that a certain structure may correspond to two different construals either for a language-using subject or within speech community. This makes a strict categorization of construal not impossible but cognitively unrealistic. This obviously does not concern the speaker, who uses and mentally processes the structure in question according to the conventional linguistic knowledge she possesses.

At the same time, the speaker's activity involves simultaneously multiple facets of processing that correspond to different dimensions of construal, which requires that any comprehensive (or so intended) analysis of an utterance must involve multiple or all dimensions of construal. While this task is possible, it is rather unrealistic to assume that a final conclusion may ever be achieved even for a specific utterance or that the analysis is able to pinpoint the relations between different dimensions of construal in a way that is ontologically realistic. Rather, the dimensions of construal are discernible exactly as analytical tools, whereas the facets of meaning they capture are fluid, evasive and dependent of the conceptualization they characterize. It is not therefore unexpected that Langacker himself states that the segmentation of construal into separate dimensions is "mostly for expository convenience" (Langacker 2007: 421–462, n. 22).

The other characteristic of construal that I have illustrated is its double nature. Construal expresses the subjectivity of the conceptualizer, and this subjectivity corresponds to alternative construals for the same objective situation. (In some cases, such as in that of profiling, construing the same conceptual content may lead to referential difference). These aspects of construal, subjectivity and selection, may and often do result as semantic patterns within discourse. In this sense, construal is not only a theoretical relationship between an actual expression and its potential alternative (the paradigmatic plane), but an actual interrelation between semantically related expressions within a written or spoken discourse (the syntagmatic plane).

In both of these cases, the subjective aspect of construal can be easily overemphasized. The construal phenomena discussed above may be categorized as subjective in the sense of 'non-objective', for they inevitably evoke the conceptualizing subject and her perspective. However, as noted in Verhagen's (2005, 2007) analysis of the ground, the conceptualizer's perspective is in many (if not most) cases construed as being in alignment with the perspective of another conceptualizer. On an even more intersubjective level, the evoked conceptualizer of an expression is not simply a conceptual origo, but also a perspectival position the recipient is invited to assume. In this sense, construal is reactive to the interactional context and thus a function of the ongoing discourse. As the discourse involves multiple participants by default, the very premise of positing construal as a (primarily) conceptual phenomenon can be questioned. The very possibility of such questioning demands a closer look at the theoretical groundwork of Cognitive Grammar.

3 CONSTRUAL AND IMAGERY

This chapter describes in detail the theoretical foundations on the basis of which Cognitive Grammar argues for its conception of linguistic meaning. The chapter is primarily concerned with the argumentative relationship between Cognitive Grammar and the existing literature it refers to, rather than the linguistic theory as such. Regrettably, the reference made by Cognitive Grammar to its theoretical precursors is relatively scarce, which requires that any claims made about its theoretical argumentation are prefaced by thorough reconstruction. Therefore, to enable a detailed but concise analysis, I must concentrate on one specific aspect of Cognitive Grammar's argumentation: its use of the notion of "imagery".

By imagery, Cognitive Grammar refers both to linguistic and mental types of iconic representation (see section 2.2.1 for discussion on iconicity in Cognitive Grammar). The relationship between these two variants proves essential for understanding the way in which Cognitive Grammar conflates distinct ontological levels in its attempt to ground meaning in mental activity. Thus, the question of imagery can serve as an illustration of Cognitive Grammar's ontological stance as a whole. Furthermore, the term 'imagery' is used in tandem with construal to refer to the non-objective side of linguistic meaning, and is therefore directly relevant for this treatment of the dimensions of construal. Indeed, imagery ties together the argumentative structure and the analytical apparatus of Cognitive Grammar.

Neither the significance of imagery in Cognitive Grammar nor the associated argumentative shortcomings of the theory have been left unnoticed in previous literature. My analysis will discuss the criticisms levelled against Cognitive Grammar to the effect that the dimensions of construal are based on a mentalist conception of meaning (e.g. Itkonen 1997, forthcoming), i.e. that they compose meaning as it is represented in the mind of an abstracted psychological subject, and that this mentalistic conception of meaning is physicalist/reductionist by nature (Kenttä 2003).

I accept both criticisms to the extent that Cognitive Grammar suffers from inadequate argumentation and ontological inconsistencies. I also concur that there exists a strong justification for the conclusions to which both lines of criticism lead. Cognitive Grammar does indeed explicitly state that meaning lies in the head of a single representative speaker/hearer, and it therefore conflates two ontological levels, that of higher mental activity (conceptualization) and that of its physical basis (neural activation). However, both lines of criticism fail to recognize characteristics of Cognitive Grammar that speak against these conclusions. First of all, Cognitive Grammar is anything but definitive concerning ontology and the relationship between the individual and the social level. Second, while Cognitive Grammar emphasizes mental structure in the description of meaning, it nevertheless is a usage-based model that continuously refers to the social aspect of language acquisition and usage; and, as a result from its non-

modular and experiential view of cognition, Cognitive Grammar is more heavily based on social phenomena than it is willing to admit.

Together these reservations make another constructive line of criticism possible. This criticism considers Cognitive Grammar a linguistic theory compatible with a social account of meaning and communication. In so being, the approach allows for a better appreciation of the argumentative structure between Cognitive Grammar and its theoretical sources of influence. This, however, requires a more subtle understanding of the social level – both in general and relative to the formation of subjectivity – than is made possible by Itkonen's insistence of the strong autonomy of linguistics or by Kenttä's focus on the argumentative weak-points in Cognitive Grammar.

Regardless of the psychologistic proclamations it puts forward, there is no doubt that Cognitive Grammar is more about 'grammar' than it is about 'cognitive' aspects of language, and this is also evident in its theoretical prerequisites. This is not to say that Cognitive Grammar's ontological delineation of language as a cognitive phenomenon does not bear effect on how language is segmented into substructures and properties. Rather, this ontological mentalism calls for close scrutiny on how Cognitive Grammar deals with the divide between the individual and the social aspects of conceptual meaning. The focusing on imagery in this chapter serves exactly this goal. By concentrating on the dual nature of the notion of concept and the semantic properties that are categorized by this notion, I will show that the metatheoretical self-conception of Cognitive Grammar is distorted by a vague conception of what counts as 'cognitive'.

In this respect, my analysis is in line with the tenacious criticism of Cognitive Grammar by Itkonen. But if there is something fundamentally wrong with the general orientation of basing linguistic meaning on mental processes, then why analyze the details of the theory's reference to some psychological studies instead of simply stating the invalidity of such a practice? The argument I make in this chapter is that the individual-psychological interpretation of these sources that Cognitive Grammar provides is not the only one possible, and that the way Cognitive Grammar describes linguistic meaning may be informative with regard to the necessary interaction between individual and the social level of linguistic organization. The analysis at hand will therefore be begun by stating the question that is central to the present concerns: how semantics as envisaged by Cognitive Grammar should be positioned *vis-à-vis* psychological and social ontology.

3.1 OUTLINE

The object of analysis, i.e. the argumentation for a specific semantic conception of Cognitive Grammar, is approached here with a focus on how it justifies, or fails to justify, the ontological stance assumed by the theory, on the one hand, and the structuring of meaning into the triad of conceptualization, conceptualizer, and construal, on the other. The treatment of these questions will emphasize the role of construal, i.e. the organization of semantic content. The metatheoretical analysis of semantic theory will hence apply to the dimensions of construal

specifically. The two main sections of this chapter correspond to two standpoints from which the theoretical structure of Cognitive Grammar may be approached: section 3.2 discusses the essential features of Cognitive Grammar's theoretical self-justification from a general ontological perspective, whereas section 3.3 focuses to the notion of imagery as a particularly illustrative facet or this justification. The summary in section 3.4 provides a synthesis of the argumentative structure revealed by the preceding chapters' analyses and considers its significance for the concept of construal.

On occasion, the following analysis will delve into minute details of Cognitive Grammar's theoretization on linguistic meaning. While not at all historical, the present analysis will also address the changes that occurred in the organization of the dimensions, when these prove to be theoretically significant. The data for the analysis has been selected from the volumes FCG-I and CGBI, which cover over two decades of the theory's development. I will continue to use the term "dimensions of construal", but when there is the need to emphasize some specific phase in the development of this notion, I will use the term "focal adjustments" (e.g. FCG-I) or "dimensions of imagery" (e.g. CIS).

3.2 MEANING IN THE HEAD

The most obvious language-philosophical notion Cognitive Grammar endorses is that of situating linguistic meaning *in* the head of the single (representative) speaker/hearer (e.g. CGBI: 27); this is to say that meaning is described as it is experienced by an idealized individual. This places Cognitive Grammar on the "internalist" side of the general internalist/externalist debate in philosophy of language (see e.g. Putnam 1973, 1975; Dummet 1978; Searle 1983; Itkonen 1997). The specific formulation of Cognitive Grammar's internalism, including the preemptive counter-arguments against possible criticisms, contains subtleties that demand closer inspection.

In this section, I will discuss how Cognitive Grammar specifies the "location", or the psychophysiological basis, of meaning (subsection 3.2.1), and then I will discuss the definition of meaning given in Cognitive Grammar (subsection 3.2.2). The division of these topics into two subchapters reflects, to a certain extent, Cognitive Grammar's own division of analytical conduct into so-called processing and phenomenological standpoints *vis-à-vis* linguistic meaning. While concentrating on the term 'cognitive processing' and its rooting in the neuronal/material function of the mind, section 3.2.1 aims to deconstruct the physicalistic justification for Cognitive Grammar's psychologism in semantic ontology. Section 3.2.2 then shifts the attention to the phenomenological aspects of meaning and offers an account of the properties of linguistic meaning that result from individual-psychologism, as established in the earlier section. The difference between these first two sections is only of a perspectival nature, as their themes overlap heavily. In section 3.2.3, I will address the criticisms directed against Cognitive Grammar's ontology of meaning (namely, criticisms articulated

by Itkonen 1997, 2008b, forthcoming; Kenttä 2003). In doing so, I will provide a summary of the aforementioned themes.

3.2.1 PROCESSING AND PHYSICALISM

To discuss the "location" of meaning is obviously to make reference to meaning via conceptual metonymy: it is not suggested here, or by Cognitive Grammar itself, that meaning could be located in the manner of physical artefacts. The locative metonymy is nevertheless applied repeatedly by Cognitive Grammar to justify a mentalist conception of semantics. This patently ill-devised use of the metonymy serves well as the starting point for the present discussion as an illustrative example of the inconsistencies in Cognitive Grammar's ontological grounding.

As pointed out by Kenttä (2003: 73–81), Cognitive Grammar's rhetoric repeatedly evokes a form of physicalism or reductive materialism, i.e. an ontological stance in which the existence of different ontological levels is accepted, but reduced, directly or indirectly, to the physical or material level ³⁶. In practice, reductive materialism entails that everything that exists can ultimately be explained by referring to physical concepts. Cognitive Grammar's reference to phenomenological and processing standpoints to meaning (e.g. CGBI: 31) does not do much to cancel such interpretation: the explanation shifts in a somewhat confusing way from experienced meaning, through an unconscious processing level, to underlying neural patterns. Moreover, neurophysiological operations are not operationalized in any systematic way but they are simply stated as a physical precondition for (linguistically relevant) thoughts to occur. Physicalism is thus evoked when convenient but it is not systematically elaborated.

Kenttä (2003) analyses Cognitive Grammar with reference to Popper's (1972) postulation of three worlds, i.e. three realms of distinct ontological constitutions: the physical ("world 1"), the mental ("world 2"), and the social ("world 3"). Relative to Popper's three worlds, there are two possible, yet mutually inconsistent, forms of physical reductionism to which Cognitive Grammar succumbs.

First, it can be claimed that Cognitive Grammar rejects the relevance of the social level in language related phenomena, as it emphasizes (individual) cognitive aspects as the central factors in the organization of language. This aspect is presented more carefully in sections 3.2.2 and 3.4.

Second, Cognitive Grammar can be said to conflate the physical and non-physical aspects of mental experience in its conception of cognition. Indeed, combinations of (partly inconsistent) definitional sentences can be found in Cognitive Grammar that justify such a conclusion: meaning (linguistic) is defined as conceptualization (psychological, e.g. CGBI: 30), and conceptualization is

³⁶ The terms 'physicalism' and 'materialism' are used here interchangeably as is the case in a large portion of the literature that discusses these strands of thought.

"explicated as" (FCG-1: 5), or "resides in" (CGBI: 31), cognitive processing, which, in turn, is constitutive of mind (FCG-1: 100). The term 'processing' lacks an explicit definition, but Cognitive Grammar seems to posit it as a series of "cognitive events" (ibid.), which "designate a cognitive occurrence of any degree of complexity, be it the firing of a single neuron or a massive happening of intricate structure and large-scale architecture".

While these excerpts imply materialistic reasoning, they hardly constitute any programmatic form of ontological reductionism: Cognitive Grammar does not claim to explain the mental and social phenomena, let alone the distinct ontological realms they belong to, with regard to physical concepts.

The type of reductionism Cognitive Grammar falls prey to appears to be restricted and inconsistent by nature. According to Cognitive Grammar, it seems, the mind is the principal setting for language and neurological activity is the defining property of the mind. This interpretation alone equals a serious accusation. Were it proven justified, it would mean that Cognitive Grammar neglects the fundamental social ontology of language (Itkonen 1978, 1997, 2003) and confuses the phenomenological and physical aspects of the mind.³⁷ In this section, we will concentrate on the latter of these two implications.

It should be emphasized that the parts of Cognitive Grammar that suggest a physicalist interpretation are vague at best, and it is doubtful that the theory would support the interpretation of all cognitive activity as a mere firing of neurons. As noted above, the parts of Cognitive Grammar which might justify a reductionist interpretation (a reduction from psychological to physiological phenomena) concern the so-called processing-related and phenomenological aspects of mind and conceptualization (e.g. CGBI: 31). These aspects of mind are posited to justify theoretical notions and descriptive procedures; as we have seen in section 2.3.1, the latter include, *inter alia*, the description of the processual meaning of finite verb clauses and the distinction between processing and conceived time as components of sequential scanning. The example is not optimal, however, since the relationship between conceived and processing time is relatively remote. The overall interconnectedness of the processing and phenomenological standpoints in Cognitive Grammar is both more integral and more complex.

The phenomenological standpoint pertains to the way in which linguistic meaning appears to the representative speaker/hearer. This standpoint is taken to be more fundamental for linguistic analysis, as it is "obviously more accessible and amenable to investigation via linguistic evidence" (CGBI: 31). The operationalization of cognitive processing could hence be seen as a special case

³⁷This is not to say that a physicalist account of mind would be automatically false, but that it would lead to problems with other aspects of Cognitive Grammar. Some type of physicalism is actually the most frequent position in the modern philosophy of mind (for a non-reductionist physicalist account, see for example Tye 1999, 2003, 2009). It is obvious, however, that positing definitional relations between phenomenal and physical aspects of mind does not assent to a specific physicalist theory, let alone constructs one. Rather, this is only a manifestation of inconsistency within Cognitive Grammar.

that stems from explanatory needs, as in the case of verbs, but the term has been given a wider interpretation in the theory.

Whereas the phenomenological standpoint refers to what appears, the notion of processing in Cognitive Grammar refers to the activity that constitutes whatever appears. Cognitive Grammar is ambiguous about the term, but processing can be associated with forms of pan-cognitive activity that serve to structure experience and, given the holistic orientation of the theory, linguistic conceptualization as well. For example, Cognitive Grammar postulates a set of domain-independent "cognitive abilities" (FCG-1: 99–146), primary aptitudes that relate pieces of information and structure both perception and conception.

The cognitive abilities include extremely general processes. For instance, comparison (FCG-1: 101–105) establishes a relationship between two or more entities and registers their mutual similarities, as well as their discrepancies. As a whole, the cognitive abilities are not explicitly based on any specific theoretical paradigm, albeit Langacker on occasion refers to perceptual psychology (FCG-1: 101; Arnheim 1969), cognitive psychology (FCG-1: 5; Miller & Johnson-Laird 1976), and mental imagery research (FCG-1: 110; Shepard 1978; Kosslyn 1980). Despite these references, the cognitive abilities Cognitive Grammar posits can be thought of as logically necessary minimum abilities that relate pieces of information and form coherent conceptual structures. For example, in sequential scanning, the detection of change or no-change inevitably involves the comparison of successive component states.

The distinction between the phenomenological and the processing level corresponds to some extent to a delineation of psychological phenomena relative to their accessibility to conscious introspection. Although Langacker does not explicitly apply this criterion, it can be inferred from the different methodologies he associates with the two different levels (CGBI: 31). The division of the processing and phenomenological levels is not unproblematic, however.

Zlatev (2010) criticizes prominent cognitive linguists, i.e. Lakoff and Johnson (1999; Johnson 2005), for a stupefied conception of phenomenology as analysis of focal consciousness. For instance, Johnson (2005: 21) defines phenomenological study in opposition to what is needed in the analysis of subconscious conceptual processes underlying linguistic meaning. Thus, in this view, phenomenology is a study of what appears to consciousness as such. Zlatev rebuts this misconception and emphasizes the nature of phenomenology as systematization of elements that make meaningful conscious experiences possible but that reside themselves in the "margins" (Zlatev 2010: 422) of consciousness. The necessary result of such focus is that phenomenological study must discard any strict division between conscious and sub-conscious phenomena.

This conclusion is automatically relevant any linguistic theory that claims to make use of phenomenological methodology. In so being, Zlatev's analysis casts a considerable doubt on the way in which the categories of processing and phenomenological levels are formulated and operationalized in Cognitive Grammar. For instance, the category of "cognitive abilities" may be questioned for lack of internal integrity and ambiguous character *vis-à-vis* phenomenology

of meaning. Is a cognitive ability posited as an actual subconscious processing mechanism, or is it a conscious correlate of such mechanisms? Or is it, perhaps, a non-thematic aspect of overt, conscious experience? Without solving this confusion, one may not be able to associate the level of cognitive processing with any systematically defined ontological position.

Indeed, by positing several mutually inconsistent definitions for mental and linguistic phenomena, Cognitive Grammar makes an effort not to be associated with any systematic ontological viewpoint.³⁸ It is clear, however, that there are two categories of mental activity, processing and phenomenological, that are pivotal for linguistic meaning from Cognitive Grammar's standpoint. In order to prove that Cognitive Grammar exhibits physical reductionism, one must demonstrate that the integrity of both of these categories is denied in favor of physicalist explanation.

This interpretation, however, is efficiently cancelled by the statements Cognitive Grammar makes about the phenomenological and processing standpoints, their mutual relation, and their status relative to the material, i.e. neuronal, foundation of cognition. Let us turn back to the locational metonymy Cognitive Grammar evokes in defense of a cognitive point of view in the description of meaning:

Where are these [linguistic] meanings to be found? From a cognitive linguistic perspective, the answer is evident: meanings are in the minds of the speakers who produce and understand the expressions. It is hard to imagine where else they might be. (CGBI: 27.)

Langacker certainly is right in considering that the experience of linguistic meaning is also an event in the material realm: the physical/physiological correlate of meaning can only be located in the heads of interlocutors. The naturality of this conclusion stems from the fact that it is a relevant answer to locative question, which is already committed to an ontological categorization, when taken literally. In so being, the answer is correct but the question itself is formulated on the basis of considerable ontological naïveté.

However, what Langacker seems to imply here, instead of materialism *per se*, is exactly a naïve type of mentalism-*ex*-matter. For Langacker, the material boundedness of meaning in the heads of interlocutors seems to serve as a ground for inhibiting the scope of the semantic theory. This is a category error *par excellence* but of a very different kind than that of reducing mental phenomena categorically to physical occurrences. In the passage by Langacker, a property of the physical realm (boundedness) is imposed onto an object belonging to the

³⁸ "Processing" in Cognitive Grammar is in many ways comparable with, but also differs from, the "cognitive unconscious", which was introduced by Lakoff and Johnson (1999: 103–104) and posited as an intermediate level of cognitive organization between the phenomenological level and neural embodiment. Zlatev (2010) provides a critical review of this postulate. Since it tries to incorporate aspects of both intentionality and biological causation, the concept is incoherent and its explanatory value is questionable.

mental realm (meaning as a mental phenomenon) in order to justify the categorization of the meaning as mental. The reasoning behind this is circular:

- 1. Meaning is what is mentally experienced by a subject.
- 2. The physical correlate of meaning as experienced by a subject is located in the brain of the subject.
- 3. Because the physical correlate of meaning is located in the brain, meaning must be a mental phenomenon.

To avoid this circularity, one would only need to accept the reduction of meaning to its physical correlate; this, however, would make the whole chain of inference redundant. Langacker is understandably unwilling to take this step; what he does instead is that he shift his position according to the given argumentative need. Indeed, the aim seems to be to underline the need for a mentalistic view in the description of meaning at the expense of consistency. Cognitive processing, in turn, serves to bypass the problem of the mind-brain-gap.

In FCG-I (p. 97), Langacker states unambiguously that "meaning is a mental phenomenon that must eventually be described with reference to cognitive processing". Langacker then proceeds to associate his view of meaning with Chafe's (1970: 74) conceptual/ideational account. Palmer (1976: 26–30) and Lyons (1977: 113), on the other hand, are introduced as adversaries to the adopted conceptualist/ideationalist position. In the passage Langacker refers to, Lyons presents his objections to conceptualist semantics. According to Lyons (ibid.), mental lexical concepts cannot be shown to have this or that functional role in "ordinary language-behaviour" and the significance of mental imagery for meaning is beyond empirical enquiry Palmer, on the other hand, attacks the notion that concepts (and the mental experience from which they arise) are a mediating link between symbols (linguistic forms) and their referents (1976: 26).

Cognitive Grammar can be reasonably described as an antithesis to these views, for it defines symbolic function of language relative to pairings of meaning and form that are internalized as a whole. Mental representations, and the processing activity that gives rise to them, are therefore indispensable for semantic investigation.

What is processing then? Above, I have stated that, despite the fact that it has not been explicitly defined, we can treat "processing" as an umbrella term for those mental abilities that give rise to the experience of meaning but reside at the

³⁹ Certainly well-informed from a strict epistemological point of view (how could one know with scientific accuracy what some other individual knows?), this criticism is insufficient in the light of the fact that all language-behavior necessarily bases itself on the *expectations* of what the others know or might know, and on the specific supposition that the other one agrees with the interlocutor on what linguistic expressions mean.

⁴⁰ This actually does not hold true as long as meaning is understood in psycholinguistic terms: consider for example Dual-coding Theory (Paivio 1971, 1991, 2006; Paivio and Begg 1981; Sadoski & Paivio 2004), which considers exactly the two-modal parallel processing (propositional and pictorial modes) in understanding and producing linguistic expressions.

background of that experience. The actual use of the term in Cognitive Grammar is ambivalent. Langacker states that "Cognitive Grammar [...] equates meaning with conceptualization (explicated as cognitive processing)" (FCG-I: 5), and elsewhere (ibid. 138) states that "[...] a conceptualization is an occurrence of a cognitive event". Moreover, Langacker defines mind as being "the same as mental processing" (FCG-I: 100), so that our mental experience both results materially from neuronal activity and is constituted from "a flow of events" (ibid.). A cognitive event is defined as "[a]ny cognitive occurrence of whatever degree of complexity, from firing of a single neuron to the comprehension of a complicated expression" (FCG-1: 489).

The primary conclusion that derives from above statements is that meaning, mind (or cognition), conceptualization, cognitive processing and neuronal activity cannot be separated in any absolute way. Moreover, the definition of a cognitive event invokes the physicalism by placing neuronal activity on the same continuum (of complexity) as "comprehension". This dissolves the concept of cognition, and the mention of comprehension gives rise to a question concerning the phenomenological standpoint Cognitive Grammar claims to endorse.

The dissolution of the notion of cognition is especially clear if we rephrase the definitions given above. When investigated more closely, they give away five equivalencies: i) Meaning equals conceptualization, ii) Conceptualization equals an occurrence of a cognitive event, iii) Mind equals a flow of cognitive events, iv) A flow of events equals cognitive processing, and v) A cognitive event equals both complex cognitive processes involving conscious comprehension and neuronal activity.⁴¹ It seems that Cognitive Grammar inescapably commits itself to a type of materialism according to which everything in the category of the neuronalmental is relevant to meaning.

It should be emphasized, however, that the statements above have been collected from separate parts of the theory (albeit all can be found in FCG-1), and it is highly unlikely that they are meant to form a coherent theoretical construct. It is thus the opposite that seems more realistic: a case of unintended incoherence. This incoherence can be better understood if we take a closer look at the relationship between cognitive processing and cognitive events, and if we relate them to the phenomenological aspect of meaning.

As cognitive processing lacks an explicit definition, it can only be defined *post hoc* relative to the cognitive abilities posited in the theory, the afore-mentioned equivalences, and the phenomenological/processing distinction presented above. There are two important hindrances, however.

First of all, if we subscribe to the equivalences i–v, we are saying that meaning (among other forms of thought) is constitutive of mind, rather than saying that

⁴¹ Note that the equivalence relations in i-iii are not absolute; e.g. conceptualization covers also non-linguistic processing and cognitive events are likely to include other events than those of conceptualization. Given the non-modular emphasis of CG, however, it is reasonable to posit equivalences such as those above as generalizations of the mind-meaning-relationship as in CG terms. Vice versa, to specify properties belonging to the conception of mind is to specify the nature of linguistic meaning, among other forms of thought.

meaning is a property of mind. If this equivalence between linguistic meaning and cognition is taken to its logical conclusion, the potential of non-linguistic cognition to explain linguistic phenomena is obviously lost. That is, if there is no distinction between language, or some domain of language, and cognition, any property of the latter is automatically attributed to former. This kind of reductive position would in fact make any independent, non-psychological study of language simply redundant and Cognitive Grammar itself could be dispensed with.

Indeed, for meaning to be explainable in terms of mind/cognition, it has to have some amount of ontological integrity. The problem with the above equivalences is nevertheless primarily rhetorical; meaning is defined elsewhere in Cognitive Grammar relative to *linguistic* conceptualization (FCG-1: 99). While this type of conceptualization is structured by the abilities of general cognition, it can nevertheless be demarcated as a separate category by the linguistic intentionality alone.

The second problem is more serious. The holistic operationalization of 'processing' seems to leave no room for what is 'phenomenological' about linguistic meaning. In fact, if we look at the equivalences posited above, it is hard, if not impossible, to see how experience or the phenomenological aspect of meaning would fit in the picture. The problem, which would not occur if Cognitive Grammar implemented a systematic physicalistic account of mind (cf. p. 85, fn. 37), stems from the fact that Cognitive Grammar gives cross-referential definitions for conceptualization, processing, events etc. that stand at odds with the processing/phenomenological segregation Cognitive Grammar postulates elsewhere. It thus seems that Cognitive Grammar lacks a systematic ontology of mind, and as a result, it conflates phenomena of distinct ontological categories that it has itself posited.

When justifying its mentalism, Cognitive Grammar disregards the subjective experience and restricts itself to draw explanation from the mind's material organization. Cognitive processing and cognitive events are posited as the basis of explanation for semantic phenomena, and, at the same time, the application of these terms shifts uneasily between the material and the mental levels ("firing of a single neuron" vs. "comprehension"). The posited cognitive abilities, as well as the overall descriptive procedure presented within the theory, reveal this shift to be illusory, however.

Cognitive abilities, while presented in a somewhat abstract manner, link directly to experience, not to some underlying computational or connectionist model of neuropsychological information processing, let alone to the materialism of neural activation. This includes, for example, 'focal adjustments' (FCG-1: 116–137), which in practice are equal to the dimensions of construal and hence pertain to the relationship between the experiencing subject and whatever is being experienced. In general, Cognitive Grammar makes absolutely no use of any neuropsychological or physiological models in explaining linguistic structure. The scarce references to such theories are impressionistic at best. The connections Cognitive Grammar draws between physical and mental phenomena are thus irrelevant in two respects: they do not serve the argumentative function

they have been given, and they do not have any effect on the further formation of the theory.

The reference to research and theoretization that only seemingly justify one's argument makes an obvious instance of *ignoratio elenchi*. A negative solution to such fallacy would be to deem the theory in question invalid as a whole. In the case of Cognitive Grammar, however, a positive alternative can be formulated as well. This is due to the very inconsistency of Cognitive Grammar: the physicalistic and psychologistic tendencies of the theory remain disconnected. In so being, the key terms these tendencies should be associated with, i.e. 'processing' and 'events', may be given an alternative reading that relates them to phenomenological aspects of linguistic meaning.

To be specific, the solution is to give 'processing' a descriptive or perspectival interpretation rather than an ontological one: anything that happens in the mind, including the experience of linguistic meaning, needs to obey certain general cognitive principles of organization. Processing refers to these principles. However, as these principles structure the explicit content of mind, it would be natural to consider them as the actual target of phenomenological survey; that is, what is non-thematical but thematizable within the consciously accessible activity of mind (see Zlatev 2010: 422).

This interpretation is justified by the context in which the term of processing presents itself: an analysis of pan-cognitive abilities related to conceptual and perceptual experience, and the semantic description of certain linguistic concepts (most notably the scanning of subsequent component states in processing of finite verbs phrases). What is shared by these processes is that they, in fact, pertain to principles of cognitive activity that give rise to phenomenal experience without being objects of that experience themselves. Thus, they can be incorporated in actual phenomenological analysis, as pointed out by Zlatev (2010). Moreover, they can also be combined with an ontological perspective that accepts the primacy of sociality for language as its basic tenet (these points are further developed in chapter 4).

A synthesis of the observations presented above will now be provided. The locational metonymy our discussion began with is indeed illustrative of Cognitive Grammar's argumentation, but it does not constitute a systematic ontological standpoint. First of all, the mind is the primary setting where semantics happen, regardless of the fact that the mind, in a sense, is constituted of that happening. Cognitive Grammar exploits the material basis of meaning (the neuronal workings of the brain) to justify the concentration of linguistic meaning on the individual/mental level. Second, the mutual dependence of the concepts "meaning", "conceptualization", "mind", "processing" and "event" in Cognitive Grammar demonstrates that the above materialistic stance is manifest in the theory's definition and understanding of linguistic meaning. Relative to the formulation of the equivalences i—v, meaning in Cognitive Grammar is presented in processual terms. In this sense, meaning is what mind does, and mind itself is

constituted by psychophysiological occurrences.⁴² Third, the materialistic proclamations by Cognitive Grammar are shown to be doubly irrelevant for the theory. As a form of *ignoratio elenchi*, they do not connect with the phenomenological aspect of the theory. Moreover, the concepts to which one could attribute the materialism of Cognitive Grammar can be interpreted as capturing non-thematical aspects of phenomenological meaning rather than genuine neuropsychological constants. This interpretation is intentionally favorable to Cognitive Grammar, but the very possibility of such interpretation is sufficient to demonstrate that the conception of Cognitive Grammar as a physicalistic theory is not reasonable.

3.2.2 MEANING AS CONCEPTUALIZATION

We have established that Cognitive Grammar equates linguistic meaning with conceptualization, the dynamic activation of linguistic concepts within a single representative language user. We also saw that conceptualization can be approached either from a processing or a phenomenological standpoint. The processing standpoint could be associated with the neurophysiological, i.e. material, constitution of the brain, but it is more reasonably associated with the pan-cognitive abilities that structure the phenomenal, experiential level of meaning, and thus does not constitute a separate ontological level or a link with the material level. The next question is whether the phenomenological aspect of meaning should be associated with a form of mentalism or individual-psychologism.

Given the definition of meaning as conceptualization, the answer would seem obvious. Cognitive Grammar sees language as "an integral part of cognition" (FCG-1: 12), the description of which "should articulate with what is known about cognition in general" (ibid.). Moreover, it is taken "as self-evident that meaning is a cognitive phenomenon and must eventually be analyzed as such" (ibid. 5). Individual-psychological semantics is thus in the core of theory's self-understanding. However, as Cognitive Grammar pays significant, albeit scarce, attention to the sociality of language acquisition and change, it can be questioned if this self-understanding is correct.

To answer this question, we shall scrutinize the notion of conceptualization. Since it is included in the definition of conceptualization, the notion of cognitive processing is included in the present analysis as well. The aim here is to relate it systematically to what Langacker means by "phenomenological" with regard to semantic investigation.

Cognitive Grammar defines conceptualization as an occurrence of a cognitive event that can be explicated in terms of cognitive processing. Langacker also

⁴² This definition of meaning as a process, as opposed to some static object of mind, has multiple argumentative advantages; here it suffices to mention the propagated fluidity of meaning thus defined. What unfolds through time may be altered by intervening factors, such as on-going discourse etc.

states that "Semantic structure is conceptualization tailored to the specifications of linguistic convention" (FCG-I: 99). There are three important conclusions that may be drawn from this seemingly simple statement. First of all, meaning is (a type of) an **experience** (e.g. CGBI: 31). As we will see below, the cognitive events Langacker describes do not manifest the type of "firing of a single neuron" but the "comprehension" of conceptual structure by a conscious subject. Second, meaning is a **process**. Langacker (e.g. CGBI: 30) emphasizes the dynamicity (the ability to be adjusted with regard to variable contexts) and temporality of conceptualization, and wishes to challenge the conception according to which meaning, based on conceptualization, is rigid and incompatible with an interactional point of view. Third, meaning relates experience to **convention**. Who or what would be responsible for the "tailoring" Langacker refers to in the quote above is unknown; conceptualization seems nevertheless to concern internalized vet socially defined entities and their individual interpretation. This gives away a major ontological discrepancy to which we will return in section 3.2.3.

Taken together, these points amount to meaning as an ongoing experience that accompanies the instantiation of a linguistic convention. Conventionality, intrinsically linked with the formulation of Cognitive Grammar as a usage-based model, e.g. FCG-1: 46, is emphasized throughout the theory. It is defined as "[t]he degree to which an expression conforms to the linguistic conventions of language" and as "the measure of well-formedness in Cognitive Grammar" (FCG-1: 488). In this formulation, the speech community has been given the authority over "form", which is analyzed as inseparable from meaning. The usage-basedness of Cognitive Grammar entails that the speech community, to some extent, has the authority over meaning as well. The correct usage of conceptual-semantic units in different contexts is sanctioned not by one individual but by many. In this sense, the social level could be interpreted as basis for the theory. Langacker, however, argues exactly for the opposite:

We can validly distinguish, however, between what a single speaker knows and the collective knowledge of a whole society. The former is arguably more basic, since collective knowledge consists in (or at least derives from) the knowledge of individuals, (CGBI: 30.)

[Continuing in the footnote:] Societal knowledge is also stored in books, database, the design of artifacts, and so on, but ultimately these reduce to the activity of individual minds in creating or using them. (CGBI: 30, fn. 3.)

Considering the relationship between the individual and society, Langacker sees the individual as more basic, and consequently, sees individual "knowledge" as primary, relative to social and shared knowledge. The primacy Langacker attributes to the individual is ontological, as is manifest in the predicates "consists in" or "derives from". This formulation is arguably not only simplistic – social knowledge is constituted in social practices that largely define what is known by

individuals – but it is also at odds with the usage-based nature of Cognitive Grammar.

The challenge here is that it is practically impossible to construe a usage-based grammar that does not involve a social component: if linguistic units are acquired in use, and use pertains to (typically successful) communicative acts, linguistic units are internalized as socially valid. Cognitive Grammar is therefore obliged to bridge social and cognitive aspects of language and meaning. The critical error Cognitive Grammar makes, as noted by Itkonen (1997: 51), is that the theory relates the social and cognitive aspects of language exactly in the opposite manner to what is the case in actual communication. That is, it is true that the existence of social phenomena, including linguistic ones, is dependent on the existence of a multitude of individual subjects. However, the fact that x is constitutive of y does not mean that any property of v could be described simply as the property of x (or any representative of x); the quality of y may depend on being constituted of a multiple instances of x. Thus the existence of a constitutive relationship in one direction does not imply a relationship of reducibility in the opposite direction. This relates directly to the concept of common knowledge, to which we will return in section 3.2.3.

In what seems to be an attempt to avoid this inherent discrepancy, the semantic-descriptive conduct of Cognitive Grammar is focused on the structuring principles of linguistic meaning as experienced. Conceptualization, or the mental experience of meaning, is thus about the individual grasping of meaning and the principles according to which this grasping happens.⁴³ The notion of conceptualization is not as much defined as it is elaborated in terms of the substructures of "semantic structure" (FCG-1: 97–98). Conversely, the meaning of the term "conceptualization" is determined by the systematic analysis of a variety of semantic phenomena. The open question is to what extent the actual analysis as envisaged by Cognitive Grammar is actually restricted by adopted cognitive psychological models. We may nevertheless presume that the theoretical notion of conceptualization is firmly rooted in what the analyst apprehends intuitively in a close inspection of linguistic expressions. The analyst's description, in turn, is a systematic generalization over a set of experiences and hence is presumed to be representative of the experience of any given speaker of the language in question.

One aspect of conceptualization that may help specifying the notion is its exact grammatical form: "[...] meaning is not identified with concepts but with conceptualization, the term being chosen precisely to highlight its dynamic nature" (CGBI: 30). As noted above, this is presented in the context of rebutting accusations to the effect that a conceptualist form of semantics is not able to deal

⁴³ As a technical note, according to the above explanation of "semantic structure" as a tailored form of conceptualization, Cognitive Grammar leaves room for two types of conceptualization: general (a) and linguistic (b). I assume the latter to be a subtype of the former so that b has all the properties of a but not vice versa. It is b, therefore, on which I will concentrate. I will also assume that by conceptualization Langacker specifically refers to its linguistic realization, if not otherwise stated. Furthermore, note that this dual nature of conceptualization is in concord with Nuyts' (2002: 434–437) separation between conceptual and linguistic meaning, discussed earlier in chapter 2.3.2.

with the demands of flexibility in actual interaction. Resorting to a nominalization is hardly a sufficient counter-criticism by its own right. Cognitive Grammar's descriptive procedure, however, provides the rhetorical move with actual substance.

First of all, the linear order of an expression is shown to be significant variable in the semantic-grammatical organization of complex sentences. Word order and constructional order are associated systematic semantic correlates, which may be hypothesized to reveal underlying constants of linguistic online processing. Second, semantic concepts that capture these order-related phenomena are suggested to be applicable to various discourse-level phenomena (see e.g. chapter 13, "Discourse", in CGBI: 457–499). Given the non-modular approach to cognition, this applicability is rather unsurprising. The result may nevertheless be taken as indicative of linguistic phenomena that pertain to different levels of complexity being processed in somewhat uniform manner.

The dynamicity the term "conceptualization" attributes to the mental experience seems to be more important, however. Langacker continues to define the scope of the term in the following passage:

Conceptualization is broadly defined to encompass any facet of mental experience. It is understood as subsuming (1) both novel and established conceptions; (1) [sic] not just "intellectual" notions, but sensory, motor, and emotive experience as well; (3) apprehension of the physical, linguistic, social, and cultural context; and (4) conceptions that develop and unfold processing time (rather than being simultaneously manifested). (CGBI: 30.)

In the context of Cognitive Grammar, the items 1–3 that conceptualization "subsumes" are to be taken as possible sources for semantic content, and item 4 consists of the possible modes of activation for semantic content (processing). In what follows, the notion of conceptualization is characterized as a whole.

Ultimately, conceptualization resides in cognitive processing. Having a certain mental experience resides in the occurrence of a certain kind of neurological activity. [...] As neurological activity, conceptualization has a temporal dimension. Even the simplest conception requires some span of time for its occurrence, and with a more elaborate conception its temporal progression is subject to awareness. (CGBI: 31.)

In the excerpt, Cognitive Grammar once more conflates between distinct aspects of cognitive organization: processing, neurological activity, and awareness. It should be noted, however, that the main point of the excerpt is to establish conceptualization as actual occurrences of mental activity, whatever the character of the said activity.

If meaning is associated with actual occurrences, as opposed to a generalization over such occurrences, what is required next is a more specific description of what an occurrence consists of. Regrettably, Cognitive Grammar is

in the habit of relating an occurrence of meaning with neuronal activity (e.g. CGBI: 32). Such reference to neurology would require and additional explanation of the significance of neuronal activity for linguistic theoretization. These kind of explanations, however, are either extremely vacuous or lacking entirely.

This does not prevent Cognitive Grammar from being partial *vis-à-vis* different processing theories. To be specific, it is stated that "Cognitive Linguists are more inclined to imagistic accounts" (ibid.), i.e. theories that assume analogical or simulative processing mechanisms. This view is claimed to be more advantageous for reflecting the nature of mental experience more directly (ibid. 33). The stance Cognitive Grammar assumes may be called an experiential or phenomenological argument: phenomenological appearance of meaning is taken as favoring a specific conception of processing. This is an interesting point in two ways.

First of all, the experiential argument in question is a weak argument, as is shown by the amount of controversy related to the neuropsychological function of imagery (to which we will return in section 3.3.1). What appears in or to our consciousness cannot be, as such, taken as a proof of existence for any particular mode of processing. Albeit researchers supporting the functional (contra epiphenomenal) nature of mental images claim that there is a direct causal link between phenomenology and an underlying type of information processing, they maintain that to achieve this conclusion one has to combine independent empirical evidence from both the phenomenological and the processing level (see e.g. Kosslyn et al. 2006: 48). Second, by showing preference for the so-called pictorialist (i.e. "imagistic") paradigm of visual processing, Cognitive Grammar associates conceptualization with a non-conscious level of conceptual organization in a way that is reminiscent of the physicalist tendencies discussed above. Albeit the domain to which the conceptualization is attributed is different, the criticism presented above still holds. Even if one would reject linguistic meaning based on individual cognition, what remains relevant for the sociality of semantics is consciousness, which is the necessary context of meanings are being grasped and conventions being internalized and put in use.

The allusions to mental imagery Cognitive Grammar makes in the description of conceptualization remain shallow, which is true for other cognitive or neuropsychological theoretical resources as well. In other words, scrutinizing "conceptualization" does not help to specify in what way "cognitive abilities" are derived from, or relate to, the pre-existing psychological theories. The formulation of cognitive abilities can thus only be regarded as a condense expression of the type of psychologism Cognitive Grammar advocates.

However, the problematic notion of processing, as considered in section 3.2.1, threatens to separate conceptualization from the direct, conscious experience of meaning to underlying neuropsychological mechanisms. This again threatens to make the concept incoherent as a whole. As I suggested, processing should first and foremost be associated with the non-thematical structural principles that govern different phenomenal experiences. Furthermore, there is an explanatory divide between "non-thematic" structures of consciously grasped meanings, which make the field of enquiry for the most of perceptually and conceptually

oriented cognitive-psychological models CG exploits, and neuropsychological mechanisms of information processing, such as the imagistic accounts by Kosslyn (1980) and Shepard (1978). The latter differ from the *neurophysiological* models in that they aim to explain the neuronal basis of the mind's functioning as opposed to that of the brain alone. However, their primary objective is not to explain conscious experience, let alone conscious comprehension of social conventions. It is thus on Cognitive Grammar's responsibility to explain the relevance of these accounts for linguistic theoretization.

Cognitive Grammar's recourse to neuropsychological research, however, manifests a lack of self-understanding relative to its level of analysis rather than an ill-devised analysis *per se*. Since the so-called cognitive abilities seem to elaborate non-thematic structures and principles of consciously accessible experience, there exists inconsistency between the argumentation and the sources of theoretical influence the argumentation is based on. Elsewhere, Cognitive Grammar discusses models that consider primarily or exclusively conceptual operations (e.g. Roschian category theory, Gestalt psychology, and conceptual semantics by Miller and Johnson-Laird, 1976). It is thus peculiar that these models are not explicitly considered in the definitions of cognitive abilities or conceptualization.

In so being, the take on semantics that Cognitive Grammar presents is hardly clarified by equating meaning with conceptualization. On the contrary, the ambiguous nature of conceptualization serves to illustrate how the different levels of mind/brain organization are systematically conflated by the theory. A task in which the notion of conceptualization succeeds is the specification of meaning as actual occurrences of mental activity. This specification, however, demands for an explanation of how individual activity may be associated with socially shared meanings. The lack of a systematic account in this respect leaves Cognitive Grammar vulnerable to criticisms of mentalism or individual-psychologism. Such line of criticism is discussed in what follows.

3.2.3 ONTOLOGICAL CRITICISM

The single most articulate criticism against conception of meaning in Cognitive Grammar is levelled by Itkonen (1997, 2008b, forthcoming). In particular, Itkonen's criticism concerns the concept of imagery and its function in the overall theory. Itkonen's critique includes three distinct but interrelated points (the formulations here are my own):

- i) Linguistic meaning has to be (primarily) social rather than mental. To enable communication and make it sensible, meanings need to be normative in the sense of being socially conventionalized. Regardless of any idiosyncrasies in individual representations of meaning, the non-idiosyncratic shared forms of meaning make the primary level of semantic analysis.
- ii) The distinction between the mental and social aspects of meaning as research objects corresponds to the distinction between the

methodologies of psycholinguistics and "autonomous" linguistics, respectively. The latter studies language as it appears through usage and the linguistic intuition of the researcher. The properties of meaning that Cognitive Grammar claims to scrutinize belong under the scope of psycholinguistics (characterized by the method of introspection) rather than to the scope of autonomous linguistics.

iii) The analytical concepts that Cognitive Grammar presents, that is, the dimensions of imagery (construal), grasp properties of meaning that belong to the social rather than the mental level. There is, in other words, a discrepancy between the theoretical claims and actual descriptive procedure conducted by Cognitive Grammar.

The three points Itkonen raises are well justified: any sufficient theoretical grammar needs to be able to account for the inherent sharedness of meaning, and Cognitive Grammar does not present a serious attempt at this task. The main point, however, is that the lack of attempt results not in coherent but in inconsistent reductionism. Consequently, the discrepancy to which Itkonen's third (iii) point refers is commensurate with the inconsistency detected in Cognitive Grammar's allusions to neurophysiology and neuropsychology, discussed in the preceding section. While the discussion above concerned mainly with the confusion between the levels of cognitive organization, this confusion was also shown to concern the question whether the analytical apparatus of Cognitive Grammar was consistent and capable of accounting for consciously accessed public meanings.

What has to be kept in mind here is that the distinction between social and mental does not equal dissociation; as Itkonen himself notes, "[...] the former is constructed out of (an indefinite number of instances of) the latter" (1997: 51). In fact, the focus of Itkonen's criticism against Cognitive Grammar is not the neglect of the social *per se* but the neglect of how the social and mental are intrinsically and elementally bound together. Itkonen (ibid.) obviously accepts that individual minds are requisite for any conventionalized linguistic meaning ever to occur. In so being, the non-linguistic qualities of cognition, despite that they are hard to delineate reliably, may also be accepted *a priori* as conditions that define the character of linguistic meaning as well. They do not do so in any absolute manner, however: the primary criterion for linguistic meaning is how a linguistic sign is used, and the valid usage is always defined socially.

The conclusion must be that psychological and social phenomena need both be included in description of meaning, albeit they show different functions *vis-à-vis* semantic description. While social phenomena provide meanings with definition proper (meanings reside in the ontological realm that gives them their distinctive character), psychological phenomena provide meanings with non-distinctive properties (i.e. those that are shared by linguistic and non-linguistic thought). This, however, is not a conclusion Itkonen seems willing to draw, at least explicitly. Rather, the dimensions of imagery are presented by Itkonen as an incoherent notion that fails to adequately describe the semantic phenomena it is applied to. This conclusion is considered, in the present perspective, unduly

harsh. To see why, more detailed depiction of Itkonen's formulation of social ontology must be provided.

Itkonen's (1997) analysis starts with a short historical introduction to the philosophy of meaning, with his focus on Frege's (1949 [1892]) separation between a linguistic sign and an image. Frege defines the meaning of a sign in negative terms relative to (mental) image that a subject may associate with the sign. According to Frege

The image is subjective; the image of one person is not that of another [...] The image thereby differs essentially from the connotation of a sign, which latter may well be common property of many and is therefore not part or mode of the single person's mind [...]. (Frege 1949 [1892] 87–88.)

The excerpt manifests – although indirectly – three distinct ontological realms according to which Frege structures his philosophy of meaning: i) the *outer*, i.e. physical, ii) the *inner*, i.e. mental, and iii) the *third realm*, realm of thoughts. This partition is analogous to that of Popper (1972), as noted by Itkonen himself. Both Popper and Frege's objective is the definition of objective knowledge; considering Frege's work as a logician, this stems clearly from his aspiration to rebut psychologism and, by doing so, to free logic from the concept of intuition (see Baker & Hacker 1984).

Suffice it to say, Frege's *inner realm*, includes classical psychological entities such as mental representations, memories, and images; whereas the 'thoughts' included in the *third realm* are objective, logical, and socially valid. For instance, two subjects may be asked to evoke a mental picture in which *the bat is on the mat*. While the two images evoked are distinctly idiosyncratic, the thought of *the bat being on the mat* as a logical relation of two objects that pertain to the material world is shared by the two subjects. The third realm is inherently vulnerable to the questioning of how individual minds may entertain thoughts that are not individual. Linguistically, however, one does not need to enter this line of reasoning; the objectivity of the third realm may be reinterpreted or naturalized as a logical consequence of the fact that the realm's contents are established in shared activities. If this interpretation is accepted, the third realm can be re-defined as the category of social entities. Naturally, the most apparent body of knowledge that can be described as social-objective in this sense is provided by language, which is the main argument of Itkonen (1997).

As a rough approximation, Itkonen's position may be seen as a favorable linguistic reinterpretation of that of Frege. The social realm (or "level" in Itkonen's wording) is presumed by those properties of linguistic meaning that cannot be reduced to, or derived from, the first two of realms. Moreover, as these properties are not reducible or derivative, they can be reasonably analyzed as definitive. Hence, meanings are primarily social in this conceptual framework.

According to Itkonen, this non-reducible social ontology of meaning is opposed to the reductionism of prominent cognitivists (e.g. Johnson 1987) as well as generativists (e.g. Jackendoff 1992). Itkonen' critique is levelled accordingly at

the weaknesses that both the representative cognitive and generative accounts share.

The general weakness of these theories, according to Itkonen (1997) is the ignorance concerning both the social ontology of language and well-known philosophical formulations of social ontology. Namely, "social" is falsely interpreted by the linguists in question as referring to universal truths of Platonic variety and detached from the physical and psychological constitution of actual social phenomena, such as language. In so being, any attempts to describe language as a social phenomenon are dismissed out of hand.

What is manifest in such position is the inability to appreciate the constitutive relation between the social and mental realm, namely that "the former is *constructed* out of (an indefinite number of instances of) the latter" (Itkonen 1997: 51), as already cited above. The dismissal of sociality altogether, then, is a logical extension of the inability to see its interconnectedness with the individual psyche. When sociality is treated separately from its mental (and physical) constitution, the Platonic misinterpretation of the notion becomes understandable – yet peculiar for a philosopher of language such as Johnson.

Johnson (1987: xxx) nevertheless suggests a detached view of the social realm, speaking of it as "this strange third realm" which "Frege he needed [...] to insure the objectivity of meaning and the universal character of mathematics and logic". A similar position is attributed by Itkonen to Jackendoff, who associates Frege's conception of meaning as a publically available entity with a conception of language as "independent of language users" (Jackendoff 1992: 26–27).

As is pointed out by Itkonen (1997), Jackendoff's assumption that "public" equals "independent" (of language users) unveils a reductionist reasoning in which only mental and physical levels are posited. Under this assumption, an entity not reducible to these two levels may only be interpreted as an artificial construct. Interestingly, as Itkonen notes, this is the interpretation Jackendoff (1992) offers for Chomsky's (e.g. 1986) E-language.

Whatever the details, the major similarity between the positions of Johnson and Jackendoff is strikingly clear: the social, in the sense associated with Frege's account, is detached from its physical and mental bases, separated from cognizant subjects, and essentially labelled either non-existent or irrelevant. The question is whether this view of the social level may be attributed to Cognitive Grammar as well.

As we have seen in sections 3.2.1–3.2.2, the ontological statements (or the statements analyzed as such) of Cognitive Grammar promote mentalism, albeit in a somewhat incoherent manner: meaning is defined as conceptualization, which is defined both in phenomenological and processing terms. This emphasis, however, does not automatically correspond to the aforementioned double neglect of the social level.

Langacker, in fact, goes to great lengths to mediate between "distributionism" (CGBI: 29, used as synonym for externalism) and mentalism. According to Cognitive Grammar, both the social and the individual level are real, and their relevance depends on the linguistic phenomena that are being scrutinized (e.g. CGBI: 30). The individual's linguistic knowledge is explained with reference to

the knowledge of many: "An individual's notion of what an expression means develops through communicative interaction and includes an assessment of its degree of conventionality in the speech community" (ibid.). Langacker also addresses the constitutive relation between the plurality of subjects and the social level in a way reminiscent of that of Itkonen.

What separates Langacker's position from that of Itkonen, however, is the question of primacy between the two levels, namely, primacy with regard to language and linguistic meaning. As noted, Itkonen maintains that language is primarily social for so are all distinctively linguistic phenomena. Langacker, in turn, argues exactly for the opposite: meanings are constituted by use and they are distributed across speech communities, but they are primarily defined relative to their phenomenological and cognitive status for individual subject.⁴⁴ Hence, unlike Johnson and Jackendoff, Langacker does not dismiss sociality of language altogether but simply considers it a lesser priority.

Whether this contrast has any significant manifestations in the descriptive apparatus of Cognitive Grammar is a distinct matter. To answer this question, we must return to Itkonen's argumentation and concern the analytical character of the dimensions of construal.

Once Itkonen has explicated the reasons for the irreducibility of the social ontology of linguistic meaning, he proceeds to present his specific formulation of social ontology with reference to the concept of 'common knowledge'. The definition requires necessarily three levels (Itkonen 1997: 55):

A knows x A knows that B knows x A knows that B knows that A knows x

This three-level model is easily demonstrated to be a necessary condition for meaningful social action and interaction. Itkonen's eccentric example illustrates that institutional interaction wouldn't be possible if we weren't as aware of the sharedness of the given convention (level 2) and of the other's awareness of the sharedness of the convention (level 3), as we are of the convention itself:

For instance, the only reason why, when approaching a bank teller, I do not start shouting "I know what to do, you don't have to tell me!", is that I possess the relevant three-level knowledge: I know that the clerk knows that I know what to do. (Itkonen 1997: 55.)

In short, social ontology does not just contain knowledge that presents itself, by some accident, as the same from one individual to another; rather, it manifests as three-leveled knowledge that is acquired through social encounters where it is observed to be same to a multitude of individuals.

⁴⁴ See also the terms "entrenchment" and "conventionalization" which in CG refer to the establishment of linguistic units in the levels of subjects and communities, respectively, e.g. CGBI: 21 n.13.)

Itkonen's point is that linguistic meaning has to assume the form of common knowledge: the meaningfulness of interaction comes from the supposition that

A knows that x means 'x'
A knows that B knows that x means 'x'
A knows that B knows that A knows that x means 'x'.

Regardless of possible idiosyncrasies of interpretation (e.g. mental imagery), the form of shared meaning as explicated in these three levels is what makes linguistic communication possible. Even if I utter x only to find out that my fellow interlocutor does not understand me, my attempt has been based on these levels of knowledge and the fact that they are tied to an institution (the linguistic praxis in a speech community) that guarantees their validity.

Social meaning is further defined as the primary semantic target of (autonomous) linguistics as opposed to psycholinguistics, the latter of which studies the mental aspects of meaning as well as the mental being of language in general. The final chapter of Itkonen's paper (1997) then addresses several examples of the division of labor between linguistics and psycholinguistics, and provides further arguments of the division. Our concern, however, is the analysis Itkonen offers of the dimensions of imagery and the role of mental images in linguistic explanation.

In subsection B of the final chapter ("Situations vs. mental images of situations", Itkonen 1997: 68–69), Itkonen criticizes cognitive linguistics for the way it exploits pictorial diagrams in semantic description. More specifically, these are visual diagrams that often depict visual or spatial settings. The images, according to Itkonen, are meant in CL to depict corresponding mental entities (the example is from Langacker 1991/CIS: 28). However, what a picture does by definition is that it depicts some entity or setting by way of reproducing certain of its visual properties in a way that is shared by many. Thus, pictures that are meant to be representations of mental entities are ambiguous in that they exploit conventions of explicit pictorial representations, but are controversial as hypothetical mental entities. In this, their usage reflects the more general tendency of cognitive linguistics to conflate the subjective–mental and the objective–social.

In the title of subsection C, Itkonen states abruptly that "[t]he 'dimensions of imagery as linguistically coded are not (primarily) psychological" (Itkonen 1997: 69). Itkonen discusses the five dimensions of imagery presented by Langacker (CIS: 5–12) and chooses two of them, salience and perspective, for closer inspection. Salience is discussed relative to the choice of preposition and word order in the construction of sentences that include prepositional phrases. Consider, for instance, the reverse constructions *the lamp is above the table* vs. *the table is below the lamp*. Here, the subjects (*lamp* and *table*, respectively), or in the terminology of Cognitive Grammar, trajectors, are analyzed as exhibiting maximal salience, so that the sentence structure represents the underlying mental accentuation of the items in question. Itkonen states that Cognitive Grammar does not in fact describe "some individual-psychological or cognitive

entity which lies under the level of consciousness" but merely depicts a semantic property, which is directly observable and a part of the "socially valid" meanings the expressions in question. This analysis is extended to other dimensions of imagery as well (Itkonen 1997: 70).

In other words, Itkonen denies the primarily cognitive status of the dimensions of imagery and reinterprets their content as primarily social. This, obviously, is not to deny their relevance for linguistic analysis but exactly the opposite is true. Inasmuch as an analytical concept captures a valid generalization over multiple uses of a semantic unit, it can be considered a feasible concept, despite the generalized meaning is of non-objective or perspectival character.

This view is in concord with the argument to be developed below that the imagery embedded in "the dimensions in imagery" is of an organizational type, a set of general, publicly observable properties of linguistic meaning. These properties need be strictly opposed to any modality-specific processes of mental simulation. However, albeit Cognitive Grammar has recently (e.g. CGBI) shifted the argumentation behind the dimensions toward an organizational stance, as is suggested by the change from the title "dimensions of imagery" to the title "dimensions of construal", the original justification for positing the dimensions is closely associated with an assumption that there exists strong parallels between perceptual experience and linguistic meaning. Itkonen's further analysis of mental images in linguistic explanation is therefore relevant for the analysis of the dimensions as well.

In subsections D to F Itkonen (1997) discusses the relation of images (in the Cognitive Linguistic literature in general) to consciousness, the necessary interpretation of images, whether mental or extramental, and the relevance of mental (visual) images for cognitive semantics. In subsection D (ibid. 70–71) in particular, Itkonen points out a discrepancy, common in Cognitive Linguistics and especially manifest in Lakoff (1987: 446–453) which prevails between the interest toward unconscious, automatic aspects of cognition, and the phenomena that are actually described. Itkonen states that the "conventional images" both Lakoff (ibid.) and Langacker (CIS: 61) claim to study are in fact available to conscious inspection.

This argument links Itkonen's criticism to the above discussion on "processing" in relation to neurophysiology (the alleged physicalism of Cognitive Grammar, chap. 3.2.1) and neuropsychology (the definition of meaning as conceptualization, chap. 3.2.2). We have seen that the cognitive abilities Langacker associates with processing are not in any way derived from, or reduced to, neuronal activation or neuropsychological information processing *per se*; instead, they are logically necessary minimum requirements for a coherent conception or perception to occur. The (very reasonable) hypothesis by Cognitive Grammar is that there prevails isomorphism between conceptual and perceptual domains that is (to some extent) constituted through cross-domain reapplication of certain processing principles. However, were this reapplication simulative in nature or not, the isomorphism, such as construal, amounts to shared abstract parameters of content in two domains, not to some similarity of the content itself. Construal, in brief, does not pertain to a mental image in any pictorial sense.

In an analogous manner, Itkonen separates the notion of (presumably non-linguistic) "conventional imagery" from the linguistic "dimensions of imagery", and states that the former are not social in any "normative sense". This dictum does not take into account the possible functional dissociation between experienced imagery and imagery-based information processing, but it nevertheless corresponds to the shown discrepancy between what Cognitive Grammar claims to study (underlying cognitive mechanisms) and what it actually describes (conventional linguistic meaning).⁴⁵ This is also in line with Frege (see above), in separating mental images from meaning.

In subsection E, Itkonen (1997: 71–72) discusses the philosophical implications of explaining meaning relative to images, with appropriate reference to Wittgenstein (1953: 54 = 2009 [1953]: 60). Itkonen repeats Wittgenstein's (ibid.) dictum that an image as an uninterpreted object is not capable of conveying meaning. It is only through "rules of interpretation", established conventions that are grounded in our social normative being that we may map meaning onto images. This is presented by Itkonen as antithetical not only to a large part of the western philosophical tradition "[e]ver since Aristotle and Plato" (ibid. 71), but also possibly to Langacker. Indeed, according to Jackendoff (1996: 110), mental pictures seem to be self-explanatory to Langacker. Itkonen (1997: 72) finds an analogy between Wittgenstein and Putnam (1981: 18) to whom something mental "intrinsically" referring to things is "wrongheaded"; to Putnam, something referring to something is a concept, which again is functionally defined as (a sign) being used in a specific manner.

Finally, in subsection F, Itkonen evaluates critically the significance of mental imagery research for cognitive linguistics. Itkonen states that the argument against the intrinsic meaningfulness of images applies directly to mental imagery, and that some rules of interpretation are necessary if the psychological findings on the matter are to be proven linguistically relevant. It is reasonable to assume that, even in this case, it is relevance for psycholinguistics that Itkonen refers to.

Let us now consider the implications of Itkonen's analysis for construal at large. First of all, the formulation of common knowledge by Itkonen is both correct and relevant for construal. The three-leveled model of common knowledge is intrinsically required by the sheer possibility of meaningful linguistic communication; the fact that it is three-level logically presumes its sharedness, and it therefore cannot be reduced to the capability or property of a single individual.

Second, Itkonen correctly points to the fact that Cognitive Grammar presumes the primacy of individual's grasp of meaning vis-à-vis the social reality of communication. Even though the significance of the speech community is acknowledged in the acquisition and change of linguistic units, the main context of meaning is the individual mind.

105

⁴⁵ As Kosslyn (1994: 6) points out, the academic debate on mental imagery as a possible format of information processing has never been primarily concerned with the pure phenomenological character of imagery. However, the conscious experience of imagery has had a somewhat ambiguous role in the debate, as is discussed below.

Third, the second point would not be problematic if Cognitive Grammar would acknowledge that, while it is concentrating on semantic phenomena, it is dealing with internalized social/normative meanings. As this requirement is not met, Cognitive Grammar fails to distinguish genuinely linguistic from idiosyncrasies of linguistic interpretation, e.g. the possible mental imagery entertained by a subject.

Accordingly, Cognitive Grammar is unable to distinguish methodologically between intuition and introspection in linguistic analysis. Albeit methodology is not the central concern here, the distinction between introspection and intuition is of fundamental importance for the definition of construal. To be exact, Itkonen (1981: 127–128) establishes three main categories of cognitive acts on the basis of their object: observation, which is directed *via* the senses into intersubjectively shared spatiotemporal reality; introspection, which is directed to "the subjective sensations caused mainly, but not exclusively, by spatiotemporal things and events" (ibid. 128); and intuition, which "pertains to concepts or rules existing in an intersubjective normative reality" (ibid.). Linguistic meanings, as objects of common knowledge, are then by definition objects of intuition (Itkonen 1997: 63), whereas the mental content these meanings evoke, such as images and biographical associations, are objects of introspection.

It is obvious that default linguistic behavior does not build on explicit self-analysis of what in our communicative understanding concerns socially shared meanings and of what pertains to our psychological experience. The division between introspection and intuition nevertheless holds *a priori*: any sensible attempt at linguistic communication conforms to the criterion that deems unshared meaning to be unfit for use. Conversely, any successful communication in terms of a novel linguistic sign deems the previously un-shared meaning now valid. It is therefore a category error (that Cognitive Grammar openly submits) to associate public meanings and their analysis (which are valid as long as we as readers agree with them) with introspective method and facts about psychological experience *per se*.

Category of linguistic meaning is therefore in large part defined by the cognitive act of intuition that correlates with objectively valid conceptions. The immediate linguistic implication is that the dimensions of imagery/construal need to be separated from any form of mental imagery, whether evoked consciously or applied as functional representations in cognitive processing.

The separation between linguistic "imagery" (construal) and mental depictions may now be stated as a logical extension of the more general separation between linguistic and mental domains (see pp. 96). As mentioned, this separation does not pertain to absolute dissociation between the two levels. As the multiple instances of mental or cognitive are constitutive of social, there is a necessary non-absolute relationship of definition between the former and the latter. Now, the conclusion that Itkonen draws on the mental imagery is that it is irrelevant for linguistic considerations. The stance I adopt here is more cautious. To be specific, the necessity of rules of interpretation in understanding pictorial representations, or in entertaining and interpreting mental imagery, does not entail that ability to evoke mental images, or analogic representations in general,

could not have any role in semantic description. Meaning cannot be equated with mental representations, but the latter may nevertheless carry specified function in how meanings actualize and evolve in communication.

It is clear that Itkonen's account of Cognitive Grammar pertains to the rehabilitation of the dimensions of imagery as a linguistic constructs, not to their dismissal. As conceptually separated both from phenomenological and processing aspects of mental imagery, linguistic imagery remains to be explained and rooted relative to social ontology. However, this does not equal the separation of the dimensions of construal from individual experience. The actual challenge is to describe the codification of experiential (including subjective) properties into linguistic meaning without falling prey to mentalism.

Paradoxically, overcoming this challenge may require systematic investigation into those properties of cognition that are necessary for occurrence of linguistic meaning for a representative subject. That is, also a valid social semantics appears to include experiential and conceptual facets of meaning, such as those captured by the dimensions of construal. If we are willing to move from inclusion toward explanation, we must investigate what aspects of cognition are necessary for the explanation of each experiential and conceptual facet. Moreover, these cognitive aspects need be subjected to analysis with regard to the social context of actual use: otherwise the result will be no more realistic than the mentalistic models already in existence.

Still, it is an open question, whether the mentalism manifest in Cognitive Grammar allows any coherent synthesis between individual-psychological and social standpoints. Itkonen most clearly answers in negative, although the strict division he makes between psychological and social may prevent such synthesis altogether. It is nevertheless apparent that, before any attempt to integrate Cognitive Grammar with a socially based semantics, Cognitive Grammar's conception of linguistically relevant aspects of cognition needs to be clarified. As Cognitive Grammar makes repeated reference to notion of imagery in explanation of experiential semantics, it is this concept that we need to scrutinize next.

3.3 IMAGERY AND CONSTRUAL

We have seen above that Itkonen, in agreement with Frege (1949 [1892]) and Wittgenstein (2009 [1953]), and in accordance with Popper's (1972) ontology of three worlds, distinguishes between social linguistic meaning and the individual imagery that may be associated with different linguistic senses. Moreover, this distinction motivates also the distinction between two kinds of imagery in Cognitive Grammar: "conventional imagery" which is simply a metaphor for the overall semantic superstructure of language, and mental imagery, which is evoked to justify the former. Langacker's vague notion of cognition and especially his notion of imagery seems to prevent him from applying this dichotomy: linguistic imagery is described in mentalistic terms and is therefore difficult to separate from what is a modality-specific activation of mental imagery.

As already mentioned, the present account agrees with Itkonen, and thus disagrees with Langacker, on the general ontological question of the mental/linguistic dichotomy: linguistic meaning is considered to be primarily social. It has also been argued that the same mental/linguistic dichotomy can and should be applied to the two distinct senses Cognitive Grammar attributes to imagery. Even with this ontological dichotomy, however, the mutual interaction of mental and linguistic imagery is not precluded entirely. It is the possibility of interaction that will be explored in the subsequent pages.

Unfortunately, Cognitive Grammar does not succeed in giving a credible account of this relationship between the two kinds of "imageries", but only implies some interaction between the two. In this section, I will clarify this relationship and consider its significance for semantic description in Cognitive Grammar. Section 3.3.1 offers a brief excursion into mental imagery and its position in neuroscience. Section 3.3.2 discusses the notion of mental imagery in Cognitive Grammar and how this notion is related to mental imagery research (e.g. Kosslyn 1994, Kosslyn et al. 2006) and the related theoretization on "mental simulation" (Barsalou et al. 1993; Barsalou 1999). In section 3.3.3, I will scrutinize the argumentative and ontological relationship of linguistic and mental imagery in Cognitive Grammar and discuss the apparent weaknesses in the analysis that tries to establish a causal link between these two. Section 3.3.4 will offer a positive account of how the concept of linguistic imagery, i.e. construal, should be analyzed as reflecting conscious experience (and hence related but not reducible to perception) but also the determination of semantics through interactional and normative aspects of language use. This is not only compatible with but can be predicted from a social ontology of linguistic meaning.

3.3.1 THE IMAGERY DEBATE

The following is not meant to be an exhaustive historical description of the imagery debate in cognitive science but rather a brief excursion to facilitate later discussion of its implications for linguistics (for a detailed view of the debate, see Tve 1991; see also Kosslvn 1994; 1–21; Kosslvn et al. 2006; 3–23; Pvlvshvn 2001. 2002). Keeping this brief is challenging for historical reasons; the idea that information presents itself in the mind as mental pictures is age-old, reaching back to Plato (the wax tablet -metaphor) and Aristotle's cognitive theory (the concept of "phantasma"). Modern western philosophy (starting from Descartes's distinction between ideas and images in Meditations, 1641) and the forefathers of scientific psychology, Wundt and James, devoted much attention to understanding the role of imagery in epistemology and mental function (see e.g. James 1950 [1890]; Wundt 2007 [1912]). After being institutionalized, however, empirical psychology soon parted ways with the philosophical tradition of scrutinizing mental experience. In order to establish psychology as a genuine science, Behaviorism developed its empirical-methodological purism into extreme, devoted itself to the systematic taxonomy of stimulus-response pairings and refuted the mental experience as too evasive for a scientific object.

In retrospect, it is obvious that this disregard of the mind was not to last. The advent of modern cognitive science, driven by the needs of military, brought about the focus on cognitive competence.⁴⁶ The new paradigm was largely guided by two main objectives: development of an artificial intelligence and control of the factors that contribute to the cognitive performance of soldiers. that is, by what exact means would the combination of hardware (computer/brain) and software (program / cognitive system) turn the input into the desired output most efficiently.

The immense subvention of, and subsequent rapid advance in, computer science contributed to the overall orientation of the cognitive paradigm as a whole: the computational theory of mind (Putnam 1980 [1961]) likened mind, as the title suggests, to a computer operating on abstract symbols. In this context, it was natural for the new cognitive psychology to concentrate on sub-personal information processing and to approach this from a computational perspective. This, however, was not all there was to the psychology of that era, and within cognitive psychology there was opposition to the "normal" paradigm. Cognitive psychology had reintroduced the notion of representation to psychological description but was treating it as a relational unit for a subpersonal processing system. A contrasting perspective to mental representations was provided by Paivio (1971), who introduced his influential dual-coding theory of learning, based on organizing, storing and retrieving information in the mind's two, mutually supporting codes, the visual and verbal. The imagery debate, however, started when the work of early "imagists" took the focus from visualizing as an aid for learning to the actual nature of the mental images as such (Pylyshyn 2001).

To be exact, the starting point for the debate was Pylyshyn's (1973) famous critique of mental imagery as a theoretical construct, which also presented a sketch for a propositional theory of mind. His proposal was that mind, including imaged objects, was best described as working on descriptional, propositional strings of symbols rather than actual mental pictures (for a comprehensive presentation of a propositional theory of vision, see Pylyshyn 2003). Kosslyn and Pomerantz (1977) marked the establishment of the pictiorialist camp by providing a model of how visual information may be instantiated in the brain by topographically organized visual areas and how information can be provided by a format that is based on spatial relations. There would, in other words, be at least one distinct cognitive format that would reserve the modality-specific nature of information from a distinct modal source. Moreover, there would be a format of information processing that would be accurately reflected by the phenomenal experience that it produces.

The debate evolved around this correspondence between the experience of images and their cognitive-psychological function, which was defended by pictorialists and attacked by descriptionalists. The debate, however, focused from

⁴⁶ The concept of linguistic competence was made famous by Chomsky's Aspects of the Theory of Syntax (1965). However, it is Chomsky's earlier (1959) stark criticism of Skinner's Verbal Behavior (Skinner 1957) that is often considered as the starting point for the decline of behaviorism and the opening salvo for the so-called cognitive revolution.

the start on a host of questions pertaining to optimal processing, the explanatory role of images, and the very conceptual feasibility of positing image-like structures in the mind. Until today, the debate has witnessed multiple changes of focus, which accompany the rapid development of neuroimaging, but it is questionable whether this empirical advance has resulted in any substantive conceptual resolution concerning the main points of dispute. These, as listed by Pylyshyn (2001), include:

- A disagreement about whether the form of representation underlying mental imagery is in some way special, and if so, in what way it is special – whether it is special because it uses distinct mechanisms specific to imagery or whether it is special because it deals with information about how things look (i.e., because of what imaginal representations are about or their subject matter);
- a disagreement about whether images are "depictive" or "descriptive";
- a disagreement about whether or not mental imagery "involves the visual system," which itself raises the question of what exactly is the visual system and in what way it may be involved;
- a disagreement about whether certain phenomena observed during episodes of mental imagery are due to the fact that the brain evolved in a particular way resulting in a "natural harmony" between the way things unfold in one's imagination and the way they unfold in the world or in one's perception of the world (what Shepard, 1975, has called "second order isomorphism");
- A disagreement about whether some of the phenomena observed during episodes of mental imagery arise because (1) people are reasoning from what they know about the situation being imagined, and are simulating what they believe would have happened if a real event were being observed, or because (2) special image-specific mechanisms are deployed when one reasons using mental images. (Pylyshyn 2001: 62.)

The "phenomena observed during episodes of mental imagery" involve behavioral, phenomenal and physiological analogs between imagery and actual perceptual experience; e.g. temporal differences in image rotating tasks that are dependent on the required amount of rotation (e.g. Shepard and Metzler 1971), "scanning" of mental images with temporal differences that correspond to the distance scanned (e.g. Kosslyn 1973; Kosslyn et al. 1978) and activation of brain areas devoted to perceptual processing in imagery tasks (see Kosslyn 1994: 12–20 for a summary).

This last type of evidence has become increasingly topical in the later history of the debate. In his 1994 monograph, which summarizes the different stages of the dispute, Kosslyn considers the imagery debate to remain unsolved, but he also claims that it has moved to a third stage. In this stage, data from neuroimaging

help the scholars to answer the conceptual questions about imagery, an aspect that is highly interesting in multiple respects.

First of all, pictorialists have steadfastly maintained that the depictive conception of representations is not dependent on the physical arrangement of the neuronal network that is responsible for imagery processing; instead, what has been posited is a so-called functional space, the parts of which represent parts of objects that are imagined but does not represent their original relations in any iconic manner (see Kosslyn et al. 2006: 14-18). Second, if pictorial representations can be presented in a functional space, the actual spatial organization of a representation becomes irrelevant. We are tempted to interpret neuroimaging results that show picture-like entities in the brain as picture-like entities of the mind, but these are entirely separate matters. With these perspectives in mind, it is peculiar that the pictorialists have been quite eager to interpret the evidence of physiological activity as evidence of a specific mode of computational operations. Third, in this "resolutional" phase, Kosslyn clearly distinguishes the neuropsychological study of images from that of the phenomenal experience of images. The weight has shifted entirely to the subpersonal information processing, where the concept of image has only a functional definition.

It seems, then, that the philosophical remarks made about the imagery debate in its most acute phase are still relevant. Block (1983: 510) points out the fact that we don't actually see mental images, but simply "have" them. We don't, orient by some part of our mind/brain that serves as the "mind's eye" to another part of our mind/brain that serves as a visual display. If we did, we would need to postulate an internal observing homunculus, and this would lead to an infinite regress. The phenomenal experience of "seeing" images thus cannot in any way serve as evidence for the format of visual thought. This might explain why the pictorialist camp are involved in a paradoxical relationship with the experience of images, as a vague index of the underlying processes.

Block addresses a similar point in connection with the so-called "no seeum" objection (Block 1983: 511)⁴⁷ leveled against the third-person perspective to the neuronal activity in the brain, which is related to the dependence that representation has on a representational system. We cannot tell that a representation is a representation just by looking. The problem is not just the explanatory gulf between what we experience mentally and what cognition does on the level of information processing. It is also the divide between different (1st and 3rd) perspectives, which is not easy to bridge. At the bare minimum, this involves the establishment of a sufficient amount of correspondences between two representative systems or perspectives, which in turn presupposes experiential access to both of these systems or perspectives. When the systems consist of one's mental activity and the topographical realization of one's brain activity, the establishment of correspondences becomes difficult; and even in a successful brain imaging study, the methodology cannot bypass the fact that the

⁴⁷ See also Block on objections against mental pictures based on Leibniz's law (ibid. 515–519) and paraphernalia (in the sense of physical apparatus needed for "handling" pictures, ibid. 519–526).

attribution of a representative function to a certain pattern of activity is always hypothetical in nature and cannot disclose the character of the representation for a given subject.⁴⁸

To put it differently, while there may be a causal link between the spatial organization of the visual areas in the brain and the representations it gives rise to, these are still clearly two different matters. If we looked in a test subject's brain and saw a highly realistic 3D picture of a Japanese dormouse, we would still not have seen the experience of that picture as a mental image, or witnessed the function of that picture in an information processing system. The discovery of such a picture would reasonably be considered non-trivial and indicative of what is going on in the mind. However, at this point, all the work to prove a specific causal link between the physical third-person image and a mental first-person image would still remain to be done. Furthermore, even if this line of research would grant us the final answer on visual processing, it would not collapse the first person visual experience into its visually observable spatial organization in the brain.

This is not to say that there could not be progress in a simultaneous, mutually informative study of processing based on spatial or visual representations and their neurophysiological implementation. This indeed is the main concern of Kosslyn and associates; though the research analyzed here (Kosslyn 1973, 1980, 1994; Kosslyn & Pomerantz 1977; Kosslyn, Ball & Reiser 1978; Kosslyn, Thompson & Ganis 2006) does not address the conceptual problems associated with the no seeum problem in a satisfactory manner. From the current point of view, however, a more interesting point is the function of mental images and their relation to conscious experience and, ultimately, to language.

According to Block, pictorialists and descriptionalists nevertheless seem to share the assumption that there is some kind of "similarity of representations of imagery and perception" (Block 1983: 509). This does not tell us anything about the underlying format of information processing, but simply helps us to delineate the problem of possible representations with the necessary property of similarity. The real question is which one of the accounts succeeds better in explaining mental imagery as a functional part of the overall cognitive architecture; but the focus on the validity of pictorial and descriptive structures as a means of information processing seems to steer the debate to a direction that has little to do with the relationship between experienced mental imagery and the proposed formats of processing.

Mental pictures that convey spatially organized information thus seem to be a plausible component in cognitive architecture, though they do not stand out as the most realistic option. As shown by Block, however, the feasibility from an information-processing standpoint does not mean that mental pictures, as they stand, are sufficient for epistemological explanation, i.e. an explanation of how mental representations relate to the world. The phenomenal similarity between a

⁴⁸ Instead, this leads to the "hard problem" of consciousness, the question why we have phenomenal experiences and how these experiences relate to the physical basis of mind. Again, for a physicalist attempt in solving this problem, see Tye 2003.

perceptual experience and an experience of mental imagery is not enough to explain that we know that the image and percept relate to each other. In fact, what seems cognitively impenetrable (outside the scope of conscious volition), is the sheer knowledge of this relation; I know, for example, that when I evoke the image of the summer cottage of my family that I imagine the summer cottage of my family, but if asked to spell out the grounds for my conviction, I could hardly give any other justification than the conviction itself⁴⁹. This shows that to be meaningful in a true representational sense, images have to be embedded in intentional states that are accompanied by the knowledge of their referential value (Thompson 2007b). This sense, however, does not need to take the specific format of instantiation of images into account.

We have discussed two distinct yet intertwined topics: neuropsychology of mental imagery and the philosophy of mental imagery. Discussing either of these topics more intensively would exceed the scope of this chapter; however the very existence of a vast controversy associated with both of these fields is enough to promote caution against justification of linguistic claims on the basis of mental imagery. The imagery debate remains both at an empirical and conceptual level; at the same time, implications of the debate for language have hardly been discussed within Cognitive Linguistics.

More importantly still, what also remains to be discussed is the manner in which the epistemological complexities of neuropsychology prevents definitive cross-disciplinary conclusions. For example, Anderson (1978) shows that it is possible to devise a propositional theory that is able to mimic the properties of a depictive one. Pylyshyn (2006), in turn, combines his propositional theory with truth-value based semantics. However, if a propositional system can mimic a depictive system, there is no reason why a propositional system would not be able to mimic an imagery-based representational system, where concepts link with external entities partially by means of similarity, i.e. mental simulation. It is therefore a question of optimality, not the possibility, of different processing systems to bridge sensory-based information with linguistic meaning.

Cognitive Grammar does not consider this particular question at all, but simply assumes an imagistic position on the basis of the argument from experience that was pointed out above (section 3.2.2). What is lacking is a systematic account of the possible constraints the choice of an optimal processing theory bears on semantic theory. Instead, Cognitive Grammar not only makes reference to imagery research but also to a psychological theory of concepts that exploits simulative processes: Barsalou's (1999; Barsalou et al. 1993) Perceptual Symbol Systems. The relationship between these three theories is discussed in the following section.

⁴⁹ This is meant as analogous to the certainty related with the meanings of words and expressions. When asked about the grounds for this certainty "I could give a thousand, but none as certain as the very thing they were supposed to be grounds for" (Wittgenstein 1969: §307).

3.3.2 ALLUSIONS TO MENTAL IMAGERY

As we have seen in chapter 2 and section 3.2 above, Langacker suggests a close correspondence between linguistic meaning and thought, so that meaning, and language in general, is seen as a function of global cognitive abilities (e.g. FCG-I: 13). Language-specific abilities are not ruled out entirely, but no such ability is seen as relevant for a cognitive theory of language.⁵⁰ With this delineation, Langacker expresses his moderately non-modular view on global cognitive architecture. At the same time, the processing of linguistic meanings is supposed to exploit the capabilities associated with perceptual processing, which are modality- or sense specific. This goes in hand with Cognitive Grammar's conception of meaning as encyclopedic.

Note, however, that encyclopedic meaning does not entail any specific mode of processing; for instance, visual information of the world can be presented in a propositional form. A fundamental aspect of cognition is its autonomous ability to raise percept-like images that are sense-specific (e.g. FCG-I: 5, 110–111; see also section 3.2.2 above), but language and the conceptual capability in general are seen as general systems that are able to exploit this autonomous ability in a global manner, thus making language non-modular. This combination of modality-specific information and non-modular systems is actually compatible with the weak modularity accepted for example by Kosslyn et al. (2006), to whom Langacker refers approvingly.

Cognitive Grammar speaks of mental, sensory, conventional, and linguistic imagery in an eclectic way that tends to leave their definitional and functional relationships vague. It is noteworthy that more recently (CGBI) Cognitive Grammar has given up the term "imagery" entirely⁵¹. Mental imagery research is cited only in brief and it is associated with the research on image schemas that has been put forward elsewhere in Cognitive Linguistics. However, a concept similar to mental imagery, i.e. mental simulation (CGBI: 293), is introduced with reference to the work of Barsalou (1999), whose model of Perceptual Symbol Systems (PSS) seeks to integrate the operations responsible for the processing of sensory information with conceptual activity. Langacker states that:

[A]s one of its facets, conceptualizing an action involves a mental simulation of it (Barsalou 1999). What this amounts to is the "disengaged" occurrence of the mental operations that occur when we actually perform the action or otherwise experience it [...]. (CGBI: 293.)

This is excerpted from context in which Langacker describes the semantics of quantifiers as a conceptual "disengagement" from everyday interaction with concrete objects. More generally, Barsalou's theory concerns the grounding of

⁵⁰ Conversely, Langacker denies that he would be making categorical statements about the nature of thought while describing his view of semantics (cf. e.g. FCG-I: 99).

thou₅

⁵¹ Here I will nevertheless use this term for expository purposes: 'imagery' with all its related confusion is in fact more illustrative of Cognitive Grammar's ontological position than the distinct notions of 'simulation' and 'construal'.

conceptual operations, in which processes that developed to handle perceptual information are exploited in autonomous conceptual processing through said disengagement and abstraction. It is noteworthy that PSS is effectively a conceptual counterpart of the information processing theory that is based on imagery. This is manifest in the manner in which meaningful "perceptual symbols" are presented as the basis of conceptual operations:

"[Perceptual symbols] are records of the neural states that underlie perception. [...] Essentially the same assumption also underlies much current work in imagery: common neural systems underlie imagery and perception [...] The proposal here is stronger, however, further assuming that the neural systems common to imagery and perception underlie conceptual knowledge as well." (Barsalou 1999: 582.)

Barsalou also notes that an imagery-based processing is not sufficient for conceptual operating, for a perceptual symbol requires a propositional component to establish the symbolic relationship with its referent. This does not entail consciousness, however. In the theory, conceptual operations are supposed to occur on two levels: conscious experience and "an unconscious neural representation" (ibid. 577). The latter is given the main emphasis, since conscious experience is optional and unreliable. Moreover, "conscious states typically follow unconscious states when processing sensations and initiating actions, rather than preceding them [...]" (ibid.; referring to Dennett & Kinsbourne, 1992; Libet, 1982, 1985).

Barsalou (1999), in other words, assumes a specific form of information processing and then expands it into a conceptual system with simulations that are "about" external referents and objects. The model is tightly linked with neuropsychological organization, thus defining a perceptual symbol as a "record of the neural activation that arises during perception" (ibid. 583). As the conscious experience of imagery is deemed secondary to the unconscious processing, Barsalou's theory does not even attempt to bridge the phenomenological and processing standpoints that Cognitive Grammar claims to occupy. The differing orientations of PSS and Cognitive Grammar give an interesting perspective to the evaluation of Langacker's earlier remarks on this issue:

How and to what extent sensory imagery figures in conceptual and semantic structure is an empirical question [...] I am nevertheless convinced that sensory imagery is a real phenomenon whose role in conceptual structure is substantial. We can plausibly suppose that a visual image (or a family of such images presupposing different orientations and levels of specificity) figures in our knowledge of the shape of an object; and certainly one aspect of our conception of a trumpet assumes the form of an auditory image representing the sound it makes. (FCG-1: 111.)

Barsalou (1999) shows that the notion of images that relate to concepts can indeed be given a systematic theoretical elaboration. However, it is unclear how Barsalou's model would be compatible with the aspect of Cognitive Grammar that emphasizes the phenomenological aspect of meaning.

Cognitive Grammar nevertheless demonstrates its affinity with PSS by replacing the term "mental imagery" with that of "mental simulation" (CGBI: 293). Meaning/conceptualization is seen as inheriting properties from perceptual experience, and support for this conception is sought from psychology. PSS seems to express the same basic idea independently of Cognitive Linguistics, but is essentially concerned with sub-conscious processing and thus does not explain conscious experience or its role in language use, other than considering it to be an optional consciousness of underlying operations that are carried out on perceptual symbols. It is noteworthy that Langacker does not pay any attention to this discrepancy in his approval of Barsalou (Langacker 1999: 625).

The analysis in Cognitive Grammar and Barsalou's (1999) analysis pertain therefore to two clearly distinct ontological levels. In order to make these theories mutually integrable, one would need to either a) assume that Cognitive Grammar is a language processing theory (which it is not), rather than a theoretical grammar; b) extend Perceptual Symbol Systems to the conscious level (to which it actually has been originally attributed, see Barsalou et al. 1993); or c) posit a systematic description of how the conscious and the sub-conscious levels interact in the constitution and use of language. All these options would nevertheless likely prove ultimately unsatisfactory: none of them would help to explain how individual cognition relates to the social constitution of linguistic meaning.

To see why, let us turn back to the task of this section: the bridging of social and individual aspects of meaning. As Itkonen shows, social entities such as language are based on 'common knowledge', which is by nature normative (Itkonen 1997). Following Itkonen,⁵² Zlatev (2008a) explores the idea that consciousness is a necessary condition for language to be a normative entity. First of all, common knowledge is necessarily accessible to conscious reflection. Even though our everyday language use does not require such reflection, it is still always possible. We know (pre-theoretically) whether a sentence S is a valid representative of our language or not (Zlatev 2008a: 41). This, in turn, is due to the fact that language and linguistic units are normative entities. That is, a linguistic sign does not simply reside among multiple subjects in the manner of a shared experience of an object or a non-intentional social-psychological tendency such as drug abuse. Instead, it does so as a social object that is defined by criteria of correctness or well-formedness.

Normativity, as is repeatedly noted by Itkonen (see e.g. Itkonen 2008b: 302–303) cannot be reduced to consistency of behavior, for it resides in acts of consciousness that involve recognition and interpretation of signs according to pre-existing conceptions. This entails the conclusion that language cannot be

 $^{^{52}}$ A substantial part of Itkonen's work is devoted for formulating and defending a normative conception of language (e.g. Itkonen 1974, 1978). For the present discussion, Itkonen's more recent papers (2008a, 2008b) are especially relevant for they address also the development of Cognitive Linguistics.

reduced to unconscious processing, for one cannot do so to a socially constituted criterion – or a corresponding judgement – of correctness (Zlatev 2008: 42).

Formal correctness, however, is only one part of the picture. In authentic linguistic communication, the highly automatic recognition of a unit is only prerequisite for semantic and pragmatic interpretation, both of which also rely on what the recognized linguistic units are taken to mean in that given language. This implies that, albeit not reflected upon by default, the linguistic conduct necessarily preserves the threefold structure of a genuine sign, which includes a linguistic vehicle, meaning, and the referent. Now, one's conscious experience does not usually emphasize the inherent three-fold structure of a sign. Yet the very first-person consciousness of one's linguistic action is not only real (try imagine speaking to someone without knowing it), but also relies on the fact that it is a signitive activity mediated by the specific linguistic means. The apprehension of meaning therefore implies the recognition of linguistic symbolization as discernible from other intentional activities (such as fantasizing, remembering or perceptually observing) and, essentially, distinct from the subject herself (Zlatev 2008a: 45).

If we adopt a socio-normative conception of language, then consciousness is not only indispensable for language but it is also the most relevant aspect of cognitive organization from linguistic standpoint. From this perspective, the status of any theoretical model of neuropsychological information processing vis- \dot{a} -vis linguistics is not explanatory, but remains to be explained relative to conscious experience, a task on which neither Langacker nor Barsalou are willing to embark. It is not surprising that Langacker gives a skeptical statement on the significance of (visual) mental imagery for semantic theory.

Though visual imagery (and sensory imagery more generally), is indeed significant for semantic structure, it is certainly not exhaustive of it, and in fact the theory would be little affected if there were no such thing. (CIS: 347, fn. 7.)

In short, mental imagery is expected to have some role in semantics as the way in which meaning appears to a subject, but this aspect of processing is not included in Cognitive Grammar itself. Where a lexical concept is concerned, one possibility would be that the conceptual base of a predicate would include a modality-specific domain and a corresponding profile within that domain, which would equal a mental image of the predicate's referent. In fact, when applying the profile/base -distinction to lexical items, Cognitive Grammar often implies a percept-like conception of certain semantic properties of a linguistic concept, for instance, the said association between the lexical concept of trumpet and the auditory image of the trumpet's sound.

The most primitive semantic properties of concepts are associated, in Cognitive Grammar, with so-called basic domains (cf. section. 2.2.4). Basic domains present "cognitively irreducible representational spaces or fields of conceptual potential" (CIS: 4). Furthermore, Langacker (FCG-1: 149) considers sensory-based domains to be an important sub-category of the basic domains. As

opposed to the causal relation between the trumpet and the sound it makes, the relation between a concept and its basic domain, as described in CG, is often more fundamental. For example, the basic domain of three-dimensional space gives rise to a set of concepts that are primarily spatial, so that their constitutive semantic import is defined as a delineation in that particular domain, e.g. geometrical figures such as 'line' and 'circle' (FCG-1: 149). However, lexical concepts typically cannot be reduced to a configuration in a basic domain, but are complex and also include sensory information of different modalities; in addition, abstract concepts (consider epistemic adverbs such as 'perhaps') may not be associated with any sensory images at all.⁵³

Mental imagery, when analyzed in this way, would seem to be potentially relevant only for a limited subset of lexicon. In contrast, to assume that cognition includes modality-specific information, whatever the format, is rational both phenomenologically and from a processing standpoint. This amounts to the fact that an encyclopedic view of meaning does not imply any specific type of processing. We have visual information and we have auditory information, yet this implies nothing about the manner of activation of either information types.

Moreover, we may posit a dissociation of modality-specific information and modality specific processing both at the phenomenological and the processing level separately. First of all, the subjective experience of sensory images is an indisputable fact (for some subjects), and whether these conscious images are functional or merely epiphenomenal, they prove that autonomous mental experience distinguishes between the senses.

Second, the manifest ability to recollect sensory-like information from long-term memory is proof of existence of the modal tractability of cognition. For instance, consider the classic example of the basic visual domain in the autonomous processing of geometric figures. Whether it involves the experience of seeing with the mind's eye or not, the subject's ability to succeed in tasks such as those operationalized in Shepard and Metzler (1971) does prove, independently of the mode of processing, that we have the ability to evoke modality-specific information autonomously, according to the task at hand.

In sum, both the conscious experience and sub-conscious processing show modal discernibility; yet this fact does not prove anything about the actual neuropsychological or physiological nature of processing or its relationship to overt experience. Moreover, as semantic predicates are typically complex, that is, they are intersections of multiple conceptual domains and corresponding sub-profiles, their cognitive grammatical description does not depend on the fate of a certain domain, domain type or a specific neuropsychological status of a concept's profile.

It is therefore apparent that not even the description of lexical concepts of sensory experience would force Cognitive Grammar to take a specific stance on cognitive processing. Nevertheless, Cognitive Grammar's combination of

comprehension in reading.

⁵³ The relationship, which implies the relative autonomy of its participants, between imagery and abstract language is also studied experimentally, see e.g. Sadoski & Paivio (2004) on imagery and

¹¹⁸

theoretical restrictiveness (relative to cognitive processing) and descriptive flexibility (relative to the semantic content of predicates) allows the theory to associate itself with the psychology of mental imagery, and even to grant it some theoretical significance and consider its potential linguistic applications, without establishing any argumentative ties between actual mental imagery research and the theory itself.

3.3.3 LINGUISTIC VS. MENTAL IMAGERY

With the argumentative confusion outlined above, it is hardly surprising that Cognitive Grammar implies multiple senses for the concept of imagery. These different senses, however, do not align with the conscious/unconscious segregation but they are defined with regard to their linguistic function. This section specifies the relationship between two different imageries Cognitive Grammar makes reference to: mental and linguistic. The question is whether these two imageries necessitate each other in description of conceptual meaning.

In establishing his notion of linguistic imagery, Langacker distinguishes it both from mental imagery and from what the term traditionally has stood for in the study of literature and poetic language: metaphor, metonymy and other such tropes. This is illustrated by the following excerpt:

The term imagery is often employed as an equivalent of **metaphor** (or **figurative language**), which I also consider an inherent and fundamental aspect of semantic and grammatical structure. [...] Image and imagery also describe the occurrence of a perceptual sensation in the absence of the corresponding perceptual input. [...] I understand the term image and its derivatives in a third (and somewhat idiosyncratic manner: they describe our ability to construe a conceived situation in alternate ways — by means of alternate images — for purposes of thought or expression. (FCG-1: 110, emphasis in the original.)

The distinction between different types of imagery is inevitable, but not absolute. Indeed, Langacker suggests that they are mutually related to some extent in that they are all expected to bear some relevance for grammar as symbolization. If imagery in the sense of figurative language is set aside, the question is what kind of connection is posited between mental and linguistic imagery. It should be remembered that linguistic imagery refers to construal and the multiplicity of ways in which an objective situation may be interpreted or conceptualized by a subject.

[Cognitive Grammar] assumes that the meaning of an expression is not fully given by an objective characterization of the scene it describes. People have the capacity to construe a scene by alternative images, so that semantic value is not simply received from the objective situation but instead is in large measure imposed on it. (CIS: 35.)

Given this definition, linguistic imagery approximates construal in the general sense of the term (e.g. in social psychology, see Aronson et al. 2010), that is, the construal of a state of affairs from a subjective point of view. As we have seen with the dimensions of construal, Cognitive Grammar attributes this constructivity of language especially to grammatical meaning, so that semantic content is more manifest in the lexicon. This tendency is also present in the dimensions of imagery. Cognitive Grammar refers constantly to this correspondence between grammar and semantics as "conventional imagery" that grammar offers to the use of speakers. However, the phenomenological or processing-related status of these conventional images, by means of which the different construals are achieved, is not specified.

While Cognitive Grammar promotes a clear demarcation between linguistic and other forms of imagery, it is difficult to relate these different forms to each other, which holds true for other psychologistic constructs as well. This is illustrated by the following diagram that collects the main categories of cognitive activity posited by Cognitive Grammar.

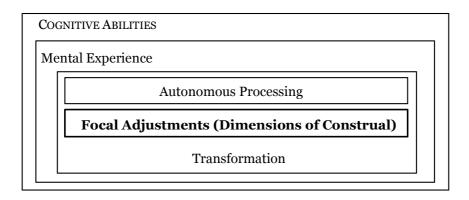


Figure 3

To be specific, Figure 3 depicts the category of so-called "cognitive abilities" (FCG-I: 99–146), a set of linguistically relevant mental capabilities. The subcategory "Mental experience" (FCG-I: 99–109) represents a set of perceptually grounded principles of cognitive processing (including, for example, comparison, FCG-1: 101–105) that are assumed to be relevant for linguistic meaning and to structure other subcategories in the diagram. In "Autonomous processing" (ibid. 109–116), Langacker discusses the ability of entertain and utilize mental imagery for purposes of thinking, and presents the dichotomy between mental and linguistic imagery (ibid. 111). On the same occasion, however, Langacker also emphasizes the putative significance of mental images for conceptual meaning, and thus repeats the category error of identifying mental

experience with cognitive processing.⁵⁴ The third of the categories, "Focal adjustments" (FCG-I: 116) equals the dimensions of construal. The relationship between the focal adjustments and the autonomous processing in general is not explicated, but the adjustments can reasonably be seen as a specific form of this processing. Finally, "Transformation" (FCG-I: 138) introduces the ability to shift between construals or different modes of attending mentally to a scene.

The category of "Cognitive Abilities" may thus be characterized as a discontinuous collection of cognition-general and language-specific abilities that partly overlap. At first glance, this would seem to violate the principle of explaining language with regard to cognitive abilities that are not domain-specific. Once again, this is as a problem of rhetoric. Cognitive Grammar merely presents the posited cognitive abilities as general or linguistic according to the domain in which they manifest more prominently. This is not the optimal strategy, for it adds to the general confusion of how different facets of cognition are mutually related by the theory. As a result, the grounding of construal in general cognition requires substantial clarification of different cognitive abilities.

As is established in chapter 2 above, the content requirement of Cognitive Grammar results in diagrammatic iconicity between grammatical form and meaning: certain general semantic parameters, some of which are captured by the dimensions of construal, are correlates of grammatical parameters of selection: e.g. complexity and detail in grammatical structure correlates with semantic complexity and detail, which is describable in terms of the dimension of specificity. Diagrammatic iconicity, by definition, is restricted to correlation between relations of signs and relations between semantic units. Cognitive Grammar, however, seems to be willing to recourse (implicitly) to imagic iconicity in explanation of semantic features; that is, experiential or non-objective semantic features are derived from iconic correspondence between a cognitive (autonomous) representation of an entity and direct (non-autonomous) experience of the said entity.

Note that no such argument of imagic iconicity is openly made. The experiential argument (see section 3.2.2, p. 96), under which imagistic accounts are preferred, nevertheless involves the same point: a cognitive theory most suitable to inform a cognitive grammar is one that best reflects phenomenal experience. This, in fact, reveals the methodological primacy of phenomenological analysis for Cognitive Grammar. However, this also reveals multiple inconsistencies in Cognitive Grammar *vis-à-vis* phenomenology and mental images.

First of all, as is already pointed out above in the discussion on imagery debate (pp. 122), the conscious experience of imagery does not automatically reflect an underlying processing mechanism. In addition, Thompson (2007) points out that both sides in the debate also seem to misinterpret both phenomenology in general

⁵⁴ Autonomous processing, to my understanding, is supposed to exploit, share, or inherit properties from perceptual processing, a view that is compatible in a general way with the imagery theory by Kosslyn and PSS by Barsalou. The identification of processing with experience allows Langacker to assume a strong analogy between perceptual experience and meaning.

and phenomenal mental images in particular. As is made apparent by Block (1983), description of the experience of imagery as a type of viewing mental objects is seriously flawed. As opposed to such discernible mental representations, Thompson seeks out for a realistic phenomenology of imagery by concentrating to the very experience of images. As experiences such as these are abound (albeit not universal), they can be said to be phenomenologically real, which makes them also a valid object of analysis, inasmuch the focus is deliberately shifted from neuropsychological considerations to investigation of conscious experience. This move nevertheless calls for a substantial revision of the manner in which conscious imagery is understood.

The main argument by Thompson (2007: 143) states that conscious mental imagery does not necessarily correspond to depictive representations. What is defined by the imagery's phenomenal character, however, is that it involves an enactive experience of imagery (ibid). That is, we are aware of experiencing images that correspond to real or imagined perceptual occurrences, but nothing in our experience defines the correspondence as iconic by its nature. Rather, it is the experience itself that carries the representative function, in that it is an intentional experience of an image of an entity.

Thompson's approach is both realistic and economical. By denying phenomenal imagery and underlying processing mechanism a strictly corresponding relation, it is possible to concentrate on how experienced imagery stands in an intentional-representative relationship *vis-à-vis* external entities and states of affairs without succumbing to a representational account of mind. The model is also capable of accounting for the fact that many do not experience imagery but are still able to report spatio-visual properties of entities and states of affairs: one may have an enactive experience of an entity or state of affairs without simulating it in any explicit, modality-specific manner.

The critique Thompson levels against common misconceptions of conscious imagery is applicable to Cognitive Grammar as well. The conscious mental imagery that Langacker evokes seems to be needed for bridging the perceptual experience to linguistic meaning, thus allowing the explanation of the analogous properties of these domains. However, the concept of mentally simulating a perceptual experience in order to grasp an expression's meaning is exactly what Thompson's analysis of phenomenal imagery argues against. That is, we do not need analogical representations to evoke experiential content if we are able to enact the given experience.

Not only is this approach preferable over common neuropsychological conceptions of phenomenal experience of imagery, it is also particularly fitting for Cognitive Grammar that attempts to describe experiential meaning with recourse phenomenological analysis. To be specific, the abstract isomorphism Cognitive Grammar assumes between (conscious) perceptual experience and the (conscious) meanings of linguistic expressions may be based on linguistic intentionality itself. For instance, when learning the character of a Cairn terrier and then linguistically meaning the terrier afterwards, my intentional acts preserve the constitutive properties of the canine breed. What this means is that

it is the similarity of the acts *vis-à-vis* their object and direction of intention that define their content, not their phenomenal parity.

On one hand, this viewpoint underlines the irrelevance of processing mechanism: the Cairn is perceived as an animate creature regardless of presence of analogous mental structure. On the other hand, the viewpoint underlines the non-modal, non-sensual nature of linguistic imagery. Linguistic imagery, so conceived, stands "simply" for language/world isomorphism of the perspectival/non-objective type. The dimensions of construal may themselves be applied to illustrate the nature of isomorphism. Within the dimensions, what is preserved is not the phenomenological quality of the experience; e.g. what it is "like" to see an instance of the aforementioned Scottish breed. Instead, the dimensions manifest the preservation of knowledge. For instance, the specificity value of the concept 'cairn', and the parameter of specificity itself, reside on the level of abstraction that is completely irrespective of mode of sensuous experience.

So defined, linguistic imagery is not imagic in any actual sense but isomorphic with experience on the highest conceivable level of abstraction. As an attribute of linguistic meaning, it can be hypothesized to consist of experiential characteristics that are mediated by non-modular conceptual abilities.⁵⁵ The latter, however, are contingent theoretical postulations and secondary to the properties of meaning itself. Moreover, analogical simulation in terms of conscious images is not needed in this model at all.

A trivial conclusion follows that linguistic imagery is associated with domaingeneral attributes also attributable to (conscious) mental imagery – we may define imagery as schematic properties within conscious mental imagery. This conceptual confusion is a reason acute enough to replace the term of linguistic imagery with the term construal. More important, however, is the argumentative function attributed to the conscious experience of mental images. The theoretical and ontological status of the concept suffers from all the discrepancies involved

⁻

⁵⁵ This leads to the question how the isomorphism should be explained. Within Cognitive Linguistics, the explanation has typically been based on non-modularity of cognition. Non-modular cognition works optimally by extending the use of primary bodily based (sensorimotor) cognitive structures to novel domains by specified mechanisms of mapping, e.g. metaphor. According to Conceptual Metaphor Theory (Lakoff 1993), the metaphoric extension of cognitive structures are restricted by invariance principle (presented originally as "invariance hypothesis", Lakoff 1990). The principle states that the so-called cognitive topology of the source domain (from which a cognitive structure is selected for mapping) is preserved by the metaphoric mapping. As a result, the non-modular cognition is characterized by bodily-based, imageschematic reasoning, in which recurrent cognitive structures of sensorimotor experience (image schemas) come to characterize also the more abstract and complex domains of conceptualization. For example, Lakoff and Núñez (2000) apply this approach to the emergence of mathematical reasoning. A partial nonmodularity (or weak modularity) is accepted also by the present study for the grounding of linguistic analysis, and, accordingly, a cross-domain mechanism of extension is included. It should be noted, however, that emphatically individual-psychological basis of image schemas in Cognitive Metaphor Theory makes them a rather weak candidate for the grounding of meaning in experience. A critical review and a positive alternative are provided by Zlatev (e.g. Zlatev 2005) and discussed below in section 4.4.

with the conflation of conscious mental experience with cognitive processing. This reductionist tendency of Cognitive Grammar is at odds with the theory's emphasis on the phenomenological character of meaning and processing, and it lacks systematic justification in the form of theoretical unification of consciousness and processing. Moreover, Cognitive Grammar fails to refer to studies that would support such an approach, and presents images as a phenomenon of consciousness without grounding this postulation in a model that would treat images on such level.

Second, the argumentative function of the concept of mental imagery relative to linguistic imagery is implicit. Conscious mental images are not given a definite explanatory function but rather only implied to have a "substantial" (FCG-1: 111) role in conceptualization. This reference to imagery is impressionistic and can be interpreted in two (not mutually exclusive) ways: that a) some "perceptual sensations" are attached to some linguistic concepts as parts of their meanings (e.g. the sound of a trumpet), or that b) existence of "perceptual sensations" is proof of the nature of some concepts and thus proof of a partial analogy between perception and conception, and is thus a putative reason to expect the conceptual realm to inherit properties from the perceptual realm (e.g. the dimensions of construal). Both of these functions are phenomenologically grounded, and therefore their specific association with the existing processing theories is ambiguous. In any case, what is theoretically more important here is the supposed mediating function of mental imagery between experience and meaning.

This leads to the third point, which is the redundancy involved with the mediating function of conscious mental imagery in linguistic meaning. Establishing conscious mental imagery as the correlate of linguistic meaning would help to explicate some similarities between linguistic meanings and the experiences to which the meanings refer. However, this would not help explain linguistic meanings, for the idea of a mental image is inherently impressionistic. In visual processing, according to Kosslyn et al. (2006), an image refers to the activation of a functional space, which arguably reflects the geometrical features of the imaged objects in "real" space. On the conscious level, we may have the experience of a mental image, but this experience is inherently already interpreted as such in consciousness. The phenomenological argument for this, presented by Thompson (2007), is so obvious it seems paradoxical: as we experience something as a mental image we experience it as a mental image of something. The notion of mental image can be posited to describe the subjective quality of this experience, but as such it fails to explain the "aboutness" of the experience. Thus when we describe our introspective experience of linguistic meaning, we have no way of telling the nature of our knowing from the nature of the object of our knowing.

Tackling this shortcoming of a conscious mental image would easily lead to the question of representationalism vs. direct realism in the philosophy of mind; that is, are internal representations needed in the first place to account for the mind's connectedness to the world? Many philosophers answer in the affirmative (e.g. Dretske 1995; Tye 1995), and while this view is attacked by direct realists

and modern phenomenologists (e.g. Drummond 2012), the question here is whether Cognitive Grammar is able or willing to provide a systematic account of how internal representations relate to semantic theory. Here, I will content myself with stating that Cognitive Grammar does assume a representationalist position in reducing linguistic meaning to internalized cognitive processes. This specific take on representationalism, with regard to both mental representations in general and mental images in particular, is far from being explicit or systematic, however. The Cognitive Grammar's representationalism is insufficient exactly because it lacks a description how mental representations attach to linguistic signs on the one hand and on mind-external objects on the other.

If we simply take the experience of imagery as a representative example of how the mind works in retrieving information as subjective and experience-like in its richness, we are not only being redundant but we are also committing ourselves to a questionable causal explanation. We have seen that, as both camps in the imagery debate have agreed, the type of information processed by a system is not dependent on the specific format of this information. This is true of linguistic information as well, although we must acknowledge the ontological requirements that are specific to semantics. If we adopt the view that meaning is an object of common knowledge and grounded in public use, we also have to accept that this knowledge has to be internalized in some way or another. Yet the mode of this internalized knowledge has to be distinguished from the object of this knowledge, as is demonstrated, inter alia, by Husserl (Logical Investigations 2001b [1901]). Since every (cognitive) act of knowing is different, the object of knowing needs to have a constitution that is independent of any particular act; and if there is independence from any given act, there is also independence from any characteristic of any given act, including the modality in which knowledge presents itself in one's consciousness.

Obviously, the object of knowledge, such as the meaning of the expression *the lamp is above the table*, may include perspectival or subjective properties, but only as properties that are publicly shared and grounded in intersubjective practices. The challenge is to explain this intersubjective subjectivity as a social phenomenon grounded in an indefinite number of individual cognitions, without recourse to specific types of mental events. This, however, is yet another a task Cognitive Grammar is not willing to embark on.

The result is that conscious mental imagery, in the context of Cognitive Grammar, is neither needed nor suitable to explain linguistic imagery. Instead, the notion only offers a hypothetical indication of how linguistic thought may also operate. To summarize, conscious mental imagery, as posited in Cognitive Grammar, is a problematic concept in the following respects:

i) Conscious mental imagery conflates conscious experience and underlying information processing without explaining why or how these levels interact.

- ii) Conscious mental imagery is devised to explain commonalities of experience and meaning, but this mediating function is not explicitly defined, which makes the use of the concept impressionistic, confusing and susceptible to interpretation as *ignoratio elenchi*.
- iii) The nature of conscious mental imagery is not specified relative to the social/normative aspect is meaning, which makes the postulate vulnerable to the standard criticism against pictorial models of linguistic or conceptual meaning.
- iv) Conscious mental imagery fails to explain or validate the notion of linguistic imagery.

What has been demonstrated is that one specific theoretical source of influence for Cognitive Grammar, i.e. the depictive or simulative neuropsychological theories, manifests in a hypothetical construct that is inconsistent both internally and with regard to its theoretical origin. This is not to say that any research on human's conceptual capabilities should be deemed irrelevant for linguistic considerations *a priori*. Rather, the influence of any psychological model has to be carefully assessed with regard the conceptual requirements that are posited by the nature of the object of scientific interest.

3.4 DISCUSSION

In this chapter, I have scrutinized the way in which Cognitive Grammar aims to justify its conception of semantics by borrowing the notion of mental imagery from neuropsychology (e.g. Shepard 1978; Kosslyn 1980) and by making reference to mental simulation in Barsalou's Perceptual Symbol Systems (1999; Barsalou et al. 1993). I have also discussed two distinct criticisms against this view of semantics leveled by Konstenius ([Kenttä] 2003) and Itkonen (1997, forthc., see also Itkonen 2003). The first one accuses Cognitive Grammar of theoretical inconsistency and reductionist physicalism, and the second one demonstrates the ontological discrepancy between what Cognitive Grammar claims to study (meaning as a mental phenomenon) and what it actually does study (publically observable, social meanings).

With regard to the first line of criticism, I have demonstrated that the rhetoric of Cognitive Grammar does indeed suggest physicalism in its reference to neuronal activity, but that this reference is far from a systematic mind-philosophical stance. Instead, Cognitive Grammar counteracts a materialistic interpretation by its explicit distinction between processing and phenomenological standpoints, neither of which actually is ontologically reducible to neuronal activity. With regard to the second criticism, I accept Itkonen's claim of sociality of linguistic meaning. While Cognitive Grammar analyzes meanings exactly as conventionalized, and hence shared, it mistakenly associates meaning either with phenomenological autonomous experiences, underlying cognitive operations or neuronal events. The case of mental imagery was chosen as an example of how Cognitive Grammar conflates distinct

ontological levels. Cognitive Grammar refers to neuropsychological and to cognitive psychological research to justify a notion that pertains to phenomenology of meaning, despite the fact that the cited studies explicitly dissociate themselves from the conscious experience of sensations associated with processing events.

For Cognitive Grammar, the main upshot of the imagery debate within neuropsychology is that the phenomenological experience as such does not suffice to prove a specific conception of cognition is correct or incorrect. At the same time, phenomenological consciousness is indispensable for the analyst or the ordinary language user to grasp the sense of any expression as in true representative sense. This leads to the need to distinguish between at least two modes or acts of consciousness that correspond to different kinds of objects of consciousness (or knowing). Conveniently, these two acts of consciousness are the ones of introspection and intuition, discussed above (Itkonen (1981).

If we accept the classification of linguistics as an intuitional science (Itkonen 1981: 131–132), then the task is to describe meaning as an object of intuition. This again leads to a need to explain the experiential, perspectival and subjective aspects of meaning, that is, the dimensions of construal, as properties of the object in question. This is the task of the following chapter, in which I will show that a correct understanding of the dimensions of construal is dependent on the concept of intersubjectivity. That is, construal is explainable relative to the codification of experiential constants into meaning and immanent in the adjustment of expression according to pragmatic needs; moreover, both of these aspects of construal are inherently dependent on intersubjective co-activity.

4 THE INTERSUBJECTIVITY OF CONSTRUAL

The previous chapters have scrutinized the dimensions of construal as an integral part of Cognitive Grammar's descriptive apparatus (chap. 2) and their theoretical justification (chap. 3). This chapter will include a concise synthesis of these separate analyses. Synthesis is not the goal itself; rather, the purpose is to lay the groundwork for a re-evaluation of the dimensions of construal that appreciates their intersubjective nature. This reinterpretation is illustrated by the analysis of construal phenomena in written discourse.

Since the results of chapters 2 and 3 obviously determine the nature of their synthesis, a brief recapitulation is in order.

The analysis in chapter 2 demonstrated that "construal" and "conceptualizer" are mutually dependent subparts of "conceptualization", which is defined as the actualization of linguistic meaning for a representative language user. The scope of construal phenomena as depicted in Cognitive Grammar was laid out, and the connections of related analytical concepts to the theoretical presuppositions of the theory were discussed. The treatment of conceptualizer demonstrated that there is a close association between construal and common ground (Nuyts 2002; Verhagen 2005, 2007). A complex, structured ground that involves multiple conceptualizers is needed for the description of a host of construal phenomena, which implies a type of intersubjective alignment built in language's representative capacity. The analyses of excerpts from Finnish magazine texts, on the other hand, illustrated how the dimensions of construal relate closely to the informational advance of discourse and the build-up of shared knowledge, which can be described in terms of Current Discourse Space (CGBI: 59-60). This motivates a segregation between the paradigmatic axis (the selection of linguistic units for expression) and the syntagmatic axis (the semantic interpretation on the basis of preceding discourse) of construal; both of these have been shown to be relevant for the coordination of discourse vis-à-vis multiple conceptualizers.

Chapter 3 scrutinized the theoretical foundations of Cognitive Grammar, and placed the main emphasis on the theory's individual-psychologism and its manifestation in the so-called phenomenological and processing standpoints. The notion of imagery was chosen as the analysis' focal point; this was motivated both by the notion's problematic nature relative to the ontology of mind-internal phenomena and by its association to construal (often denoted as "linguistic imagery" until recently). The first half of chapter 3 addressed the ontological criticism leveled against this conception of meaning (Itkonen 1997, 2008b, forthc.; Kenttä 2003). The established criticisms were found adequate to the extent that the argumentation of Cognitive Grammar suffers from ontological inconsistencies; the theory attributes cognitive-psychological ontology to semantic phenomena that are actually primarily social, and this conflation is especially manifest in the concept of imagery. The second half of the chapter then shifted the focus onto the relation of linguistic imagery to its mental counterpart, i.e. the ability to evoke percept-like images in the absence of corresponding

stimuli. The conclusion was that mental imagery needs to be separated from construal not only for ontological reasons (the discrepancy between mental image and social linguistic meaning), but also because of the fact that the realization of subjectively construed meaning in individuals is not dependent on any specific form of cognitive processing.

Taken together, these analyses show that the concept of construal (and conceptualizer), as separated from mental imagery, is needed for an adequate description of a natural language's semantic potential. However, the criticism in chapter 3 only reveals the need for a social grounding of construal. The manner in which this grounding should be carried out is the topic of this chapter.

While it stems from a commitment to the view that the notion of social ontology of linguistic meaning is correct, the task at hand is primarily a linguistic-theoretical instead of philosophical one. The question this chapter will explore is how does Cognitive Grammar's notion of construal relate to actual language use, and what are the conceptual prerequisites for the adequate description of construal from a socially grounded perspective. This is obviously an instantiation of a more general question of how the sociality of linguistic meaning manifests itself in the linguistic interaction.

In linguistics, these questions are typically addressed under the heading of intersubjectivity. Within the fields of interactional linguistics and conversation analysis, intersubjectivity has been operationalized as a category for reciprocal sense-making, understanding and interaction (see e.g. Heritage & Atkinson 1984: 10–11; Linell 2009; Sacks et al. 1974; Schegloff 1992). On the most abstract level, intersubjectivity can be defined as the construction of social entities, such as understanding and objectivity, in co-operation with multiple subjectivities. In Conversation Analysis, this has been elaborated, *inter alia*, by the analysis of the understanding of previous turn by the present speaker (e.g. Sacks et al. 1974) and by the analysis of the manifestations that institutional contexts show in the interlocutors' actions (e.g. Drew & Heritage, eds., 1992).

The present analysis assumes a perspective on linguistic intersubjectivity that differs from these interactionist accounts in that it concentrates exclusively on the formation and organization of semantic content. The purpose here is to present a formulation of intersubjectivity that makes a coherent, socially grounded description of construal possible. Accordingly, discourse and communicative setting are included in the analysis as sources and determinants of conceptual meaning. This semantically inclined approach to intersubjectivity links the present study to the ongoing discussion on the necessity of grounding cognitive linguistics in the sociality of actual language use (e.g. Haser 2005; Verhagen 2005, 2008; Zlatev 1997, 2005; see also Foolen et al., eds., 2012; Zlatev et al., eds., 2008).

Two interpretations, or groups of interpretations, of intersubjectivity are especially relevant: 1) intersubjectivity is one of the key concepts both in the Husserlian and post-Husserlian phenomenological analysis of objectivity and the social constitution of experience; and 2) intersubjectivity has a dual interpretation as a descriptive and theoretical-explanatory concept in evolutionary and developmental psychology. In this study, a specific formulation

of intersubjectivity is adopted that stresses the latter use of the term, while it associates it with the phenomenological approach to semantics; namely, the hierarchical model of intersubjectivity by Zlatev (2005, 2007a, 2007b, 2008a, 2008b, 2013). This formulation can be outlined as follows (adopted with slight alterations from Zlatev 2008b):

- i) Intersubjectivity is the sharing of experiential and representative states (cf. Zlatev 2008b: 215) either in an immediate embodied or in a symbolically mediated manner.
- ii) Intersubjectivity is not a unitary concept, but a functionally defined category for processes, structures and properties of human action which characterize joint intentional action and knowledge.
- iii) The categorizing a process, structure or property of human action or knowledge as intersubjective amounts to defining it as irreducible to individual intention, embodiment or cognitive structure.

Intersubjectivity can thus be defined as referring to the alignment and organization of social phenomena in the actual everyday interactions. However, any definition of intersubjectivity is necessarily based on some ontological preoccupations, and the definition given above is not neutral in this respect.

This is illustrated by the competing accounts of intersubjectivity in empirical psychology. The so-called Theory-of-Mind approaches (e.g. Fodor 1983, 1994; Goldman 1989) seek to explain intersubjectivity skills in accordance with the development of individual intellect and/or with hardwired cognitive processes. The so-called enactivist approaches, in turn, model intersubjectivity relative to the emergent properties of social interactions and embodiment (e.g. Gallagher & Hutto 2008; Gallagher 2009; 2011a, 2011b; Hutto 2009). The former are most often criticized for their relative inability to account for infant intersubjectivity or the phenomenological directness of one's experiences of the intentions and states of the other. The most substantial limitation of the enactivist models of intersubjectivity is their relative inability to account for the higher forms of social understanding in a cohesive manner, for instance, those involving hypotheses, beliefs and analogies about other people's mental life (see. e.g. de Bruin & de Haan 2012). A sufficient compromise would therefore seem to be a model that is based on body and interaction, and that allows for some mediated forms of intersubjectivity, such as the representational conceptual capacity associated with natural language.

The representative function of language is characterized by a systematicity and a conventionality that depend on norms that exhibit at least some autonomy and stability over their specific instantiations. As a normative entity, language constitutes an object of common knowledge, and this objectivity translates into a distinction between the object and the subject of a linguistic act. Language can be and most often is pre-reflectively experienced as a direct expression of one's subjectivity, but it nevertheless is expressive as a set of acts that are distinct from

their subject. Language therefore presupposes the more primary levels of intersubjectivity, which is an experience both of foreign subjectivity and shared objectivity that cannot be constituted by linguistic praxis alone. This implies that both the acquisition and the use of language hinge on more rudimentary intersubjective abilities.

A model that accounts systematically for both ends of the intersubjectivity continuum is provided by Zlatev in his mimetic hierarchy (e.g. Zlatev 2008b, 2013). Zlatev builds his model on the notion of bodily mimesis (adopted from Donald 1991), which refers to non-conventional symbolization through the use of the body. Mimesis hierarchy is also a developmental stage-model (e.g. Zlatev 2008b: 219). Most importantly for present purposes, the mimesis hierarchy serves as a conceptual framework, according to which language as a fully conventionalized semiotic system may be embedded in the larger domain of human intersubjectivity.

This leads to the argument I will develop and defend through this chapter; namely that construal needs to be related to intersubjectivity. I argue that the content of the term in Cognitive Grammar presupposes intersubjectivity in a manner that exceeds a "mere" social ontology of meaning. The argument, which will be presented in full in section 4.5, can be concisely expressed in three assertions.

First of all, construal as a selection is carried out among semantic units that are by definition socially shared; this part of argument is largely in line with Itkonen (1997), but its elaboration will also include a phenomenological approach to pre-linguistically shared objects of expression. Second, following Verhagen (2005, 2007, 2008), I argue that meaning is not intersubjective only in the sense of its constitutive sociality, but also in that it includes types of intersubjective alignment that are conventionalized into expression. In other words, expressions are not only constituted and distributed intersubjectively but also signify intersubjectivity, and this signified intersubjectivity is an essential part of what the construal nature of a given expression is. Third, since it involves the selection of semantic representation, construal cannot be comprehensively described without being grounded in actual interaction and both the linguistic and extralinguistic context. This context includes the multiple interlocutors, their interactive motives and their shared understanding of the extra-linguistic circumstances the communication is about. In other words, construal is described correctly as reflexive vis-à-vis what is not construed.

This three-partite argument thus relates construal both to the conventional semantic value of an expression as well as to its pragmatic specification. What is relevant here is that neither conventional nor contextually variable elements of construal can be adequately described irrespectively of the intersubjective organization of communication. It is this fundamental attribute of construal that is elaborated throughout this chapter.

A few remarks on the nature of this analysis are warranted First of all, the integration of construal with an intersubjective perspective is necessarily schematic, for the scope of both notions is as vast as the scope of language itself. The resulting redefinition of construal is nevertheless coherent and, moreover,

extends the traditional scope of the term, especially in the domain of pragmatics. The linguistic analysis of selected construal phenomena is in turn carried out on a very constricted set of semantic constructions, thus making use of, and providing support for, a rather narrow proportion of the overall model of intersubjectivity. I argue, however, that this analysis succeeds in its primary task of providing proof of the existence of pragmatic attributes of construal that presuppose a structured, pre-linguistically constituted intersubjectivity, and that rebut a strictly psychologistic explanation for construal.

The reevaluation of construal from an intersubjective perspective may seem to violate the original spirit of the term, which is one of Cognitive Grammar's central semantic constructs. One could argue that construal cannot be distinguished from its cognitive basis without distorting its overall theoretical status, and therefore should be accepted as a concept that refers to individual language processing, whether this is consistent with Cognitive Grammar's analytical practices or not. I claim, however, that this reevaluation is precisely motivated by the actual analytical scope of the notion of construal, and can therefore be attributed to the conceptual clarification (instead of the dismissal or reversal) of Cognitive Grammar's view of what construal is about.

Cognitive grammar claims to assume a phenomenological approach to semantic analysis (CGBI: 31), i.e. it approaches linguistic evidence as it appears to the analyst, albeit this methodology is most often carried out only implicitly. In contrast, Husserlian phenomenology emphasizes the inherently public nature of most experiences; indeed the notion of intersubjectivity is applied exactly to describe the inevitable role of others in one's grasp of objectivity as well as one's own subjectivity. Given that this constitutive intersubjectivity is a recurrent element of Husserlian and post-Husserlian analyses of experience, it would seem that Cognitive Grammar exhibits a rather shallow understanding of the phenomenological method. This is only an expected methodological corollary of Cognitive Grammar's ontological confusion with regard to its research object (Itkonen 1997, 2008a, 2008b, forthc.; see discussion in section 3.2.3). What these points suggest is exactly the need for the complementation of Cognitive Grammar's analysis of meaning with a phenomenologically informed conception of intersubjectivity; and it is Cognitive Grammar itself that implies the need for such complementation.

4.1 OUTLINE

The content of this chapter is divided into three main sections. In section 4.2, I will explore the philosophical foundations of intersubjectivity in Husserlian phenomenology, and discuss the relation of intersubjectivity to the notion of intentionality. Section 4.3 analyzes the connection of these foundations to the modern conceptions of intersubjectivity in different varieties of developmental, social and clinical psychology, as well as in linguistics. Finally, section 4.4 addresses the compatibility of linguistic construal, as presented in Cognitive Grammar, with the selected formulation of intersubjectivity. The main objective

of this section, however, is to ground the linguistic analysis put forward in the following chapter 5. Finally, section 4.5 assesses the felicity of this task as well as recollects the main points of this chapter at large.

4.2 INTERSUBJECTIVITY AS A PHENOMENOLOGICAL CONCEPT

Intersubjectivity had its first appearance in 1885 in the philosophical work of Johannes Volkelt, but it is safe to say that Edmund Husserl, the founder of phenomenology, was the first to integrate this concept into the development of a systematic philosophical program. Husserl's work, despite the frequent radical departures of later phenomenologists, can still be considered representative of the phenomenological movement at large (see Zlatev 2010: 415). Furthermore, I consider it central for the understanding of the functions intersubjectivity has been given in fields other than philosophy.

The purpose of this section is to explicate the philosophical grounding of the notion of intersubjectivity. Instead of a comprehensive historical introduction, my presentation will provide a brief account of the term's status within Husserlian phenomenology (especially as presented in Zahavi 2001a, 2001b, 2003a, 2003b) and its implications for semantic analysis from a cognitive linguistic perspective. Before that, I will discuss how intersubjectivity is indispensable for a phenomenological approach to knowledge, and how understanding this requires a grasp of how knowledge relates to one's conscious experience. In following section, this relation is addressed through an introduction to the Husserlian concept of intentionality.

4.2.1 INTENTIONALITY

For Husserl, epistemology does not concern mind-independent reality; phenomenology, as presented in Logical investigations Untersuchungen, vol. 1: 2001a [1900-1901], vol. 2: 2001b [1901]), avoids commitment to any metaphysical position (see e.g. Zahavi 2002, 2003a: 8, 39). The primary question Husserl is concerned with is how knowledge is possible via the processes of consciousness. Yet Husserl, especially in the first investigation of Prolegomena to Pure Logic, provides a substantial critique against the psychologism of his era, which sought to naturalize epistemology by reducing it to psychical processes. Husserl (2001a: §24) points to the fact that knowledge, or the object of knowledge, cannot be reduced to the act of knowing, for this reduction would make recurrent reference to universal logical truths impossible. This stems from the axiom that every act of knowing is or might at least be slightly different by some formal characteristic, however peripheral. If knowledge equals both this act of knowing and another act separately, the very notion of knowledge dissolves. Thus, there has to be distinction between the act and the object of knowing. The problem for, and raison d'être of, phenomenology is to describe how the subjective act of knowing reaches knowledge which is inherently objective; that is, phenomenology seeks to describe the subjective conditions of objective knowledge, without recourse to psychophysiological causation (Zahavi 2003a: 13).

The phenomenological method, or collection of methods, is thus a systematic survey into the structures and processes of consciousness that constitute of our experience in its entirety. These structures, which are the analyst's "data", are approached as they appear upon close inspection; and this has led to a host of tenacious methodological criticisms (for a concise review in favor of phenomenology, see Cerbone 2012). The methodological challenge is to unveil structures that are logically and universally essential to experience, and thus transcend individual subjectivity. Phenomenology does not establish itself in mere introspection, but seeks for the ideal conditions of knowledge, which may or may not be revealed by reflection on conscious experience.

For Husserl, there is a group of experiences within our conscious life that hold special value for the constitution of world knowledge and for experience as such. These are the experiences of objects external to our consciousness, that is, the experiences that manifest intentionality.⁵⁶ The specific interpretation of this term is what characterizes Husserl's anti-representational account of consciousness, and thus prefaces the description of intersubjectivity.

Intentionality is not an explanatory concept but a property of consciousness that needs to be either explained or meticulously described (the latter being the path phenomenologists choose), that is, the essence of what enables mind to connect with the world (Zahavi 2003a: 14). An objectivist approach would explain intentionality by saving that an intentional relationship with an object is established when the object affects the mind causally. According to Husserl, however, this cannot hold for the simple reason that there are non-existent, paradoxical and abstract objects, which lack causal power: e.g. hallucination, by definition, is not caused by the object that is being hallucinated (ibid; see also Drummond 2012). This tends to lead to subjectivism and representationalism; if intentionality is a relation and, for a relation, both relata need to exist, there needs to be something mind-internal to which an intention attaches (Drummond 2012: 118; Zahavi 2003a: 15). Epistemologically, however, this view can also be proven wrong: by positing an intra-mental or act-immanent (dependent on the act of consciousness) entity as the object of intention, one faces the impossibility of objective knowledge or even of recurrent experiences of the same object, as is the case with psychologism (ibid.).

In contrast, Husserl can be considered a proponent of non-metaphysical direct realism (Zahavi 2003a: 28–60, 66), to whom the act of knowing and the object of knowing need to be strictly separated. The object itself cannot be actimmanent, that is, immanent to an act of our consciousness; if this were the case,

intersubjectivity.

⁵⁶ There are experiences that lack an intentional object, e.g. emotional states. These experiences made Husserl diverge from Brentano, to whom intentionality is a characteristic of consciousness as such. Intentionality is nevertheless indispensable for the subject to have an experience of the world. Therefore, I consider it a key feature of phenomenological epistemology in general, not just of the understanding of

we would not be able to constitute identity, for example, when observing the same object on multiple occasions. This is simply because every occasion of observation would constitute its own object, which then could be connected to other objects only by their similarity to them. Similarity, in turn, does not suffice to constitute identity; the multiple reasons for this insufficiency are a prominent topic in the phenomenological literature (see e.g. Drummond 1995; 2012: 131).

Husserl thus refutes both objectivist and subjectivist conceptions of intentionality. Instead, he describes intentionality as an intrinsic property of consciousness (Zahavi 2003a: 21). The subject is inherently directed outward, transcending itself, and this makes the intentional object a part of the experience itself. In the case of both real (perceptually apprehended, non-illusory) objects and the objects of our imagination, objects are intended as transcendent, extramental objects.

But how can an extramental, non-existent object be the object of our intention? If we do not posit mental representations, are we not then forced to posit some third ontological category whose members exist independently of both the cognizing subject and the objective world? Husserl's answer to this question would be a steadfast no. Husserl does not deny the material and psychological constitution of thought: the psychophysiological structure and activity of our bodies is not only a necessary precondition for consciousness, but also its significant determinant (e.g. Zahavi 2003a: 98-100). This physicality per se is simply not the issue phenomenology is striving to solve.⁵⁷ Intentionality, however, is not a physiological phenomenon but a relationship between consciousness and the objects that appear to it. Choosing consciousness as the seat of explanation does not entail that material and immaterial objects are analyzed the same by a phenomenologist. On the contrary, the entities apprehended perceptually are given primary significance phenomenological account of how we are in the world. It is only that this centrality is described relative to the manner of givenness in which objects present themselves in our experience and, ultimately, relative to our acts of intending.

We may flesh out this general characterization by considering the three elements of experienced objectivity according to which we may segment and analyze an intentional act. We may either concentrate on 1) the *intentional object* and the way it is *given* in our experience; 2) the *intentional content*, that is, the meaning the experience bears for us; and 3) the *immanent content* of the experience, the very stuff of experience, which requires our objectifying interpretation in order to become or give rise to an intentional act (Zahavi 2003a: 22).

For instance, when I observe a cup, I am faced with a stream of perspectival sensuous experience, a set of visual profiles. This immanent content, as it stands, is not meaningful, yet I perceive the cup as a cup, not as a random detail in my

⁵⁷ This is not to say that the body is not fundamental to phenomenology (see e.g. Merleau-Ponty 2003 [1945]; Violi 2012), but this significance does not derive from the mere physical being as a complex of biomass.

overall visual experience. This is exactly because I intend the cup as such; its preceding experiential significance is presupposed by the fact that I am able to orientate to it as an object of a specific kind. Thus the intentional content is what establishes the object just as it is intended, providing it with identity over manifold of sensations. But the meaning, the intentional content, still has to be separated from the object; my intention is attached to the cup, not to the intentional act that equips the cup with its "cupness".

In turn, the phenomenological analysis of non-existing intentional objects can be characterized as follows. The intentional object needs to be separated from the intentional act, for this would lead to subjectivism. The intentional object, furthermore, cannot be equated with any intramental representation, since a representation itself is parasitic for our direct perception of things. Indeed, a representation presupposes the presentation and interpretation of what the representation is about. This leads to the fact that whether the objects of our intention exist or not, they are intended as objects in the world; as I have mentioned, both real and irreal objects are extramental and transcendent (transcending the intentional act). The way we experience objects is naturally affected by our history, interests and perspective; the intentional object in phenomenology is equal to the object exactly as we intend it, so it is our intention that harnesses the object with its sense or significance for us (Drummond 2012: 123). This does not, however, entail that the object's significance relates only to how we experience it. On the contrary, sense attaches to an object which we apprehend directly as residing in the world. Thus, we need to distinguish the directly perceived object from its sense; this sense is mediated in that it is based on our historical, cultural and previous bodily experience (Drummond 2012: 128). An irreal object thus bears significance for us even while being extramental and non-existent as such.

This neither makes an indisputable case for a non-representational model of intentionality, nor does it need to; it only needs to be acknowledged that such a model is possible in principle.⁵⁸ The idea that a subject may experience, and thus effectively intend, an object without an intervening mental substitute does not provide us with a ready explanation of how we experience foreign subjects, but it establishes the starting point for a phenomenological survey to that end. As will be discussed in sections 4.3.3 and 4.4, this account does not exclude the possibility of internalized representations *per se*; indeed, representations can be posited as a necessary component not only of the linguistic capability of the individual but of the constitution of language as a social phenomenon; it is only that representations are denied the default status in explaining of how the mind connects with the world.

In sum, the intentional object, regardless of its ontological status, transcends any single intentional act; I may observe a physical object several times from different angles or with different needs (the so-called intentional quality), but the object itself retains its identity. Therefore, how we arrive at objectivity, identity,

 $^{^{58}}$ For an elaborate non-representational, or presentational, model of intentionality, see Drummond (2012).

and ontological categorization of intentional objects is a synthesis of different kinds of experience. Phenomenology is thus not a subjectivist theory but one seeking to ground objectivism in the networks of different kinds of intentional acts, including intersubjective ones, which provide us with verification for our epistemological stances toward the objects and the states of affairs we witness in our experience. Needless to say, different kinds of objectivity exist; my intuition of the present object, say this cup of coffee, which is present and intuited not just by me but also by you when you sit next to me is of a very different kind than our shared conviction that the Earth is round, that two plus three equals five, and that I am writing this thesis in (tolerable) English. However, every definition or experience of objectivity is derivative from the relationality between multiple subjects.

4.2.2 INTERSUBJECTIVITY

Phenomenology's methodological concentration on the way things appear to us has led to claims that phenomenology is solipsistic in nature. Paradoxically, one of the main motives for implementing methods that focus on the subject's grasp of the world⁵⁹ is exactly to show how little the subject can do on her own (Zahavi 2003a: 111). In fact, when considering what makes intentional objects and the subjectivity that transcends intentional acts possible, Husserl turns to our ability to experience other subjects, that is, the intersubjectivity of our experience. Objects present themselves as experienced publically, because their very objectivity rests on an intersubjective constitution.

The scope of this work allows only for a cursory characterization of intersubjectivity. In contrast, Husserl himself devotes a substantial portion of his work to intersubjective constitution of experience and knowledge⁶⁰. Intersubjectivity, similarly to intentionality, is for Husserl a basic property of our experience already from a pre-reflective point of view: we experience the world and its objects as publically observable (2003a: 110) and we experience other subjects as foreign, yet self-given (ibid. 113–114). Beyond this immediate experience lies the constitutive role of intersubjectivity that phenomenology aims to disclose; intersubjectivity as a condition for there to be subjectivity, objectivity and intentional relations in the first place (ibid. 111). While intersubjectivity manifests itself, *inter alia*, in our apprehension of objects, it is the experience of a foreign subject that is given the constitutive function of intersubjectivity itself. Indeed, Husserl himself considers the relationship between mother and child as the original of all relations (Zahavi 2003: 113). The question then is not how we

⁵⁹ E.g. transcendental reduction, systematic detection and exclusion of psychological and worldly (i.e. causal, social etc.) interpretations from experience, in an attempt to unveil the experience at its core (cf. Crowell 2012).

⁶⁰ As pointed out by Zahavi (2003a: 157/n.33), Husserl had an appreciation for the significance of intersubjectivity for the phenomenological project already when he wrote *Ideen I*; and even though the expression of this appreciation was postponed until the posthumous publication of *Ideen II*, intersubjectivity can nevertheless be considered a key concept in Husserlian thought.

apprehend the Other on the basis of how we experience foreign objects, but vice versa. The subject-subject relationship is nevertheless not an unanalyzable primitive for Husserl but something that needs close inspection: this is the only way to grasp the way we grasp the world.

A challenge seems to arise: in order not to fall into skepticism or solipsism, one needs to posit the foreign subject not just as an experiential fact but as an actual subject; but how are we ever able to really experience the other in our mundane experience, and how can we as phenomenologists ever describe that experience as more than just distinct from the experience of an object?

The answer to this question requires the acknowledgement and analysis of different kinds of intersubjectivities. One would not be able to recognize a foreign subjectivity without one's body and its dual status both as a subject and an object of one's experience. Indeed, I am not only capable of embodied action, but I am capable of action that is directed towards myself; I am able to touch my hand, feed my mouth, and scratch the back of my head etc. (ibid.). For Husserl, this foundational double-sensation (Zahavi 2003a: 104) of one's body is a precondition for the experience of the bodily presence of the Other: the recognition of a subject-object duality that is similar to, and distinct from, ours. Yet the Other remains transcendent and inaccessible to the experiencing subject. For Husserl, it is exactly this elusive, inaccessible self-givenness of the other that we experience when we experience the Other proper. Husserl's standpoint is summarized by Zahavi (2003a) as follows:

"That I have an actual experience of the Other, and do not have to do with a mere inference, does not mean that I can experience the Other in the same way as the Other experiences himself or herself, nor that the consciousness of the Other is accessible to me in the same way as my own is. [...] [I]t is only because the foreign subject eludes my direct experience in this way that he or she is experienced as an Other at all. [...] The self-givenness of the Other is inaccessible and transcendent to me, but it is exactly this limit that I can experience." (Zahavi 2003a: 113–114.)

In other words, we witness a subjectivity that bears resemblance to our own, but that is transcendent in its self-givenness. This occurs in immediate experiential terms; we may be able to generate elaborate theories on the motives behind the actions of the Other, but these constructs presuppose a pre-theoretical experience.

By positing the Other as transcendent yet immediately experienced self-givenness, phenomenology adopts an oppositional position toward the previous solutions to the problem of other minds that are based on the so-called argument from analogy. This argument, formulated and defended by, *inter alia*, John Stuart Mill, states that the subjectivity of the Other is attained through a stepwise inference of covert psychological states from overt behavior: I, for example, yawn when I am tired, and I am capable of reflectively associating my overt activity with my psychophysiological subjective state. Then, when I observe other bodies that

are performing similar activities, I proceed to attribute their hidden subjectivities with the subjective state that I myself have previously experienced.

Husserl (e.g. in *Cartesian Meditations*, 1999 [1950]), among other phenomenologists (e.g. Scheler 2008 [1923]), has nevertheless refuted this seemingly unproblematic solution. This is due to the fact that the explanation presupposes what it seeks to explain: the foreign subjectivity itself. The recognition of similarity between the actions of two separate subjects does not, upon closer inspection, result directly from an act of comparison, for it involves a mapping between two perspectives and between two different sensory modalities; there are my first-person proprioceptive, auditory experience of my own action (as well as my subjective state of tiredness) and my third-person visual and auditory experience of the Other (Zahavi 2001b: 152–153). In order to make such a mapping possible, we already need to have some grasp of the subjectivity of the Other as someone who is actually performing these acts and is able to exhibit a subjective state similar to that of our own.

In addition, an inferential solution to the problem of other minds violates our experience of the Other, in which her mental state and its expression are experienced as a unified whole and intrinsic to the recognition of the Other's action (Scheler 2008 [1923]: 254). Considering the constitutive status of the Other for the mode of one's being in the world, a phenomenologist such as Husserl or Scheler would maintain that approaching other minds as an inferential challenge is to entirely misconstrue the epistemological nature of human condition.

The bodily-based experience of the Other is elementary for any understanding of a foreign subject, but it is only a starting point for a philosophy that aims to establish objectivity on the grounds of intersubjectivity. We are faced with the fact, that for Husserl, intersubjectivity is not only constituted but also constituting. In fact, Husserl goes as far as to say that the ego that experiences other subjects is itself constituted intersubjectively. How is this achieved without falling prey to circular thinking?

Different types of intersubjectivity come into play here. The bodily encounter with the Other is the constitutive cornerstone of our experience of foreign subjectivity, as the Other's experience and intentions are observable in their bodily manifestations, but are transcendent in their specific subjective quality. This encounter does not only posit a new category of Other, but also irrevocably alters our experiential categories in their entirety. We come to experience that, in our triadic interaction with the Other and the present objects, the objects indeed are not "merely" intentional objects but objects in their own right, as they retain their status as independent of the specific subject. In this, the transcendence of the Other becomes the origin of all transcendence (Zahavi 2003b: 235): the transcendent objectivity of our experience is grounded in the fact that it is public to the indefinite number of Others. At the same time, Husserl considers that intentionality itself presupposes intersubjectivity. This is grounded in the horizonal intentionality of objects, i.e. the identity of an object that is constituted over an indefinite number of its perspectival appearances (Zahavi 2001b: 154-155). When we observe a building from the street, our intention is not directed toward its façade but toward the building proper, which implies all the different perspectives from which the building can be observed. This plurality of perspectives merges with the intrinsic public nature of my observing: any of the indefinite perspectival appearances can be ascribed to an indefinite foreign subjectivity. In this, my perceptional intentionality manifests what Zahavi (1997: 312) refers to as open intersubjectivity of experience, an a priori reference to a multitude of subjects.

Intersubjectivity, which is grounded in the experience of a transcendent Other, is at the core of the phenomenological account of objectivity, intentionality, and of transcendence itself. The next question is how we proceed from these premises toward an understanding of the subject, which is at the very onset of the phenomenological survey. To put it simply, we do this by bringing focus back to the necessary first-person orientation of phenomenology. Intersubjectivity is only made possible by an asymmetry, that is, an ontological separation, between self and other. Intersubjectivity thus presupposes subjectivity. But then in what way does the former help to constitute the latter? For subjectivity to attain its relative ontological independence, its constitution in intersubjectivity has to be partial. There are, in other words, intrinsic, sui generis moments of subjectivity, such as the temporal flow of consciousness (for discussion, see Zahavi 2003b), that do not presuppose the Other. However, the intersubjective nature of a fundamental portion of our experience, the experience of the intersubjective validity of the objects we perceive, provides the experiencing ego with the fundamental separation of what it experiences. That is, the nature of subjectivity as a constitutive ego (an ego that constitutes transcendence and transcendental objects) is defined by the fact that we are able to constitute objects as valid objects to subjects in general. Without this sociality of our experience, the very distinction between subject and object would not hold, at least in the sense we know it.

It must be re-emphasized that Husserl, despite having once called his project one of "descriptive psychology" (a term adopted from Brentano), did not claim to offer a causal psychological explanation, but a description of the ideal conditions for knowledge, that is, the structures of experience that constitute its objective validity. Paradoxically, this restrictiveness makes his formulation of intersubjectivity relevant for any psychological consideration of human social capacity. While the phenomenological analysis of intersubjectivity is clearly nonempirical, it still may provide an accurate description of the subject as an experiential phenomenon, and it may inform empirical psychology by providing logical constraints for the definition and formulation of analytical questions and concepts (for discussion, see Zlatev 2010). The single most important characteristic of Husserl's position relative to intersubjectivity is its direct, bodily-grounded and non-inferential nature, as opposed to the philosophical approaches that rely on an inferential capacity when solving the problem of other minds. This approach, however, has not been greeted with unreserved acceptance by modern psychology of social mind; instead, empirical research on intersubjectivity is characterized by a paradigmatic division, which interestingly rekindles the philosophical debate on the argument from analogy.

4.3 INTERSUBJECTIVITY AS AN EMPIRICAL CONCEPT

The concept of intersubjectivity has been adopted by modern schools of psychoanalysis (e.g. Atwood & Storolow 1984; Ogden 1994; Stolorow 1997, 2013; Stolorow et al. 2002) and developmental psychology (e.g. Meltzoff & Moore 1977, 1994, 1997; Stern 1971, 1977; Trevarthen 1979, 1980), with Vygotsky (1978) and Wittgenstein (2009 [1953]) as important mediators. From developmental psychology the use of the concept has spread, inter alia, to neuropsychology (Barresi & Moore 1996, 2008; Gallese 2004; Iacoboni 2009; Franks, ed., 2010) and linguistics (Foolen et al., eds., 2012; Zlatev et al., eds., 2008). The impetus to this expansion results in part from the growing interest in the origins of distinctly human forms of higher intersubjectivity, such as sophisticated symbolic interaction and exceedingly complex forms of culture (see e.g. Zlatev et al. 2008). These forms of intersubjectivity nevertheless seem to rely on more rudimentary social capacities that are also found in other animals, an observation that fuels comparative evolutionary psychology of intersubjectivity (see e.g. Hutto 2008; Pika 2008). Whatever the persuasion of the researcher, much of the controversy concerning intersubjectivity revolves around the emergence of intersubjective skills in neonates and young infants. Since the understanding of this developmental phase bears directly on how language and its acquisition should be depicted, we will proceed to discuss infant intersubjectivity in the following section.

4.3.1 INTERSUBJECTIVITY IN A DEVELOPMENTAL PERSPECTIVE

In developmental and evolutionary psychology, intersubjectivity may be explained roughly in two ways: either based on the subject's theoretization or inference about others, as in the so-called Theory-of-Mind models (henceforth ToM); or based on the subjects' mutual and direct recognition of their orientations ("intersubjective" or "enactivist" approach).⁶¹

The scientific discussion on the development of intersubjectivity skills in early infancy has been dominated by various approaches that belong to the ToM category. Despite notable variation among these approaches, they typically share "the commitment to the idea that social cognition is primarily about mindreading" (de Bruin & de Haan 2012: 226). "Mindreading" here refers to the reflective interpretation of others, which is based on their recognition as subjects that hold beliefs and desires which may or may not correspond to ours. In socialled Theory Theory (henceforth "TT", e.g. Gopnik & Seiver 2009), the mindreading capacity is explained as a form of inference, which in turn is based on a "theory", a set of overt generalizations of the interrelations between internal states (beliefs and desires) and external behavior (intentions and actions). Simulation Theory ("ST", e.g. Goldman 2006) is typically presented as a rival to

141

⁶¹ In practice, the models for intersubjectivity in grown-ups tend to be multi-leveled and include both mindtheoretical and enactivist aspects. The classification of models into separate categories may nevertheless be carried out on the basis of the theory's primary emphasis.

TT models, and motivated as a reaction to the over-intellectualism attributed to the Theory Theory. According to ST, one interprets the underlying mental state of the other by 'placing oneself in the other's shoes' and mapping one's own suitable mental state on the other with respect to the other's overt behavior. In sum, TT and ST are similar with respect to the emphasis they place on internal-external mapping but differ in the explanation for the specific mechanism behind this mapping.

The ToM -models of both of these varieties have been criticized for the fact that the mindreading skills to which they attribute our social sense-making rarely show up in conscious experience (Gallagher & Hutto 2008: 18–19). Moreover, their recourse to implicit processing, e.g. by means of mirror neurons, leads ToM models to the problem of how sub-personal theories or simulations could be applied to mediate between first- and third-person perspectives in social interpretation (ibid. 19). Finally, evidence from newborns and small children shows that the capability of mutual sense-making between the child and the caregiver emerges earlier than ToM models would predict, and exhibits a behavioral sophistication that ToM models are not able to account for (ibid. 20).

Enactivist and related approaches (e.g. Gallagher 2003; Hutto 2007; Gallagher & Hutto 2008; Thompson 2007a; Varela, Thompson & Rosch 1991) in turn take this sophistication of infant interaction as their starting point. They hypothesize that even small children are able to experience meanings directly as inherent properties of others' overt actions, without the intervention of theoretical or simulative mentalistic representations. This direct kind of social understanding is accompanied by the ability to use one's body expressively, starting with different primary, protoconversational practices and little by little taking conscious control of body as a symbolic mediator.

As opposed to ToM models, the enactivist approach has been criticized for a relative inability to account for higher social-cognitive skills (e.g. de Bruin & de Haan 2012); the direct, experiential understanding that enactivism builds on is not easily extended to the description of, for instance, complex folk-psychological propositions concerning others' motives. It would thus seem that an optimal description of intersubjectivity in adults would require a compromise between these two models. However, given the variety of shortcomings with the ToM line of thought, an optimal approach would actually be a multiple-level model that would build higher forms of intersubjectivity progressively from more rudimentary ones. It is exactly this kind of model, which complements an enactivist description, rather than compromising it in favor of ToMs, that Zlatev (e.g. 2008b, 2013) provides. To have clear picture of such a multi-leveled model, let us consider the developmental-psychological basis of enactivism closer.

Enactivism has been greatly influenced by the seminal studies of Bateson (1979), Stern (1971, 1977, 1985), and Trevarthen (1979), who independently examined the close, embodied proto-conversational interaction between infants and caregivers. These studies concentrated on the nuances of the interaction in which the mother gave sensitive, affective support during the child's application of new attentive and motor skills. Trevarthen, for one, found "complex conversation-like engagements in which both infant and mother exhibited

intuitive competence for sharing their impulses" (Trevarthen 2008: IX). Most importantly, these engagements necessarily preceded any conceptual mind-reading capacity, which suggests that they involve the ability of the infant to directly attune to the other's mind, by assuming the same or remarkably similar state or orientation. However, the ability was not perceived as a unitary phenomenon but one with stepwise evolution, which gave rise to Trevarthen's notion of Primary and Secondary Intersubjectivity.

Primary Intersubjectivity is present in the interaction between a newborn and her mother from birth, but the child's ability to participate in this relation is likely to evolve before birth (Trevarthen & Aitken 2001: 7). It consists of non-referential interplay and rhythmic imitation between mother and child, which presupposes an intermodal mapping between child's vision (caretaker's face) and proprioceptive sense of her own body (Zlatev 2008b: 220; cf. Husserl's "doublesensation" above, pp. 12). Primary Intersubjectivity is characterized by an involuntary engagement in non-representational interaction with the caretaker, as well as by a lack of differentiation between self and other. In other words, the interaction between newborn and parent at this stage is intersubjective in that it involves reciprocal reactivity that presumes a modal reversal from perceived to executed activity, a rhythmic attunement in the patterns of facial, vocal, and gestural interplay, and, above all, a recognition of the other exactly as the other subject. At the same time, this recognition is not conscious, since this kind of consciousness would automatically result in a differentiation between self and other, which is manifest in the intersubjective capacities of later developmental

Because of this lack of representational capacity and the lack of differentiation between self and other, Zlatev (2008b: 220) refers to the child's interaction with the caretaker in Primary Intersubjectivity as proto-mimetic. The manifest capabilities of the child at this stage serve to ground proper mimetic and postmimetic skills later on, but do not in themselves constitute imitation in a conscious and representative sense. Primary Intersubjectivity, however, posits an evolution of its own. From birth, neonates may not be able to discriminate between self and caretaker in a conscious manner, but they nevertheless show an "innate protoconversational readiness" (Trevarthen & Aitken 2001: 7) to regulate the self-other relationship. The behavior of small children as young as 2 months old starts to involve rhythmic motor play with caretakers, which shows early intersubjective motives (ibid. 5). The increasing complexity of this interaction throughout the first 9 months of life is accompanied by simultaneous increase in interest toward external objects. It is then the integration of the child's intersubjective and subjective (here, object-oriented) motives that marks the onset of Secondary Intersubjectivity at the age of 9 months (ibid.).

In the beginning of Secondary Intersubjectivity, the infant starts not only to grasp the other's orientation toward an outside object but also the object itself, and to perceive the relation of the two as intentional. That is, the child starts to detect intentional relations as goal-directed, contextual actions; and thus this stage can also be called pragmatic intersubjectivity (Gallagher & Hutto 2008: 23). The enactivist interpretation (ibid.) of this ability is that intentional relations are

apprehended as inherently meaningful in their own contexts, without inference of implicit beliefs, desires or other motives from the explicit situation, objects, and the others gestures. Rather, the relation between the other and the object is meaningful as such: for example, when the child sees the caretaker approach the door and her hand reach for the door knob, it is the perceptual meaning of that action that presents itself as the intention of opening the door, not some interpretation of a hidden desire.

This stage has also been shown to have an evolution of its own. The development of a child's attentive control, from around 9–14 months onward, starts to manifest in that the child repeatedly follows the gaze of the caretaker to the object that is being observed and then checks back to the direction of the gaze (ibid. 24). Around 18 months, the child already detects the adult's intentions toward an instrument and is even capable of correcting the inadequate use of a toy (see Meltzof & Brooks 2001). Gallagher and Hutto (2008: 24–25) interpret these abilities as in line with Gibsonian affordances (Gibson 1979). The environment does not represent itself as a blank slate but as situations that are endowed with meaning through the observation of, and co-operation with, a functioning care-taker. This entails that neither objects nor subjects are observed neutrally, but relative to their possible uses or intentions in given contexts. This leads to an action-oriented, holistic understanding of the other, not primarily as a mental, calculating subject but as an interactant in relation to the exact pragmatic situation in which she is observed.

Primary and Secondary Intersubjectivity can thus be described with reference to the recognition of a foreign subject and to a developing capacity to discern the other's intentional relations in pragmatic contexts. Conversely, these stages can be described without need to posit mentalistic abilities, such as inference from overt behavior. The question is how far this kind of pragmatic, non-mentalistic action interpretation can be extended in the description of higher intersubjective skills. The answer proposed by some enactivists (e.g. Gallagher 2001; Hutto 2007, 2008; Gallagher & Hutto 2008) is that the abilities established during Primary and Secondary Intersubjectivity not only stay in place in adults, but also constitute the foundational part of our understanding of the other. The ability to grasp mental predicates that characterize the other's attitude toward overt action is grounded in these abilities, but it is cultivated to its full extent by exposure to language and specifically to one genre of linguistic interaction between children and adults: narratives. Folk psychology thus originates in intersubjective encounters, which simply include forms of interaction that are increasingly indirect.

In this model (e.g. Gallagher & Hutto 2008), language is evoked as an explanatory factor. However, it is unclear, whether the model as such is sufficient for explaining the linguistic capacity itself. To address this question, let us turn to the enactivist analysis of intersubjective abilities in adults.

4.3.2 INTERSUBJECTIVITY IN ADULTS: ENACTIVISM

Enactivism is an approach that aims to explain cognition relative to an organism's interaction with its environment⁶². Cognition is defined as "the enactment of a world and a mind on the basis of a history of the variety of actions that a being in the world performs" (Varela et al. 1991: 9). This is a seemingly vague formulation, which nevertheless unambiguously refutes a context-independent constitution of mind. The theoretical foci of enactivism are closely linked to intersubjectivity, as the interaction between conspecifics is essential for cognitive ontogenesis and the manifestation of fundamental psychological traits, such as the conception of self and autobiographical memory⁶³. Enactivism draws from multiple sources, including biology, general systems theory, and phenomenology. The influence of the latter is evident in enactivism's general principle to "study the mind in a way that does justice to human experience while remaining scientifically sound" (de Bruin & de Haan 2012: 229). A central manifestation of this principle is the substantial emphasis enactivism places on second-person perspective in the analysis of interaction. This emphasis is motivated by the phenomenological fact that our experience of others is primarily of the second-person character: while we may nurture highly elaborate theories about the mental lives of the others, these theories are only made possible and meaningful by the face-to-face encounters that preceded them. These encounters are not of third-person mentalizing kind, but are direct and directed toward a genuine second-person interlocutor. Moreover, these encounters maintain this direct basis regardless of the higher social-cognitive abilities that build on it. (De Bruin & de Haan 2012.)

Enactivism presents itself in contrast to "cognitivist" accounts of human mind, of which ToM approaches are a folk-psychological representative. This contrast is best illustrated relative to the question of representations. Loyal to its phenomenological foundations, enactivism discards the cognitivist concept of mind as an information-processing system that operates on mental representations (for discussion, see de Bruin & de Haan 2012; on representationalism, see Fodor 1981; Tye 1995, 2000). Instead, the interaction between an organism and its environment is direct in the sense that the environment presents itself as meaningful via the meaningfulness of the objects, events and actions that are manifest in our interaction. This general principle is applied to intersubjectivity specifically. Gallagher characterizes the enactivist account of social cognition as follows:

⁶² Gallagher presents this view under the rubric of Interaction Theory (e.g. Gallagher 2004), which can be defined as another variation of enactivism.

⁶³ The exact impact of society for the constitution of the self continues to be a hotly debated theoretical issue, especially between current socio-psychological theories (see e.g. Novak et al. 2000), which derive from symbolic and other forms of interactionism (e.g. Mead 1950), and evolutionary psychology, which emphasizes innate motives for human behavior (e.g. Pinker 2002). What is not debated, however, is the axiom that intersubjective experience shapes self-conception both as a pragmatic accommodation to immediate circumstances and as a long-term accommodation to continuous tendencies of others' behavioral responses.

- (1*) Other minds are not hidden away and inaccessible. The other person's intentions, emotions, and dispositions are expressed in their embodied behavior. In most cases of everyday interaction no inference or projection to mental states beyond those expressions and behaviors is necessary.
- (2*) Our normal everyday stance toward the other person is not thirdperson, detached observation; it is second-person interaction. We are not primarily spectators or observers of other people's actions; for the most part we are interacting with them in some communicative action, on some project, in some pre-defined relation; or we are treating them as potential interactors.
- (3*) Our primary and pervasive way of understanding others does not involve mentalizing or mindreading; in fact, these are rare and specialized abilities that we develop only on the basis of a more embodied engagement with others. (Gallagher 2013: 60.)

The resemblance between these points and the discussion on phenomenology above is not accidental. Gallagher's anti-representational social cognition can indeed be interpreted as an instance of naturalized phenomenology (see e.g. Gallagher 2012; Petitot et al., eds., 2000)⁶⁴. The idea of this approach is to combine the explicit phenomenological analysis of consciousness with empirical cognitive-psychological methods so that conceptual restrictions on both of these approaches can be attained (e.g. Gallagher 2012: 78–80). The influence of phenomenology is especially manifest in the conviction that in normal daily interaction the intentionality of the other is by default directly apprehended as an immanent experiential property. However, the possible non-immanent, long-term goals and the conceptual schemes of how to achieve these goals remain not only hidden, but are fundamentally secondary to the necessary immediacy of our experience of the other.

What is latent in Gallagher's formulation is a general methodological guideline on which enactivism builds. An organism is what it does, and what it does is fundamentally reactive; so the proper unit of analysis is the organism within its environment, or even more radically, the organism as a feature of that environment. In the following extract, de Bruin and de Haan characterize the application of this notion to social cognition:

The proper unit of analysis is not the individual (let alone the individual brain) but rather the coupled system as a whole, including the participants, their dynamic interactions, and the context in which these interactions take place. (de Bruin & de Haan 2012: 229.)

An analogical point is made by Leavens et al. (2008) with respect to communication in biological terms:

146

⁶⁴ This can be seen as a manifestation of the larger naturalizing trend within contemporary phenomenology (see e.g. Petitot et al. 2000; Gallagher 2012).

Because communication is distributed across boundaries of transduction and because networks of transduction exist at all levels of living systems, from cells to organisms and societies, and because cognition (the discrimination and use of information) is hence an inherently communicative act, therefore it is a category error to interpret communicative behavior as an index to unseen cognitive processes. [...] It might be argued that networks of communication between neurons comprise functional cognitive systems, or modules, that are properties of individual brains, but because of the distributed nature of cognitive processes, where no cognitive activity can develop or be manifested in a sensorimotor vacuum, all cognitive activity is co-constituted by organisms plus the physical consequences of action and sensation. (Leavens et al. 2008: 189.)

These claims share the conviction that if the valid analysis of a functional organism is in fact an analysis of the organism in its environment, and if one fundamental attribute of that environment are the conspecifics (to which we orient in a direct manner), the proper unit for the analysis of intersubjectivity is, as a minimum, a pair of conspecifics. This is what de Jaegher and di Paolo (2007) refer to as a coupled system, in which the depicted processes presume the system as a whole, while the parts of the whole are attributed autonomous control over their function.

We have seen that intersubjectivity without a mentalistic component is a possible if not indisputably the only valid description for social cognition in neonates and small children at least until the age of two years. By that age, children have acquired the understanding that others have "internal goals and wants" that differ from their own (Wellman & Phillips 2001: 130). The question is how children from that age on develop a fully-fledged capacity to understand others as not only acting and interacting but also thinking subjects.

Let us briefly consider and the proposal given within the enactivist framework. Narrative Practice Hypothesis (NPH, Hutto 2007, 2008; Gallagher & Hutto 2008) is a further development of enactivism and it is directly devised to account for intersubjective action-interpretation and folk-psychological understanding. As the name suggests, NPH explains the folk psychology as a result from an infant "being introduced to, being made familiar with, and actively engaging in folk-psychological narratives: stories about reasons for actions" (de Bruin & De Haan 2012: 240). The core of the hypothesis is that the very foundation of psychological explanation is stored and conveyed in fables and fairy tales that people tell their children everywhere.

As an enactivist enterprise, NPH offers an account of narrative competency that enables a direct form of understanding of others, of which folk-psychological understanding is one sub-category. This is due to the fact that folk-psychological narratives and the corresponding competency in these are embedded within the wider context of narratives in general. What children are exposed to is a constant overflow of linguistically represented descriptions of actions for reasons, and

psychological reasons that are only a subtype of these albeit an important one (Gallagher & Hutto 2008: 28).⁶⁵ Folk-psychological narratives, of which Little Red Riding Hood is a prime example (ibid.), provide actions with subjective reasons, i.e. goals and motives that are internalized by the characters. The recurrent exposure to narratives of this variety equips children with a model that they can use when the overt features of the observed action of the other fail to explicate the other's intentions. Gallagher and Hutto state that:

[Folk-psychological narratives] generally only come into play in those cases in which the actions of others deviate from what is normally expected in such a way that we encounter difficulty understanding them. [...] Appeal to folk psychology may come into play when culturally-based expectations are violated. For the most part, well-rehearsed patterns of behaviour and coordination dominate. (Gallagher & Hutto 2008: 30.)

Narratively induced folk psychology, in other words, is presented as a problem-solving mechanism. As a hypothesis, the realism of NPH depends on whether one accepts a heavily pragmatic conception of action interpretation on a more general, non-psychologistic level. For example, our reasoning of why our remote acquaintance is going to India involves a synthesis of multiple epistemic strategies (Gallagher and Hutto, ibid: 26–27). According to NPH, however, all of these strategies are grounded in our previous experiences of our acquaintance or of people in general acting for reasons. In both of these cases, the interpreted reasons or motives derive from the history of culturally, intentionally and interactively motivated actions, rather than from posited mental states. On the contrary, the mapping of mental states on the other is only made possible by the general narrative structure of people acting for fundamentally external reasons. This mentalizing capability is thus secondary and supplementary to the direct narratively constituted intentional framework of default action interpretation.

NPH as such is attractive, but it is difficult to grasp in what way it is capable of accounting for higher forms of social cognition in a direct manner. In other words, it is not clear how narrative practice provides one with a distanced understanding of others without the internalization of some folk-psychological theory. If making sense of others' actions through narrative practice is based on learning through repetition, is it not likely to involve a schematic representation of the belief—action-relationship? Or if narrative practice is to be interpreted as a strategy for understanding in problematic contexts, is it not still a strategy for interpretation? All in all, NPH may implicitly rely on inferential capabilities in its explanation of folk psychology, as noticed by de Bruin and de Haan (2012).

Interestingly, de Bruin and de Haan criticize enactivism for shortcomings in exactly what NPH provides: the bridging of the so-called cognitive gap (de Jaegher and Froese 2009: 439) between direct embodied interaction and higher cognitive intersubjectivity. De Bruin and de Haan's verdict is that the available

 $^{^{65}}$ Just consider the amount of different kinds of why-questions to that adult caretakers are required to answer when explaining social norms or their own behavior to their children

enactivist solutions lead to two types of inconsistency: enactivism either a) remains loyal to the notion of direct coupling and thus fails to account for folk psychological action interpretation (de Bruin & de Haan 2012: 238–240), or it b) succeeds in the description of "higher" social cognition but only by letting go of the direct, embodied grounding of interaction (ibid. 241–243).

De Bruin and de Haan only propose a putative solution to this dilemma, but it is worth discussing as it leads to the intersubjectivity of language. What they suggest is that the problem of enactivism lies in the notion of direct coupling; this the concept which defines the constitutive relationship between intersubjectivities of different levels of complexity. The revision of direct coupling needs to start with a discussion of the polysemy of "direct". This term may refer to the "immediacy of knowing" (without e.g. inference or representation, de Bruin and de Haan 2012: 243, italics in the original), on the one hand, and to "the immediacy of the presence of the participants in a social situation" (ibid., italics in the original, on the other. To be a viable theory of social cognition, enactivism needs to explain how social cognition works when the latter kind of situational immediacy is canceled; the indirect reflection on people's mental states is itself a phenomenological fact. But what about the immediacy of knowing? De Bruin and de Haan's analysis of NPH shows that the application of the skills gained via narrative practice cannot be described without the operationalization of some amount of inference or folk-psychological concepts: the actual action interpretation involves, after all, the projection of hypothetical covert motives.

This leads to the conclusion that a strict commitment to direct coupling needs to give way, to a certain extent, to mediated social cognition, which is what in fact takes place in NPH's version of enactivism. Anti-representationalism needs to be refined so that it is only opposed to mental representationalism as a categorical mind-philosophical standpoint. In this manner, the immediacy of experience can be preserved, even when the experience may have representations as its objects, that is, culturally transferred concepts and conceptions but also mental images, memories, fantasies etc. that appear in explicit stand-for relations vis-à-vis their representational objects.

This is maintained by de Bruin and de Haan (2012: 244–246) in their revision of the notion of coupling itself. Instead of discarding the concept altogether, they suggest that it should be seen as a dynamic, cyclical concept decomposable into phases of de-coupling and re-coupling (ibid. 245). De Bruin and de Haan (ibid. 244) consider de-coupling as an integral part of coupling itself: a systematic adjustment of the response to a situation on the basis of previous encounters. This adjustment may include reflection as well as a comparative function with respect to psychologizing concepts. However, since it is grounded in the immediate pragmatic context of the concurrent interaction and based on previous interactions, de-coupling can in no way be absolute, but is itself a function of the directness of coupling (ibid.).

De Bruin and de Haan's (2012) critique of enactivism is accurate, but as it stands, it pertains more to a demand for complementation than to complementation in its own right. The question that is left to be answered is how intersubjectivity is extended by culturally transferred concepts. In this, language

constitutes both a medium for, and an object of, transference. Both enactivism by Gallagher and Hutto and its critique by de Bruin and de Haan point to the significant function of language in mediated social understanding; yet they only characterize vaguely the possible lines of study. In contrast, an explicit account of this function is presented by Zlatev (2005, 2007a, 2007b, 2008a, 2008b, 2013), who ties language and intersubjectivity in bodily mimesis.

4.3.3 INTERSUBJECTIVITY AND LANGUAGE

Zlatev (2008: 217) characterizes his conception of intersubjectivity as exhibiting three main properties: 1) it is non-unitary, involving the understanding of a variety of mental, entities from emotions and attention to "proposition-like entities"; 2) it is stage-like developmentally, evolutionarily, and structurally; and 3) it is bodily-based. Zlatev (2005, 2007a, 2007b, 2008a, 2008b, 2013) presents a model in which human intersubjectivity (both in ontogeny and phylogeny) is seen as developing through different levels of bodily mimesis. In this 5-level mimetic system, the first three levels give rise to linguistic competency, along which more sophisticated forms of social cognition develop (Zlatev 2008a: 138). However, language is seen as a direct continuation of the mimetic ability, and intersubjectivity is described as co-evolving with mimesis in ontogeny (and phylogeny). Zlatev, in other words, posits a hierarchy of intersubjectivity skills, some of which ground language and others that are themselves grounded by linguistic practice. The hierarchy is presented as developmental and evolutionary (since it captures similarities as well as differences between humans and nonhuman primates), but also as applicable to the description of intersubjectivity in adults. In what follows, I will summarize Zlatev's model chiefly from a developmental perspective, but only to explicate the full-blown intersubjective capability adults manifest in linguistic interaction.

Zlatev's model of *mimesis hierarchy* (2008b: 218–221) is based on Donald's (1991) theory of human evolution, which seeks to explain the modern state of human cognition as a result of mimetic practices and representations, as well as a corresponding mimetic culture; in our ape ancestors, this has involved tool-use, ritual dance, and gestural communication, for instance. Most important here are the mimetic representations which Donald defines as "conscious, self-initiated, representational acts that are intentional but not linguistic" (ibid 1991: 168). The fact that they are not linguistic links these representations with bodily mimesis in particular (Donald 2001: 268). As a rough generalization, Zlatev's mimesis hierarchy draws from Donald's notion of bodily mimesis, while seeking to elaborate the concept with respect to its internal (hierarchical) organization, the role of consciousness in mimesis, and the ontological nature of communication (see Zlatev 2008a: 138).

Bodily mimesis, in general, involves a mapping between exteroception and proprioception (see section 4.3.1 on primary and secondary intersubjectivity), iconic or indexical correspondence between a bodily act and an object, and an intended stand-for-relation (e.g. Zlatev 2013: 51). Language is based on bodily mimesis both ontogenetically and synchronically, but it also involves a departure

from the immediacy of mimesis in that it bases its representative function in conventionality/normativity and systematicity/ compositionality. On the basis of this, Zlatev presents his five-level hierarchy:

- 1. Proto-mimesis: associated e.g. with neonatal imitation, mutual attention and 1st order mentality
- 2. Dyadic mimesis: shared attention, understanding of other's intentions, 2nd order mentality (understanding others through projection)
- 3. Triadic mimesis: joint attention, having and understanding communicative intentions, 3rd order mentality (attention and intentions)
- 4. Post-mimesis₁/protolanguage: semantic conventions, 3rd order mentality (expectations)
- 5. Post-mimesis_{2/}language: (false) belief understanding, 3rd order mentality (beliefs)

(Zlatev 2008b: 219.)

As mentioned, this hierarchy is not only evolutionary and developmental, but also describes the synchronic organization of mimetic abilities in adults; and while it explicitly concentrates on mimesis, it simultaneously classifies the levels of intersubjectivity based on said abilities. The first two stages in this hierarchy correspond approximately to the Primary and Secondary Intersubjectivity presented by Trevarthen (1979) and adopted by Gallagher and Hutto (2008). The third stage in this model proves significant, not only in that it appears to be the diverging point in the development of humans and non-human primates, but that it constitutes the necessary predecessor of language (Zlatev 2008b: 229). Zlatev points out the interesting logical necessity that the perceptual intersubjectivity witnessed at this stage requires a so-called third-order mentality, that is, ability "to see that you see that I see X" (ibid. 230), which is directly analogous to the structure of common knowledge posited by Itkonen (1997: 54-62, 2008b: 286-290; see section 3.2.3 above). This is called "joint attention" (Zlatev 2008b: 230), a mutual orientation to a shared object with the necessary reciprocal consciousness about the mutuality of the orientation itself.

Joint attention presupposes the understanding that my own gaze serves as an indication of my orientation to the other in the same way that the gaze of the other indicates her orientation to me. An understanding follows that I may use an embodied act in a communicative function, and that the other may do so as well (ibid. 229). This understanding, which is present in perceptual intersubjectivity, is simultaneously manifest in the abilities that involve using one's body signitively, for instance, declarative pointing and other indexical gestures (ibid. 230). In other words, children and enculturated apes that have reached this stage have acquired the understanding of the other not only as an intentional subject but a as subject with communicative intentions. This is not something that small children may reflect on or explicate linguistically in a propositional form; rather, this understanding pertains to expectations that are latent in the observation of

the other's behavior and requires later development of meta-representational skills to be conceptualized and explicable.

Triadic mimesis constitutes an intersubjective structure that is basic to intentional communication; it includes the self, the other, and the shared representation, as well as the appropriate reciprocal understanding of what is shared. Most importantly, this structure is attained by means of embodied interaction. The explanation offered by Zlatev refutes both mentalism and solipsism: it refutes mentalism in that it bases the understanding of the other in direct, contextual apprehension of the other's intentions; and it refutes solipsism in that the skills that manifest and constitute this understanding are learned in a careful, embodied tuning-in with the other in mimetic practices.

Thus triadic mimes is is the precursor of linguistic ability; it is only a precursor, however, for it lacks two fundamental characteristics of language: conventionality and systematicity. These, according to Zlatev (2008b), are acquired through two subsequent levels of post-mimesis: post-mimesis₁, which involves semantic convention, i.e. using symbols without the direct, indexical or iconic involvement of body; and post-mimesis₂, which involves the mastery of language as a system that interprets units by relating them mutually. The two levels of post-mimesis thus are two subsequent steps away from the immediacy of embodied intersubjectivity. Post-mimesis₁ equals proto-language, which again involves the apprehension of semantic convention. At this stage, children, as well as some enculturated apes, are able to comprehend and use signs with a completely arbitrary and conventional signitive function (ibid 232). Yet the use of signs shows none or only weak signs of systematicity; that is, the relations of signs, such as their sequential order, may not yet produce constant semantic effects. It is in the level of post-mimesis2 that the distinctively combinatory nature of human language is manifest: the ability to relate symbolic units by means of syntactic constructions thus arriving at increasingly complex conceptual structures (ibid. 234).

Despite the arbitrariness of the signitive function in both the proto-linguistic and linguistic levels, neither of these should be considered as independent of the preceding intersubjectivity skills or of the accumulative structure the different levels of hierarchy constitute. First of all, although the categorization of protolanguage and language as "post-mimetic" is justified by their divergence from online imitation proper, the conventionality and systematicity they respectively exhibit builds on and preserves the capabilities manifest earlier in ontogenetic development. That is, while conventionality and combinatory nature are a sign of divergence, cross-modality, availability for consciousness and the stand-forrelation witnessed in triadic mimesis continue from mimesis to post-mimesis. This is why Zlatev's theory is a layered model "where earlier capacities continue to co-exist with the newer ones, which may subsume but not abolish them" (Zlatev 2008: 219; Stern 1985). In contrast, the characteristic traits of postmimesis, while non-direct in that they are relatively independent of the context of use, are themselves 1) products of interpersonal exchange, in that both conventionality and systematicity are emergent properties that are learned via

active participation in recurrent intersubjective actions and, and 2) dependent of the set of units they are properties of.

Conventionality and systematicity of language are thus based on forms of intersubjectivity characterized by non-conventionality and non-systematicity; yet they pertain to the representative function of language, which is yet to be explained. How do we get from the immediacy of bodily mimesis to representations that mediate objects, events and states that are not present or even perceptually observable? As mentioned above, enactivist accounts of intersubjectivity discard mental representations, and in doing so seems to become unable to account for the highest forms of social cognition. Zlatev seems to endorse the enactivist agenda to the effect that language is seen as a facilitator of the folk-psychological understanding of the concept of belief. The representative capacity of language itself is hypothesized to "carry with it training in the understanding of others' beliefs" (Zlatev 2008b: 236). The existence of mental predicates, such as believe and know, as well as the very use of language in discourse that promotes a mutual perspectival exchange between interlocutors are also underlined as linguistic facilitators of folk-psychological understanding (ibid.). From an intersubjective perspective, it seems implausible that language acquisition would be based on exposure to usage simpliciter, it seems rather that it presupposes preceding capabilities of *internalizing* meaningful structures.

What distinguishes Zlatev's account from an enactivist understanding of higher social cognition is that it posits mental representations as a prerequisite for language (Zlatev 2005, 2007a, 2007b). The posited "mimetic schemas", however, are radically different from those usually presented in cognitive science. These schemas, as the name suggests, are schematizations over multiple mimetic acts, or "[c]ategories of overt or covert bodily mimesis" (Zlatev 2007b: 134), such as GRASP-X and JUMPING; they are conceptual, covert re-enactments that are internalized from overt imitations of the actions of the other. While mimetic schemas are supposed to be internalized early on, in level 2 of Zlatev's mimesis hierarchy (which corresponds to Trevarthen's secondary intersubjectivity in child development), their intentional communicative use occurs in level 4, giving rise to the above-mentioned non-systematic communication, which serves as the necessary precondition for acquiring and using linguistic signs (Zlatev 2013: 66).

Mimetic schemas are accessible to consciousness in their full representative function: that of standing for something else. In other words, they are identical to the classical definition of sign as a three-partite structure consisting of expression, content, and subject (Zlatev 2013: 66). Zlatev thus posits a category of representational thought proper, as opposed to classical cognitive science, which typically defines the notion of representation functionally to include any piece of information a posited system operates on. Zlatev's account preserves the anti-representationalism of phenomenology in that he does not mimetic schemas as the basic form of thought or consciousness, but as a form of internalized social representations, which themselves are capable of serving as intentional objects. In rehearing and thus reinforcing socially apprehended skills, these representations could also serve to ground imagination, which is a central factor

in Donald's (1991) evolutionary model and a phenomenological fact by its own right,

The fact that mimetic schemas concern mimetic acts grounds them in bodily action in an intersubjective setting (Zlatev 2007b: 144); that is, they are grounded in an imitation of action which involves: 1) observing the action of the other; 2) mapping this visual, third-person information of the other to the proprioceptive 1st person sense of one's own body; and 3) carrying through the observed, crossmodally mapped action by oneself (ibid. 131). This sequence of action, or rather, this repetitive series of actions, through which the child monitors and adjusts the relationship between her mimetic acts and the ones she is imitating, is internalized both in its intended representativeness and in its proprioceptive experiential meaning as a generalization over multiple instances. The pivotal factor is that, albeit being internalized, the origin of mimetic schemas in overt imitative action makes them internalized representations of a social kind (ibid. 143). An act of bodily mimesis is intersubjective a priori: it presupposes not only the other and the imitated action of the other but also the very intersubjective supertructure of the situation, the recognition of the other as an intentional agent of the same kind as oneself. A mimetic schema as the internalization of a mimetic act thus inherits its intersubjective validity (ibid.). While in small children this hardly involves explicit consciousness, mimetic schemas are nevertheless internalized as presenting a cross-modal unity. This in turn implies a protocommunicative function: when I imitate you, I present you with a similar perceptual-proprioceptive experience to the one you presented me with your original action.

Mimetic schemas are thus shared representations in a pre-reflective sense, as opposed to language, which is an object of social knowledge. They are supposed to be shared by members of a community who engage in a close "body-to-body" communication (Zlatev 2007b: 143), and are analogous to language in that they are grounded in "culturally salient activities and actions" (ibid: 144). Mimetic schemas nevertheless depart from language in their restricted nature with respect to number, consciousness and compatibility. For Zlatev, it is exactly this intermediate nature of mimetic schemas that motivates their postulation as a necessary link between non-representational (i.e. proto-mimetic) and conventional-representational (i.e. post-mimetic) stages of intersubjectivity. Being grounded in overt bodily activity, they can be posited as an extension to the mimetic capacities that are already in place, above all the recognition and corresponding exploitation of observable and thus potentially signitive characteristic of the other's intentional acts. Simultaneously, they manifest the novel capacity for schematization, which is in a necessary condition for later internalization of linguistic units in a usage-based model. Mimetic schemas are not merely ad hoc entities, however, but are motivated by established behavioral contingencies of small children.66

In brief, language can be seen as a further extension to pre-established mimetic capabilities *via* the mediation of mimetic schemas, which are a model

 $^{^{66}}$ Including pathologies of interpersonal psychological development (see Zlatev 2007b: 143–144).

for internalized experiential representations, that is, stand-for-structures for certain crude motor activities and spatial constellations. Post-mimesis₁ (protolanguage) and post-mimesis₂ (language) extend the representational structure of mimetic schemas by adding conventionality and systematicity, respectively.

While hypothetical by nature, Zlatev's model of intersubjectivity surpasses the others we have considered in its scope and ability to account for the emergence of language. It does so exactly by resorting to representations that ground language and linguistic meaning, and that constitute folk-psychological understanding. The conception of representation as an object of consciousness nevertheless remains loyal to the phenomenological experience: we do in fact entertain thoughts that involve a clear, representational about-relation vis-à-vis their extramental referents. At the same time, this conception of representations is not only compatible with Itkonen's (1978, 1997) social ontology of meaning but also complements it: mimetic schemas serve to model how linguistic symbolization may be grounded in pre-conventional communication, in which the intersubjective validity stems from direct bodily identification with the other.

Thus Zlatev's mimesis hierarchy not only manages to ground language in wider a scope of intersubjective capabilities, but also manages to provide a consistent general depiction of those capabilities. What has not been discussed yet is that mimesis hierarchy also introduces an experiential component to semantics. If semantic units are attained similarly to mimetic schemas through generalization over instances of use, they are not simply constituted by their extra-linguistic objects but by instances of subject/object-interaction, which suggests that non-objectivity as captured by the dimensions of construal derives directly from a phenomenological experience of language use. This is promising for the purposes of the study, but Cognitive Grammar's concentration on the mental representational content of semantic units obscures the fact that this content is not sufficient for linguistic meaning. The integration of the notion of construal within a hierarchical model of intersubjectivity therefore requires a substantial re-evaluation of this model, to which we turn next.

4.4 CONSTRUAL AND INTERSUBJECTIVE EXPERIENCE

The above discussion of intersubjectivity describes a strand of thought that extends from early phenomenology to present-day developmental and evolutionary psychology. Phenomenological, enactivist, and other representatives of this strand of thought share the conviction that the human condition is marked by a direct, experiential and constitutive sociality that cannot be reduced to folk-psychological reasoning about the other's mental life.

With respect to philosophy, in the first half of our discussion, Husserlian intersubjectivity was shown to be a plural concept, which includes, but is not limited to, perceptual, social and psychological forms of experiences of the presence and intentions of the Other, all of which, however, are fitted into a non-representational conception of the phenomenal mind. The second half of our discussion demonstrated that the philosophical opposition between direct and

mediated conceptions of intersubjectivity is largely duplicated in the current empirical research on the psychology of intersubjectivity. We pointed out that direct or enactivist models of intersubjectivity surpass mentalist ToM approaches with regard to their ability to plausibly ground intersubjectivity in empirically observable behaviors and in that they give a credible description of the development of intersubjectivity skills from nuanced interaction between small children and their caregivers. However, enactivism was found to require a reformulation that includes more distanced capabilities for intersubjectivity that were nevertheless grounded in immediate interpersonal co-operation (de Bruin & de Haan 2012). This requirement was then shown to be met by Zlatev's (2008b) five-level mimesis hierarchy, which includes internalized representations called mimetic schemas (Zlatev 2008a).

While mimetic schemas are mental in the sense of being internalized and thus autonomous vis-à-vis the situations in which they have been acquired, they are not cognitive in a strict sense. Instead of a specific mode of processing, they fulfil the function of a true sign in that they consist of expressions that stand for a certain content for a subject (Zlatev 2007b: 134). Mimetic schemas are not linguistic but bodily-based and non-systematic in the sense that they lack symbolic interrelations. They nevertheless serve as a model for how the signitive function evolves through intersubjective practices: most importantly, this involves a mutual agreement by the interactants on the signitive function as well as an understanding of the intersubjective nature of this agreement. Thus mimetic schemas both presuppose certain capabilities of intersubjectivity and constitute such capabilities themselves. What is presupposed is the experience of foreign subjectivity as such and the recognized similarity between the self and this subjectivity, which itself presupposes a cross-modal mapping between vision and proprioception. This mapping can then be harnessed to serve a communicative function. The capability mimetic schemas thus embody is that of "understanding and expressing communicative intentions" (Zlatev 2007b: 123).

With these attributes combined, mimetic schemas can be claimed to bridge the bodily-based and direct and the conventional and symbolically mediated forms of sociality. Accordingly, mimesis hierarchy avoids representationalism at least in subject-to-subject-relationships, reserving the status of representation for genuine stand-for structures, and considering these structures secondary relative to the direct experience of others.⁶⁷ This conception of representations can be accepted as an *a priori* requirement both for linguistic communication and for a theoretical description thereof. Language is defined by its symbolic function, and, moreover, the fact that this symbolic function transcends particular

⁶⁷ It is crucial to acknowledge that this position *vis-à-vis* representationalism is not dependent on the inclusion or exclusion of representations but derives from the role granted for representations in epistemological theory. Whereas representationalism (e.g. Fodor 1981; Tye 1995) posits an indirect mindworld relationship, mediated by mind-internal representations of the world, mimetic schemas, for example, "only" pertain to intersubjectively grounded, both overtly expressible and covertly (cognitively) stored, representations that retain the structure of a true representation as consciously differentiated content and expression for that content (Zlatev 2008a: 133–135).

instances and subjects entails internalized generalizations over instances and subjects. The specific theoretical value of mimesis hierarchy is that each of its distinct levels is constituted progressively from pre-existing intersubjective skills, which serve to ground a new semiotic capacity as the child's development allows her to grasp it through pragmatic contexts (Zlatev 2008b: 219). Mimesis hierarchy thus provides a promising approach to the integration of conceptual semantics as presented in Cognitive Grammar to a more encompassing semiotic theory. This integration also provides systematic means to explain the conventionalization of experience into linguistic meaning. However, the means provided necessitate once again a critical re-evaluation of how the relationship between experience and meaning has been originally explained by Cognitive Grammar.

4.4.1 DISTINCTION BETWEEN EXPERIENCE AND MEANING

The starting point for analyzing the relationship between experience and meaning is provided by the phenomenological treatment of so-called non-actual movement clauses by Blomberg and Zlatev (2014). These expressions of nonactual movement show a linguistic mapping of movement of entities that are "in reality" conceived as stationary: e.g. the highway goes through the forest (ibid: 411)⁶⁸. Expressions such as these are treated in Cognitive Linguistics as paramount examples of the necessarily cognitive nature of semantics: the movement in question cannot be traced back to the actual circumstances so it has to be a matter of individual's conceptual strategy. Blomberg and Zlatev explicate the major weaknesses of the standard Cognitive Linguistic explanations (by Langacker 1987; Talmy 2000; Matlock 2004a, 2004b) for this expression type, and show that 1) mental simulation (e.g. Barsalou 1999, 2009; cf. the discussion above in section 3.3.2) is not a sufficient explanation for either actual or nonactual movement in linguistic expression (Blomberg & Zlatev 2014: 398–401); and that 2) the expression type is in fact constituted of different sub-types with distinct experiential motivations (ibid. 2014: 402-410). More important than this critique, however, is Blomberg and Zlatev's account of the relationship between the experiential motivation and the actual semantics of non-actual movement clauses.

While Blomberg and Zlatev discard sub-personal simulative processes as a basis of semantics, they (ibid. 413) also oppose the strict dismissal, namely by Itkonen (2008a), of the cognitive linguistic description of non-actual motion. When he considers mental scanning, Itkonen argues steadfastly for its a priori irrelevance to meaning that is constituted by socially binding norms. Mental scanning is strictly individual, while norms are inherently social (ibid. 23). Itkonen thus adapts the critical remark he has made earlier on the notion of imagery (see section 3.2.3) to mental scanning. While Blomberg and Zlatev do

⁶⁸ In Cognitive Grammar, this phenomenon is referred to as "abstract" (Langacker 1986), "subjective" (CIS), "fictive" (CGBI), or "virtual motion" (Langacker 1999b). The term "dynamic construal" is also used by some cognitive linguists (e.g. Huumo 2007).

not explicitly argue against the ontological differentiation between the individual (psychological) and the social, they aim to describe the way in which social meanings are grounded in individual experience, suggesting a "middle road" (Blomberg & Zlatev 2014: 413): that of experiential semantics, which is informed by the phenomenological analysis of meaning, and where the regularities of individual experience are allowed to enter semantics in principled and restricted manner. The principles and restrictions of this view, referred to as consciousness—language interactionism (ibid. 397), are explicated through application of the Husserlian notion of *sedimentation* (1970 [1936]; Woelert 2011).

In *Origin of geometry* (Husserl 1970 [1936]), Husserl introduces sedimentation and discusses the way in which linguistic meanings build on endless repetitions and appropriations, that is, by accommodating use in an ever increasing set of contexts and referents. This repetition and accommodation leads to a sedimentation or burial of the original motivating experiences, while the totality of sedimented uses and thus related experiential settings define the expression's conceptual content (Woelert 2011: 119–120). Sedimentation thus pertains to a double process of loss in specificity and gain in "communal availability" (Blomberg & Zlatev 2014: 413), which also manifests in the "creation of stabilized, typifying structures of meaning" (Woelert 2011: 120).

What Husserl describes, and Blomberg and Zlatev summarize, comes close to the process of conventionalization and schematization of meaning via use that is central to the emphasis Cognitive Linguistics places on the usage-based learnability and dynamism of natural language. The point in which Blomberg and Zlatev, as well as Husserl, diverge from Cognitive Linguistics is that in this model the continuous appropriation of meaning is seen as bleaching from consciousness the experiential origin of the given linguistic expression, while simultaneously forming the implicit basis for the use of this expression. Sedimentation thus results in a cognitive dissociation between an experience and its corresponding meaning. Yet, Blomberg and Zlatev (ibid. 414) emphasize that the dissociation is only partial: the ability to autonomously "reanimate" the original experience is at least to some extent preserved even in "naïve" speakers, as opposed to educated phenomenologists. More importantly, however, pre-reflective linguistic meaning preserves not only characteristics of the experienced object but also specific characteristics of how it is experienced. In other words, the semantic differences between referentially synonymous expressions and expression types can be grounded in different ways of perceiving things (ibid. 415).

While concentrating on non-actual movement, Blomberg and Zlatev are actually suggesting a phenomenological characterization of construal.⁶⁹ To sort

⁶⁹ Or, rather, a conceptual basis for such a model. To construct such a cross-disciplinary framework, an extensive supplementation (or "productive reciprocal fertilization" (ibid. 416), flowing in both directions between phenomenology of language and cognitive linguistics, is required. Blomberg and Zlatev suggest, that with regard to the sedimentation of the manner in which the object is intended, Cognitive Linguistics may inform phenomenological survey, which, at least in some cases seems to underestimate the

out its chief characteristics, including the actual operative value of *sedimentation*, some reconstructive effort is required.

As mentioned, Blomberg and Zlatev are able to break down different linguistic sub-types of non-actual movement. These types are then provided with and partly derived from, distinct motivations that link expressions to dynamic characteristics of perceptual experience. Especially interesting in this respect is the motivation for the subtype that Langacker (e.g. 2006) calls subjective motion. The original motivation provided by Langacker for this expression type is mental scanning (also applied to the temporality of verbs, see section 2.3.1.), in which the conceptualizer "traces an analogous mental path" (Langacker 2006: 25) along the mentally depicted stationary object; for instance, in The trail rises steeply near the summit (Blomberg and Zlatev 2014: 405). This explanation is criticized by Blomberg and Zlatev, inter alia, for neglecting the objective pole of conceptualization in emphasizing the subjective processing mechanism. What Blomberg and Zlatev suggest as a correction is the grounding of subjective motion in the actual perceptual experience (Blomberg and Zlatev 2014: 408) as opposed to in its simulation. The question is how this grounding should be carried out in practice.

The "middle road" Blomberg and Zlatev offer as a solution is based on an emphasis on the enactive, embodied and intersubjective basis of perceptual experience. First of all, the perceptual experience that gives rise to subjective motion is not purely subjective, but should be characterized from a phenomenological standpoint by a mutual interaction of the subject and her surroundings. In this interaction, objects are experienced in unity with the affordances the interaction brings forth. For instance, the affordance of traveling provided by *The trail* (ibid. 404). These affordances are in turn accompanied by their corresponding perspectival experiences, such as that of a moving experiencer along the trail.⁷⁰

Second, the perceptual experience itself is characterized by the subject's own constitutive role: the affordance an object is associated with is not its inherent property but a result and property of the subject-object interaction. While the subject's constitutive function is not typically thematized in our experience or in semantics, both realms are largely determined by the intricacies of human embodiment.

Third, as our introduction to Husserl's conception of intentionality and intersubjectivity show, the affordances of the experienced objects (which in this

⁷⁰ As Blomberg and Zlatev (2014: 405) emphasize, affordances such as these provide only one experiential motivation for non-actual movement. The other two are: the dynamic manner of perceiving provided by the spatial extensionality of the observed object (elongated objects without affordance of movement); and the use of imagination (ibid. 407–409), which comes closest to the simulative processes suggested by Talmy, Langacker and Matlock. For simplicity, I will here only refer to affordances as the perceptual, motor or cultural properties of the observed or conceptualized object that motivate a distinct

construal pattern.

perseverance of perspectivity in human conceptualization (see e.g. Blomberg & Zlatev 2014: 414; referring to Sokolowski 2000: 92).

respect are analogous to the perspectival appearances of the objects), their objectivity as such, and the phenomenologically experienced constitutive subjectivity of self are themselves to a great extent constituted intersubjectively. From a phenomenological point of view, affordances are publically distributed, i.e. taught and learned, patterns of interaction that are accompanied not only by perspectival experiences but also by the consciousness of the public nature and sharedness of these experiences.

These three aspects, which characterize perceptual experience, then make mental simulation as such deficient in grasping what is presupposed by the semantics of non-actual motion. By themselves, however, they are only the starting point for the definition of the relationship between experience and meaning.

4.4.2 EXPERIENCE AND MEANING-INTENDING ACTS

To preface the definition of the relationship between experience and meaning, Blomberg and Zlatev (2014: 403–404) elaborate the subject's constitutive role in objective experience with recourse to Husserl's notion of *kinaestheses*. This notion is directly linked to our discussion above (section 4.2.1) on the immanent content of our experience in relation to the objects we experience. Our experience of objects is basically integrative *vis-à-vis* the possible perspectival appearances, which we interpret actively as belonging to the same object. *Kinaestheses* in Husserl refers to our basic mode not only as perceivers but as actively moving perceivers for which every angle of observation of a certain object always presupposes all the other possible angles and corresponding appearances. Because of this, the perceptual meaning of an intended object can be and most often is simultaneously perspectival and holistic: we perceive the façade and yet we orient to the building as a whole (see section 4.2.1).

At the same time, the totality of the object, which is associated with an indefinite multitude of possible viewing points and corresponding perspectival appearances, presupposes its sameness to the Other. The combination of subjective perspectivity, on the one hand, and intersubjective objectivity, on the other, is also an inherent for linguistic meaning. The conceptual challenge here is not just to describe but to explain this correlation in phenomenological terms; that is, to explicate its nature and mechanisms instead of merely stating the interrelation between two domains.

Previously, we discussed how the concept of sedimentation is operationalized by Blomberg and Zlatev to argue against certain mentalist interpretations of semantics. Now we will consider the positive contribution of the concept to semantic analysis, which has to start with the nature of meaning, defined phenomenologically as the content of meaning-intending acts (Banchetti-Robino 1997: 311).

In short, a meaning-intending act is an act of intending that turns the (physical) sign into an expression by linking it with its referent or *designatum*. As Banchetti-Robino (1997: 306) notes, in the process of meaning-intending, the intention is directed at the intentional object, i.e. the designatum, and thus the

meaning "as such" (ibid., original emphasis) is something we become aware of only during "subsequent reflection" (ibid.). The meaning of the expression, i.e. the content of the meaning-intending act, is nevertheless separate both from the act and its referent. For all acts that intend the same object, the content is "the ideal correlate of this single object" (Husserl 1970 [1936]: 292).

The "ideal" invariant correlate of multiple meaning-intending acts of the same object can, however, be redressed as normatively binding sameness from one instance to another. By this reformulation we arrive at a common denominator between a set of meaning-intending acts that intend and are grouped together by means of the same expression. The sameness of the expression in turn cannot be defined by its *designatum* or the similarity between the acts but by the social norms that define the correct use of the sign in certain settings for certain referents.

If it is accepted that the subject's intentionality in a meaning-intending act links meaning to its referents, the mode in which the content of the act is given becomes irrelevant. Whether the content's cognitive correlate is propositional or simulative does not alter the fact that, for instance, I intend a given drowsy Cairn Terrier by *that drowsy Cairn Terrier* (cf. Thompson 2007b: 143). On the contrary, what is relevant is the determination of the content and its organization as such.

The preliminary phenomenological description of this determination can be given by an examination of sedimentation from an intersubjective perspective. As mentioned, sedimentation takes as its object the experiential properties of the object that the expression refers to. Sedimentation via repetition of the expression, on the one hand, results in the schematization of these properties: they become lesser in number and vaguer in character by the extension of the number of experiential instances they cover. On the other hand, sedimentation is effectuated by a multitude of meaning-intending acts, which, by default, are intersubjectively validated. To count as linguistic, a meaning-intending act needs to correspond to norms that specify the correct use of the expression for certain experiential objects.

In order for the linguistic norms pertaining to the correct symbolic use of language to be graspable, the objects, activities and situations the expression refers to logically need to be intersubjectively available as well. The correct use of an expression necessitates an agreement on the array of its possible referents. Linguistic intersubjectivity thus presupposes more basic forms of intersubjectivity, as is presumed by Zlatev's (2008b) mimesis hierarchy; that is, the validity of linguistic use includes and necessitates the intersubjective validity of experience. The Sedimentation can now be defined as a process that is constituted of multiple intersubjectively validated acts of meaning-intending. In this process, the multiple, intersubjectively-shared experiential designata, and the particular ways they are experienced, come to define the content of the expression. The

⁷¹ Note that this formulation in terms of validity is meant to emphasize the multi-leveled character of intersubjectivity that is involved; it subsumes, however, two distinct types of validity: one pertaining to the common embodiment of experience and the other pertaining to the normative character of linguistic units.

designata are not only given as such but also in their perspectival appearance to the subjects. This perspectivity is itself also intersubjectively known: when I refer to the Cairn terrier lying on the floor, my present recipient understands the reference exactly as shared unity between two distinct perspectival experiences. In typical instances of nominal reference, perspectival differences are omitted. Specificity or schematicity can thus be grounded in intersubjective communicative settings, in which accommodation between perspectives results in bleaching of perspectival variables and selection of constants in meaning.

In contrast, in other types of reference, the perspectivity of the setting may become entrenched as the content of the meaning-intending act. In non-actual movement clauses, what is entrenched is the dynamic perceptual experience, or its enactive extension to cases in which the nature of the experiential object motivates such dynamism. However, as the notion of sedimentation implies, the entrenchment or application of such a dynamic conceptualization does not pertain to an establishment of a transparent expression/experience linkage. Instead, well-entrenched linguistic conceptualization comprises learned patterns of semantic organization, the application of which is guided, to a significant extent, by the linguistic convention itself.⁷²

In this way, the perceptual and cognitive motivations for non-actual motion discussed by Zlatev and Blomberg (2014) may validate the acquisition of the semantic pattern as a semantic extension from the prototypical expressions for actual motion. In any case, the influence of experiential motivation for the dynamic construal of static settings may be largely indirect; and the definitional distance between the motivation and the pattern may increase even further through the entrenchment of the construal pattern both on the communalhistorical and the individual-developmental levels. This indirectness, however, does not equal an irrelevance of direct perceptual experience, embodiment or experientially grounded patterns of conceptualization for semantics. Woelert (2011) considers spatialization as a basic trait of cognition, from which higherorder conceptual abilities are derived by processes of metaphorical and schematizing extension. For Woelert, as for cognitive linguists such as Lakoff and Johnson (1999), Talmy (2000), and Langacker (CGBI) this does not just provide a linguistic-historical explanation, but largely determines the character of cognition by constituting an "implicitly functioning cognitive-conceptual scaffold" (Woelert 2011: 120).

While Blomberg and Zlatev defend "a reciprocal relation between prelinguistic experience and linguistic meaning" (Blomberg & Zlatev 2014: 397), they criticize Cognitive Linguistics for conflating these two domains (ibid. 411). Instead, linguistic meaning needs to be constituted as an ontological category of its own, which is likely to inherit a certain subset of its main characteristics from pre-

⁷² In these cases, we may see what Husserl (1970 [1936]: 36; see Woelert 2011: 119; Blomberg & Zlatev 2014: 413–414) refers to as "persisting linguistic acquisitions", that is, the conventional construal mechanisms of language that restrict our conceptual possibilities. From a phenomenological perspective, this nevertheless does not lead to linguistic relativity, for the restrictions themselves are graspable by conscious analysis (see Banchetti-Robino 1997).

linguistic experience, but it also needs to exhibit these characteristics in a schematized and autonomous manner: the conceptualization can override and/or rearrange the particulars of the experienced referent for communicative purposes. This in turn is essentially the same as *construing* the referent in different ways. The difference between this understanding and that of Cognitive Grammar is that the distinction between experience and meaning genuinely involves two-directional relationship. On the one hand, the processes that structure pre-linguistic experience have their sedimented corollaries in the processes that structure meaning. On the other hand, the pre-linguistic experience continues to be the referential target for linguistic conceptualization; that is, conceptualization exhibits only relative autonomy from experience, since the experiential referent (in an intersubjective setting) continues to restrict the scope of possible conceptualizations or construals.

As noted above, both the perspectival experiences and their linguistic appropriations, which constitute the process of sedimentation, intersubjective. These two distinct types (experiential and linguistic) of intersubjectivity may now be given a more specific characterization, which relates construal to the meaning-intending act. As we have mentioned, for Husserl (1970) [1936]: 292) the meaning of an expression is equal to the content of a meaningintending act. The content is in turn equal to the ideal correlate of the designatum, and is thus separate both from the designatum and the intentional act. The separation of the content from the act and the object can now be identified with Blomberg and Zlatev's separation of linguistic meaning both from specific processing mechanisms and from pre-linguistic experience. This identification, however, necessitates that the phenomenological notion of meaning as content be opened up to include the perspectivity that is manifest in linguistic meaning. In other words, the ideality of the so-called ideal correlate has to be toned down, somewhat against the objectives of Husserl (see Banchetti-Robino 1997: 311-312), to allow for semantic features that are simultaneously intersubjectively valid and subjectively constituted. What this implies in turn is that, in addition to the intended object itself, the ways of intending bear upon the content of the expression (Blomberg & Zlatev 2014: 414).

While Blomberg and Zlatev (ibid.) do not explicitly state so, the combining of a cognitive-linguistic (usage-based) conception of meaning with a phenomenological analysis actually suggests that the content of meaning-intending acts is in large part constituted by the acts themselves. In other words, the content of an expression comes to incorporate two types of the object's properties, neither of which are independent of the manner of experiencing. These properties are: i) the experienced properties of the object that are conventionalized as relevant for their meaningfulness and ii) the properties of experiencing that may be prompted by and characteristic for certain types of objects while not being experienced as properties of these objects.

While neither of these types of properties is originally independent of the experience, it is exactly the autonomy from particular experiences that these properties achieve through linguistic practice and sedimentation. In other words, it is through the use of expressions for shared experiential objects that the very

acts of intending come to be associated with these expressions; and inasmuch as the quality of the given act bears communicative relevance, it becomes linguistically objectified, i.e. independent of any given instance of intending. Sedimentation thus involves objectification, i.e. entrenchment as the objective content of the expression, of the subjectively perspectival properties of experience.⁷³ For example, non-actual motion involves a remapping of the dynamicity experienced in instances of actual motion to the objects or situations that prompt such mapping by the partial likeness of the experience involved. This mapping in turn necessitates the establishment of a construal type as socially-sanctioned practice of interpreting the type of object or situation in question. This does not result in positing a specific type of mental structure: the formulation in terms of "objectification" simply entails that a certain form of conceptualization has been established as a conceptual routine that is autonomous from the original motivating experience.

Insights from phenomenology may thus be used to inform experiential semantics, as represented by Cognitive Linguistics in general and Cognitive Grammar in particular, so long as the definition of the expression's content is extended in the aforementioned manner. The phenomenological analysis comes with provisos, however. First of all, the notions of intentionality and intending act as the bases of linguistic meaning presuppose a pre-linguistic objectivity on which particular ways of intending are based. Second, this pre-linguistic objectivity presupposes intersubjectivity, which in turn characterizes the entire process of sedimentation as well as any linguistic categories that are constituted as a result thereof, including that of construal. It seems then that experientialist semantics is doubly social, presupposing both the public nature of experience and the normative nature of experiential semantic patterns that are established via sedimentation.

4.4.3 INSCRIPTION OF EXPERIENCE INTO MEANING

Let us now consider a broadly phenomenological approach to description of construal. This involves combining the aforementioned notions of experience, meaning-intending act, and sedimentation with a multi-leveled model of intersubjectivity.

As established above, the pre-linguistic perceptual experience that presumably gives rise to semantic categories appears to the subject as inherently public. Furthermore, this perceptual intersubjectivity comes with a structure that pertains to the unity of the perspectival profile and to the intended entirety of intentional objects: the perception of an intentional object presupposes all of its possible perspectival appearances and corresponding vantage points, which in

⁷³ Linguistic subjectification in turn results in a shift of conceptual content from what is explicitly expressed (i.e. profiled by the expression) to the subjective ground presumed by the expression. This is not, however, a reversal of the type of objectification outlined above: the objectification in question involves an explication of pre-linguistic experiential factors, i.e. a shift from the non-linguistic to the linguistic domain, whereas subjectification is a process within the domain of language.

turn implies the object's givenness to other subjects. This implication *per se* does not establish perceptual intersubjectivity but provides it with a structure. Our experience of the object is understood simultaneously as intersubjectively public and subjectively perspectival. What is logically necessitated by this shared experience is the simultaneous differentiation and integration of distinct perspectival appearances pertain to the same perceptual object.

Now, if experiential semantics is accepted as a valid enterprise, it needs to be grounded not in embodied experience *simpliciter* but in experience that has this basic structure of object-directedness. That is, the existence of perspectival meaning is similar to the existence of perspectival experience in that it necessitates a segregation between the intended object and the manner, or multiple manners, in which the object is intended. This again presupposes the aforementioned integration of perspectives vis-à-vis the intended object in its entirety. Not only is this integrative structure a necessary condition for a meaning-intending act, it also in part defines the nature of the meaning intending act, as we will see next.

The sedimentation of meaning, as presented in Husserl (1970 [1936]), Woelert (2011), and Blomberg and Zlatev (2014), necessarily makes use of intentional acts that are not only directed toward intersubjectively available objects but that are also in and of themselves public. This axiomatic intentionality of communication is presupposed by Cognitive Grammar – or by any other usage-based grammar; what Cognitive Grammar is lacking is an explication of its implications. The primary implication is that usage-basedness rules out any absolute distinction between the rules that pertain to a linguistic unit's correct use and the unit's meaning. It is only through the conventionalization of, and repetitive exposure to, certain linguistic symbolization that we come to objectify and understand the unit "as such", i.e. as a context-independent symbolic structure. Even in this case, however, the semantic content is determined by the instances of correct use. The extreme conclusion that can be drawn from this is that meaning should be equated with the (correct) use of an expression (e.g. Itkonen 1997, forthc.). The phenomenological standpoint demands, however, that correct use of an expression involves experiential content that is identical between, and autonomous relative to, multiple acts.74

What is significant for the present concerns is that the shift of the intentional content from experience to meaning can be explained relative to meaning-intending acts. The prerequisite is that a meaning-intending act is itself, by definition, intersubjective. In the simplest type of meaning-intending act, i.e. the intending of a perceptual object, the object is originally physically present. In this case, successful communication involves agreement on the fact that verbal symbolization corresponds to a specific intuitively given object, which again presupposes a sharedness of the object and thus a perspectival integration in the manner we have described above. Perspectival integration in an intersubjective

⁷⁴ A correct understanding of this autonomy is critical: it is not suggested that the content exists independently of the acts in which it is manifest, yet it can be experienced and understood as *distinct* from these acts, which is a precondition for conventional semantics to transcend individual instances.

setting, however, presupposes the presence of distinct perspectives and the perspective of the other is often not only given a priori but sensed and understood pre-linguistically. In other words, a linguistic expression is introduced into a setting, in which the intentional act is associated with the experienced act-specific subjective disposition of the intending Other. In fact, the recognition of a meaning-intending act requires pre-existing intersubjective capacities, and these capacities (such as the ability to recognize facial expressions) bring along the ability to recognize different types and qualities of meaning-intending acts. This largely automatic and involuntary type of cognitive empathy (see Herlin & Visapää 2011) helps to explain the phenomenological fact that we experience the intending Other in her actual subjectivity, predisposed to intending in a specific way: angry, happy, remembering, anticipating, directing, orientating etc. If these properties are inherent to the act of intending, and the content of intending is constituted by a multiplicity of intending acts, then there is no way to exclude these properties of the act a priori from the content of the act. Instead, in a usagebased model, the only criteria for the inclusion or exclusion are the intersubjective intelligibility and communicative relevance of these properties. Thus, an experientialist theory of semantics produces construal as an inherent property of usage-based grammar.

This intimate link between experientialism and construal, however, is trivial for the purposes of the present analysis. What is not trivial is the specification of construal it brings about. Most importantly, since it is grounded in tripartite meaning-intending acts, the very notion of construal presupposes a nonconstrued conception of the content of the construal (see Itkonen forthc.), that is, the referent or state of affairs the construal is about. It is then logically unavoidable that non-construed meaning is inexpressible. However, despite the fact that we may posit it as a logical necessity, the non-construed referent is not simply a technical notion but also captures an important part of the language-speaker's capability. In fact, it can be stated that a specific construal of a referent or of a state of affairs is actually enabled by the phenomenological fact that this construal represents something that is represented as a non-construed entity of the objective, shared world. The construal in question may express the subjective position of the speaker, but the actualized expression presupposes that this position is attainable by the addressee through the non-construed entity.

A non-construed referent is never entirely ideal or conceptually empty but makes use of the contextual knowledge shared by interlocutors. In the case of a shared perceptual object, for example, the meaning-intention of that object simultaneously presents an instance both of reference and categorization by linguistically profiling a set of properties exhibited by the object and by other category-members alike. This reference and categorization in terms of profiled attributes is not, however, equal to a reduction of the experiential object to those attributes or to the mere category membership by either of the interlocutors; instead, the categorization in this case serves the function of reference, which again is directed toward the experiential object as a whole. The nature of construal as selection is exactly dependent on this qualitative distinction between

the content and the object of intention, in which an expression singles out properties of the object as communicatively relevant.

Thus, from an experientialist perspective, construal as an inherent property of linguistic expression is not only compatible with but dependent on a hierarchical notion of intersubjectivity, such as the one provided by Zlatev (2008b, 2013). Instead of an expression of an individual subjective state, construal builds on the perspectivity inherent in the conventional, socially shared semantic potential of natural language. The specific manifestation of this potential is necessarily relative vis- \dot{a} -vis the actual communicative context. Its relation to context defines construal's nature as selection; that is, a selection relative to the non-selected construal options, and constituted by an intention toward the referential object as a whole.

The embedding of construed meaning in an intersubjective framework thus implies a methodological revision of construal as a pragmatic phenomenon. The nature and scope of this revision are illustrated best by analysis of actual data. Before that, the general argument put forward at the beginning of this chapter needs to be reassessed relative to the ramifications of the foregoing treatment of intersubjectivity.

4.5 DISCUSSION

The foregoing analysis verifies the general argument of intersubjectivity provided in the beginning of this chapter. To be specific, the analysis demonstrates that a coherent conception of experiential semantics necessarily involves intersubjectivity as its integral part. Similar to perspectival experience, the existence of perspectivity in meaning involves separation of meaning from the referent as a non-perspectival whole. In so doing, the perspectival givenness of conceptualized entities implies their givenness to other subjects. That is, a phenomenological analysis of objectivity requires that a conception of an entity as a non-perspectival whole builds on the integration of multiple perspectival appearances, and this integration constitutes the entity as same for many. This dictum encompasses perceptual and linguistically construed entities alike.

The preceding analysis, however, shows that linguistic construal involves properties that cannot be derived from perceptual or pre-linguistic experience in any straightforward manner. The explanation and description of linguistic construal must therefore be devised carefully in order to avoid reduction of semantics into experience (see section 4.4.1 above). In order to do so, we must revisit the general argument to explicate the specific manner the argument is not only verified but elaborated by the foregoing analysis.

The general argument was divided into three assertions that pertain to: 1) the common sharedness of semantic units, 2) the conventional intersubjective alignment manifest in an expression, and 3) the notion of construal as a form of selection, i.e. the accommodation of expression according to the pragmatic context. Below, each assertion is recapitulated and supplemented with the relevant conclusions from this chapter.

1. Construal as a type of selection is carried out among semantic linguistic structures, which are intersubjective by their very nature; their intelligibility hinges on their sharedness which in turn is based on norms of correct use but also the fact that their pre-linguistic designata are socially reinforced as objects of shared observation and joint activity.

This first assertion of my argument can in principle be derived from Itkonen's formulation of social the ontology of linguistic meaning: if meaning is generally social, then construal must be social too. However, Itkonen (forthc.) also points to the necessity of pre-linguistic objectivity that precedes and enables construal. Itkonen's conclusion is also confirmed by our discussion on the phenomenology of experiential meaning (Blomberg & Zlatev 2014). Thus even the analysis of construal at the semantic level needs to account for *what* is construed in order to account for *how* something is construed.

In the present study, the analysis of the pre-linguistic basis of construal is based on phenomenological approach and its variant represented by Blomberg and Zlatev (2014). In general, Zlatev's (2008b, 2013) mimesis hierarchy provides a developmental, functional and hierarchical description of how the intersubjectivity in general, and the sociality of language in particular, is constituted and manifested. The discussion on experientialist semantics above shows that this layered model is indeed inevitable if one seeks to explain and describe the inscription of experience into linguistic meaning: subjective experience can only be expressed if the experience itself exhibits some intersubjective validity. By grounding experientialism in meaning-intending acts within intersubjective contexts, one is able to discern how the extra-linguistic context – including the subject's co-operation, attentive co-alignment and non-conventional communication – comes to define what shared experiential constants and ways of intending become entrenched in semantics.

Thus, the main implication of combining experiential semantics with a phenomenological approach to consciousness and intentionality is that, within a social conception of meaning, experiential meaning and intersubjectivity necessarily presuppose each other. Moreover, the interdependence between experientialism and intersubjectivity bears upon how construal should be understood as a type of selection. Since linguistic categorization and category formation are dynamic and to an extent ad hoc, internalized or conventionalized units can only explain construal in part. However, construal presupposes that the non-construed entity is a unifying structure between distinct construal options, and, to some extent, this interrelatedness between different construals is conventionalized into the category of linguistic knowledge. This particular type of knowledge is concomitant with Cognitive Grammar's well-known notion that grammar is a structured inventory of linguistic units. The present account diverges from Cognitive Grammar in that this knowledge is defined not only genealogically but ontologically social; otherwise it would not count as linguistic meaning proper.

2. The semantics of these structures are intersubjective not only in a way analogous to the first point (being shared) but also in that they are conventionalized into expression of particular types of intersubjective alignment.

In other words, expressions are not only distributed intersubjectively but also signify intersubjectivity, and this signified intersubjectivity is essentially commensurate with what counts as the construal nature of the given expression.

After the analysis in section 4.4, it can be stated that this second assertion follows directly from the first one that refers to the intersubjective basis of experiential meaning in general. As we have mentioned, there are ultimately no *a priori* grounds for excluding the properties of meaning-intending acts from becoming sedimented into the intentional content of subsequent meaning-intending acts. Since meaning-intending acts are intersubjective by definition, these sedimented properties naturally include ways of intending intersubjectively, which in turn serve the function of coordinating intersubjectivity (a function which has been extensively surveyed by Verhagen, 2007a, 2007b, 2008). It is from this perspective, then, that a vast proportion of semantic characterizations of grammatical categories can be, and should be, formulated *vis-à-vis* the alignment between multiple conceptualizers.

Consider, for instance, the interrogative mood, the semantics of which in fact cannot be adequately described without evoking a primary and secondary conceptualizer as separate constructs. The interrogative pertains to a requirement for verification, and such requirement only makes sense as a coordination between subjects who differ with regard to their epistemological statuses. This coordinative function, however, does not limit itself to what is traditionally referred to as speech acts (Searle 1969). Interestingly, it is Langacker, who points out the fact that also simple declarative also serves a certain interactional function in its lack of special marking (CGBI: 74) and that the prototypical interactional values of the basic sentence types are accompanied by alternative values in different social scenarios (ibid. 471). This description, as adequate as it is, requires a correct ontological grounding: for these prototypical, and less typical, context-dependent interactional values to count as linguistic (and, indeed, interactional) they have to be commonly known for what they are. This is not a mere change of rhetoric, for it immediately constricts the manner in which construal should be defined and described in relation to its pragmatic context.

3. As it involves selection of semantic representation, construal cannot be comprehensively described without grounding it in actual interaction and extralinguistic context, including the multiple interlocutors, their interactive motives and shared understanding of the extra-linguistic circumstances the communication is about.

This last point pertains to the rehabilitation of the fundamentally pragmatic nature of construal. If we accept that construal is a matter of selection, we presuppose at least representative pragmatic reasons for a given selection. Given the pace and reactivity of spoken discourse, it is not reasonable to associate selection with premeditated rational decision-making. This does not imply, however, that the pragmatic reasons weren't there or that they were, in some sense, post hoc. In fact, pragmatically efficient construal can be stated as a necessary condition for successful communication in that it establishes an intersubjectively valid access to the intended referential object.

Most important here is the implication that, if in actual communication no expression is interpreted context-independently, then construal is context-dependent as well. This can be addressed from two rational perspectives. First of all, construal as a selective process is intelligible inasmuch as the contextualization of its end-result is assumed as a guiding principle for the process itself; relative to this dictum, construal pertains to pragmatic adjustment of expression. Second, we may concentrate on the construed expression as an end-result of an expressive selection, so that the expression is interpreted, elaborated and disambiguated with respect to the common ground of the interlocutors. This perspective reveals, albeit not in an absolute manner, the guiding criteria of construal as a selection.

This means that selection does not concern language as a pre-organized whole but it falls upon certain pragmatically accentuated and organized categories, and furthermore, that the selection is guided by both linguistic and extra-linguistic motives. The account of linguistic meaning developed here entails that none of these motives or their subsequent linguistic realizations can be given a strictly individualistic interpretation.

On one hand, construal undoubtedly has its mental correlates; it seems reasonable to assume that no facet of construal can adequately described without recourse to some moments of intentionality. Moreover, construal serves also the expression of subjective states and promotion of individual goals. On the other hand, it has been shown that these acts of meaning-intending, albeit they are dependent on individual cognition and often devised to express cognitive states, presuppose both linguistic and pre-linguistic intersubjectivity. The intersubjective constitution of construal bears upon how construal should be defined and understood as an analytical concept. The general argument above suggests that, while built on semantic convention, construal cannot be understood coherently as independent of some pragmatic context. The next step is to demonstrate, by the application of the dimensions of construal, direct practical consequences of the argument for linguistic analysis.

5 DYNAMICS OF CONSTRUAL AND CONTEXT

The previous chapters of this book have considered construal and Cognitive Grammar more or less from a theoretical point of view. This fifth chapter integrates these theoretical considerations to the application of dimensions of construal in analysis of written discourse. Namely, the present chapter is structured along three distinct cases of linguistic construal patterns, each of which consists of multiple construals that align with respect to one or two dimensions of construal. The construal patterns have been excerpted from distinct magazine articles in the data and they are presented below with general characterizations of each of these texts. The following analyses nevertheless focus exclusively on the selected construal phenomena. In other words, they do not aim at any comprehensive text-analytic description of the excerpts or the articles as a whole.

While each analysis below contributes to the assessment of the general argument as a whole, the topics of these analyses have been chosen so that they illustrate different parts of the argument. To be sure, the three types of intersubjectivity, outlined by the three assertions of the general argument, should be simultaneously manifest in any actual expression. Conversely, any actual construal corresponds *a priori* to values on multiple dimensions of construal. The analyses below are thus necessarily restricted in scope *vis-à-vis* the likely complexity of construal phenomena: albeit interaction or correlation between multiple dimensions of construal is not at all precluded (instead, it is expected), the analyses decisively focus on one or two dimensions of construal that are especially central to each construal pattern.

A substantial extension of the notion of construal is suggested by the treatment thus far, and this is reflected by the following linguistic analyses. Hence, each analysis begins with recapitulation of the standard analytical procedure and scope defined for the relevant dimension of construal. Then, the chosen series of construals is depicted within its immediate textual context; this also involves application of the chosen dimension of construal. Finally, each analysis is concluded by a treatment of the types of semantic and pragmatic intersubjectivity that are central to the construal pattern in question.

The following analyses nevertheless rely on the dimensions of construal as they are defined in Cognitive Grammar. Indeed, the dimensions of construal largely maintain their original character with regard to their analytical function. This may seem paradoxical given the necessary revision of construal at large. The discrepancy is only illusory, however. First of all, it is accepted here that construal involves representational linguistic function and that the dimensions of construal characterize the phenomenological qualities of linguistic representations. Second, the optimal formulation of a dimension of construal may be disputed, but the adoption of an intersubjective approach does not automatically entail any changes in how a specific dimension of construal characterizes a

phenomenological quality of a linguistic representation. That is, we may consider it necessary to redefine construal as a phenomenon that systematically involves intersubjective and contextual motivation, but it still needs to involve a representational component, which, in turn, is describable in terms of dimensions of construal.

This is not to say that the analysis of linguistic data and the requisite application of the dimensions of construal would not involve any changes vis-àvis a standard analysis in lines of Cognitive Grammar. These changes, however, consider primarily the scope of the dimensions of construal and may be considered as an addition to, rather than a cancellation of, what these concepts are customarily used for. For instance, the so-called conceptual background (CGBI: 57) is originally presented as a requisite cognitive structure for a coherent interpretation that does not pertain to the profiled entity. This basic function of the term is maintained by the present approach (see section 5.3 below); however, background is considered first and foremost a pragmatically mediated, intersubjective feature of discourse that needs to be symmetrically accessible to interlocutors to count as communicatively relevant. This in turn affects the presumed contents of conceptual background, as the analysis below will show.

As this kind of extension of the dimensions of construal follows quite naturally from their original definition, it is possible (and therefore preferable) to carry out the linguistic analysis without introducing any additional terminology. The analyses nevertheless involve a conception of the analyzed construals as correlates of acts of meaning-intending, as defined in phenomenological terms in the previous sections. Methodologically, the analyses put forward reflect a systematic conceptual analysis of the requirements that each construal poses for its coherent apprehension. What I argue, is that this involves consistent establishment of co-referential relationships between different construals, so that different contents of different acts of meaning-intending may be coordinated in terms of non-linguistic intentional objects, whether these are given signitively or not.

In a straightforward cognitivist fashion, the function of establishing coreference could be allotted to, for instance, a complex schematic network consisting of distinct conceptualizations with partly overlapping conceptual profiles (as nodes of the network). The phenomenologically oriented approach adopted here nevertheless promotes skepticism toward such a heavily representationalist approach. Not only would this violate against a phenomenological description of direct experience of external objects (see Drummond 2012), this would also be inconsistent with the notion of intersubjectivity endorsed here. A representational status is therefore reserved here for necessary contents of linguistic representations proper, which also make the object of the following analyses. What the analyzed construals are representations of – that is, their extralinguistic designata – are involved in the analyses only implicitly; the relationship between construal and non-construed designata (including different states of affairs) is discussed in chapter 6.

5.1 OUTLINE

The remainder of this chapter is organized according to the applied analyses based on the dimensions of construal. The next three sections thus consist of analyses of series of construal in the following order. The first analysis (section 5.2) focuses on specificity, illustrating the role of conventional meaning for construal, while it also emphasizing the inevitability of pragmatic factors in establishing specificity-related intra-textual correspondences between partly synonymous semantic units. The second analysis (section 5.3) involves the two interrelated dimensions of focusing and prominence and focuses more heavily on the pragmatic activation of distinct sub-domains within a concept's overall semantic scope. Finally, the third analysis (5.4) considers perspectival effects related to the Finnish passive. Moreover, it investigates how a passive construal involves a site of identification for the reader by the omission of an explicit subject/agent from the text. This example simultaneously represents a complex subjectivity-related pattern and highlights the necessarily intersubjective nature of the semantics and pragmatics associated with the phenomenon. Finally, last part of the chapter (section 5.5) provides a synthesis of the presented analyses relative to the general argument and explicates some latent corollaries of the phenomenological standpoint assumed here.

5.2 SPECIFICITY AND CONTEXTUAL SPECIFICATION

In Cognitive Grammar, specificity is defined as "the level of precision and detail at which a situation is characterized" (CGBI: 55). As noted in section 2.4.1 (pp. 46), this definition can be further elaborated by explicating two sub-dimensions in which the level of precision and detail can be varied: the naming or lexical categorization of the entity ($cat \rightarrow civet$) and the syntagmatic elaboration of the expression ($that\ cat \rightarrow that\ strange-looking\ wild\ cat\ eating\ coffee\ beans$). These two sub-dimensions, however, blend in actual discourse ($that\ wild\ civet$); they can either be in mutual alignment, yielding a higher degree of specificity, or one can be compensating the other, for instance if naming manifests intermediate level of specificity in a syntagmatically elaborate expression. The existence of two separate sub-dimensions may thus result in complex patterns of specificity between distinct construals.

Related to these aspects of specificity are the previously introduced syntagmatic and paradigmatic planes of construal (see section 2.4.1; Jakobson 1956, 1960): the relationship between the selected construal and its alternatives *in praesentia* and *in absentia*. From the perspective adopted here, both of these planes need to be integrated by the description of construal from an intersubjective perspective. Even a construal choice clearly motivated by a syntagmatic construal pattern can only be considered a choice *vis-à-vis* a paradigm of relevant construal options. Furthermore, a syntagmatic construal pattern constitutes only one contextual motivator of selection among many. One

therefore needs to proceed with caution when explaining construal with reference to the linear organization of discourse.

However, an interrelationship between two co-referential construals is a particularly solid motivating factor, for it does not serve the motivating function alone. Two formally different yet co-referential expressions are related semantically *a priori*, and their interrelation is specified by any semantic description of either of the *relata*. It is thus reasonable to concentrate on clear cases of syntagmatic construal phenomena, while retaining their requisite paradigmatic dimension as the relevant conceptual background of the analysis. In this section, this approach is applied to a pattern of co-referential construals that are mutually aligned according to their relative specificity.

In discourse, various levels of knowledge (and mental states *qua* beliefs about the other's level of knowledge) are involved as pragmatic factors that motivate and constitute certain construals. The naming of a referent as *civet*, for example, presumes a certain level of knowledge for both interlocutors, but the specificity of the name 'civet' cannot be reduced to a mental state of either interlocutor: the conventional semantic value, the level of specificity it attains through context, and its appropriateness as a component within the relevant linguistic context are all defined socially.

This does not entail, however, that the level of knowledge needs to be symmetrical. Rather, both a linguistic and non-linguistic common ground is presupposed by the sheer possibility of communication, and construal as such can be described in terms of the establishment and coordination of that common ground within a pre-established asymmetrical distribution of knowledge.⁷⁵ Indeed, this function is central to all dimensions of construal. Yet the coordination of shared *vis-à-vis* non-shared knowledge is especially salient in the dimension of specificity, for the "level of precision" of an expression is clearly a correlate of the levels of knowledge possessed by the interlocutors.

In so being, an analysis of multiple specificity-based construals must consider both the alteration of specificity between the construals and the manner in which the common ground motivates this alteration. This is underlined by the analysis of the following example, which is excerpted from an article that discusses a crisis work project aimed at the youth.

- 22. [...] elämäntilanteen käsittelyssä saattaa nousta pintaan [a]vaikea asia, kuten [b]vanhemman alkoholismi, [c]äkillinen kuolemantapaus perheessä tai [d]väkivalta.
 - '[...] the handling of one's life situation may bring up [a]a difficult thing, such as [b]alcoholism of a parent, [c]a sudden death in family, or [d]violence.

(MT 3/2010: 30, emphasis and indexes added)

⁷⁵ Only partially, for the ideational function does not provide exhaustive motivation for construal.

In traditional terms, excerpt 22 can be described as a syntagmatic presentation of the paradigmatic relationship of hyponymy (Lyons 1977: 291): the noun phrase 12 vaikea asia 'a difficult thing' serves as a superordinate structure relative to which the subsequent noun phrases 22b—d are represented as hyponyms. In contrast, Cognitive Grammar would describe the pattern as a formation of an emergent category 22a, followed by the elaboration of its members 22b—d. What is relevant to our discussion is what makes this latter interpretation possible in the first place: the schematic relations between the presented conceptualizations. However, even the specificity of a single noun phrase is dependent on the context in a manner that demands close inspection of the semantic/pragmatic distinction. The analysis of construals in example 22 thus requires that some conceptual clarification on the nature of specificity is done.

Cognitive Grammar distinguishes between conventional linguistic types that are abstracted from actual expressions and the instances of these types in actual discourse (CGBI: 264–266). As a covert linguistic structure, a type serves a categorizing function, whereas an instance as an overt linguistic structure serves to refer. The shift from a type to an instance (equals notion of token) is referred to as instantiation (ibid. 266–267). Instantiation is characterized in cognitive terms so that the instantiated concept assumes some position in the so-called "domain of instantiation" (ibid. 268). This cognitive operation also results in an increase of specificity, even if only because the location within the domain of instantiation is added to the concept's base (ibid. 267, FCG-1 437–439).

Albeit instantiation is described by Cognitive Grammar as a cognitive operation, both the type and its instance are usage-based constructs. Furthermore, they are mutually reciprocal and interdependent usage-based constructs; the former as a generalization over multiple socially sanctioned instances and the latter as use sanctioned by the schematic commonality between the previous instances. Furthermore, a type is functionally a schema of multiple instances, and a schema, in Cognitive Grammar, is essentially *not* suggested to have its own ontological status (CGBI: 217).

Instantiation is therefore an indefinite process of specification that is carried out by a linguistic concept when the concept is grounded by the discursive context. Consequently, there are no specific measures according to which the effect of the ground in instantiation may be demarcated. This entails that instantiation may be indeterminate also between the interlocutors; that is, there may be a discrepancy in what different interlocutors understand as the common ground. Yet any ground-related communicative discrepancy between the interlocutors logically presupposes an agreement on and *a priori* sharedness of some segment of the ground. Therefore, instantiation cannot be defined exclusively in conceptual terms but it needs to include the intersubjective setting relative to which it may be described as a coordination of the shared level of knowledge.

Now that this premise is explicated, we may return to the original example. As mentioned above, the excerpt 1 involves the establishment and elaboration a category: 22a posits a schematic entity, which is then exemplified by expressions 22b-d:

- 22. [...] elämäntilanteen käsittelyssä saattaa nousta pintaan [a]vaikea asia, kuten [b]vanhemman alkoholismi, [c]äkillinen kuolemantapaus perheessä tai [d]väkivalta.
 - '[...] the handling of one's life situation may bring up [a]a difficult thing, such as [b]alcoholism of a parent, [c]a sudden death in family, or [d]violence.

This conclusion presupposes an interpretation on multiple levels. First of all, the category-membership interpretation involves that 22b-d are analyzed as specific forms of 22a. Second, this analysis depends on a constructional meaning ('X such as $x_1, x_2 \dots \& x_n$ '), which is evoked by the comparative conjunction *kuten* 'such as': the conjunction profiles a relationship between a schematic entity and its instances and it thus evokes schematic positions for all of these entities. Third, the construction imposes as its default value an increase in specificity between the category-establishing and category elaborating instances; this is a requirement by semantic convention, which is fulfilled by expressions 22b-d.

The dimension of specificity in example 22 is thus not the only factor that enables and prompts the category-interpretation. I will demonstrate, however, that specificity is the central semantic factor involved with the co-referential relations between the expressions in question. Most importantly, my analysis will demonstrate that expressions 22a-d constitute a cross-elaborative pattern in which each instance specifies all the other instances in the pattern without changing the relative specificity hierarchy among them. Before describing this cross-elaborative pattern, certain issues with the category-establishing expression 22a need to be clarified.

First of all, vaikea asia 'a difficult thing' is a generic expression: as a singular noun it profiles a single conceptual entity, which, however, cannot be associated with any single object in the world. In Cognitive Grammar, a generic expression is analyzed as a virtual instance, which corresponds to, instead of categorizing or referring to, actual instances (CGBI: 527). It can be argued, however, that the constructional function of 'X such as...' is exactly to enable specification of a generic conceptualization. In fact, neither the Finnish kuten nor its English counterpart such as can be added to a non-generic noun phrase, since the conjunction profiles a relationship of exemplification. The instances following this conjunction may be either generic, such as in this case, or non-generic. The conjunction example 22 establishes thus categorization/instantiation between generic expressions that differ by their relative specificity.

There are also socio-linguistic motives that may explain the highly schematic construal in example 1a. Socio-linguistic studies on vague language (e.g. Cheng & Warren 2003; see O'Keeffe et al. 2007) point to its function of avoiding, *inter alia*, threatening, authoritative, or over-educated impressions, especially in professional contexts and among youth. For example, a study by Adolphs et al. (2007) demonstrated the high prevalence of vague language in British health-communication contexts. The selection of *vaikea asia* 'a difficult thing' may well

be an allusion to vagueness typical for social work -related discourse. This motive does not, however, alter the construal pattern found in examples 22a-d, but rather explains the relative likelihood of the specification of *vaikea asia* as a difficult 'issue', a sensitive theme of discussion in the mental health context. This specification reduces the schematic gap between the category name 22a and the category members 22b-d, adding to the cohesion of the excerpt as a whole.

The primary focus here is on the manner in which an explicit linguistic categorization results in a cross-elaboration of the category and the categorized. When *vaikea asia* 'a difficult thing' in example 22a is defined as a category-establishing phrase by the following conjunction and noun phrases, its conceptual base is specified. To be specific, the conceptual base of 'a difficult thing' is specified as a complex schematic network of various psycho-social issues, relative to which the category title profiles one generic and non-specific representative. The co-ordinate noun phrases from 22b to 22d, in turn, are interpreted as being connected by their equal membership-status. Regardless of the varying specificity of their profile, they all profile an entity against the same conceptual background (the category of 'difficult things' relevant to the context of counseling). Notably, this holds true for example 22a as well; while the context (in this case, examples 22b–d) adds to the interpretation of its overall semantic scope, *vaikea asia* still continues to profile a 'thing', thus attaining its categorical meaning metonymically.

The seemingly simple paragraph in example 22a actually involves a quite complex pattern of specificity. Most importantly, the description of this pattern needs to distinguish between the level of specificity in a concept's profile and the level of specificity in its base. While the instantiation of a concept in a context affects both of these levels, the effects vary between the profile and the base according to the expression and its context. The content of instances 22b–d, together with the relevant background information and the theme of the article, determines the profile of *vaikea asia* 'a difficult thing' by singling out the specific semantic variant 'issue' within the schematic network associated with this polysemic noun. At the same time, the conceptual base of *vaikea asia* is specified by the profile of the categorizing relationship (*kuten* 'such as') and the categorized entities (examples 22b–d).

Conversely, the generic noun phrase *vaikea asia* 'difficult thing', together with the constructional context *kuten*, define a substantial portion of the base of the entities profiled in examples 22b–d. The category-instantiating noun phrases profile not just random entities but the members of a newly-established category. From a technical viewpoint, the conceptual base of the category instantiating expressions consists, to a substantial degree, of a schematic network that is elaborated by these expressions themselves. Since the instances of alcoholism, death and violence are virtual, this schematic network receives an interpretation as far more complex than what the profiled structures in the network directly yield. Thus we have a pattern that can be referred to as a virtual categorization, which refers metonymically to a multiplicity of categorizing instances of various issues as 'difficult things'.

While this analysis may seem exceedingly complex, it is in fact illustrative of the prerequisites for a coherent interpretation of example 22: the fact that the 'alcoholism of a parent', for instance, is indeed meant as 'a difficult thing' for its bearer to handle. For construal as a relationship between conceptualizer and the semantic content, this analysis bears several implications.

First of all, the coherent interpretation of example 22 as a pattern of categorization requires that there is increase in specificity from 22a to the set of 22b–d. We may now specify this criterion so that it concerns exclusively the profiles involved. The reason is that the profile is the prominent substructure within the concept's semantic scope that delimits the scope of possible interpretations; that is, it determines the set of potential referents (see CGBI: 267). For instance, both *hen* and *Black Shumen* evoke the conceptual base of chicken breeds, but the necessary specifications of *Black Shumen*, i.e. specifications that relate to its referent, make this latter concept more exclusive. If the condition of further profiled specifications is not fulfilled, a categorizing construal pattern such as the *kuten*-construction fails to provide additional information and, consequently, fails as meaningful communication.⁷⁶

Second, construal in terms of specificity is extremely context-sensitive in that both the profile and the base of the concept are interpreted relative to the common ground (or CDS). As noted, the determination of the profile of *vaikea asia* in 1a as an 'issue' is reactive to the preceding linguistic context, whereas its conceptual base is specified as categorical through the subsequent construction and categorized conceptual entities. The selection in terms of specificity may also be reactive relative to the wider context of the magazine text, the magazine itself, and its hypothetical audience. It can nevertheless be stated that the coherent interpretation of *vaikea asia* 'difficult thing' in example 22a hinges on the specification of a 'thing' as an 'issue' by the presumed readers of the article.

Thus, the specificity of an actual expression needs to be analyzed on the levels of the profile and the base separately, even though these two levels necessarily interact. Essentially, neither the degree nor the function of specificity for a given semantic unit can be adequately estimated without operationalizing contextual knowledge, whether linguistic or extra-linguistic. This is not to deny that the analysis must involve a justified conception of the context-independent semantics of the expression. The point is that the conventional level of specificity for a given expression can motivate the use of the expression only as far as it is related to the background of the communicative situation and its resulting pragmatic implications.

This brings us back the general argument presented above. As we have established above, construal can be dissected into two components, both of which characterize the relation of the conceptualizer and the conceptual content: 1) the selection of a specific construal and 2) the non-objectivity of construal. Selection

⁷⁶ It is worth noting that this function of restricting possible interpretations is fundamental to any concept in and of itself: the selection of 22a is not reactive only to the linguistic (syntagmatic) context but also to the common ground of directing referential function with ideal precision and without excessive, irrelevant conceptual content.

may now be posited primarily to be a function of the communicative intention within a given context. It is also carried out among linguistic units, which manifest semantic features the amount and salience hierarchy of which are determined by their experiential and communicative significance. The argument from intersubjectivity posits that neither of these facets of construal can be reduced to an individual conceptualization, and this necessarily holds true for specificity in particular.

With respect to selection, the level of specificity is determined as a sufficient delimitation of scope of interpretation vis-à-vis both the excluded and the included options, and this sufficient delimitation is in turn relative to the knowledge shared by the discourse participants; that is, the knowledge of the linguistic unit's conventional meaning and the knowledge of the currently relevant conceptual background. Yet these levels of equally distributed knowledge presuppose a wider context of unequally distributed knowledge: what is being communicated is given for one participant and new for another. This is not meant to evoke some particular communicative situation with specified participants but simply to note that discourse cannot be approached without the attribution of communicative directionality or dialogism to it (see Bakhtin 1981). Thus a linguistic expression not only construes a representative author and recipient, but also represents them hierarchically. One manifestation of this asymmetry is that, due to the intentionality of communication, the expression represents an expectation concerning especially the level of knowledge that the recipient has (Jaakola et al. 2014).

The central implication of this asymmetry for specificity is that the construed level of specificity demarcates the shared level of knowledge in contrast to what is *not* shared. That is, the (representative, schematic) author of excerpt 22 could in principle elaborate 'a difficult thing' on a much more specific level than 'alcoholism of a parent' or 'death in the family', i.e. by specific instances thereof. While there is no pragmatic access to those higher levels of specificity, the excerpt, like any instance of communication, is made intelligible by the expectation of their existence; in this case, it is a schematic network of 'difficult things' that can be further elaborated or otherwise characterized in the course of the text. Thus, the explicit, profiled level of specificity defines a shared entry point to the wider background knowledge, which is presumed to be asymmetrical relative to its accessibility for the different conceptualizers. Furthermore, it is the nature of this asymmetry that defines what can be shared between the participants.

The logical outcome of this reasoning thus is that the level of specificity of an actualized expression is a correlate of the presumed levels of knowledge of the interlocutors. Moreover, the level of specificity is dependent on a presumed asymmetry between these levels. A striking fact, which is typically neglected for its self-evident character, is that the adjustment of the expression in terms of specificity would bear no communicative relevance what so ever if there were no presumably different levels of knowledge involved in the communicative situation.

This asymmetry is not always clearly functional (consider, for instance, interlocutors remembering a shared experience), but it can be stated as a default feature of communication that is motivated by informational exchange. Moreover, the informational asymmetry between the interlocutors is necessarily speculative by its character: if the specific sources or points of asymmetry were known, there would be no asymmetry in the first place. The representative informational asymmetry of the text is not some omnipresent authoritative or patronizing esthetic effect, but pertains simply to the intentionality of communication. An expression of exclusive professional terminology, an instance of naming-based construal, may therefore construe a relatively well-informed recipient, while the expressive context nevertheless specifies the content of the term further, making the content of the expression accessible for a layman as well.

Consider, for instance, the complex noun phrase kiintymyssuhdemalli 'early attachment model' (MT 4/2010: 18, discussed in Jaakola et al. 2014: 648-649). The noun phrase is an instance of a lexical contamination but nevertheless presented as a developmental psychological term that refers to the psychological relationship formed between a child and her caretaker in the early infancy. Despite being ill-formed, the term is used in a straightforward manner (in an article discussing psychological structures affecting juveniles' mental health), which presumes a reader with a certain professional background in psychology or psychiatry.77 However elaborated by a given reader, the explicit expression and the text represent this expectation as a shared knowledge. This understanding, whether elaborated by a professional or non-professional reader, nevertheless includes an epistemic asymmetry, in which the nature of the interpreted authorship of the conceptualized matter is largely dependent on specificity.

I argue that the postulation of default informational asymmetry is valid for specificity in general and for example 22 above in particular. In 22a, the meaning of *vaikea asia* 'a difficult thing' is defined largely by the context, and especially by the cross-elaborative pattern analyzed in the foregoing. As a construal, it is therefore motivated by both intra-textual and inter-conceptual relations: these are assumed as accessible for both the representative writer and reader alike. However, without assuming an asymmetrical informational context, within which the common ground and the grounded construal are embedded, the notion of specificity cannot bear any actual communicative value (inasmuch as esthetical considerations are excluded).

Specificity cannot therefore be reduced to a parameter that characterizes conventionalized semantic units. Instead, it pertains to an extremely context-sensitive value that links semantics to the requisite pragmatic inferences for a coherent reading of multiple expressions. The considerations above demonstrate

⁷⁷ As noted by Jaakola et al. (2014: 649), the scientific status of the term does not dictate its interpretation, which can also rest heavily on the overall text and/or on a layman's conception of the affection between child and caregiver. Yet, regardless of the multiple alternative readings, the interpretation is likely to evoke psychological expertise as one of its components. This does not need to be actual expertise on behalf of the reader but rather a schematic conception of such expertise what is relevant for the interpretation.

that specificity is a factor that guides co-reference and categorization, and that these functions can be posited as necessary conditions for an intelligible reading of the text. However, the interpretation of excerpt 22 also involves clearly distinct conceptualizer positions. While the dimension of specificity does not determine whether an expression profiles parts of the ground or not, one of its pragmatic functions is to allocate the informational asymmetry between the conceptualizers, which, by itself, presupposes a complex ground. Specificity is thus relevant for both conventionally and contextually shared knowledge as well as for the default arrangement of unequally distributed knowledge and communicative intentionality. The specificity of an actual expression therefore exceeds the scope of conventional meaning as such.

5.3 DYNAMICS OF BACKGROUND AND PROFILING

The following analysis concentrates on construal phenomena that are categorized by the dimensions of focusing and prominence. The common denominator of these dimensions is that they capture semantic asymmetries of conceptual centrality that are either inherent to the organization of concepts or that reside in the relationships between concepts.

Cognitive Grammar defines the dimension of focusing as the selection of conceptual content and its organization into a conceptual foreground and background. In contrast, the dimension of prominence is the parameter according to which the conceptual content is hierarchically organized. The conceptual foreground, for example, is more prominent *vis-à-vis* the background. Focusing is thus a linguistic manifestation of prominence (CGBI: 68; see section 2.4.3).

The separation between these two dimensions is somewhat arbitrary, albeit warranted by a perspectival difference: whereas focusing pertains to the scope and delimitation of necessary semantic content, prominence includes dichotomies that characterize a concept's profiling function *vis-à-vis* its semantic content or other profiled entities. As these dimensions overlap and interact, the present analysis will combine analytical concepts from both of them: the notion of conceptual **foreground/background** as a form of focusing, and **profile/base-segregation** as a sub-dimension of prominence. The interrelatedness between focusing and prominence also serves to exemplify the more general complexity of dimension-specific alternations in construal phenomena.

A brief revision of the selected sub-dimensions is in place (see sections 2.4.2 and 2.4.3). The selected analytic concepts are actually pairs of concepts that represent particular prominence-based conceptual asymmetries. Segregation in terms of foreground and background, to begin with, hierarchically organizes the different cognitive domains associated with the concept's meaning. For instance, with respect to the meaning of 'pencil', its function as an instrument for writing (describable as the cognitive domain of [WRITING]) is typically foregrounded relative to the fact that the pencil can and needs to be sharpened

by a pencil sharpener; yet this organization in terms of cognitive domains is easily overruled under contextual factors (e.g. FCG-1: 164–165, FCG-2: 88). In this case, the mere need of sharpening may be sufficient: in *this pencil surely needs sharpening* the domain of sharpening is not only explicitly evoked by a distinct profile but is also central to the meaning of (*this*) *pencil* itself.

The profile, in contrast, is defined in Cognitive Grammar as the focus of attention and the most prominent substructure within the conceptual base, which consists of cognitive domains and is delimited by the concept's scope. Additionally, the profile "can also be characterized as what the expression is conceived as designating or referring to [...] (its conceptual referent)" (CGBI: 66). The point is that within the overall scope of a concept not all semantic knowledge pertains directly to the referent itself; it is therefore necessary to demarcate the subset that does. For instance, a spatial object such as 'ball' assumes the profile of a three-dimensionally round object by occupying a corresponding form of space within the cognitive domain of space. Yet this profile is only graspable as residing in and distinguished from its surroundings; the profile therefore always presumes boundaries and ultimately some larger region from which it is bounded.

Once again, the phenomena that we will analyze involve a series of coreferential alternative construals, and these are found in a small excerpt of a magazine article. The following example 23 consists of an opening section from a research-based (popular) article, authored by the researchers themselves, that summarizes the findings of a project on self-coping strategies among the clinically depressed population. Note that this article is situated in a permanent section of the Mielenterveys magazine, marked with the heading *Asiantuntijalta* 'from an expert', which presents only self-written reports by psychology scholars.

23. Miltä masennus näyttää masentuneen itsensä silmin, ja miten masennuksen täyttämässä arjessa voi selviytyä? Itä-Suomen yliopiston yhteiskuntatieteiden laitoksella tehtävässä, Suomen Akatemian rahoittamassa, [a] Masennuksen kanssa eläminen-tutkimushankkeessa selvitetään masennuksesta kärsivien ihmisten selviytymiskeinoja.

[b] Tutkimushanketta johtaa sosiaalipsykologian professori Vilma Hänninen, ja muina tutkijoina ovat [...]. [c] Tutkimuksessa tarkastellaan haastattelujen valossa 40–49 vuotiaiden miesten ja naisten kokemuksia ja selviytymiskeinoja [...] Kerromme tässä artikkelissa pisimmälle ehtineiden eli nuoria ja naisia koskevien [d] osahankkeiden tuloksia.

'What does depression look like for the person suffering depression herself, and how can one cope in daily life filled with depression? Carried out at the department of social sciences at the University of Eastern Finland and funded by Academy of Finland, [a]the Living with depression -research project looks into the coping strategies of people suffering from depression.

[b]**The research project** is led by professor of social psychology Vilma Hänninen, and the other researchers are [...]. [c]**The research** observes, in the light of interviews, the coping strategies of 40–49 year old men and women [...] In this article, we will report some of [d]the results of the **sub-projects** that have advanced the most.'

(MT 3/2010: 12, italics in the original, emphasis with bold added)

The paragraphs, taken from the beginning of the article, present the background and motivation for the article in general; that is, the research project, which, with its preliminary findings, provides the article with its substance: the actual experiences of the research subjects. The focus here is on the reference to the research project and the research itself. Note that the translations of the glossed examples are, in part, more precise than the translation of the excerpt as a whole, for the latter needs to take textual and thematic matters into account.

23a Masennukse-n kanssa elä-minen -tutkimus-hankkeessa [modifier omitted] depression-GEN with live-NMLZ research-project-INE 'in the Living with depression -research project'

23b *Tutkimus-hanke-tta* research-project-PTV 'the research project'

23c *Tutkimukse-ssa* research-INE 'in the research'

23d *osa-hankke-i-den tuloks-i-a* part-project-PL-GEN result-PL-PTV 'results of the sub-projects'

In brief, the noun phrases in examples 23a-d comprise a set of references that are different in that they exhibit different conceptual profiles within the same constantly updated conceptual base. This pattern of interrelated conceptual profiles reveals a more complex network of prominence-related phenomena, all of which are pivotal for a coherent interpretation of the excerpt.

Let us begin by concentrating on the separation of the conceptual foreground from the conceptual background in this excerpt. On a general level, the background, against of which an expression is interpreted, may include any relevant content of the preceding discourse as gathered into the so-called Current Discourse Space (CDS). The CDS is structured so that the thematic structure of discourse determines which subpart or domain of the CDS is currently most prominent (CGBI: 281–282). This may often be a linear function of temporal distance in the discourse (ibid.), but this is not necessarily the case.

In excerpt 23, a substantial part of the CDS has already been determined by the context of the magazine, the title of the section (*Asiantuntijalta* 'From an expert'), the heading of the article (*Miten elää masennuksen kanssa* 'How to live with depression') and the leading paragraph, which emphasizes the importance of the independent initiative of the person suffering from depression. The opening sentence ('What does depression look like [...]") introduces, in a schematic manner, the subjective point of view of the depressed person and her daily struggle. This is followed by a new sentence and a pair of co-ordinate participle modifiers that finally allow the first mention of the project. Example 23a, *Masennuksen kanssa eläminen -tutkimushankkeessa* 'in the Living with depression-research project', presents the project by an inessive adverbial, which expresses metaphorical inclusion of the activity described by the following predicate verb.

The significance of the conceptual background from the very beginning of the excerpt can be substantiated by taking a closer look at its specific contents. For example 23a, the relevant elements include, *inter alia*, the cognitive domain of depression, the individual's first-person experience of depression, and the perspective of a researcher. Especially relevant is the construal choice of the preceding sentence: the wh-question presumes a schematic set of experiences as the interest of the research team. The meaning of 23a is essentially to specify the evidential chain (from experiencers to researchers) that allows the elaboration of these experiences. Conversely, the meaning of 23a as an epistemic source is defined by the fact that the wh-clause points out the epistemic challenge the research project is to solve.

As mentioned, the conceptual background consists of separate cognitive domains. In 23a, at least two embedded cognitive domains are concurrently active. First, there is the cognitive domain of depression at large: the condition, its symptoms, its prevalence, and its social impact. Second, there is the cognitive domain of the individual experience of depression, evoked by the wh-question and reinforced by *eläminen* 'living', the head within the compound noun's complex modifier. For 23a, it can be stated that the experiential sub-domain is also the most relevant one, since it is foregrounded relative to the wider background of the mood disorder. This foregrounding is due to the fact that the research project is presented as the context of seeking the precise perspectival, experiential knowledge, the need of which is profiled by the preceding question. The 'research project' in 23a is thus immediately linked with the question the team "in" the research project seeks to answer, whereas the general cognitive domain of depression is presumed by both the question and the project as residing further in the background.

From 23a onward, the dual structure of these embedded domains is constantly reinforced and re-evoked as the relevant conceptual background, while it simultaneously exhibits slightly different functions depending on the part of the text it is in. Most importantly, the matrix of the general and experiential domains of depression serves as the background for a thematic development in terms of the 'research project' and the semantic content thereof: the researchers, their mutual hierarchy, the research questions and so on. Here, the background has

explicit semantic effects that need to be described by a prominence-related hierarchy of trajectors and landmarks (see section 2.4.3).

The distinctive pattern found in 23a-b is that all of the co-referential expressions serve as landmarks as defined in Cognitive Grammar. The 'research project' in 23a serves as a locative (Finnish inessive -ssa 'in'), 23b serves as an partitive object, 23c serves as another locative adverbial, and 23d serves as a genitival attribute for the object. Note also that all but one (23d) of the expressions assume a theme position within the immediate sentential context.

This pattern may be analyzed in part against the background formed by the research-oriented section of the magazine in which the article is located. It is not only that the domain of clinical depression itself is evoked, but it is evoked as a readily interpretable object of academic interest. Thus, the reference to research in 23a—d equals the specification of an organizational scheme that is already part of the conceptual background: this givenness is what makes the theme position in 23a—d felicitous, but also relevant. A knowledge frame (see e.g. Jaakola et al. 2014), which is presumably shared by the conceptualizers, is a logical starting point for the grounding of the discourse: in Mielenterveys magazine, the academic research is a continuously active part of the background for a variety of clinical and social themes. However, the specification of the general background by new information is what makes a piece of discourse meaningful. A well-justified textual strategy is therefore to occupy a series of theme positions with slightly altered framing adverbials that allow an increasing specification of the general topic as a context of distinct activities.⁷⁸

Simultaneously, the noun phrases in 23a-d exhibit the canonical landmark function in that they specify the given trajectors *vis-à-vis* one specific parameter, their relationship to the research project itself. In other words, 23a-d refer to the overall complex matrix which the trajectors, and the processes the trajectors take part in, specify by explicating different sub-structures: namely, objects, agents, objectives and results, respectively. The pattern as a whole can be considered a network of mutually related, partly synonymic landmarks, which enables an integration of new information into a pre-existing schematic whole; that is, the complex matrix of the research project itself.

Essentially, an intelligible interpretation of excerpt 23 requires that 'research project' be understood not only as some abstract, institutional entity but as a reification of complex processes and a co-operation of actual human subjects. This academic/professional understanding as a relevant knowledge frame is presumed by the interpretation of co-reference between the noun phrases in 23a–d. First and foremost, the background specifies the particular manner in which the partially synonymous expressions co-refer. Reference, in turn, is described by Cognitive Grammar as a function of conceptual profiles. Let us therefore analyze

⁷⁸ Note also that, while Finnish does not code definiteness by a separate grammatical category (i.e. articles), Finnish does apply word order to express the givenness of sentence elements. The sentence-initial position of expressions 23a–c thus signals their definiteness, which itself, however, is due to multiple contextual factors.

next how the profiling and conceptual background interact in expressions 23a-d.

As has been discussed, examples 23a—d exhibit only partial synonymy, and each of these concepts serves to elaborate the background for the each subsequent concept. What is shared by these instances is that they all instantiate the reification of a process, or a complex of processes, into a thing (CGBI: 119). What distinguishes the expressions is the manner in which they evoke this process by reifying it differently.

23a Masennukse-n kanssa elä-minen -tutkimus-hankkee-ssa depression-GEN with live-NMLZ research-project-INE 'in the Living with depression -research project'

23b *Tutkimus-hanke-tta* research-project-PTV 'the research project'

23c *Tutkimukse-ssa* research-INE 'in the research'

23d *osa-hankke-i-den tuloks-i-a* part-project-PL-GEN result-PL-PTV 'results of the sub-projects'

The compound noun in 23a introduces a new, highly specific conceptual entity to discourse. However, as mentioned in the discussion above, the noun may be described as profiling a previously non-profiled but contextually salient, schematic 'project'. The adjectival modifiers referring to a specific university, to its department and to academic funding (see the translation on page 186) elaborate an academic context that is already present. Furthermore, the compound's own complex modifier 'living with depression' constitutes the landmark or reference point (CGBI: 504–505), which reifies the previous discourse on experience of depression and thus establishes a specific relationship between the compound's head and pragmatic context (see CGBI: 504–505). In other words, the head 'research project' profiles a salient substructure of the pragmatically central domain of research. Both the profile of the modifier and the profile of the head are thus determined relative to different parts of the conceptual background.

Next, the evident referential synonym of 23a, i.e. the partitive object *tutkimushanketta* 'the research project' in 23b, re-profiles the head of 23a. The 'research project' in 23b thus picks up a substructure in the complex domain, which has been previously defined by the more elaborate conceptual profile. Its level of specification is evidently high enough to grant a co-referential interpretation, which, in turn, further specifies the background within which the profile of 23b marks a foregrounded entity. Once identified with the specific

'project' of 23a, the 'project' of 23b does not require to be distinguished from other such activities.

In an analogous fashion, the profile of 23b facilitates the specific type of profiling of *tutkimus* 'research' in 23c. The Finnish noun has both *nomen actionis* and *nomen acti* variants of meaning,⁷⁹ but the overall pragmatic context the expression foreground the latter option. The 'research' refers to an ongoing activity, reifying the process of 'researching'. In other words, the profile of 23c focuses on the pivotal process associated with the compound noun *tutkimushanke* 'research project'. What is interesting here is that 23b and 23c can be interpreted as having somewhat identical semantic scope: both 'research project' and 'research' may evoke the content of the actual research as well as the researchers and the institutional settings. It is thus plausible that 23b and 23c differ from each other only relative to the semantic content that is profiled⁸⁰; this is reflected in the explicit shift from the compound as a whole (23b) to its modifier (23c), now re-analyzed as an autonomous structure (CGBI: 199–200).

Finally, the profile of osahankkeiden 'sub-project' in example 23d makes use of all previous expressions 23a—c as well as the preceding discussion of the project in general. As a compound noun, it profiles not just a project but a project in a subordinate relationship $vis-\dot{a}-vis$ the whole elaborated by 23a—c. The modifier osa—'sub-', a variant of which is a freestanding Finnish noun of its own ('part'), is used here as a dependent structure that profiles the relationship of the head with respect to the implicit landmark of the project as a whole.

A particular background-related effect on profiling in expression 23d can now be detected. Note that, in *osahanke* 'sub-project,' there is no explicit reference to the research or the academic context but the interpretation of the 'sub-project's' academic nature is nevertheless self-evident. The co-referential relationship to the previous expressions 23a–c is naturally a central factor contributing to the salience of this interpretation. It can be argued, however, that the certainty of the present interpretation is not a matter of background alone.

The head in 23d, which refers to the 'project', is in fact a particular semantic extension of 'project'. This extension, let us call it 'project_r', is largely synonymous with 'research project' in that it refers to a scientific joint effort with schematic agents, means and goals. This extension is a conventional unit of academic jargon but can also be construed contextually, and both of these interpretive options are possible for 23d. A relationship of synonymy between 'research project' and 'project_r' does not entail that their profiles do not differ. In fact, they differ in terms of compositionality (CGBI: 60-62). The compound noun 'research project' arrives at the targeted meaning through a compositional path that distinguishes between schematic joint operation (project) and the activity (research) that is then used to specify the type of the operation. The variant 'project_r', on the other

⁷⁹ Similarly to the noun uni 'sleep' discussed in 2.4.1. On the Finnish variants of *nomen actionis* and *nomen acti*, see Nuutinen 1976.

⁸⁰ As mentioned in 2.4.3, the descriptive motivation for the notion of profile is exactly that it is needed for capturing differences between expressions that are analogous relative to their semantic contents (and in some cases even relative to their referents) but still differ semantically (CGBI: 66–68).

hand, does not separate these elements but collapses them into the same, compositionally degenerate profile (CGBI: 61–62).

Most importantly, however, example 23d presents a case in which the conceptual background determines the selection of a specific profile among the options provided by a polysemic network. Either a conventional semantic unit or a pragmatic on-demand construct, the interpretation of 23d as 'sub-project_r' is warranted by the previous semantic pattern of co-reference.

We may turn to the above profiling pattern and its functional motivation as a whole. Despite the overt differences between expressions 23a-d, i.e. the use of compound nouns and modifiers, the comparison of the expressions shows also certain similarities that are effectively explainable with recourse to the notion of profile. As a generalization, the different profiles in 23a-d are used to refer to the same conceptual entity; yet they arrange its contents differently relative to the dimension of prominence. This variation in the choice of profile can only peripherally be attributed to stylistics and avoidance of repetition, for the choice bears non-trivial effects on the cohesion of the text and the separate constructions they take part in.

Above all, co-reference is a fundamental source of cohesion (Halliday & Hasan 1976: 31–32) or coherence (on the distinction between these two, see Sanders & Pander Maat 2006). A pragmatic extension of this fact is that by varying the specific type of reference (i.e. construal) one is able to simultaneously maintain co-referential relations and emphasize different semantic attributes of the profiled entity and thus facilitate the integration of new information into a given entity in a more variable and elaborate way (see Halliday & Hasan 1976: 276).

The notion of profile thus provides means to segment the motivations for different kinds of reference. For example, the use of *tutkimus* 'research' in 23c, which profiles the actual scientific activity more prominently than, say, *hanke* 'project', enables the specification of the actual scientific scope and objective of the project. The use of 23d *Osahanke* 'sub-project' in turn allows for an explication of attributes (e.g. methods, results, findings etc.) that are sub-project-specific but can nevertheless be associated with the "research project" and its objectives in their entirety. New information is integrated to the pre-existing whole but in a manner that presupposes the partition of the whole into meaningfully ordered sub-structures.

Profiling as an arrangement and rearrangement of semantic content is to a significant extent a function of the relationship between the expression and its conceptual background. Profiling and the foreground/background-organization thus affect each other: co-referential profiles in discourse bear upon the conceptual background according to which subsequent entities are profiled. By this context-sensitivity, profiling is remarkably similar to the dimension of specificity: both the selection of overt linguistic unit and the level of detail of its content are reactive *vis-à-vis* the immediate linguistic context. Yet profiling, as demonstrated in 23a–d, can be given its own separate function: shifting the conceptual focus within a conceptual base, as well as facilitating more specific integration of new information with the existing conceptual whole. The question is whether it is possible to reduce this particular function to the individual

manipulation of conceptual matter in terms of a set of hypothetical cognitive operations.

Given the intersubjective perspective presented in section 4.4, the answer is negative. To be exact, the co-referential pattern of 23a-b *could* be reduced on an individual-psychological level but this reduction would inevitably truncate pivotal aspects of the pattern's pragmatic function. To explicate these aspects, we must consider the relationship between the conventional and non-conventional meaning in the analyzed instances.

Similar to the role of specificity in a syntagmatic construal pattern, the analyzed interaction of conceptual background and profiling involves the interaction of conventional semantics and pragmatic elaboration. The conventional senses of each separate expression 23a—d pertain, by definition, to objects of common knowledge. In contrast, the constellation they constitute together seems involve a type of inference dependent on relatively exclusive frames of knowledge (academic research), which in turns renders the analysis of the construal pattern in excerpt 23 relative in kind. This does not obviously pose a problem for Cognitive Grammar, as the theory diminishes the difference between semantics and pragmatics in favor of a psychologistic usage-based interpretation of both. The psychologism of Cognitive Grammar, however, has already been refuted as incapable to ground a coherent conception of construal. The description of construal thus needs to be formulated in a manner that is intersubjectively valid but allows for substantial variation in the background knowledge evoked by the representative conceptualizers.

In practice, this entails an indefinite, pragmatically determined common ground, or CDS, that may fail to fulfill its own ontological criteria (of being shared) but is nevertheless "presumed" (CGBI: 59) as the basis of communication. The contents of the CDS are thus not just indefinite but largely non-linguistic, non-normative and indistinguishable from the relevant background knowledge of the interlocutors. The effect and *modus operandi* of this background knowledge is nevertheless mediated by the conventional grammatical and semantic means (for instance, a network of interrelated semantic units). Furthermore, despite being presumed, indefinite and therefore fallible, CDS is defined by the very presumption of its shared nature. Understanding of a text is therefore dependent of a projected intentionality as a part of the understanding of a text as a meant semantic structure.

In fact, the determination of the conventional meanings present in examples 23a—d is dependent of a correct analysis of the cognitive domains providing their shared conceptual background. Conversely, the selection of these expressions can only made sensible through the expectation that this background can be accessed through the expressions themselves. What this analysis implies is that a sufficient description of the excerpt 23 involves an analysis of intersubjectivity both of conventional and non-conventional variety. Here, the latter pertains to a complex, pragmatically constituted conceptual domain, which is not normative but contextually necessary.

Analytically, a text-pragmatic analysis of conceptual profiles *vis-à-vis* a contextually updated domain of background knowledge motivates a substantial

revision of the relevant dimensions of construal. From the present perspective, construal in terms of conceptual foreground/background organization and profiling equals the coordination of the most prominent substructure within a shared informational structure or CDS. This structure may be either a conventionally determined domain or a pragmatically constituted/evoked larger whole, but in both cases, it is analyzed as intersubjectively valid. As with pragmatic inference in general, both the process of coordination and the structure being coordinated are indeterminate by their nature. Their case-specific definitions can nevertheless be stated on a representative level; moreover, the interconnectedness of saliently co-referential elements in examples 23a–d defines the scope of feasible interpretations to a relatively high extent. Moreover, both the process of coordination and the coordinated structure are necessarily presumed by interlocutors as intentional and relevant for correct interpretation of the discourse.

Contrary to the specificity-based construal pattern discussed above, the pattern of profiling and background evokes a domain of equally distributed or accessible knowledge as the basis of interpretation. However, these pragmatic functions are not mutually exclusive options but dimension-like in that they themselves may co-occur and align in actual discourse. Accordingly, the symmetry of information that is evoked by the notions of conceptual background and profiling is presumed on the basis of present communicative intentionality; namely, the intention that the reader evokes certain knowledge frames in her formation of synthesis between expressions 2a–d (see Jaakola et al. 2014: 7–8).

Construal in terms of profiling and background is thus both similar to and different from its specificity-based counterpart analyzed above. Similarly to specificity of a semantic unit, the shared pragmatic background construct of CDS can be considered a relevant semiotic structure only due to the asymmetrical disposition of the distinct conceptualizer positions. The construal phenomenon observed in examples 23a—d nevertheless differs from specificity in that the determination of profile of an expression presupposes that a substantial amount of background information is equally shared and structured by the interconnections of the distinct conceptual profiles. Construal in terms of background and profiling is not only context-sensitive, but also inherently intersubjective. This is due to the fact that it presumes the coordinated (hence directional) maintenance, updating and organizing of shared conceptual structure by elaborating and emphasizing its sub-structures.

5.4 PERSPECTIVAL SHIFT AND THE FINNISH PASSIVE

Perspective, as defined in Cognitive Grammar (CGBI: 73–85), is the most complex dimension of construal. It involves notions such as viewing arrangement, vantage point, subjectivity and (temporal) dynamicity, all of which lend themselves to the description of a wide array of linguistic phenomena (see section 2.4.4). The grouping of these analytical concepts under the same rubric is nonetheless well motivated. While construal in general pertains to the

relationship between the conceptualizer and the conceptual content, the dimension of perspective evokes this notion more saliently than any other dimension of construal: perspective, regardless of the specific sub-dimension, can largely be defined with regard to the position the conceptualizers assume *visà-vis* the conceptualized content (e.g. CGBI: 73).

The following analysis concentrates on one particular type of perspectival construal. Subjectivity, in Cognitive Grammar, refers to the extent to which the facets of conceptualization (e.g. the conceptualizers) are profiled, and thus construed objectively, or left un-profiled, and thus construed subjectively. The structure to be analyzed is the Finnish present tense passive indicative (e.g. *tarvitaan* 'is needed'), which leaves the distinct grammatical subject unexpressed. With the Finnish passive, the un-expressed subject would (typically) refer to a human agent or other human participant (ISK⁸¹ 2004: §1313). There are also non-human uses of the Finnish passive (see Shore 1986), which, however, are quite peripheral especially relative to the present topic. The analysis below concerns subjectification of a human agent or an experiencer by means of a present tense passive construction in a narrative or descriptive section of a magazine text.

Morphologically, the Finnish passive in question (on the morphology of Finnish passive forms in general, see e.g. ISK 2004: §110; Jaakola 2015; Löflund 1998) is formed inflectionally by adding, after the verb stem, a passive marker (e.g. -tA-, -dA- tai -lA-), a possible marker of past tense and a personal suffix (e.g. -tA-, -dA- or -lA-), a possible marker of past tense (-i) and a personal suffix (-An). In the excerpt to be analyzed all the predicate verbs are in the present tense and represent the same Finnish verb type, e.g. the passive tarvitaan.

With this verb type, both the stem and the passive marker include a t-element; the inflectional form is thus analyzed as involving a fusion of the t-element of the passive marker with that of the stem: tarvi=t=a-an.

Semantically, the Finnish passive voice refers to a process, which typically involves a human as its central participant: a human agent⁸² or, less often, an experiencer. A necessary condition is that the participant could be expressed by the grammatical subject (ISK 2004: §1313). The anonymity of Finnish passive can be overridden by the calque *toimesta* 'by x', but this expression is quite formal in style and thus restricted mainly to juridical and organizational contexts. It has been debated whether Finnish passive corresponds to the passive of Indo-

⁸² The linguistic notion of agent is obviously far from un-problematic, as is illustrated by the long tradition of efforts to associate it in a consistent manner with different parts of speech (e.g. case grammar of Fillmore 1968, 1977). See also Jespersen (1993 [1924]), who surveys at length the discrepancy between grammatical and so-called notional categories (e.g. ibid. 165); the latter essentially capture semantic roles that the former express differently from one language to another. On the other hand, the Finnish passive is distinct from its English counterpart in that it can only be formed from verbs that assume a human agent; a condition that can easily be tested by the formation of corresponding active construals (ISK 2004; §1321, see also §1323). An agent is therefore assumed as a prototypical notion of an intentional human actor that is presumed by the process the given verb refers to.

⁸¹ ISK = Iso suomen kielioppi [The comprehensive grammar of Finnish].

European languages (e.g. Blevins 2003; Comrie 1977; Helasvuo 2006; Kittilä 2000; Larjavaara 2007; Pajunen 1991; Shore 1986, 1988). Finnish passive nevertheless exhibits the prototypical passive function, suggested for example by Kittilä (2000: 290) by foregrounding the patient at the expense of an implicit, typically human agent, often retrievable from the context.

Not only is the Finnish passive restricted to verbs of actions and activities with a default human agent, the passive is often used in contexts that provide means for elaborating the given implied agent. The analysis in this section concentrates on a specific use of the Finnish passive in written discourse, which manifests distinctive semantic and pragmatic characteristics but also fulfils the general characterization of passive as prompting a contextual elaboration of the agent. To be specific, the excerpt 24 includes multiple uniform instances of what Helasvuo (2006: 234) calls the simple passive⁸³, as separated from passive past participles used with active voice auxiliary *olla* 'be'. While the segregation of these types is not unproblematic, the category of the simple passive is descriptively convenient, as it captures the form's pragmatic function of maintaining contextually determined reference to the implied agent(s). This holds true for excerpt 24 as well.

Excerpt 24 was taken from the beginning of an article that describes the work done in SOS crisis center, a non-profit organization that offers help for people facing acute psychological distress. The present tense passive forms describe the working of the customer team at the crisis center, as if the reader was brought onto the actual scene:

24. On keskiviikko ja SOS-kriisikeskuksen asiakastiimin viikkopalaveri. Kriisivastaanoton vastaavan Pirjo-Riitta Liimataisen edessä pöydällä on pino keltaisia lappuja. Jokainen niistä kertoo yhden ihmisen kipeästä elämäntilanteesta.

Kriisiaikaa [a]tarvitaan tällä kertaa 19 asiakkaalle. Joukossa ovat 19-vuotias tyttö, jolla mahdollisesti on uhka kunniaväkivallasta, nelikymppinen turvapaikanhakija, 22-vuotias liikuntavammainen opiskelija [...].

Heidän taustallaan on monia ongelmia, jotka kietoutuvat toisiinsa: läheisen sairastuminen tai kuolema, erotilanne, huostaanotto, aviokriisi [...]. Osalle [b]tarvitaan tulkkia.

Avunpyynnöt [c]laitetaan kiireellisyysjärjestykseen, ja asiakkaat [d]jaetaan kriisityöntekijöille. [...]

'It is Wednesday and the weekly meeting of the customer team in the SOS crisis center. On the table, in front of the counselor-in-chief Pirjo-Riitta

the speaker and the recipient(s).

 $^{^{83}}$ In one particular use, the simple passive alternates with the passive form as a colloquial first-person plural – essentially a simple passive form with a personal pronoun me, 'we' – as a form of maintaining personal reference (Helasvuo 2006: 248–251). The described action involves the speaker and possibly the recipient(s) as well. The typical use of the present tense is to either prompt or describe future action of both

Liimatainen, there is a pile of yellow cards. Each of them represents a painful situation of one human being.

This time around, crisis time [help] [a] is needed for 19 customers. Among them are a 19-year-old girl, who is possibly facing a thread of honor violence, an asylum seeker in his forties, a 22 year old physically disabled student [...].

In the background, they have many intertwining problems: the sickness or death of a beloved one, divorce, custody, marital crisis [...]. For some of them, an interpreter [b] is needed.

The requests for help [c]are arranged according to their urgency, and the customers [d]are shared among/to the crisis workers.'

(MT 2/2010: 18, emphasis added)

The excerpt starts with a straightforward depiction of the spatiotemporal and occupational setting of the customer team at work. Quickly enough, however, the focus shifts to the group of customers who have turned to the crisis center in their need for help. After exemplifying the requirements of the customers' situations, the text moves on to describe the action taken by the customer team in organizing their forthcoming work.

Peculiar enough, the opening paragraph is in fact the only occasion in the body text in which the workers of the crisis center are explicitly mentioned (the leader of the team *Pirjo-Riitta Liimatainen* is mentioned later on in the role of interviewee). None of them are represented as syntactic subjects either. The compound *asiakastiimin* 'customer team' is presented as the genitival modifier of the *viikkopalaveri* 'weekly meeting', the complement in the existential clause expressing the context of the described activity. *Liimataisen* is presented as the genitival complement of postposition *edessä* 'in front of', which makes her the experiential and spatial landmark relative to which the situation cards of each customer are located.

From the beginning of the second paragraph onward, the customers presented by the yellow situation cards are the only human referents explicitly mentioned in the text. In other words, the physically present workers are linguistically evoked only via the activity described by passive forms, whereas the customers mentioned explicitly are present at the scene of action only virtually. What we witness in examples 24a-b, and to certain extent in examples 24c-d as well, is nevertheless a depiction of an elaborate interaction between the members of the team and their customers. The examples 24a and b may be analyzed as a complex conceptual blend (e.g. Fauconnier & Turner 2002): a set of temporally intermittent actions (the previous telephone conversations, the discussion at the meeting, the forthcoming consultations) are synthesized into a singular, currently present, continuous and shared activity.

The passive verbs 24a-d thus receive an endophoric and plural interpretation.⁸⁴ To be exact, they form a pattern of maintaining the reference

⁸⁴ This use corresponds to the so-called prototype 2 of passive posited by Shore (1988: 166–169), which Shore, in general, denotes as "indefinite". Prototype 2 is characterized by a contextually determined

established by previous mention of the agents (see Helasvuo 2006: 249–250 for a similar function of passive in spoken discourse). The pattern in excerpt 24 does not, however, maintain the reference unchanged, but it rather adjusts both the scope and manner of it as the text and the co-referential pattern itself unfolds. From example 24a to 24d the nature of the described activity, the linguistic context of the verbs, and the previous instances contribute in the specification of who is in need, who arranges (and what exactly), who shares (and to whom). What is thus in play is subjective, contextual elaboration of agents with a highly schematic profile. In terms of construal, the identities of these agents are not profiled, so they are construed subjectively. However, the presence of a non-specific human agent is profiled by the passive suffix, as is the temporal relation between the described activity and the ground. The question is how this subjective construal of agency affects the relationship between the conceptualized activity and its conceptualizers.

It must be clarified that subjectivity is not a one-dimensional dimension; it does not only pertain to the extent to which the ground is objectified but also to the manner in which it is objectified: e.g. certain modal elements evoke more saliently the primary conceptualizer as a source of epistemic or deontic authority; this again is a source for the asymmetry between the primary and the secondary conceptualizer. Indeed, Verhagen (2005, 2007) describes the phenomenon of perspectivization as a variety of profiling patterns between the distinct substructures of both the objective and the subjective poles of construal. This nuanced take on subjectivity is directly relevant for our description of the present passive in 24a–d, in which the partial subjectification of the agent will be shown to have a differentiating effect on the conceptualizer positions.

To preface this approach to the passive, let us consider the useful analogies provided by two other grammatical categories of Finnish that also are used in order to subjectify the human agent, recipient or experiencer. The first one is the Finnish zero-person construction, which presents, in a third person singular, a process without an explicit grammatical subject. The second is the so-called independent A-infinitive construction, in which the Finnish A-infinitive, typically applied as the form of the complement in a verb chain, is presented independently, that is, without a subject or a complement-taking predicate verb. Both of these constructions lack an explicit subject and construe a site of identification for the recipient; yet they do it in substantially different ways with different pragmatic effects.

The relatively frequent Finnish zero-person construction (Laitinen 1995, 2006; see also Hakulinen & Karttunen 1973), with the zero in place of subject, expresses a generic, virtual instance of an experience. This experience, however, is typically associated with the primary conceptualizer who offers it for the secondary conceptualizer to relate to: $t\ddot{a}$ [\emptyset] sulaa '[one] melts down here'. While the zero-person construction lacks a distinct grammatical subject, this lack

endophoric reference to a specific agent or a group of agents, as opposed to the generalized exophoric reference of prototype 1 (see ibid. 162–166). Whereas prototype 1 presupposes a plurality of agents (ibid. 162), for prototype 2, the number of agents is "irrelevant" (ibid. 167), i.e. completely determined by context.

itself is pronounced by the third-person inflection of the predicate verb: the construction can thus be analyzed as involving a site of identification profiled indirectly by the construction itself (see e.g. Visapää 2008: 76). While the experience expressed by the zero-person may be associated with speaker herself, 85 it is expressed exactly as an intersubjectively valid experience: the fact that 'one melts down here' applies and is relevant to the speaker and the hearer(s) equally. It can therefore be argued that a zero-person construction evokes subjectively a multiplicity of experiencing subjects, for whom a virtual experience is constituted as a site of identification.

In contrast with the zero person construction, the independent A-infinitive construction (Visapää 2008) is a relatively peripheral expression type with a poetic or affective effect; for instance, the shockingness of the deed described: *jättä-ä tutkimus kesken viime metreillä* 'to quit one's research right at the end'. The A-infinitive lacks specification both in tempus and person, so the relation between the described activity and the ground is maximally subjective. This in turn prompts the inspection of the activity from the perspective of a generic experiencing agent (Visapää 2008: 85). The construction nonetheless makes the recipient responsible for a substantial part of the elaboration of the activity. While canceling the specification of the activity/ground relationship, the A-infinitive assumes the function of expressing virtual, i.e. imagined, remembered, or generalized activity. The primary conceptualizer therefore manifests in the emotive tone of the expression. This emotive presence in turn co-aligns with the typical pragmatic function of the A-infinitive construction, which is to offer the experience to be identified with by the addressee(s).

Both the zero-person construction and the independent A-infinitive construction thus express a generic, albeit experientially grasped, activity. Moreover, the virtual nature of the description in these constructions entails that the activity stands in a correspondence relationship vis-à-vis a number of actual or potential occurrences. What distinguishes these construction types from each other is the manner how they relate, or do not relate, this activity to the ground. The zero-construction, with its tense and person marking (that constitute a site of identification), grounds the virtual instance relative to the conceptualizers: for instance, the virtual 'melting' above is presented as representative of spatiotemporal occurrences that are real or potential to the interlocutors. In contrast, the A-infinitive subjectifies all traces of the ground (Visapää 2008: 76). In other words, the construal itself does not in any sense specify how the virtual instance should be related to the reality of the communicative context in terms of the representativeness, the temporality or the reality of the expression itself. For instance, 'to quit one's research' in the example above, may quite well correspond to an actual instance of quitting. However, this correspondence does not in any

⁸⁵ As a grammatical device of generalization, the zero-person construction can be extended to contexts, expressible by frame-setting adverbials, that do not include the speaker herself; rather, these contexts are expressed as relevant to the addressee(s) or other participants (Laitinen 2006, examples on pages 209, 211, 213). In such cases, however, the generalization is still applicable to the speaker as well, despite the fact that the epistemic source of the generalization is not the actual experience of the speaker.

way belong to the infinitival profile, or even to the expression's conventionally determined base, but is established subjectively on the basis of the pragmatic context.

The use of the passive in examples 24a-d resembles both the zero-person construction and the independent A-infinitive construction in that it subjectifies the participant that otherwise would be expressible by the grammatical subject. However, the passive construal shows important distinctive features as well. In contrast with the zero person, the passive construction typically receives a nongeneric interpretation and implies an agent who is distinct from the conceptualizers (cf. pp. 194, fn. 77), the identity of whom is nevertheless not specified *vis-à-vis* ground. Relative to the A-infinitive construction, the Finnish passive differs mainly in that it presents, by default, an actual, spatiotemporally grounded activity, within which only the identity of the agent/experiencer is subjectified.

In sum, a prototypical instance of the passive construction pertains to a nongeneric, partially subjective construal. Its narrative-descriptive use in present tense, such as in examples 24a-d, seems to allow a perspectival identification similarly to zero person and A-infinitive constructions. In this case, however, the target of identification is not the agents or other participants of the described activity but the primary conceptualizer as the observer on site (see below).

As suggested by Verhagen (2007: 60), any piece of meaningful linguistic communication may be considered as an invitation from a conceptualizer to another to assume a certain perspective relative to the conceptualized matter. I nevertheless argue that the passive construal in excerpt 24 exemplifies a particularly pronounced case of perspectival accommodation between conceptualizers; moreover, this accommodation shows features specific to the passive construal. The question is how this effect may be described in terms of the dimension of perspective.

Clearly, as the examples provided by the zero-person construction and the independent A-infinitive construction illustrate, any construal phenomenon involving a perspectival accommodation requires that the relationship between the primary and secondary conceptualizer is adjusted. In fact, the analysis of examples 24a—d below shows that such an accommodation is dependent on the default epistemic asymmetry between the conceptualizers (see sections 4.5.1 and 4.5.2 above), even when the default setting is overridden by a given construal. In any case, the use of passive in a narrative-descriptive function involves a complex pattern of interaction between the conceptualizers and the distinct agents/experiencers within the text. This pattern, and the perspectival shifts it involves, is illustrated best by a piecemeal analysis of examples 24a—d and the manners in which they construe the identity of the agents.⁸⁶

framework and its discourse identities, the perspectives construed by the text do not serve expression-

-

⁸⁶ These characterizations inevitably extend the analytic scope of the conceptualizer from clausal semantics to interpretation of a narrative as a complex of participants and activities with a consistent thematic advance. This requisite extension brings the notions of conceptualizer and ground closer to the notions of discourse identities and participation framework by Goffman (1981). As with Goffman's

In example 24a, the passive predicate *tarvitaan* 'is needed' takes as its partitive object the compound *kriisiaikaa* 'crisis time', which refers to the time that is reserved for face-to-face counseling.

```
[24] Kriisi-aika-a [a] tarvi-ta-an tällä kertaa 19 asiakkaa-lle [crisis-time-PTV need-PASS this time 19 customer-ALL] 'This time around, crisis time [help] [a] is needed for 19 customers'
```

The predicate verb and the partitive object evoke saliently the role of "needers", which matches that of customers in a typical setting. However, the allative adjunct 19 asiakkaalle 'for 19 customers' profiles the customers as recipients, and the need of time is actually a feature that fits the counsellors too. While it seems strange that a counsellor would 'need' her own time, it is actually the treatment of each customer's individual situation – the cooperation of the counsellor and the customer – that comes with the temporal requirement. The category of the 19 customers and the category of the employees of the center merge to form a complex domain of interaction, in which the exact customer–counsellor relationships are left un-profiled. I therefore argue that 24a receives interpretation of collective agency involving the counselors and customers alike, despite the clashing profiling of '19 customers' as recipients.

This also holds true for the next instance of *tarvitaan* in example 24b: now the object has changed, but the need itself derives from the cooperative setting:

```
[24] Osa-lle [b]tarvi-ta-an tulkk-ia.

[part-ALL need-PASS interpreter-PTV]

'For some [of them], an interpreter is needed.'
```

The allative adjunct *Osalle* 'for some [of them]' expresses the recipients of help and serves an anaphoric restrictive function in that it delimits a sub-domain within the previously established category of 19 customers. Still the need for an interpreter does not come from the subjective need of a customer but it emerges from the interaction between a customer and a counsellor: they both need the interpreter equally.

The shared agency evoked in examples 24a-b does not last, however. In examples 24c-d, the requests for help and the persons to which they refer are presented as objects. Moreover, the described administrative or organizational activity clearly restricts the scope of agency to the team working at the center. Note that neither example 24c nor 24d determines the interpretation whether the agency is commensurate with the team as a whole, with a part of the team, or with the previously mentioned *Pirjo-Riitta Liimatainen*.

```
[24] Avu-n-pyynnö-t [c] laite-ta-an kiireellisyys-järjestykse-en [help-GEN-request-PL put-PASS urgency-order-ILL]
```

specific needs but cohere to build an experientially grounded, comprehensive depiction of the described activities.

'The requests for help [c] are arranged according to their urgency'

In example 24c, the context of a weekly meeting and the nature of described activity imply the possibility of a collective effort, e.g. the negotiation over the relative urgency of the cases. However, neither the context nor the process described by the passive determines the agent in any specific manner. The interpretation is necessarily a synthesis between not only the conventional semantics of the predicates, constituents and adjuncts, but also a specific understanding of administrative work in a meeting setting. Thus it is as likely that the agent is only one individual, e.g. Liimatainen, within the team.

This indeterminacy is repeated and further illustrated by the passive construal in example 24d:

```
[24] ja asiakkaa-t [d]jae-ta-an kriisi-työntekijö-i-lle. [and customer-PL share-PASS crisis-worker-PL-ALL] 'and the customers [d]are shared among/to the crisis workers.'
```

The semantics of laitetaan 'are arranged' in 24c does not exclude a collective agency, and the activity is directed toward an object other than the team itself. Neither does jaetaan 'are shared [among]' in 24d exclude a collective interpretation. The semantics of the verb may imply a singular sharer vis-à-vis multiple recipients. This combined with the contextual knowledge about the hierarchy within the team, and the allative adjunct kriisityöntekijöille 'among/to the crisis workers' may gear the interpretation toward a singular agent. Note, however, that the appearance of a referent in an adjunct position does not suffice to rule out the option that the referent is an active participant of the described activity, as is demonstrated by 24a-b. Rather, it is the overall semantic contribution of the selected predicate verb, the adjunct, and above all, one's background knowledge of the given activity that suggests the singular interpretation of the agent in 24d. Finally, note that the passive forms 24c-d are parts of the same sentence. The combination of their shared sentential context and homomorphism may be taken as an indication of a shared agent, which suggests that the 'arranging' in example 24c could also involve a singular agent only.

The pattern followed from 24a to 24d is thus characterized by a stepwise delimitation of the scope of possible agents, while the pattern simultaneously maintains their subjective construal. From 24a to 24b the scope is kept the same, and from 24b to 24c, the agency of the customers is excluded. Finally, from 24c to 24d the scope of agency is not altered in any definite or explicit manner; it may be analyzed as continuous or as delimited from the team to its representative member(s).

As mentioned, the passive construals from 24a to 24d adjust the personal reference via subjective specification but also maintain the reference (see Helasvuo 2006: 248–251) by their construal uniformity and the resulting network of partially synonymous expressions. Starting from the first instance, the passive *tarvitaan* 'is needed' establishes a subjective reference to all

aforementioned human agents, and the subsequent instances utilize this relationship by suggesting co-reference through exhibiting the same grammatical form. At the same time, the increasing specificity of the agency is not only a function of each instance separately but also of the co-referential linkage between them (see sections 4.5.1 & 4.5.2 above).⁸⁷ Since the construal is maintained the same, the specification of the agents is carried out on the subjective level: the schematic profile of the agent, expressed by the passive marking, is therefore specified indirectly via its conceptual basis only.

The construal pattern in examples 24a-d thus involves simultaneously a homomorphism of the objective construal (schematic profile of a human agent) and an alternation of the personal reference on the level of subjective construal (contextual and co-referential retrieval of agents). This of bipolar function of maintaining and adjusting personal reference is linguistically significant by its own right. The pattern allows a conceptualization of delicate circumstances not just without identifying the customers and workers of the crisis center, but also without construing the unequal distribution of agency that necessarily results from the customers' vulnerable situation. It can be argued, however, that this function is a necessary correlate of an effect that is more clearly perspectival by nature.

This subtle construal effect is difficult to verbalize, but it can be concretized by a coined zero-person alternative. For instance:

```
Kun [Ø] on kriisi, [Ø] tarvitsee kriisiaikaa 
'When [one] faces a crisis, [one] needs crisis time'
```

To be exact, the zero person construal allows a generalization that is applicable to the situations of the customers but not to the situations of the crisis workers. The zero person construction may stand as a virtual instance for a practically indefinite number of actual instances, but the construction comes also with the more specific site of identification, which may be occupied (virtually) only by one conceptualizer at a time. This restriction is further illustrated by the oddity of an allative adjunct, 19 asiakkaalle 'for 19 customers':

```
?kun on kriisi, tarvitsee kriisiaikaa 19 asiakkaalle.

'When [one] faces a crisis, [one] needs crisis time for 19 customers'
```

Conversely, it is indeed the passive construal that allows the co-operative interpretation in 24a-b. It may still seem unnatural to conceive the workers of the crisis center as needing the crisis time. However, we now may refine the earlier position on the sharedness of the need in question. The passive allows

⁸⁷ The co-referential chain leading to the originally mentioned agents gives the pattern an economical advantage: the processual frame evoked by the verbs is elaborated contextually at a level of specificity that allows for a coherent conceptualization without excessive detail on the possibly quite variable identity of the

agents. The combined effect of the syntagmatic increase in specificity and paradigmatic perspectival assimilation in 24a-d exceeds mere conceptual economy, however.

dissipating the fact that the need of help on the behalf of the customers is more direct in character than the need on behalf of the workers, who in fact are required to share their "own" time. Passive, in other words, allows an equal construal of agency in a situation that is not subjectively construed as equal in any actual sense.

This brings us to the central point, that is, the intersubjective basis of the construal phenomenon in question. I argue that, consistently with Cognitive Grammar, the non-profiling of agent's identity by the passive construal results in the subjectification of the distinction between the agent and the conceptualizer. However, I also argue that this subjectification results in the lessened salience of the primary conceptualizer and, logically, in an increase in the salience of the secondary conceptualizer. What this adjustment of salience means in practice is that the passive description in 24a–d does not appear as mediated by the primary conceptualizer but as a conceptualization of experience that is immediate to the secondary conceptualizer.

This formulation may appear counter-intuitive: we know that the text is written by, and represents the perspective of, an observer distinct from the implied agents. Indeed, such background information is necessary for the understanding of the expressions 24a-d or the text as a whole (see below). The question, however, is how the semantic content of the expression is construed and profiled. Furthermore, perspectival effect I suggest may be restricted to the context of narrative-descriptive written discourse, in which the primary conceptualizer would, by default, have a particularly salient role as the source of a first-hand experience. The perspectival effect is in any case subtle, indefinite and indirect, so it needs to be described with precision. Moreover, it needs to be described relative to the overall organization of the participants of the construal relationship, whether they reside at the subjective or the objective pole of conceptualization.

The chief component of perspectivity is the viewing arrangement, which subsumes the ground, the conceptualizers, the object of conceptualization and the mutual relationships between these structures (CGBI: 73–75). The so-called default arrangement in conceptualization (ibid. 74) pertains to an explicit construal of an object, which is distinct from the ground, and to an implicit construal of the ground and the conceptualizers. The result is a maximal asymmetry between the objective and subjective poles of conceptualization (ibid. 77). Yet the default arrangement involves another, less pronounced asymmetry: the conceptualizers are defined relative to the directionality of communication (ibid. 261–262, Verhagen 2007: 60). The primary conceptualizer of the default setting is therefore the speaker, but also the epistemic authority of the conceptualization, albeit the object of conceptualization is equally present for both of the conceptualizers.

This is naturally the same epistemic asymmetry that we have witnessed in the previously analyzed construal patterns. The asymmetry nevertheless has particular corollaries in the passive construal. First of all, the chief premise of preceding analysis on excerpt 24 is that the text forms a truthful, consistent description of an actual occurrence that the writer has witnessed in person.

Second, since the primary conceptualizer is also the observer, whereas the secondary conceptualizer is not, the narrative use of the passive construal yields a maximal asymmetry between the primary and secondary conceptualizer relative to experiential basis of knowledge. The object of conceptualization is pragmatically available for the reader via the conceptualization alone (whereas it is available to the construed writer as the direct correlate of observation).

The epistemic asymmetry thus results from the unequal accessibility of the object of description. In the case of excerpt 24, an active construal of the team at work would involve the third person inflection, which in turn would ground the activity as carried out by the agent separate from the observer. This as such does not affect the specifications of separate conceptualizer positions, but this is exactly the point: the ground would be construed subjectively "as it is", given the context of this specific article. The question is why the passive construal in examples 24a—d would alter this default asymmetry.

The answer, in brief, is that it doesn't. Instead, the passive construal, in its lack of profiled personal distinction, reduces the asymmetry between the subjective and objective poles of conceptualization. In other words, the passive construal dissipates a salient experiential observer, such as would be evoked by the third-person marking as an inverse counterpart within the ground.⁸⁸

This adjustment, however, entails logically that the default asymmetry between the primary and the secondary conceptualizer is reduced as well. The representative writer of the text is still present as the necessary primary conceptualizer, but her presence as an observer at the scene of activity is left unevoked by the construal. At the same time, the topic (an actual activity), the narrative mode and the present tense necessitate a schematic and subjective virtual observer, whose experience co-extends with the described activity.

With the dissipated primary conceptualizer, this virtual position is most naturally assumed by the salient conceptualizer, whose presence cannot be canceled by any linguistic means: the reader. That is, if we take seriously the Cognitive Grammar's proclamation of the inherent perspectivity of linguistic meaning, also the segment represented by expressions 24a-d needs to be construed relative a representative conceptualizer position. The position is obviously pre-given by, and inscribed in, the text; yet the dissipation of person distinction and the consequent first-person observer position results in a construal which is simultaneously pre-given and immediate.

This adjustment of the salience of different subjective positions is obviously relative and subtle by its nature. Yet it is based on the semantic distinctions Cognitive Grammar presents as the basis of subjectivity in the first place. Moreover, not only is this analysis commensurate with the analysis of subjectivity by Cognitive Grammar, it involves and is dependent on complex ground and subjectively construed specifications thereof: the perspectival explanation of the passive construal is only feasible relative to two separate conceptualizer positions. But the above analysis has been dependent on still another

⁸⁸ Note that this is a definitional feature of grounding elements: they ground by standing in a relationship vis-à-vis some substructure of the ground (e.g. CGBI: 259, 297).

presupposition that has not yet been stated: the adoption of the secondary conceptualizer's perspective in the reading of the text.

The notion of perspectival accommodation posits two requirements: 1) there are at least two perspectives, the perspective to be accommodated and the perspective that serves as the target of accommodation; and 2) the perspective to be accommodated has been taken by an interlocutor. The latter requirement is not just logically inevitable but so self-evident that it is easy to neglect. For instance, the unmarked basic clause, expressing the default viewing arrangement, presents the object of conceptualization as equally accessible to both conceptualizers. Yet the equality of the construal derives from the discernibility of the conceptualizer positions, and the instantiation of the expression in a communicative situation defines it equal exactly as against the background of the directionality inherent in the communication (see pp. 196 above). A simple declarative thus presents an equally accessible description, the communicative momentum of which is nevertheless dependent on the assumed conceptualizer position through which the conceptualization is accessed (see Verhagen 2008: 313–315; pp. 179–181 above).

Thus, despite its social constitution, the meaning of an expression is never entirely the same to all of the possible conceptualizer positions. This does not lead to subjectivism, however: the construal effects that differentiate between distinct conceptualizer positions are simply a part of an expression's total value, and they are equally available to any speaker of the language to apply. While the spoken discourse manifests this asymmetry most saliently in the directionality of the speech acts, a written narrative brings about distinctive conceptualizer-specific effects that relate especially to the organization of semantic content. In the passive construal of examples 3a–d, this effect is the accommodation to the observer position, which is in an immediate epistemic relation with the conceptualized activity.

It should be acknowledged that the position of the observer does not segregate between the conceptualizers: the described activity is presented by passive as the object of conceptualization for the primary and secondary conceptualizer. However, the very adoption of this position, and the subjective construal this perspectival shift correlates with, depend on a perspectival position that serves as a standard of comparison. Consider, once more, example 24a:

```
[24] Kriisi-aika-a [a] tarvi-ta-an tällä kertaa 19 asiakkaa-lle [crisis-time-PART need-PASS this time 19 customer-ALL] 'This time around, crisis time [help] [a] is needed for 19 customers'
```

The example describes a concrete, practical need, emerging from the interaction between multiple agents, albeit this interaction is abstracted from spatiotemporally distinct activities. The need of crisis time presents itself in an observable, spatiotemporal setting, likely as a topic of discussion. At this point, however, we already have adopted a position of a conceptualizer with access to

the overall viewing arrangement on-site.⁸⁹ This is a simple contingent fact that derives from the basic descriptive procedure of Cognitive Grammar, combined with the narrative style of the excerpt: a construal relationship needs to be established and, in this case, it needs to be established between the ground and a real, past occurrence that is nevertheless construed as immediately present. This involves a necessary adjustment of perspective, in which an epistemologically mediated depiction receives an immediate construal.

Were this adjustment prompted by an active construal, the perspective of the observer would be marked by the personal distinction, as mentioned above, and the other's (i.e. primary conceptualizer's) perspective would be assumed as a salient part of the ground. In the actual passive example, the same on-site perspective is assumed but without the personal grounding. The perspectival shift, in other words, is attained without identifying the target of accommodation with a certain part of the ground.

What is significant in this line of reasoning is that such a shift would be totally irrelevant from the perspective of the primary conceptualizer: this is due to the *a priori* identity between the primary conceptualizer and the observer. Most importantly, however, the subjective construal of the identity of the agents would be irrelevant too: the constitution of co-referential relationships on the subjective level of the expressions is only motivated by the fact that one does not have access to the "actual" co-referential relationships. The requisite subjective reconstruction of these relationships, then, is coextensive with the perspectival shift to the position of the on-site observer.

This reading of the excerpt may appear highly subjective, but a criticism of subjectivism can be refuted offhand. First of all, the use of imagistic terminology may give the impression that the suggested interpretation is based on mental simulation or an according theory of processing (e.g. Barsalou 1999), but this is not the case. The notion of observer has been applied metaphorically only, following the Cognitive Grammar's visual metaphor of viewing arrangement, but the application of the metaphor does not indicate any commitment to a certain psychologistic stance. In my analysis, I have applied the visual metaphor solely to express various epistemic positions and relations, and the matching of the metaphor's source domain with the excerpt's visual style is an expository adversity more than anything else.

Moreover, the reading is offered as to exemplify asymmetrical pragmatic intersubjectivity, but this does not entail that reading would be subjective in the sense of idiosyncratic, let alone arbitrary. Instead, the interpretive requisites it presents are not only accessible to whomever who may assume the position of the secondary conceptualizer, but they also can be presented as the part of the intersubjectively valid meaning of the text as a whole. As said, the subjective construal of identity may be relevant only for the secondary conceptualizer, but the relevance alone does deem a part of meaning only unilaterally accessible.

⁸⁹ Note that this is not a metaphysical access to some conceptualization of the writer but, once again, an interpretive feat necessary to a coherent reading of the text.

Rather, unilateral relevance on one side of the ground can be interpreted as a motivating factor on the other.

Finally, one could contest the above analysis as too impressionistic to capture distinctions that are linguistically significant. I acknowledge that the selection of a passive construal may be motivated primarily or solely by the need of anonymity. This possibility, however, does not contest the very existence of the perspectival effect; and, moreover, this alternative, while quite probable, is not in fact exclusive. Even when the primary motivation of a subjective construal is the subjectivity itself, the subjectification of the agent may simultaneously serve the function of perspectival accommodation as well. In fact, the two functions, the anonymity and perspectival accommodation attained by a passive construal, can be posited as partial correlates at least, and their simultaneous presence seems to be a requirement of many uses of the construal. The prevalence of the present tense passive indicative, for instance, in the work instructions in nursing industry, is a prime example of a subjective construal of agent, which exhibits anonymity and perspectival accommodation while being a clear conceptualizer-dependent construal effect.

In conclusion, I have argued that the narrative use of the Finnish present tense passive indicative involves perspectival alignment between the secondary conceptualizer and the observer of concrete activities. Significantly, this construal type reduces the salience of the primary conceptualizer, which is due to the lack of personal distinction as grounding devise. However, my analysis has demonstrated that such a perspectival effect is dependent on the interpreter's adoption of the specific conceptualizer position. The observed construal type may well conventionalize into a semantic variant that includes this perspectival effect as its conventional semantic value. At this point, however, this effect is best explained as a function that the subjectification of the agent adopts in a particular (type of) discursive context.

Whereas previous analyses emphasized both the symmetry and asymmetry of knowledge between the conceptualizers, the above analysis of the Finnish passive demonstrates the grammatical structure's function in the perspectival adjustment between the conceptualizers and the agents of the profiled activity. Ceteris paribus, this last construal phenomenon derives most clearly from a specific grammatical construction and from the intersubjective alignment this construction imposes on the ground. Even in this case, however, the analysis has disclosed pragmatic construal effects that cannot be described consistently within the confines of the construed expression, or even within the linear structure of the discourse alone. Instead, the description of perspectivity requires specifications on the level of pragmatic intersubjectivity; namely that a subject positions oneself relative to the positions offered by the discourse. Thus, the described perspectival effect of the passive construal not only distinguishes between different conceptualizers but depends upon assuming a specific conceptualizer position. The analysis of the Finnish passive consequently provides further evidence for construal as a context-driven selection of conceptual matter and as an alignment of that matter relative to multiple perspectives, rather than according to conceptualizer's subjective position alone.

5.5 DISCUSSION

The most rudimentary conclusion that can be drawn from the examples analyzed above is that construal exceeds in scope the analytical function associated with it by Cognitive Grammar. Not only is the notion of construal applicable to textual wholes greater than clauses and sentences – a characteristic that is in accordance with the unitarian principle of Cognitive Grammar. In addition, it has been shown that construal, both as selection and organization of semantic content, is specified and motivated by the pragmatic context. The preceding treatment has focused on construal solely in "intra-textual" (or endophoric, see Halliday & Hasan 1976) contexts, but it should be evident that the pragmatic basis of construal can be limited to language only arbitrarily.90

Moreover, the foci of the preceding analyses have been on variable construals of the same referent or state of affairs as explicitly present in the analyzed texts. The concentration on the syntagmatic organization of co-referential construals has been motivated by the very definition of construal as a means of organizing semantic content in alternative ways. What the analysis has revealed, however, is that alternative construals do not simply co-refer in distinct ways but also affect each other's interpretation.

The analysis of specificity scrutinized a pattern of co-reference that is established by constructional meaning of the conjunctive structure kuten 'such as'. This particular conjunctive presents the subsequent noun phrases as instances of a category, thus evoking a category interpretation of the preceding entity. More importantly, the analysis showed that specificity at the level of explicit profiling is likely due to what is shared by the interlocutors. In other words, the more elaborate the shared information structure between conceptualizers, the more schematic construal can be allowed. However, the level of specificity of an overt expression was shown to relate to the maintenance of a shared information basis within a larger asymmetrical distribution of knowledge. This asymmetry is not merely an a priori motivation for communication but a pragmatic determinant of construal with practical consequences.

The subsequent analysis on focusing and prominence showed the dependence of profiling, central to the semantic unit's referential function, on linguistically maintained background information. The analysis, in other words, confirmed the observation made in the discussion on specificity that that the selection of a conceptual profile is largely a function of the intersubjectively shared common ground. At the same time, the analysis also revealed profiling-specific pragmatic phenomena. Most importantly, the analyzed co-referential profiles were shown to enable an integration of new information to the profiled entity on a level of specificity that could not be attained by repetition of the same construal alone.

90 The emphasis nevertheless reflects the nature of written discourse: the lacking of on-line, multimodal coordination of common ground, as well as control over the efficiency of communication, shifts the balance of pragmatic inference more heavily on the endophoric relations (see Jehandrie 1999; chap. 8). The generalizability of the case-specific observations made above to spoken discourse remains an empirical question.

Finally, the treatment of perspective with regard to Finnish passive demonstrated that perspectival indeterminacy at the level of profiling, due to the subjective construal of the agent, results in a decrease of the primary conceptualizer's salience and in a respective increase in the salience of the secondary conceptualizer. The profiling of the agent, and the non-profiling thereof, was thus shown to impact the perspectival and position of the secondary conceptualizer, an effect mediated by the constitution of the primary conceptualizer.

The results apprehended above seem to follow in a quite straightforward manner from extending the notion of construal to include immediate linguistic context, i.e. the co-referential construals *in praesentia*. However, these results are also dependent on an intersubjective conception of construal. The preferability of an intersubjective approach to construal was demonstrated not only by the analysis of conventional-semantic ground presupposed by perspectival semantics but also by the description of construal relative to the overall pragmatic context of the analyzed texts. Instead of being describable in terms of cognitive processing, the analyzed construal effects explicitly involved a coordination and maintenance of the epistemic and perspectival relationship between conceptualizers and their position *vis-à-vis* the object of conceptualization. The results are consistent with, and therefore provide support for, the dependence of experiential semantics from intersubjective constitution of language, established in section 4.4.

As mentioned in the beginning of this chapter, the analytical concepts applied here are provided mainly by Cognitive Grammar itself. Indeed, it has been one of the chief purposes of this chapter to demonstrate the compatibility of these concepts and an intersubjective approach to semantics and pragmatics. Thus, the methodology applied here has consisted of embedding the dimensions of construal to an intersubjective conception of meaning – instead of presenting an entirely novel conceptual apparatus for construal phenomena. The chosen methodology, I argue, has been workable because the dimensions of construal accurately capture real and functional semantic values and differences between multiple expressions.

The analyses in this chapter have thus established that the dimensions of construal make valid analytical constructs. As their standard theoretical justification has been refuted (chapter 3) and replaced with an intersubjective alternative (chapter 4), we may now state that the intersubjective alternative provides more realistic conception of linguistic construal. However, what still remains to be explicated is how the character of actual linguistic construal phenomena may be explained relative to the phenomenological, intentionality-based conception of a meaning-intending act. This task has been reserved for the following chapter.

6 SYNTHESIS: THE NATURE OF CONSTRUAL

Each of the preceding main chapters has extended the customary understanding construal vis-à-vis the ontology and scope of the phenomenon. At the same time, I have maintained that Cognitive Grammar's analytical concepts are not themselves in need of revision. Rather, the non-standard application of the dimensions of construal to written discourse has followed systematically from their standard definitions (CGBI: 55–89). The intersubjective approach adopted here has required that the dimensions of construal have been extended to account for the pragmatic alignment between distinct conceptualizer positions. This extension, however, has not required redefinition of the existing analytical terminology (let alone introduction of novel terminology) but a careful explication of the implications inherent to the dimensions of construal. The dimensions of construal thus apply to perspectival meaning as an inherently social phenomenon, as has been predicted in the previous chapters (3 & 4).

The conception of construal as an inherently intersubjective phenomenon stands in a stark contrast with Cognitive Grammar's theoretical self-understanding, as has already been demonstrated by Itkonen (1997). The critical analysis in chapter 3 and the positive, phenomenologically grounded analysis in chapter 4 provide reasonable basis to consider the intersubjective approach superior to the standard approach outlined by Cognitive Grammar. One of the main reasons for this, I would argue, is that the conception of construal defended here is associated with a genuine appreciation for the phenomenological character of linguistic meaning as a correlate of a meaning-intending act. That is, meaning of an expression is not associated with a mental representation in any cognitivist sense. Rather, the meaning of an expression is the objective (socially constituted) correlate of a meaning-intending act that is directed toward not the meaning itself but toward the entity that the given expression is about.

This object-directedness of communicative intention is not only phenomenologically real and logically necessary but also essential for any genuinely intersubjective conception of interaction. Were the relationship of coreference between multiple construals only a feat of individual's capacity of conceptual integration, a syntagmatic construal pattern could hardly be a functional facet of genuine communication. It is thus assumed here that construal, and a construal pattern for that matter, pertains to the careful adjustment of representational content in a context that involves conventional, shared linguistic knowledge as well as the other subject, either actually or virtually present.

The linguistic analysis in the preceding chapter nevertheless made use of the analytical concepts of Cognitive Grammar without explicitly relating them to a phenomenological account of intentionality. Rather, this has been an implicit requisite for the analysis conducted above. It is therefore the task of this present chapter to consider how the phenomenological account (section 4.4) and

linguistic analysis (chapter 5) of construal are inherently related. This synthesis requires that the main results of each previous chapter are reiterated once more.

6.1 SUMMARY OF THE RESULTS

Chapter 2 offered a concise introduction to the conception of semantics presented in Cognitive Grammar and then proceeded to the general presentation of the conceptualizer and the dimensions of construal.

This presentation of semantics concentrated on three interrelated characteristics, i.e. the (relatively) non-modular conception of cognition (section 2.2.2), the notion of categorization based on prototypes and schemas (section 2.2.3), and encyclopedic semantics (section 2.2.4). Together, these characteristics are applied by Cognitive Grammar to refute "objectivist" or "externalist" varieties of semantics and, conversely, to constitute and defend a cognitivist alternative. In general, language conveys meaning that cannot be reduced to the objective properties of things and states of affairs in the world, but necessarily includes the properties of how things, states and events have been perceived and conceptualized. Semantics thus need to be grounded in what is generally known about cognitive processing.

The following sections then presented the notions of conceptualizer (section 2.3) and the dimensions of construal (section 2.4), which have been proposed by Cognitive Grammar to account for the properties of meaning that imply a conceptualizing subject. The treatment of these notions provided a general view of how Cognitive Grammar approaches the meaning of an expression as a complex of the subject (conceptualizer) and object of conceptualization, as well as how it approaches the construal relationship between these distinct poles. The presentation on the dimensions of construal, in particular, served to highlight the relatively high descriptive power of these concepts, by showing that the dimensions capture highly relevant syntagmatic patterns according to which alternate construals enable the simultaneous establishment of co-referential connections and the accommodation of an expression *vis-à-vis* the textual context.

Chapter 3, in turn, scrutinized the theoretical justification for the dimensions of construal. Two critical accounts of Cognitive Grammar's semantic approach were assumed as the starting point. Kenttä (2003) and Itkonen (1997) have criticized Cognitive Grammar for committing itself to a reductionist physicalism or psychologism (sections 3.2.1–3.2.3) with its conception of meaning and semantics. The reanalysis provided by chapter 3 demonstrated that these accounts were generally well justified but inexact in some respects. First of all, Kenttä's observation that Cognitive Grammar conflates the neuronal, processing, and phenomenological levels in cognition was found correct. However, the reanalysis of the points relevant to Kenttä's critique revealed that Cognitive Grammar's definitions for linguistic meaning are often mutually inconsistent, which makes a categorical ontological interpretation of the theory an unrealistic task.

Second, the critique by Itkonen (1997) of Cognitive Grammar as an incoherent psychologistic semantics was shown to be well-founded. Moreover, the provided reanalysis found agreement with Itkonen on the ontological discrepancy between CG's psychologistic argumentation and the socially shared nature of the dimensions of construal. As opposed to Itkonen, the analysis concluded that, despite being socially distributed, the experiential attributes of meaning can be given a coherent explanation starting from CG's own premises. What is required is a reinterpretation of the relationship between experience and semantics, the need of which was demonstrated by the incoherence involved with the notion of imagery.

In section 3.3, Cognitive Grammar was shown to conflate different senses (especially mental and linguistic) of imagery in order to defend a cognitivist conception of meaning. Cognitive Grammar, more specifically, was shown to succumb to the idea that simulative processes that mediate between pre-linguistic experience and linguistic conceptualization are needed to explain the transfer of meaning from the former to the latter. The analysis of the concept of imagery revealed that Cognitive Grammar, in fact, posits different kinds of simulative mental entities, none of which adequately explains the "imagistic" properties of semantics. It was pointed out that mental imagery in cognitive psychology (e.g. Kosslyn et al. 2006) is posited as a format of sub-personal information processing and that and thus fails to justify an exact (psychological or other) conception of linguistic meaning, the latter of which is necessarily consciously accessible.

In contrast, non-objectivist semantics was shown to require an experiential subject (or more precisely, a multitude of experiential subjects), whose experience is conventionalized into meaning. This fact, however, does not restrict in any way the cognitive mode through which the experiential background shapes meaning. In sum, it was demonstrated that a recourse to cognitive processing only resulted in incoherence in the argumentative structure of CG. Furthermore, as the dimensions of construal were shown to reside in the publicly shared semantic repository of language, their experiential basis needed to be sought after elsewhere.

This task was reserved for chapter 4, which approached construal from an intersubjective perspective. If construal constitutes an empirically sound linguistic category (chapter 2), which consists of variables that characterize meaning as distributed over speech community (chapter 3), the manner in which construal is defined, explained and applied needs to derive from a non-individualistic conceptual framework. Such a framework would need to be ontologically reasonable (in contrast to cognitivist individualism), coherent and applicable to the description of linguistic meaning. After an outline of the phenomenological basis of the notion of intersubjectivity (section 4.2), followed by a brief introduction into the developmental and cognitive psychological application of the concept (section 4.3), Zlatev's (e.g. 2007b, 2008b) mimetic-hierarchical model was found to meet these criteria. In particular, mimesis hierarchy is able to ground proto-linguistic and linguistic forms of intersubjectivity into the embodied and immediate forms that precede them and

does so in a conceptually cohesive way, providing predictions for pathologies of intersubjective and linguistic development (see e.g. Zlatev 2007b).

The next task was to investigate whether Zlatev's hierarchical model was compatible with Cognitive Grammar's notion of construal, and if so, what this combination would yield in terms of the dimensions of construal. The inclusion of internalized representations was established as a common denominator between mimesis hierarchy and Cognitive Grammar. The representations allowed in the former, however, were found to be very well-specified and restricted compared to, for instance the notions of mental imagery and simulation endorsed by Cognitive Grammar.

These representations, called mimetic schemas (Zlatev 2005, 2007a, 2007b) are pre-linguistic and grounded in bodily mimesis but serve to model how linguistic units can be adopted as well. They are not posited as units of a subpersonal processing mechanism but as true representations that preserve the distinction between the subject, the sign, and the expression. Moreover, mimetic schemas are not posited as a type of simulation of any kind, albeit some simulative capacities may in part provide the cognitive infrastructure for their internalization (see e.g. Blomberg & Zlatev 2014).

Instead, mimetic schemas are schematizations over repetitive signitive bodily actions involving cross-modal mapping. This schematization and its applicability for communicative purposes entails an internalization and a relative autonomy from particular instances of use. As internalized representations, mimetic schemas may involve mental rehearsal or simulative processing. The constitution of their representative character, however, is their rooting in the intersubjective praxis, through which they are acquired and applied. While not directly applicable to description linguistic meaning, mimetic schemas were found to embody the minimum cognitive requirements of socially shared semantic units: they indeed need to be internalized or abstracted from specific instances but in a manner that conserves not only the relevant experiential characteristics of the usage-events but also their pre-linguistic intersubjective validity.

Section 4.4 outlined the conceptual basis for integrating the notion of construal with a multi-leveled model of intersubjectivity. The treatment of non-actual motion by Blomberg and Zlatev (2014) was assumed as the starting point for the analysis, as it provides a concise treatment of the experiential motivation for a distinctive type of construal: the conceptualization of a static configuration or a state of affairs by clausal constructions that involve motion verbs. In short, Blomberg and Zlatev are able to distinguish three different experiential motivations that corresponded to semantic types of non-actual movement, which testifies to the non-unitary nature of non-actual movement in language. Combined with the conventionalization and self-organizational principles of language (such as that of economy) as meaning-determining factors, the non-unity of an experiential motivation for meaning refutes a one-to-one mapping between experience and language. What is needed, then, is a systematic account of the mediating processes between these two domains.

Blomberg and Zlatev (2014) suggest a general approach in terms of Husserl's notion of sedimentation (in *Origin of geometry*, Husserl 1970 [1936]), which

pertains to the gradual bleaching of the motivating experience as a part of the structure of the expression. In my own discussion on sedimentation, I argued that its basis in multiplicity of concrete meaning-intending acts (see Husserl 2001b [1901]; Banchetti-Robino 1997) entails that the process in its entirety is characterized by the practice of intending in an intersubjectively validated way. That is, in order to meaningfully communicate experiential meaning, not only does the act of meaning-intending but also the object and content of the act need to be shared. Moreover, an expression is not self-constituting but gains its referential and representative functions by repeatedly occupying analogous extra-linguistic and linguistic contexts that themselves are also necessarily shared. My analysis thus concluded that non-objective or experiential meaning (e.g. construal) and intersubjectivity presuppose each other. In addition, sedimentation was shown to provide a plausible conceptual framework for how the representative content of an expression is constituted in a cumulative and schematizing fashion via a multitude of meaning-intending acts.

Previously, chapters 2 and 3 had presented two distinct types of intersubjectivity relevant for construal: the intersubjectivity entrenched to the conventional semantics of certain constructions, treated extensively by Verhagen (2005, 2007, 2008), and the social ontology of meaning, argued for by Itkonen (1997). With the notion of sedimentation, Verhagen's conventional-semantic intersubjectivity could now be integrated as a part of a larger domain of socially constituted experiential semantics.

The integration yielded yet another level in the overall picture. The conception of construal as a selection among referentially synonymous expressions led to the question concerning the criteria for the actual choice. While this question could presuppose an untenable mentalist position, it is possible to posit that these criteria consist of heavily restricted pragmatic factors found in the immediate textual context. The most essential factor considered here is obviously the other subject, which corresponds to the representational secondary conceptualizer. A sufficient analysis of construal must therefore account for how the given expression relates the secondary conceptualizer to the immediate pragmatic context of discourse.

This approach is justifiable from the premises of Cognitive Grammar itself. The conception of semantics that Cognitive Grammar promotes is eminently context-sensitive, as a consequence of the structured nature of semantic units and of the networks they are suggested to constitute (see FCG-1: chap. 4 "Domains", chap. 10 "Categorization and Context"). Since the dimensions of construal capture exactly these internal and relational properties of expressions, it is viable to describe construal as a "selection" in a specific sense: not as linguistic correlate of conscious pre-meditation but as an accommodation of the scope and organization of the expression's semantic content to the pragmatic context. This accommodation constitutes the third and final level of intersubjectivity that is relevant for construal.

Finally, chapter 5 applied the dimensions of construal to the analysis of written discourse in order to assess the practical corollaries that stem from the three-partite redefinition of construal. In order to allow an analytical extension

of the dimensions as well as to control pragmatic variables, three example analyses were carried out on separate co-referential patterns sampled from the data. In each pattern, a certain dimension of construal, or multiple dimensions, was particularly prominent. Despite the seeming simplicity of the examples, the analyses revealed a complex interplay between the alternate construals and between the construals and the linguistic context.

The first analysis (section 5.2) concentrated on the dimension of specificity as a variable between co-referential expressions. The first of these expressions established a pragmatic category that was elaborated by the following expressions. This structure of category elaboration was shown to involve distinctive mechanisms on the levels of the profile and the base for each particular instance: namely, the position of the given instance in the overall co-referential pattern would bear upon the content of the instance's base, while the selected profiling expression would serve the function of delimiting the scope of interpretation within that space. Thus, specificity was demonstrated to have an interpretation-directing function within a contextually constructed conceptual base. Simultaneously, specificity was shown to be an essential semantic variable in maintaining a common ground within an asymmetrical distribution of knowledge.

The second example (section 5.3) involved the interrelated dimensions of focusing and prominence in the constitution of construal on the basis of a cumulative common ground, which is symmetrical by definition. The examined co-referential pattern involved the reference to a 'research project' by profiling different substructures of the complex concept, so that each reference served to elaborate the conceptual background of each subsequent reference. Moreover, this background-defining function was also shown to eventually affect the interpretation of each instance's profiling function as well. Given the schematicity and/or polysemy related to conventional *semantic* units, profiling, when associated with a given *instance*, is largely explainable as context-based profile determinacy.

The third and final analysis (section 5.4) focused on the Finnish passive voice as a type of construal with distinctive effects that relate to the dimension of perspective. The analysis showed how the subjectification of the agent involved in the expressed activity resulted in particular multiplicative effects in the expression's overall perspectival setting. This involved a decrease in the (construed) mediating function of the primary conceptualizer and a corresponding increase in the secondary conceptualizer's salience. The observed perspectival effect could be brought back to the conventional semantics of passive form, but an essential part of that effect was identified as prompting an elaboration of the agent with regard to the common ground. In other words, the observed construal phenomenon was, once again, found to be defined to a significant extent by pragmatic elaboration.

These three examples thus underline the nature of linguistic construal as a function of both the profile of a conventional semantic unit – including its measure of specificity – and the semantic background relative to which the profile is interpreted. The distinctive analytical value of each separate dimension has

beem shown to relate to the aspects of this profile—background-relationship that the dimension happens to capture. While the analyses in chapter 5 focused on the context-dependent nature of construal, they nevertheless presupposed the conventional semantic values of the expressions. Included in these were attributes that clearly could not be reduced to the object of conceptualization but that were related to the relationship between the object and the conceptualizers as well as with the positioning of the conceptualizers with respect to each other.

In sum, after presenting the analytical scope of the dimensions of construal in chapter 2, and assessing their theoretical constitution from a critical perspective in chapter 3, chapters 4 and 5 demonstrated that construal should and could be given a novel, experiential-semantic interpretation. The formulation of an intersubjective conception of construal showed that, in order to explain and describe the non-objective perspectival properties of meaning, one needs to ground the representative content of language in a pre-linguistically intersubjective framework. The application of the dimensions to written discourse, in turn, demonstrated how this grounding necessarily extends the analytical scope of construal to include the pragmatic context. At bare minimum, the relevant contexts consists of other subject(s) and present co-referential alternative construals.

The result is a conception of construal, according to which a construal pattern adjusts perspectives of the primary and secondary conceptualizer. A construal pattern builds on conventional semantic units of the given language that are, by definition, symmetrically accessible to any proficient speaker of that language. Yet the necessary inclusion of multiple conceptualizer positions yields also conceptualizer-specific pragmatic effects, as demonstrated by the analysis in section 5.4. That is, the subjectively assumed conceptualizer position vis-à-vis a specific construal affects the manner in which other co-referential construals are operationalized in the interpretation of each specific construal.

6.2 THE NATURE OF CONSTRUAL

Cognitive Grammar presents construal as the capacity to mentally arrange the same conceptual content in alternate ways (FCG-1: 117, see also CGBI: 4). Moreover, this capacity is presented as divisible into subordinate attributes (dimensions) that have direct analogues in perception (especially vision) and are supposedly cognition-general (CGBI: 85–86). In agreement with Itkonen's (1997) social ontology of meaning, I have refuted this view as incoherently reductionist. Cognitive Grammar's recourse to cognition-general properties or capacities ignores the fact that similarities between perception and meaning do not presuppose simulative processes that mediate between the two (see Thompson 2007: 143; cf. Barsalou 1999). Linguistic conceptualization requires only that we are able to correctly re-evoke experiential meaning, no matter what the precise processing mechanism is that enables this process. Experiential semantics, by definition, is structured by the non-objectivity of experience (stemming from our bodily and cognitive disposition), but it would be a category

error to attribute properties of meaning to cognitive processes mimicking that experience, when they in fact can be described relative to conventional and communicative schematizations of the experience itself.

It is clear that only a restricted subset of semantic units refers to objects and states of a direct experiential nature. On the contrary, a natural language boasts a vast and elaborate inventory of units that point to virtual, theoretical and abstract referents of no direct embodied appearance. In addition, grammatical categories and constructions can be presented as inherently meaningful symbolic units (e.g. CGBI: 170; see also Goldberg 1995). A sufficient semantic grammar thus cannot resign itself to the mere mapping of conceptual relationships between expressions and experiential referential objects. Instead, it also needs to account for linguistic phenomena that stem from conceptual capacities such as abstraction, opposition (e.g. Woelert 2011: 116–117) and grouping in terms of part-whole-hierarchies (Langacker 1997: 4).

I argue, however, that the ontological ramifications of this conceptual point of view are easily and commonly misconstrued. First and foremost, underlying processing or conceptualization mechanisms can be posited to explain crosslinguistically prevalent semantic patterns, at least in a putative fashion. This still does not entail that the patterns can be reduced to the mechanisms: rather, the processing mechanisms can be hypothesized to manifest in how meanings are constituted through a series of actual usage-events (see e.g. Woelert 2011).

This ordering of matters is not simply a rhetoric maneuver, for it bears directly on how the role of cognition should be understood in constitution of meaning. If the effects of our embodied (including cognitive) disposition on linguistic meaning come into being via an indefinite amount of intersubjective usage-events, then these effects are essentially conventionalized as properties of those events. This in turn entails that these properties need to be distinguished from the properties of the events' internalization and subsequent activation: if this was not the case, there could not be representational semantic content distinct from an individual meaning intending act and the phenomenological account of objective linguistic meaning would become impossible.

Take for example the schematicity of 'unemployment benefit'. Every single utterance of the corresponding expression *unemployment benefit* involves meaning-intention toward a certain referent by a certain semantic means (a complex compound noun that profiles two interrelated juridical entities). Let us accept these means as pre-established semantic conventions. Every single meaning-intention involves cognitive activity, which in part restricts the semantic content of the intention in that it leads to the usage of the expression in a certain context. For example, there is no way of restricting the scope of the encyclopedic knowledge that enters my intention of 'unemployment benefit' *a priori*, and my knowledge certainly motivates the choice of the expression in certain communicative contexts.

The actual linguistic meaning associated with every instance, however, is not determined by that knowledge but by the actual instances in their respective contexts, which restrict the semantic content shared by the multiple interlocutors. This being the case, linguistic communication necessarily involves

the objectification of the properties of the intentional act, e.g. what 'benefit' means in the context of the Finnish welfare policy. In the occurrence of this objectification, not only do these properties become intersubjectively constituted but they also cease to be dependent on the distinct cognitive mode in which they are given. That is, the semantic specificity of an expression does not result primarily from the complexity or type of the underlying cognitive processes. While there is a psychological correlation between these two, the specificity of the expression is chiefly determined by communicative practice. Individuals succumb to the norms of this practice to their best cognitive ability – while also bending and breaking the norms repeatedly.

There is thus a categorical difference between specificity as a property of cognitive activity and specificity as a property of the object of the conceptual activity. Furthermore, as the difference holds *a priori*, it holds for any other dimension of construal as well. What should be noted is that this difference cannot be explained away by assuming a psychologistic approach to meaning, for the difference does not only reside between the distinct ontological realms (psychological and social) but also between the act and the object of the act on a solely psychological level. That is, if a linguistic concept is assumed as a socionormative entity, the representative content of which is established as a usage-based constant, it needs to be somehow distinct – albeit not independent – from the individual acts that grasp it⁹¹. The fact that the act/object distinction is not easily given a naturalized description does not contest its aprioristic validity. Conversely, one cannot preclude the fact that the same semantic content and its construal can be processed in even slightly differently ways indefinitely.

Over the course of the conventionalization, there is no obvious, empirically observable point after which a specific construal value is objectified and thus separated from the processing pattern that originally gave it its phenomenological character. However, when specificity is objectified as a socionormative value of an expression, there is no way of bringing it back to a certain processing pattern, starting from its phenomenological nature: this processing pattern – as the *object* of conceptualization – can be constituted by a multitude of different cognitive acts, or even types of acts.

Positing ad hoc psychological categories to account for this property's "leap" from the act of processing to the object of the act would be self-defeating. The leap needs to be understood, inasmuch as a phenomenological standpoint is assumed, as an *a priori* condition for constant semantic values to exist. 92 As such, it nevertheless entails that the semantic content and construal of an expression cannot reliably be brought back to a specific cognitive type of existence, for there

⁹¹ As is posited already by Husserl in the fifth logical investigation, though from another perspective.

⁹² This leap is here supposed to be concomitant to the leap from non-normative to normative that Itkonen (e.g. 2008a: 27) posits for linguistic meaning. The leaps share both an a priori nature and an indeterminacy with regard to "timing". The leap I propose could be seen as a phenomenological correlate of the emergence of normative semantic constant, but here the more specific relationship between my proposal and that of Itkonen has to be ignored.

is no way of precluding indefinite amount of distinctive cognitive realizations or even multiple categories of realizations for the same semantic unit.

It must therefore be concluded that an explanation of construal in terms of underlying cognitive processes is not only reductionist but triply irrelevant. First, our cognitive disposition comes to affect meaning only through intersubjective communicative usage-events; second, the stability of meaning from one usage-event to another cannot be explained away by the similarity of corresponding cognitive processing events, since the same conceptual content, even the same construal, can be processed in slightly different manners *ad infinitum*; third, inasmuch as this similarity can be brought back to the intersubjectively determined content of the meaning-intending act (which, in principle, can be given a naturalistic description), a processing-based explanation is simply redundant.⁹³

Semantics thus needs to accommodate non-objective or experiential meaning in a manner that discards psychologism and accounts for the intersubjective basis of semantic representation. Above, I have approached this task by formulating, on the basis of Zlatev's (e.g. 2007b, 2008) mimesis hierarchy and separate phenomenological considerations (section 4.4), a three-partite argument of construal's intersubjective basis (section 4.5). Given the strong conceptual basis for this argument and the analytical applicability of the conception of construal that ensues, I consider the intersubjective approach to construal superior to the original formulation of the concept. At the same time, the adopted approach bears implications for semantic analysis not all of which were explicitly operationalized in the analyses in chapter 5. It is therefore in place to consider these implications, largely based on Zlatev's (2005, 2007a, 2007b) and Blomberg and Zlatev's (2014) analysis of experientialist semantics, for the ontology of construal.

As mentioned, Blomberg and Zlatev suggest a specific type of experientialism that they refer to as "consciousness-language interactionism" (Blomberg & Zlatev 2014: 397; see also Zlatev et al. 2012). Consciousness-language interactionism accepts that we have subjective states, such as emotions, but maintains that language makes reference to these states via their publicly observable, embodied expressions (Zlatev et al. 2012: 425) and that this reference ultimately presupposes the intersubjective validity of the states themselves (ibid. 448). With reference to Husserlian conception of subjectivity and intersubjectivity, consciousness-language interactionism thus contests the notion of a strictly private experience, even in the domain of emotions, which have often been considered its paramount representative.

Accordingly, Zlatev et al. (2012: 423–424, 447–448) also refute the strict identification of meaning with use, a view that may allotted to Itkonen (1997, 2008a) and Wittgenstein (2009 [1953]). From their interactionist point of view, such extreme usage-based approach threatens to exclude experiential content from language's expressive repertoire. At the same time, consciousness-language interactionism seeks to avoid collapsing meaning with conscious experience by

⁹³See section 2.3.1 on the processing and conceptualization of time.

emphasizing language-specific organizing principles, such as economy and communicative relevance (Blomberg & Zlatev 2014). Interactionism is offered exactly as a means for mediating between usage-based and experiential extremes. Meaning involves experience-based representative content, the quality of which is defined by the properties of the (non-private) experience as well as the communicative practice.

In section 4.4 above, I have approved this formulation of experientialism. Accordingly, I have aimed to demonstrate that an intersubjective notion of construal follows naturally from consciousness-language interactionism in that it captures perspectival experiential properties and properties of meaning-intending that are conventionalized into semantics. However, the linguistic analysis in chapter 5 emphasized the pragmatic nature of construal. The question thus is how the semantic and pragmatic aspects of construal should be bridged together.

The first part of the answer is implied by the usage-based nature of Cognitive Grammar: the context-sensitivity of construal witnessed in chapter 5 is intimately linked with the context-independent semantic nature of the instantiated expression types. More precisely, construal as a pragmatic elaboration within discourse is prompted by the manner in which the expression, by its conventional value, selects and organizes conceptual content. For instance, in the analysis of specificity, the conventional schematicity of *vaikea asia* 'difficult thing' is one of the central factors enabling its categorizing function and, conversely, the elaboration (or specification) of the category by other semantic units. The actual semantic content of *vaikea asia*, by contrast, is both a function of the concept's usage (e.g. the pragmatic scope of distinct valid instances of *asia* 'thing') and one of the decisive factors with regard to its selection. Construal thus cannot be explained away by usage *simpliciter* but needs to involve a conventional-representative component.

The fact that the context-sensitivity of construal presupposes positive semantic content leads us to the second necessary component that bridges semantic and pragmatic aspects of construal together: extra-linguistic objectivity. Above, I have stated that a coherent conception of construal as a part of experiential semantics involves the interlocutors' access to non-construed entities and that the nature of this access is suggested by phenomenological analysis of intentionality. It is here that we must open up this argument in full.

Itkonen (forthc.) and Nuyts (2002) propose, albeit from different perspectives, that the conception of semantics endorsed by Cognitive Grammar both implies and necessitates a more basic type of conceptualization. For Itkonen, this implication is logical: a perspectival nature of meaning is only possible against the backdrop of a more neutral, pre-linguistic conceptualization of matters. For Nuyts, the grounding function of modal predicates in Dutch (and their unfitness for CG's category of grounding elements) suggests that grounding is primarily a phenomenon of conceptual semantics, a wider holistic domain of pragmatic and world knowledge that interacts with, but cannot be reduced to, the

٠

⁹⁴ For a similar view on meaning from a phenomenological point of view, see Lohmar 2012.

domain of linguistic semantics proper. The analysis of experientialism (section 4.4) confirms the rationale behind these observations, in that a domain of intersubjectively valid experience is presupposed by linguistic expression in general and by construal in particular. Simultaneously, the analysis suggests that the basis of this domain is most naturally described by the notions of intentionality (section 4.2.1) and (pre-linguistic) intersubjectivity (section 4.2.2).

First of all, if we accept that language conveys representational content, we have already admitted the validity of the object of representation, to which the content of the expression attaches by our intention; vaikea asia, for example, does not refer to its own conceptual content but to a thing in the world by its conceptual content (though not by that content alone). However, Cognitive Grammar only considers a "conceived reality" (CGBI: 298, see also FCG-1: 114), an epistemic position that motivates specific construals. The object of reference, in turn, is defined in a purely solipsistic manner as the profile or instance of expression (CGBI: 269), both of which are entities of cognitive realm. This approach is insufficient from the perspective developed here, for it neglects the basis that provides communication common experiential meaningfulness. It is also dubious whether this "conceived reality", given the above conception of reference, is able to account for the uncontestable phenomenological fact that the meaning of an expression is simultaneously dependent of, and separate from, its (non-mental) referent.

Semantic representational content is restrictive, perspectival and schematic vis- \dot{a} -vis pre-linguistic experience and is thus a valid research object in its own right. However, its very restrictiveness, perspectivity and schematicity can be analyzed by linguists and grasped by language-using subjects only relative to pre-linguistic experience, which simultaneously exhibits these properties and transcends them in its intersubjective validity. In other words, we do not primarily experience or attend to a subjective flow of sensations but to publicly observable, distinctive objects, properties, and states of affairs. In an analogous manner, we do not speak primarily about meanings, let alone about how we experience these meanings, but about things-in-world by means of these expressions, the content of which thus needs to be distinctive from, but intentionally attached to, their referents.

Construal thus gains its independent phenomenal nature from its very ability to turn "back" toward language and set it against the background not only of alternate construals but of the non-construed object of expression, which is indispensable for establishing said construals as mutual alternatives in the first place. This is not to say that construal exists only *post hoc* as a conscious reflection but that construal is irrevocably embedded in acts of consciousness that are directed not toward the conceptualization or construal itself but toward the object of conceptualization. If this was not the case, and construal pertained to cognitive or conceptual content per se, there would be no way of distinguishing between linguistic-semantic features and the features of experience, and the act

of reference would be reduced into mental experience without any intersubjective value.95

I therefore argue that the notion of construal is logically dependent on a nonmentalist notion of reference. This inherent object-directedness of linguistic acts of meaning-intending makes it feasible to specify construal's nature in relation to the phenomenological notion of intentionality. Inasmuch as its accepted that linguistic meaning pertains to objective (socially constituted) correlates of meaning-intending acts, i.e. the contents of these acts, construal may be defined as those characteristics of said correlates that have derived from previous such acts. In other words, construal embodies properties of object-directedness that, by definition, presuppose the conscious subject as the locus of intentionality and the experiential origo relative to which the object is represented. This subjective character of construal as a linguistic phenomenon is in turn irrevocably dependent on intersubjective accessibility of both the subjective type of objectdirectedness as well as the object itself. That is, construal is attained as a semantic property of linguistic acts that are directed toward objects and states of affairs in an intersubjective setting. Were it not assumed as a property of linguistic intentionality toward extra-linguistic reality, construal would not exhibit subjective perspectivity or intersubjective validity.

This definition, I argue, constitutes the conceptual minimum requirements for a coherent notion of construal. There are analytical factors, however, that also support this definition. First and foremost, without a connection between a construed expression and a non-construed object, there would exist no criteria for selecting the most sufficient or suitable construal among many. Or, conversely, it would not be possible for the recipient to integrate different coreferential construals as meaningful acts that are directed toward entities outside the conceptual realm of semantics itself. In fact, it would not be intelligible to speak of alternate construals in the first place. Alternate construals could, in principle, be mutually associated by means of an ad hoc mental category or a pragmatic domain, and thus be given a cognitive motivation. The actual selection would then be carried out according to some subjective criterion or some conceptual target. This approach is nevertheless unsatisfactory for the reasons mentioned above: reference is carried out by commonly known expressions and gains its communicative significance from the fact that it is that both or multiple interlocutors can agree upon.

In so being, construal as a selection and organization of conceptual content stands in need of a criterion that is external to the category of alternate construals itself. The most evident candidate for this is the manner in which the designatum is given to the interlocutors.

In sum, construal is dependent on the notion of reference for two distinct yet intertwined reasons. First, the very notion of construal as non-objectivity of

⁹⁵ This pre-reflectivity of construal, a sub-species of the pre-reflectivity that is characteristic of linguistic conduct in general, explains why we primarily speak of things as they are and only attend to the ways of construing things in special circumstances, e.g. a challenging interpersonal situation, a linguistic analysis.

conceptualization requires an objective (or at least more objective) type of conceptualization to be detectable. 96 Second, the idea of construal as a type of selection between alternate construals necessitates a category-external criterion, a criterion of "rightness" (see Lohmar 2012: 382). What these points require together is that the linguistic act simultaneously represents the designatum as perspectivized and that it points to it as a non-perspectival whole. The combination of construal and reference is, in other words, remarkably similar to the structure of the perceptual intentional act in which the object of the act is perceived simultaneously as perspectivized and complete. In section 4.4, the prelinguistic objectivity instantiated in intentional acts has been posited as an a priori condition for linguistic expression and construal. Now, it can be concluded that this structured objectivity is not only a pre-condition but an active modus operandi of linguistic communication; in other words, the relationship between construal and reference is functional.

The specific function of, and complexities involved with, reference vis-à-vis construal fall out of the scope of the present study. We may nevertheless consider specific requirements that construal poses for the notion of reference. In the current intersubjective perspective, reference needs to be understood as an act of establishing a relation between all relevant conceptualizers and the referent. It consists of performing a linguistic symbolization that allows the recipient access to the intended designatum through the correct interpretation of the speaker's intention. In so being, an expression is construed on the basis of a common ground, or as Cognitive Grammar depicts it in conceptual terms, Current Discourse Space. Whatever the specific formulation of ground, construal as a property of a meaning-intending act can be characterized as ordering of semantic content according to pragmatically and intersubjectively constituted basis of shared knowledge.

This entails that the grasping of the expression's meaning necessarily involves the relating of different conceptualizer positions. While the different conceptualizer positions consider this ground to be organized asymmetrically, these positions nevertheless relate to each other and to the ground to be a whole. Thus, it can be stated that the construal and the perspective it profiles for the interlocutors to adopt is not an end in and of itself but a means to grasp the designatum. What Cognitive Grammar defines as the object of conceptualization (or the object-pole of conceptualization) is in fact a conceptual representation of the actual object that lies outside of the conceptualization as such.

Construal is thus guided by the mutual conceptual accessibility of the designatum for both or all of the intended conceptualizers. Conceptual accessibility in turn is not a binary or one-dimensional attribute but is subject to an open-ended multitude of semantic and pragmatic variables. The referent may

⁹⁶ This is not to exclude the possibility of linguistic categories affecting what is experienced and understood as extra-linguistically objective. I decidedly refrain from taking a specific stance on linguistic relativity, while acknowledging a reappraisal of the notion in a weakened sense (e.g. Levinson 1996; Slobin 1987, 1996). The analysis here simply presumes an experiential pre-linguistic objectivity that may be affected by language but is nevertheless accessed by means other than linguistic conceptualization.

be present (or "intuitively given", in the phenomenological terminology) or not, it may be perceptual or abstract, concrete or relational (or "categorial", in the phenomenological terminology), and it may relate differentially to distinct interlocutors. What motivates the selection of a particular construal of the given referent, then, is the givenness of the referent and how given the referent is for each speaker. Construal, in other words, pertains functionally to conceptual mediation between multiple perspectives; and for this mediation to be possible, the referent is required as the site of convergence for the alternate perspectives.⁹⁷

The inclusion of reference thus completes the analysis of construal as a relational entity. Construal does not pertain to the non-objectivity of meaning as some self-constituting property of conceptualization; instead, it is graspable as a relation between the conceptualizers and the object of conceptualization, the latter of which cannot be reduced to a mental entity. Construal can be presented as the linguistic manifestation of the general attribute of intentional relations in that it captures those semantic phenomena that depend on the particular manner of intending.

Being linguistic, however, the manner of intending that construal captures is always complex, as it involves not only the subject and object poles of conceptualization but also the other or secondary conceptualizer; this equips the construal relationship with an intersubjective structure, as noted by the analyses of Verhagen (2005, 2007, 2008). Moreover, the conventional and systematic nature of a linguistic expression restricts and directs the possibilities of construal as a form of intersubjective intentionality. It is therefore justified to define construal as a partly conventional coordination of intersubjective intentionality. In particular, it coordinates the conceptual accessibility of the designated object between the conceptualizers through the conventional semantic value of the expression and through the pragmatic determination (disambiguation and elaboration) of the expression.

6.3 DISCUSSION

We have thus arrived at a characterization of construal that rebuts a cognitive solipsism in the speaker/hearer's position relative to both of the other subjects and relative to the objects of conceptualization. Despite Cognitive Grammar's claims to the contrary (CGBI: 28), this type of anti-solipsism contravenes with the manner in which the theory associates linguistic meaning with conceptualization. In particular, the other subjects and the objects of conceptualization, which are entities and states of affairs in our lived experience, cannot be reduced to a genealogical explanation for internalized and schematized

experiential referent for both interlocutors.

⁹⁷ An individual's attempt to establish a relation between, for example, the recipient and the designatum may obviously fail. The sociality of reference, however, does not hinge on its actual sufficiency; we are not speaking here about a metaphysical sociality and the existence of other subjects but about the character of a linguistic act. In addition, construal is often, if not most often, selected in order to convey subjective experience. This particular source of "rightness", however, is never sufficient on its own, for communicating subjective experience makes only sense if we presume an equal accessibility of the

mental entities (cf. CGBI: 30). Instead, the fact that we have those experiences of others and objects is the continuously active component that enables the very occurrence of linguistic meaning and construal. Only within this non-linguistic experiential reality, relative to which the linguistic act and meaning are simultaneously experienced both as dependent and separate, does an expression come to bear meaning in general and non-objective meaning in particular.

7 CONCLUSION

In this study, I have aimed to describe accurately the conception of construal Cognitive Grammar endorses and develop an intersubjectively grounded alternative that alleviates the theoretical discrepancies found in the former. The primary advantage of the approach developed here is that it openly seeks to integrate the analysis of representational semantic content with that of a pragmatic context, however delimited or linguistic in character. The point is that the scope of pragmatic considerations can be further extended in the lines envisaged here. Moreover, the approach developed and defended in this book is in accordance with the usage-based emphasis of Cognitive Grammar itself. What is required by the analyses above is that the necessarily social character of linguistic representational content needs to be acknowledged, as is the case with the mechanisms according to which this representational content is defined from linguistic context.

The dimensions of construal as presented in Cognitive Grammar have repeatedly demonstrated the capability of capturing significant semantic generalizations over referentially synonymous expressions. However, it has also been demonstrated by the present investigation that their original formulation implies or presupposes a social basis of meaning that stands at odds with the theory's psychologistic proclamations.

It has been demonstrated on multiple occasions that Cognitive Grammar involves a social component by definining language as a learned inventory of linguistic units. Unfortunately, Cognitive Grammar also makes the contradictory claim that the sociality of language is secondary to cognition, for the latter is more "basic" than the former (CGBI: 30). The outlook manifest in this claim threatens to reduce the social basis of language into a restrictive sub-component of an individual's conceptual achievement. In contrast, it has been proposed here that it is intersubjectivity that is basic to linguistic conduct in particular and to human experience in general. In this view, an individual's linguistic capacity and its manifestations need to be embedded in a framework in which multiple interlocutors and the speech community at large define the unit of analysis.

The stance defined in section 4.4, and developed thereafter, posits that the human cognitive make-up, which is embedded in our overall physical and sensory disposition, can and should be included as the major determinant of experiential meaning, and that without the inclusion of experience in their description, both semantics and pragmatics are greatly impoverished. What is required, however, is a correct understanding of how this cognitive and embodied disposition comes to define linguistic meaning.

The approach to semantics assumed here has been inspired by the social ontology of meaning formulated and defended by Itkonen (1978, 1997, 2008a, 2008b, forthc.) and the version of experientialism developed by Zlatev et al. (2012; Blomberg and Zlatev 2014). On the basis of the work by these authors, I have proposed that intersubjectivity determines not only the linguistically

represented properties of experience but the ontology of construal as well. In other words, representational linguistic content and the manner in which it is construed are only accessible due to their dependency on non-linguistic and non-construed objectivity. While it has not been possible in this study to deconstruct the relationship between a construed expression and its non-construed objectivity in detail, the conceptual dependence between the two domains has been demonstrated to be foundational.

At the same time, the limitations of the present analysis need to be acknowledged. Construal is as vast as a linguistic category as the very conception of semantics it is a part of. Similarly, the ontological grounding of a semantic theory as the object of critical inquiry compares in size to the question of the theory's meaningfulness as a whole. To shed light on both of these points, i.e. construal as a linguistic phenomenon and its theoretical nature, it has been necessary to compromise in favor of the theoretical argument and at the expense of precision (with regard Cognitive Grammar's descriptive finesses) and the empirical application of the analyzed concepts. The linguistic analyses I have presented in section 4.5 have nevertheless disclosed immediate corollaries of the metatheoretical re-evaluation of Cognitive Grammar in the empirical semantic and pragmatic study. This alone suggests the feasibility of developing the intersubjective conception of construal further.

It is fair to recognize that this task is best approached by subjecting the intersubjectively framed notion of construal to rigorous evaluation by means of an empirical discourse-pragmatic analysis of diverse construal phenomena. While the phenomenological and ontological analysis of construal certainly may and should be taken further, it is dubious if such work would ever be efficient on its own. What is needed is a more precise picture of the concrete construal phenomena in which the proposed theoretical claims may become manifest or challenged.

Empirical linguistics tends to be oblivious of its ontological commitments. With conscious effort linguistic analysis itself can nevertheless be applied to challenge the way in which underlying ontological commitments are instantiated in theory formation, including the definition and specification of analytical concepts. In addition, the analysis of actual linguistic data may provide proof of the existence of phenomena that bridge semantic and interactional domains and that cannot directly be explained from a particular depiction of construal. A finding such as this consequently calls for the expansion of the relevant analytical concepts.

One specific manner of further developing CG's descriptive apparatus has proven particularly promising: its comparative application with methodologies from other paradigms, both linguistic and non-linguistic. This approach has already taken place in cognitively inspired translation studies (Tabakowska 1993) and cognitive poetics (e.g. Stockwell 2002), for example. More relevant for the present theoretical purposes, however, is the extensive work done within Fennistic studies that aims at the integration between Cognitive Grammar, text-analysis and journalistic studies (Jaakola 2012b; Jaakola et al. 2014; see also Jaakola 2012a), as well as between Cognitive Grammar and Conversation

Analysis (Etelämäki & Jaakola 2009; Etelämäki et al. 2009; Etelämäki & Visapää 2014). These studies make a further case for the semantic-analytical utility of the dimensions of construal and their related concepts, while showcasing the benefits of implementing them as a subpart of a wider analytical perspective. Representational semantic content is thus seen as capturing only a restricted proportion (albeit a substantial one) of what language amounts to in actual communicative activity.

I argue that the analysis of construal presented here is compatible with this explicit functional contextualization of cognitive semantics. 98 The integration of construal with an intersubjective perspective and notion of reference can be expressed as a super-schematic conceptual model for a dynamic semantics-inuse. This model subsumes linguistic and non-linguistic context, linguistic and non-linguistic intersubjectivity, and linguistic and non-linguistic experiential objects. In so being, it provides a systematic account of the conceptual prerequisites of experiential meaning or construal as a part of an intentional linguistic act, and thus answers in part to the conviction advocated by Etelämäki and Visapää (2014: 499; who refer to Sacks, Schegloff end Jefferson, 1974) that actual interaction is the natural home for language.

Etelämäki and Visapää (2014: 478–479) argue against the claims that Cognitive Grammar neglects the sociality of language as profoundly unjust: the explicitly usage-based nature of the theory places it on par with interactional linguistic accounts that equate meaning with its actualization in discourse. The present account departs from this sympathetic reading of Cognitive Grammar, but only partially. Indeed, Etelämäki and Visapää correctly point to the fact that Cognitive Grammar openly assumes a social basis for language with its emphasis on usage as the originator of linguistic units. It nevertheless needs to be maintained that Cognitive Grammar fails to draw the correct ontological conclusions from its usage-based nature: that the linguistic sign is not principally cognitive and that it needs not only to be given a social definition but also need to be ontologically grounded in linguistic interaction and its intersubjective basis.

At the same time, I argue that the analyses Etelämäki and Visapää (2014) provide for Finnish demonstratives and infinitives actualize exactly the approach to linguistic symbolization in interaction that my present account suggests from a theoretical point of view. Future research in these lines would benefit from a further integration and comparison of conversation-analytical and cognitive-linguistic methodology and terminology, but should also include a pronounced critical emphasis on how Cognitive Grammar defines semantics and semantic units.

Above, I have defended the view that the expression of subjective experiential meaning, in fact, is dependent on the overall intersubjective constitution of both the employed linguistic expression and the experiential designatum itself. The consistency of this view is best assessed by the scrutinizing of the expression and discussion of manifestly subjective, e.g. emotional and imaginary, experiences in

 $^{^{98}}$ Gonzálvez-García and Butler (2006) provide a useful general outline for integrating cognitive and functional linguistic perspectives.

actual discourse (e.g. Zlatev et al. 2012). In addition, the analysis of the functionality of construal would benefit from the application of the dimensions of construal in communicative situations in which the interlocutors negotiate meanings and conceptual access to the entities serving as the topics of discussion. The response of the interlocutors to insufficient communication is especially likely to reveal the inseparability of construal from the constitution and mapping of the common ground that includes the coordination of extra-linguistic context and the orientations of the interlocutors vis-a-vis extra-linguistic objects.

In this study, I have aimed to offer a novel perspective on the central semanticanalytical concepts of Cognitive Grammar that accounts for the social constitution of meaning in a consistent manner, and thus allows for a systematic application of said concepts to new discursive phenomena. While my treatment has been eminently critical, its central purpose has been to clarify the theoretical basis of Cognitive Grammar and to provide reasonable proposals for its improvement.

At the same time, Cognitive Grammar continues to be applied and refined in the analysis of semantic and pragmatic phenomena, including some that are new to the well-established tradition of the theory. As mentioned in the beginning of this work, Langacker has recently made public his effort to extend the scope of Cognitive Grammar to include discourse-related phenomena and develop the grammar into a genuinely holistic description of "linguistic structure in all its varied manifestations" (CGBI: 477). This is accompanied by the conviction that ultimately "there is no definite boundary between discourse and grammar" (ibid. 499). This proclamation opens a promising view into the future of Cognitive Grammar in that it pushes the boundaries of now-traditional cognitive semantics that operates on clausal constructions or lesser semantic units. Moreover, this opens the view from "ideational" (see Halliday 2007: 183) to a wider scope of linguistic functionality in everyday interaction. What is necessary for this expansion is that these new territories of research are not reduced to novel cognitive domains but accepted as what they are: phenomena that exceed the contents of the individual mind.

REFERENCES

ADOLPHS, SVENJA, SARAH ATKINS & KEVIN HARVEY 2007: Caught between professional requirements and interpersonal needs: vague language in healthcare contexts. In J. Cutting (ed.), *Vague Language Explored*. New York: Palgrave MacMillan, 62–78.

ANDERSON, JOHN R. 1978: Arguments concerning representations for mental imagery. — *Psychological Review*, 85: 249–277.

ARNHEIM, RUDOLF 1969: Visual thinking. Berkeley: University of California Press.

ARONSON ARONSON, ELLIOT, TIMOTHY D. WILSON, & ROBIN M. AKERT 2007: *Social Psychology*. 6th edition. Upper Saddle River, NJ: Prentice Hall.

ATWOOD, GEORGE E. & ROBERT D. STOLOROW 1984: Structures of Subjectivity: Explorations in Psychoanalytic Phenomenology. Hillsdale, NJ: Analytic Press.

BAKER, GORDON. P. & PETER. M. S. HACKER 1984: *Frege: Logical Excavations*. New York: Oxford University Press.

BANCHETTI-ROBINO, MARINA PAOLA 1997: Husserl's theory of language as calculus ratiocinator. — Synthese 112: 303–321.

BAKTHIN, MIKHAIL 1981: *The Dialogic Imagination: Four Essays*. Edited by Michael Holquist, translated by Caryl Emerson and Michael Holquist. London: University of Texas Press.

——1984 [1929]: Problems of Dostoevsky's Poetics. (Problemy poetiki Dostoevskogo, edited and translated by Caryl Emerson.) Minnapolis, MN / London: University of Minnesota Press.

BARRET, CLARK H. & ROBERT KURZBAN 2006: Modularity in Cognition: Framing the Debate. — *Psychological Review* 113 (3), 628–647.

BARRESI, JOHN & CHRIS MOORE 1996: Intentional relations and social understanding. *Behavioral and Brain Sciences* 19, 107–154.

——2008: The neuroscience of social understanding. In J. Zlatev, T. P. Racine, C. Sinha & E. Itkonen (eds.), *The Shared Mind. Perspectives on intersubjectivity*. Philadelphia: John Benjamins Publishing Company, 39–65.

BARSALOU, LAWRENCE W. 1999: Perceptual symbol systems. — *Behavioral and Brain Sciences* 22, 577–660.

BARSALOU, LAWRENCE W., WENCHI YEH, BARBARA J. LUKA, KAREN L. OLSETH, KELLY S. MIX & LING-LING WU 1993: Concepts and meaning. In K. Beals, G. Cooke, D. Kathman, K. E. McCullough, S. Kita & D. Testen (eds.), *Chicago Linguistic Society 29: Papers from the parasessions on conceptual representations*, volume 2, 23–61.

BATESON, GREGORY 1979: Mind and Nature: A Necessary Unity. New York: Dutton.

BENVENISTE, EMILE 1966 [1956]: La nature des pronoms. In Emile Benveniste, *Problèmes de linguistique générale 1*. Paris: Gallimard, 251–257.

BERLIN, BRENT & PAUL KAY 1969: *Basic Color Terms: Their Universality and Evolution*. Berkeley: University of California Press.

BLEVINS, JIM 2003: Passives and impersonals. — *Journal of Linguistics* 39 (3), 473–520.

BLOCK, NED 1983: Mental Pictures and Cognitive Science. — *The Philosophical Review* 92 (4), 499–541.

BLOMBERG, JOHAN & JORDAN ZLATEV 2014. Actual and non-actual motion: why experientialist semantics needs phenomenology (and vice versa). — *Phenomenology and Cognitive Science* 13, 395–418.

DE BRUIN, LEON & SANNEKE DE HAAN 2012: Enactivism & Social Cognition: In Search of the Whole Story. — *Journal of Cognitive Semiotics* IV (1), 225–250.

BÜHLER, KARL 1990 [1934]: Theory of Language: The Representational Function of Language. (Sprachtheorie, translated by Donald Fraser Goodwin). Amsterdam: John Benjamins.

CERBONE, DAVID R. 2006: *Understanding Phenomenology*. Durham: Acumen.

——2012: Phenomenological Method: Reflection, Introspection, and Skepticism. In D. Zahavi (ed.), *The Oxford Handbook of Contemporary Phenomenology*. Oxford University Press, 7–24.

CHAFE, WALLACE L. 1970: Meaning and the Structure of Language. The University of Chicago Press.

——1994: Discourse, Consciousness, and Time: The Flow and Displacement of Conscious Experience in Speakind and Writing. The University of Chicago Press.

CHENG, WINNIE & MARTIN WARREN 2003: Indirectness, Inexplicitness and Vagueness Made Clearer. — *Pragmatics* 13 (3), 381–400.

CHOMSKY, NOAM 1959: Review of Verbal Behavior. — Language, 35: 26–58.

———1965: Aspects of the Theory of Syntax. Cambridge, MA: MIT Press.
——1972: Studies on semantics in generative grammar. The Hague & Mouton.
1981: Lectures on government and binding. Dordrecht: FORIS.
——1986: Knowledge of Language. New York: Praeger.
1995: <i>The Mimalist Program</i> . Cambridge, MA: The MIT Press.

CHOMSKY, NOAM A. & HOWARD LASNIK 1993: The theory of principles and parameters. In J. von Stechow, A. Jacobs, W. Sternefeld & T. Vennemann (eds.), *Syntax: an international handbook of contemporary research*. Berlin: De Gruyter.

Comrie, Bernard 1977: In defense of spontaneous demotion: the impersonal passive. In P. Cole & J. Saddock (eds.), *Syntax and semantics, vol. 8: Grammatical relations.* New York: Academic Press.

CROFT, WILLIAM & D. ALAN CRUSE 2004: Cognitive Linguistics. Cambridge University Press.

CROWELL, STEVEN 2012: Transcendental Phenomenology and the Seductions of Naturalism: Subjectivity, Consciousness, and Meaning. In D. Zahavi (ed.), *The Oxford Handbook of Phenomenology*: 25–47.

DENNETT, DANIEL C. & MARCEL KINSBOURNE 1992: Time and the observer: the where and when of consciousness in the brain. — *Behavioral and Brain Sciences* 15, 183–247.

DONALD, MERLIN 1991: Origins of the Modern Mind. Three Stages in the Evolution of Culture and Cognition. Harvard University Press.

——2001: A Mind So Rare: The Evolution Of Human Consciousness. New York: Norton.

Dretske, Fred 1995: Naturalizing the Mind. Cambridge, MA: The MIT Press.

DREW, PAUL, & JOHN HERITAGE (EDS.) 1992: *Talk at work: Interaction in institutional settings*. Studies in Interaction Sociolinguistics 3. Cambridge University Press.

DRUMMOND, JOHN J. 1995: Synthesis, identity, and the a priori. — *Recherches husserliennes* 4, 27–51.

——2012: Intentionality without Representationalism. In D. Zahavi (ed.), *The Oxford Handbook of Contemporary Phenomenology*. Oxford University Press, 115–133.

DUMMETT, MICHAEL 1978: The Social Character of Meaning. In Michael Dummett, *Truth and Other Enigmas*. Cambridge: Harvard University Press, 420–430.

ECO, UMBERTO 1979: ECO U (1979) *The Role of the Reader: Explorations in the Semiotics of Texts*. University of Indiana Press.

ETELÄMÄKI, MARJA 2009: The Finnish demonstrative pronouns in light of interaction. — *Journal of Pragmatics* 41 (1), 25–46.

ETELÄMÄKI, MARJA, ILONA HERLIN, MINNA JAAKOLA & LAURA VISAPÄÄ 2009: Kielioppi käsitteistyksenä ja toimintana. Kognitiivista kielioppia ja keskusteluanalyysiä yhdistämässä [Grammar as conceptualization and as action: combining cognitive grammar and conversation analysis]. — *Virittäjä* 113 (2), 162–187.

ETELÄMÄKI, MARJA & MINNA JAAKOLA 2009: "Tota" ja puhetilanteen todellisuus [Tota and the reality of speech situation]. — *Virittäjä* 113 (2), 188–212.

ETELÄMÄKI, MARJA & LAURA VISAPÄÄ 2014: Why blend Conversation Analysis with Cognitive Grammar? In R. Laury, M. Etelämäki & E. Couper-Kuhlen (eds.), *Pragmatics (Special Issue on Approaches to Grammar for Interactional Linguistics*) 24 (3), 477–506.

EVANS, VYVYAN & MELANIE GREEN 2006: Cognitive Linguistics: An Introduction. Edinburgh University Press.

FAUCONNIER, GILLES 1994: *Mental Spaces: Aspects of Meaning Construction in Natural Language*. New York: Cambridge University Press.

——1997: *Mappings in Thought and Language*. New York: Cambridge University Press.

FAUCONNIER, GILLES & MARK TURNER 2002: The Way We Think: Conceptual Blending and The Mind's Hidden Complexities. New York: Basic Books.

FILLMORE, CHARLES J. 1968: The Case for Case. In E. Bach and R. T. Harms (eds.), *Universals in Linguistic Theory*. New York: Holt, Rinehart, and Winston, 1–88.

——1976: Frame semantics and the nature of language. — Annals of the New York Academy of Sciences: Conference on the Origin and Development of Language and Speech. Volume 280: 20–32.

Fodor, Jerry 1981: RePresentations: Philosophical Essays on The foundations of Cognitive Science. Cambridge, MA: The MIT Press.

——1983: *The modularity of mind*. Cambridge, MA: The MIT Press.

-1994: The Elm and the Expert: Mentalese and Its Semantics Cambridge, MA: The MIT Press. FOOLEN, AD, ULRIKE M. LÜDTKE, TIMOTHY P. RACINE & JORDAN ZLATEV (EDS.) 2012: Moving Ourselves, Moving Others: Motion and emotion in intersubjectivity, consciousness and language. Amsterdam: John Benjamins. FRANKS, DAVID D. & JONATHAN H. TURNER (EDS.) 2010: Handbook of Neurosociology. Dordrecht: Springer. FREGE, GOTTLOB 1949 [1892]: On sense and nominatum (Über Sinn und Beteutung, translated by Herbert Feigl.). In Herbert Feigl and Sigfrid Sellars (eds.), Readings in Philosophical Analysis. New York: Appleton-Century-Crofts, 85–102. GALLAGHER, SHAUN 2001: The practice of mind: Theory, simulation, or interaction? — Journal of Consciousness Studies 8 (5–7): 83–107. -2003: Self-narrative, embodied action, and social context. In A. Wiercinski (ed.), Between Suspicion and Sympathy: Paul Ricoeur's Unstable Equilibrium. Toronto: The Hermeneutic Press. -2004: Understanding problems in autism: interaction theory as an alternative to theory of mind. — Philosophy, Psychiatry, and Psychology 11, 199-217 -2005: Neurophilosophy and neurophenomenology. In L. Embree and T. Nenon (eds.), *Phenomenology 2005*. Bucharest: Zeta Press, 293–316. -2009: Neurophenomenology. In T. Bayne, A. Cleeremans & P. Wilken (eds.), Oxford Companion to Consciousness. Oxford University Press.470-472. -2011a: Phenomenology, neural simulation, and the enactive approach to intersubjectivity. In J. McCurry (ed.), Phenomenology, Cognition and Neuroscience. Pittsburgh: Duquesne University Press / Simon Silverman

Phenomenology Center, 18–39.

——2011b: Strong interaction and self-agency. Humana-Mente: Journal of Philosophical Studies 15: 55–76.

——2012: Gallagher, S. 2012. On the possibility of naturalizing phenomenology. In D. Zahavi (ed.), Oxford Handbook of Contemporary Phenomenology. Oxford University Press.

——2013: When the problem of intersubjectivity becomes the solution. In M. Legerstee, D. W. Haley & M. H. Bornstein (eds.), The Infant Mind: Origins of the Social Brain. New York: The Guilford Press, 48–74.

GALLAGHER, SHAUN & DANIEL HUTTO 2008: Understanding others through primary interaction. In J. Zlatev, T. P. Racine, C. Sinha & E. Itkonen (eds.), *The Shared Mind. Perspectives on intersubjectivity.* Philadelphia: John Benjamins Publishing Company.

GALLESE, VITTORIO 2004: From mirror neurons to the shared manifold hypothesis: A neurophysiological account of intersubjectivity. In S. Taylor-Parker, J. Langer & C. Milbrath (eds.), *Biology and knowledge revisited:* From neurogenesis to psychogenesis. Hillsdale: Lawrence Erlbaum Associates, 179–203.

GARFINKEL, HAROLD 1984 [1967]: Studies in Ethnomethodology. Cambridge: Polity.

GEERAERTS, DIRK 1985 [1981]: Paradigm and paradox. An exploration into a paradigmatic theory of meaning and its epistemological background. (Paradigma en paradox. Een onderzoek naar een paradigmatische bekenistheorie en haar kentheoretische achtergronden. English translation of unpubl. doctoral thesis.) Leuven University Press.

——1988: Cognitive grammar and the history of lexical semantics. In B. Rudzka-Ostyn (ed.), *Topics in Cognitive Linguistics*. Amsterdam: John Benjamins Publishing Company, 647–677.

——1989: Prospects and problems of prototype theory. — *Linguistics* 27 (4), 587-612.

GEERAERTS, DIRK & HUBERT CUYCKENS (EDS.) 2007: *The Oxford handbook of Cognitive Linguistics*. Oxford University Press.

GIBBS, RAYMOND W. JR. & GUY C. VAN ORDEN 2010: Adaptive cognition without massive modularity. — *Language and Cognition* 2 (2), 149–176.

GIBSON, JAMES J. 1979: The Ecological Approach to Visual Perception. Hillsdale, NJ: Lawrence Erlbaum Associates.

GILLESPIE, ALEX & FLORA CORNISH 2010: Intersubjectivity: towards a dialogical analysis. — *Journal for the theory of social behaviour* 40 (1), 19–46.

GOLDBERG, ADELE E. 1995: Constructions: A Construction Grammar Approach to Argument Structure. The University of Chicago Press.

GOLDMAN, ALVIN I. 1989: Interpretation psychologized. — *Mind and Language* 4: 161–185.

——2006: Simulating Minds: The Philosophy, Psychology, and Neuroscience of Mindreading. Oxford University Press.

GONSÁLVEZ-GARCÍA FRANCISCO & CRISTOPHER S. BUTLER 2006: Mapping functional-cognitive space. — *Annual Review of Cognitive Linguistics* 4, 39–96.

GOPNIK ALLISON & ELIZABETH SEIVER 2009: Reading minds: How infants come to understand others. — *Zero to Three* 30 (2): 28–32.

HAKULINEN, AULI & LAURI KARTTUNEN 1973: Missing persons: on generic sentences in Finnish. — *Chicago Linguistic Society* 9, 157–171,

HALLIDAY, M.A.K. & RUQAIYA HASAN 1976: Cohesion in English. Longman: London.

HARRISON, CHLOE, LOUISE NUTTALL, PETER STOCKWELL & WENJUAN YUAN (EDS.) 2014: Cognitive Grammar in Literature. Amsterdam: John Benjamins.

HASER, VERENA 2005: *Metaphor*, *Metonymy*, and *Experientialist Philosophy: Challenging Cognitive Semantics*. Berlin: Mouton de Gruyter.

HEIDEGGER, MARTIN 1978 [1929]: *Being and Time*. (*Sein und Zeit*. Translated by John Macquarrie & Edward Robinson.) Oxford: Blackwell.

HEIDER [ROSCH], ELEANOR R. 1971: "Focal" color areas and the development of color names. — *Developmental Psychology* 4: 447–455.

——1972: Universals in color naming and memory. — *Journal of Experimental Psychology* 93: 10–20.

HELASVUO, MARJA-LIISA 2006: Passive: personal or impersonal? A Finnish perspective. In M-L Helasvuo & L. Campbell (eds.), *Grammar from the human perspective: case, space and person in Finnish*. Amsterdam: John Benjamins, 233–255.

HELASVUO, MARJA-LIISA & TUOMAS HUUMO 2010: Mikä subjekti on? [On the subject of subject in Finnish] — *Virittäjä* 114 (2), 165–195.

HELLE, MERJA 2009: Journalistisen työn muutos ja sen tutkiminen. In E. Väliverronen (ed.) *Journalismi murroksessa*. Helsinki: Gaudeamus.

HELLE, MERJA & MAIJA TÖYRY 2008: Mallilukijasta muutoksen työkalu? [Model reader as a tool for change?] — *Journalismi-kritiikin vuosikirja* 2008. Tiedotustutkimus.

HERITAGE, JOHN & J. MAXWELL ATKINSON 1984: Introduction. In J. M. Atkinson & J. Heritage (eds.), *Structures of Social Actions: Studies in Conversation Analysis*. Cambridge University Press: 1–16.

HERLIN, ILONA 1998: *Suomen kun* [*The Finnish kun*]. A doctoral thesis. Helsinki: Suomalaisen Kirjallisuuden seura.

HERLIN, ILONA & LAURA VISAPÄÄ 2011: Mitä on empatia ja mikä sen suhde kieleen? [What is empathy and how is it related to language?] In I. Herlin, E. Laukkanen, M. Mäkinen, J. Salminen & L. Visapää (eds.), *Kieli ja empatia*. [Language and empathy]. Kielen opissa 9. Department of Finnish, Finno-Ugrian and Scandinavian Studies, University of Helsinki.

HORN, LAURENCE R. 2001: A Natural History of Negation. Center for the Study of Language and Information, Leland Stanford Junior University: CSLI Publications.

HUSSERL, EDMUND 1970 [1936]: The origin of geometry. In Edmund Husserl, The crisis of European sciences and transcendental phenomenology. An introduction to phenomenological philosophy (Die Krisis der europäischen Wissenschaften und die transzendentale Phänomenologie. Eine Einleitung in die phänomenologische Philosophie, translated by David Carr.) Evanston, Il: Northwestern University Press, 353–378.

——1993 [1952]: Ideas Pertaining to a Pure Phenomenology and to a Phenomenological Philosophy – Second Book: Studies in the Phenomenology of Constitution (Ideen zu einer reinen Phänomenologie und phänomenologischen Philosophie – Zweites Buch: Phänomenologische Untersuchungen zur Konstitution, translated by R. Rojcewicz and A. Schuwer). Dordrecht: Kluwer Academic Publishers.

——1999 [1950]: Cartesian Meditations: An Introduction to Phenomenology. (Cartesianische Meditationen, translated by Dorion Cairns.) Dordrecht: Kluwer Academic Publishers.

——2001a [1900–1901]: Logical investigations 1: Prolegomena to pure logic, Expression and meaning, The ideal unity of the species and modern theories of abstraction (translated by J. N. Findlay from the second German edition of Logische Untersuchungen). London: Routledge.

——2001b [1901]: Logical investigations 2: On the theory of wholes and parts, The distinction between independent and non-independent meanings, On intentional experiences and their 'contents', Elements of a phenomenological elucidation of knowledge (translated by J. N. Findlay from the second German edition of Logische Untersuchungen). London: Routledge.

HUTTO, DANIEL 2007: The narrative practice hypothesis: origins and applications of folk psychology. In D. Hutto (ed.), *Narrative and Understanding Persons*. Cambridge University Press.

——2008: First communions: Mimetic sharing without theory of mind. In J. Zlatev, T. P. Racine, C. Sinha & E. Itkonen (eds.), *The Shared Mind. Perspectives on intersubjectivity*. Philadelphia: John Benjamins Publishing Company, 245–276.

——2009: Folk psychology as narrative practice. — *Journal of Consciousness Studies* 16 (6-8), 9-39

Huumo, Tuomas 1997: Lokatiivit lauseen semanttisessa tulkinnassa: Ajan, omistajan, paikan ja tilan adverbiaalien keskinäiset suhteet suomen kielessä. Doctoral thesis: introduction and 7 previously published papers. Publications of the Department of Finnish and General Linguistics, University of Turku.

——2005: How fictive dynamicity motivates aspect marking: The riddle of the Finnish quasi-resultative construction. — *Cognitive Linguistics* 16 (1), 113–144.

——2007: Force dynamics, fictive dynamicity, and the Finnish verbs of 'remaining'. — *Folia Linguistica* 41 (1–2), 73–98.

——2009: Fictive dynamicity, nominal aspect, and the Finnish copulative construction. — *Cognitive Linguistics* 20 (1), 43–70.

IACOBONI, MARCO 2009: Imitation, Empathy, and Mirror Neurons. — *Annual Review of Psychology* 60: 653–670.

ISER, WOLFGANG 1978: *The Act of Reading: A Theory of Aesthetic Response*. Baltimore, MD: Johns Hopkins University Press.

ISO SUOMEN KIELIOPPI = ISK [The comprehensive grammar of Finnish] 2004. Edited by Auli Hakulinen, Maria Vilkuna, Riitta Korhonen, Vesa Koivisto, Tarja-Riitta Heinonen & Irja Alho. Helsinki: Suomalaisen Kirjallisuuden Seura [Finnish Literature Society]. Also available at http://scripta.kotus.fi/visk URN:ISBN:978-952-5446-35-7

ITKONEN, ESA 1974: *Linguistics and metascience*. A Doctoral dissertation. Studia Philosophica Turkuensia II. University of Turku.

——1978: Grammatical theory and metascience: A critical inquiry into the philosophical and methodological foundations of 'autonomous' linguistics. Amsterdam: Benjamins.

——1981: The Concept of Linguistic Intuition, in F. Coulmas (ed.), *A Festschrift for native speaker*. The Hague: Mouton de Gruyter 127–140.

——1988: Rationality as an explanatory principle in linguistics. In H. Weydt (ed.), *Logos Semanticos: Studia in Honorem Eugenio Coseriu, vol. II.* Berlin: Mouton de Gruyter, 77–87.

——1997: The social ontology of linguistic meaning. In T. Haukioja, M-L Helasvuo & M. Miestamo (eds.), *SKY Yearbook*. The Linguistic Association of Finland: 49–80.

——2003: *What is language? A study in the philosophy of linguistics*. University of Turku: Publications in General Linguistics 8.

-2006a: Concerning Radical Construction Grammar. In T. Haukioja (ed.): Papers on Language Theory. University of Turku: Publications in General Linguistics 10, 106–121. -2006b: Three fallacies that recur in linguistic argumentation. In T. Haukioja (ed.): Papers on Language Theory. University of Turku: Publications in General Linguistics 10, 2006: 122–126. -2008a: Concerning the role of consciousness in linguistics. — *Journal* of Consciousness studies 15 (6), 15–33. -2008b: The central role of normativity in language and linguistics. In J. Zlatev et al. (eds.) The Shared Mind. Perspectives on intersubjectivity. Philadelphia: John Benjamins Publishing Company: 279–305. -(forthc.): Kognitiivisen kieliopin syvintä olemusta etsimässä. A manuscript. JAAKOLA, MINNA 2004: Suomen genetiivi [The Finnish genitive]. A doctoral thesis. Helsinki: Suomalaisen Kirjallisuuden Seura [Finnish Literature Society]. -2012a: Kognitiivinen kielentutkimus [Cognitive Linguistics]. In V. Heikkinen, E. Voutilainen, P. Lauerma, U. Tiililä & M. Lounela (toim.), Genreanalyysi: tekstilajitutkimuksen käsikirja. Helsinki: Gaudeamus: 537-545. -2012b: Displaying knowledge in journalistic texts: A contrastive analysis of an evidential particle in Estonian and Finnish. — Lähivõrdlusi. *Lähivertailuja* 22, 43–70. –2015: Passiivi ja morfologian monimutkaisuus. Opetuksen näkökulma

[The Finnish passive and the complexity of morphology]. —*Virittäjä* 119, 67–87.

Jaakola, Minna, Maija Töyry, Merja Helle & Tiina Onikki-Rantajääskö 2014: Construing the Reader: Multidisciplinary approach to journalistic texts. — *Discourse & Society* 25 (5), 640–655.

JACKENDOFF, RAY 1992: Languages of the Mind: Essays on Mental Representation. Cambridge, MA: The MIT Press.

——1996: Conceptual Semantics and cognitive linguistics. — *Cognitive Linguistics* 7 (1), 93–129.

Jaegher (de), Hanne & Tom Froese 2009: On the Role of Social Interaction in Individual Agency. — *Adaptive Behavior* 17, 444–460.

JAEGHER (DE), HANNE & EZEQUIEL DI PAOLO 2007: Participatory Sense-Making: An enactive approach to social cognition. — *Phenomenology and the Cognitive Sciences*, 6 (4), 485–507.

JAKOBSON, ROMAN 1956: Two aspects of language and two types of aphasic disturbances. In Roman Jakobson & Morris Halle, *Fundamentals of Language*. The Hague: Mouton de Gruyter, 67–96.

——1960: Closing Statements: Linguistics and Poetics. In T. A. Sebeok (ed.), *Style in Language*. Cambridge, MA: The MIT Press, 350–377.

1971 [1957]: Shifters, verbal categories, and the Russian verb. In *Selected Writings II*. The Hague: Mouton de Gruyter, 130–147.

James, William 1950 [1890]: The principles of psychology. New York: Dover.

JANSSEN, THEO A. J. M. 2002: Deictic principles of pronominals, demonstratives and tenses. In F. Brisard (ed.), *Grounding: The epistemic footing of deixis and reference*. Berlin: Mouton de Gruyter, 151–193.

JESPERSEN, OTTO 1993 [1924]: *The Philosophy of Grammar*. The University of Chicago Press.

JOHNSON, MARK 1987: The Body in the Mind: The Bodily Basis of Meaning, Imagination and Reason. University of Chicago Press.

——2005: The Philosophical Significance of Image Schemas. In B. Hampe (ed.), *From Perception to Meaning: Image Schemas in Cognitive Linquistics*. Berlin: Mouton de Gruyter, 15–33.

JÄÄSKELÄINEN, ANNI 2013: Todisteena äänen kuva: Suomen kielen imitatiivikonstruktiot [Imitations of sounds as evidence: the constructions of imitatives in the Finnish language]. A doctoral thesis. Department of Finnish, Finno-Ugrian and Scandinavian Studies, University of Helsinki.

JÄÄSKELÄINEN, PETRI 2004: *Instrumentatiivisuus ja nykysuomen verbijohto. Semanttinen tutkimus.* Jyväskylä Studies in Humanities 22. University of Jyväskylä.

KATZ, JERROLD J. & JERRY A. FODOR 1963: The structure of a Semantic Theory. — *Language* 39: 170–210.

KENTTÄ, REETTA-LEENA [KONSTENIUS, REETTA ALEXANDRA] 2003: Langackerin kognitiivisen kieliopin metateoreettinen analyysi: Kognitiokäsite ja tieteellinen argumentaatio kognitiivisessa kielitieteessä. A master's thesis. University of Helsinki.

KIELITOIMISTON SANAKIRJA 2: L-R 2012 [Dictionary of modern Finnish]. The renewed 3rd edition. Edited by Eija-Riitta Grönros, Minna Haapanen, Tarja Riitta Heinonen, Leena Joki, Riina Klemettinen, Liisa Nuutinen, Marjatta

Vilkamaa-Viitala. Helsinki: Kotimaisten kielten keskus [Institute for the Languages of Finland].

KITTILÄ, SEPPO 2000: Passiivin prototyypistä [On the prototype of passive]. In A. Pajunen (ed.), *Näkökulmia kielitypologiaan* [*Perspectives on language typology*] Helsinki: Suomalaisen Kirjallisuuden Seura [Finnish Literature Society], 286–312.

Konstenius, Reetta Alexandra 2014: *Empiria, eksperimenti ja etiikka. Kielitieteen metateoriaa*. A doctoral thesis. Department of Modern Languages, University of Helsinki.

KOSSLYN, STEPHEN M. 1973: Scanning visual images: Some structural implications. — *Perception & Psychophysics* 14, 90–94.

——1980: Image and Mind. Cambridge, MA: Harvard University Press.

——1994: *Image and Brain: The Resolution of The Imagery Debate*. Cambridge, MA: The MIT Press.

KOSSLYN, STEPHEN M. & JAMES R. POMERANTZ 1977: Imagery, Propositions, and the Form of Internal Representations. — *Cognitive Psychology* 9, 52–76.

KOSSLYN, STEPHEN M., THOMAS M. BALL & BRIAN J. REISER 1978: Visual Images Preserve Metric Spatial Information: Evidence from Studies of Image Scanning. — Journal of Experimental Psychology: Human Perception and Performance 4 (1), 47–60.

KOSSLYN, STEPHEN M., WILLIAM L. THOMPSON & GIORGIO GANIS 2006: *The Case for Mental Imagery*. New York: Oxford University Press.

LAITINEN, LEA 1992: Välttämättömyys ja persoona. Suomen murteiden nesessiivisten rakenteiden semantiikkaa ja kielioppia [Person and necessity: The semantics and grammar of constructions of necessity in Finnish dialects]. A doctoral thesis. Helsinki: Suomalaisen Kirjallisuuden Seura [Finnish Literature Society].

••			
——1995: Nollapersoona	lThe zero nerson l 🗕	– Virittäiä oo (2	1 227-258
1995. Nonapersoona	[I IIC ZCIO PCISOII]. =	- v ii iiiuju 99 (3	<i>J</i> , ეე / −ეე∪.

——2006: Zero person in Finnish: A grammatical resource for construing human reference. In M-L Helasvuo & L. Campbell (eds.), *Grammar from the human perspective: case, space and person in Finnish*. Amsterdam: John Benjamins, 209–232.

LAKOFF, GEORGE 1987: Women, Fire, and Dangerous Things: What Categories Reveal about the Mind. The University of Chicago Press.

LAKOFF, GEORGE & MARK JOHNSON 1980: *Metaphors we live by*. The University of Chicago Press.

-1999: Philosophy in the Flesh: The Embodied Mind and Its Challenge to Western Thought. New York: Basic Books. LAKOFF, GEORGE & MARK TURNER 1989: More than Cool Reason: A Field Guide to Poetic Metaphor. The Chicago University Press. LANGACKER, RONALD W. 1982: Space Grammar, Analyzability, and the English Passive. — *Language* 58: 22–80. —1986: An Introduction to Cognitive Grammar. — Cognitive Science 10: 1-40. —1987: Foundations of Cognitive Grammar, vol. I: Theoretical Prerequisites. Stanford University Press. -1991: Foundations of Cognitive Grammar, vol. II: Descriptive Application. Stanford University Press. —1993a: Reference-point constructions. — Cognitive Linguistics 4 (1), 1— 38. -1993b: Universals of Construal. — *Proceedings of the Annual Meeting* of the Berkeley Linguistics Society 19: 447–463. -1997: Constituency, Dependency, and Conceptual Grouping. — Cognitive Linguistics 8, 1-32. 1997. -1998: On subjectification and grammaticization. In J-P Koenig (ed.), Discourse and Grammar: Bridging the Gap. Stanford: CSLI Publications, 71-89. —1999a: *Grammar and Conceptualization*. Berlin: Mouton de Gruyter. —1999b: Losing Control: Grammaticization, Subjectification, and Transparency. In A. Blank and P. Koch (eds.), Historical Semantics and Cognition. Berlin: Mouton de Gruyter. Cognitive Linguistics Research 13, 147-175. -1999c: A View from Cognitive Linguistics. Commentary on Lawrence W. Barsalou, Perceptual Symbol Systems. Behavioral and Brain Sciences 22: 625. -2002 [1991]: Concept, Image, and Symbol: The Cognitive Basis of *Grammar*. 2nd edition, with a new preface. Berlin: Mouton de Gruyter. -2003: Extreme Subjectification: English Tense and Modals. In Hubert Cuyckens, Thomas Berg, René Dirven, and Klaus-Uwe Panther (eds.), Motivation in Language: Studies in Honor of Günter Radden. Amsterdam: John Benjamins. Current Issues in Linguistic Theory 243, 3-26.

——2006: Subjectification, Grammaticization, and Conceptual Archetypes. In A. Athanasiadou, C. Canakis, and B. Cornillie (eds.), *Subjectification: Various Paths to Subjectivity*. Berlin: Mouton de Gruyter. 2006. Cognitive Linguistics Research 31, 17–40.

——2007: Cognitive Grammar. In D. Geeraerts and H. Cuyckens (eds.), *The Oxford Handbook of Cognitive Linguistics*. New York: Oxford University Press, 421–462.

——2008: Cognitive Grammar: A Basic Introduction. Oxford University Press.

——2009: Investigations in Cognitive Grammar. Berlin: Mouton de Gruyter.

LARJAVAARA, MATTI 1990: Suomen deiksis [Finnish deixis]. Suomalaisen Kirjallisuuden Seura, Helsinki.

——2007: Nykyfennistiikkaa englanniksi [Modern Fennistics on English. Review of Lyle Campbell & Marja-Liisa Helasvuo, eds., 2006]. — *Sananjalka* 49, 202–208.

LATOUR, BRUNO 1996: On interobjectivity. — *Mind, Culture and Activity* 3, 228–245.

LAURY, RITVA 1997: *Demonstratives in Interaction: The Emergence of a Definite Article in Finnish*. Amsterdam: John Benjamins.

2002: Interaction, grounding and third-person referential forms. In F. Brisard (ed.), *Grounding: The epistemic footing of deixis and reference*. Berlin: Mouton de Gruyter, 83–115.

LEAVENS, DAVID A., WILLIAM D. HOPKINS & KIM A. BARD 2008: The heterochronic origins of explicit reference. In J. Zlatev, T. P. Racine, C. Sinha & E. Itkonen (eds.), *The Shared Mind. Perspectives on intersubjectivity*. Philadelphia: John Benjamins Publishing Company, 187–214.

LEINO, JAAKKO 2003: Antaa sen muuttua: Suomen kielen permissiivirakenne ja sen kehitys [Let it change: The Finnish permissive construction and its history]. A doctoral thesis. Helsinki: Suomalaisen Kirjallisuuden Seura [Society of Finnish Literature].

LEINO, PENTTI 1988: Kieli tilakieliopin kehyksestä nähtynä. In J-O. Östman, U. Nikanne & K. Jokinen & K. Wiik (toim.), *Suomen kielitieteellisen yhdistyksen vuosikirja*. Helsinki: Suomen kielitieteellinen yhdistys [The Linguistic Association of Finland] 123–142.

——1989: Paikallissijat ja suhdesääntö: kognitiivisen kieliopin näkökulma [Local cases and the relation rule: an approach from Cognitive Grammar]. — *Virittäjä* 93 (2): 161–219.

——1993: *Polysemia: Kielen moniselitteisyys* [*Polysemy*]. Kieli 7, Suomen kielen kognitiivista kielioppia 1 [Cognitive Grammar of Finnish 1]. Department of Finnish, University of Helsinki.

LEINO, PENTTI & TIINA ONIKKI 1992: Comments on Cognitive Grammar. In M. Vilkuna (ed.), *SKY Yearbook*. Helsinki: The Linguistic Association of Finland: 35–51.

LEINO, PENTTI & TIINA ONIKKI (EDS.) 1994: Näkökulmia Polysemiaan [Perspectives on polysemy]. Kieli 8, Suomen kielen kognitiivista kielioppia 2 [Cognitive Grammar of Finnish 2]. Department of Finnish, University of Helsinki.

LEVINSON, STEPHEN C. 1996b: Relativity in spatial conception and description. In J. J. Gumperz & S. C. Levinson (eds.), *Rethinking linguistic relativity*. Cambridge University Press, 177–202.

LEVINSON, STEPHEN C. 1996: Relativity in spatial conception and description. In J. C. Gumperz & S. C. Levinson (eds.), *Rethinking Linguistic Relativity*. Cambridge University Press.

LEWANDOWSKA-TOMASZCZYK, BARBARA (2007): Polysemy, prototypes, and radial categories. In *The Oxford Handbook of Cognitive Linguistics*. Oxford University Press, 139–169.

LIBET, BENJAMIN 1982: Brain stimulation in the study of neuronal functions for conscious sensory experiences. — *Human Neurobiology* 1, 235–242.

——1985: Unconscious cerebral initiative and the role of conscious will in voluntary action. — *The Behavioral and Brain Sciences* 8: 529–566.

LINELL, PER 2009: *Rethinking Language, Mind, and World Dialogically: Interactional and Contextual Theories of Human Sense-making.* Charlotte, NC: Information Age Publishing.

Lohmar, dieter 2012: Language and Non-linguistic Thinking. In D. Zahavi (ed.), *The Oxford Handbook of Contemporary Phenomenology*. Oxford University Press, 377–398

Lucy, John C. 1992: Language Diversity and Thought: A Reformulation of the Linguistic Relativity Hypothesis. Cambridge University Press.

——1996: Grammatical Categories and Cognition: A Case Study of the Linguistic Relativity Hypothesis. Cambridge University Press.

Lyons, John 1977: Semantics, vol.1. Cambridge University Press.

LÖFLUND, JUHANI 1998: Suomen kirjoitetun yleiskielen passiivi [Passive in written standard Finnish]. Åbo Akademis Förlag.

MATLOCK, TEENIE 2004a: The conceptual motivation of fictive motion. In G. Radden & K-U Panther (eds.), *Studies in linguistic motivation Berlin: Mouton de Gruyter*, 221–248.

——2004b: Fictive motion as cognitive simulation. — *Memory and Cognition* 32 (8), 1389–1400.

MEAD, GEORGE HERBERT 1950 [1934]: *Mind, self, and society: from the standpoint of a social behaviorist.* Edited and with an introduction by Charles W. Morris. The University of Chicago Press.

MELTZOFF, ANDREW N. & RECHELE BROOKS 2001: "Like me" as a building block for understanding other minds: Bodily acts, attention, and intention. In B. E. Malle, L. J. Moses, & D. A. Baldwin (eds.), *Intentions and intentionality: Foundations of social cognition*. Cambridge, MA: The MIT Press, 171–191.

MELTZOFF, ANDREW N. & M. KEITH MOORE 1977: Imitation of Facial and Manual Gestures by Human Neonates. — *Science, New Series* 198, 75–78.

——1994: Imitation, Memory, and the Repre-sentation of Persons. — *Infant Behavior and Development* 17, 83–99.

——1997: Explaining Facial Imitation: A Theoretical Model. — *Early Development and Parenting* 6, 179–192.

Meltzoff, Andrew N. & Rechele Brooks 2001: "Like me" as a building block for understanding other minds: Bodily acts, attention, and intention. In Bertram. F. Malle, Louis J. Moses, & Dare A. Baldwin (eds.), *Intentions and intentionality: Foundations of social cognition. Cambridge*, MA: MIT Press, 171–191.

MERLEAU-PONTY, MAURICE 2002 [1945]: *Phenomenology of Perception* (*Phénoménologie de la perception*, translated by Colin Smith). London: Routledge & Kegan Paul.

MILLER GEORGE A. & PHILIP N. JOHNSON-LAIRD 1976: Language and Perception. Cambridge, MA: Belknap Press of Harvard University Press.

MÖTTÖNEN, TAPANI 2009: Ajasta ikuisuuteen. Ajanilmausten kognitiivista semantiikkaa. [From time to eternity: Cognitive semantics of expressions of time]. A master's thesis. University of Helsinki.

———(forthc.) Metonymical basis of spatio-temporal mapping in expression of time.

NOWAK, ANDREJ, ROBIN R. VALLACHER, ABRAHAM TESSER & WOJCIECH BORKOWSKI 2000: Society of self: the emergence of collective properties in self-structure. — Psychological Review 107, 39–61.

NUUTINEN, OLAVI 1976: Suomen teonnimirakenteista [On Finnish action noun structures]. Stockholm Studies in Finnish Language and Literature 1. Stockholm University.

NUYTS, JAN 2002: Grounding and the system of epistemic expressions in Dutch: A cognitive-functional view. In F. Brisard (ed.), *Grounding: The epistemic footing of deixis and reference*. Berlin: Mouton de Gruyter, 433–466.

OGDEN, THOMAS H. 1994: Subjects of Analysis. Northvale, NJ: Aronson.

OJUTKANGAS, KRISTA 2001: Ruumiinosannimien kieliopillistuminen suomessa ja virossa. The grammaticalization of body-part nouns in Finnish and Estonian]. A doctoral thesis. Helsinki: Suomalaisen Kirjallisuuden Seura.

O'KEEFFE, ANNE, MICHAEL MCCARTHY & RONALD CARTER 2007: From Corpus to Classroom: Language Use and Language Teaching. Cambridge University Press.

ONIKKI-RANTAJÄÄSKÖ, TIINA 2001: Sarjoja: Nykysuomen paikallissijaiset olotilanilmaukset kielen analogisuuden ilmentäjinä [Patterns and analogy: a case study of state-denoting local case constructions in modern Finnish]. A doctoral thesis. Helsinki: Suomalaisen Kirjallisuuden Seura [Finnish Literature Society].

——2006: Metonymy in the locatives of state. In M-L. Helasvuo & L. Campbell (eds.), *Grammar from the human perspective: case, space and person in Finnish*. Amsterdam: John Benjamins Publishing Company, 67–100.

——2010: Ronald W. Langacker ja kognitiivisen kielitieteen perusta [Ronald W. Langacker and the foundation of cognitive linguistics]. In P. Haddington & J. Sivonen (toim.), *Kielentutkimuksen modernit klassikot: kognitiivinen ja funktionaalinen kielitiede* [The modern classics in linguistics: Cognitive and functional linguistics]. Helsinki: Gaudeamus, 30–57

PAIVIO, ALLAN 1971: *Imagery and Verbal Processes*. New York: Holt, Rinehart and Winston.

——1991: Dual Coding Theory: Retrospect and Current Status. — *Canadian Journal of Psychology* 45 (3), 255–287.

——2006: *Mind and Its Evolution: A Dual Coding Theoretical Approach*. Mahwah, NJ: Lawrence Erlbaum Associates.

PAIVIO, ALLAN & IAIN BEGG 1981: *Psychology of language*. Englewood Cliffs, NJ: Prentice-Hall.

PAIVIO, ALLAN & MARK SADOSKI 2001: *Imagery and Text: Dual-Coding Theory of Reading and Writing*. Mahwah, NJ: Lawrence Erlbaum Associates.

PAJUNEN, ANNELI 1991: Leksikalistinen hypoteesi ja agglutinatiiviset kielet [The Lexicalist Hypothesis and agglutinative languages]. — *Virittäjä* 95 (2), 155–181.

PIKA, SIMONE 2008: What is the nature of the gestural communication of great apes? In J. Zlatev, T. P. Racine, C. Sinha & E. Itkonen (eds.), *The Shared Mind. Perspectives on intersubjectivity*. Philadelphia: John Benjamins Publishing Company, 165–186.

PALMER, FRANK 1976: Semantics: A New Outline. Cambridge University Press.

PETITOT, JEAN, FRANCISCO J. VARELA, BERNARD PACHOUD & JEAN-MICHEL ROY (EDS.) 2000: Naturalizing Phenomenology. Issues in Contemporary Phenomenology and Cognitive Science. Stanford University Press.

PINKER, STEVEN 2002: *The Blank Slate: The Modern Denial of Human Nature*. New York: Penguin Books.

POPPER, KARL 1972: *Objective Knowledge: An Evolutionary Approach*. Oxford University Press.

PUTNAM, HILARY 1980 [1961]: Brains and Behavior. (Originally read as part of the program of the American Association for the Advancement of Science, Section L, History and Philosophy of Science, December 27, 1961.) In N. Block (ed.), *Readings in Philosophy of Psychology, Volume 1*. Harvard University Press, 24–36.

- ———1981: Reason, Truth and History. Cambridge University Press.

PYLYSHYN, ZENON W. 1973: What the mind's eye tells the mind's brain: A critique of mental imagery. — *Psychological Bulletin* 80 (1), 1–24.

——2001: Is the imagery debate over? If so, what was it about? In E. Dupoux (ed.), *Language*, *Brain*, *and Development: Essays in the Honor of Jacques Mehler*. Cambridge, MA: The MIT Press.

——2002: Mental imagery: In search of a theory. — Behavioral and Brain Sciences 25, 157-238.

——2003: *Seeing and Visualizing: It's Not What You Think.* Cambridge, MA: The MIT Press.

——2006: Imagery. In R. Gregory (ed.), *Oxford Companion to the Mind*. Second edition. New York: Oxford University Press.

RIMMON-KENAN, SHLOMITH 1983: Narrative Fiction: Contemporary Poetics. London/New York: Methuen.

ROHRER, TIM 2007: Embodiment and Experientialism in Cognitive Linguistics. In Geeraerts, D. & H. Cuyckens. (eds.), *The Oxford Handbook of Cognitive Linguistics*. Oxford University Press.

ROSCH, ELEANOR 1973: Natural categories. — *Cognitive Psychology* 4 (3), 328–350.

——1978: Principles of Categorization. In E. Rosch & B. L. Lloyd, (eds.) *Cognition and Categorization*. Hillsdale, NJ: Lawrence Erlbaum Associates, 27–48.

ROSCH, ELEANOR, CAROLYN B. MERVIS, WAYNE D. GRAY, DAVID M. JOHNSON & PENNY BOYES-BRAEM 1976: Basic Objects in Natural Categories. — *Cognitive Psychology* 8 (3), 382–439.

ROSCH, ELEANOR & BARBARA L. LOYD (EDS.) 1978: Cognition and Categorization. Hillsdale, NJ: Lawrence Erlbaum Associates.

SACKS, HARVEY, EMANUEL A. SCHEGLOFF & GAIL JEFFERSON 1974: A Simplest Systematics for The Organization of Turn-taking for Conversation. — *Language* 50 696–735.

SADOSKI, MARK & ALLAN PAIVIO 2004: A Dual Coding Theoretical Model of Reading. In R.B. Ruddell & N.J. Unrau (eds.), *Theoretical Models and Processes of Reading*. International Reading Association.

Samuels, Richard 1998: Evolutionary Psychology and the Massive Modularity Hypothesis. — *British Journal for the Philosophy of Science* 49: 575–602.

SANDERS, TED & HENK PANDER MAAT 2006: Cohesion and Coherence. In K. Brown (ed.), *Encyclopedia of Language and Linguistics. Volume 2. Amsterdam:* Elsevier, 591–595.

Schegloff, Emanuel 1992: Repair After The Next Turn: The Last Structurally Provided Defense of Intersubjectivity in Conversation. — *American Journal of Intersubjectivity* 97 (5): 1295–1345.

SCHELER, MAX 2008 [1923]: *The Nature of Sympathy.* (Wesen und Formen der Sympathie, translated by Peter Heath.) New Brunswick, NJ: Transaction Publishers.

SCHÜTZ, ALFRED 1972 [1932]: The Phenomenology of the Social World. (*Der sinnhafte Aufbau der sozialen Welt: eine Einleitung in die verstehende Soziologie*, translated by George Walsh & Frederick Lehnert). Evanstone, IL: Northwestern University Press.

SEARLE, JOHN 1969: Speech Acts. Cambridge University Press.

——1983: *Intentionality: an Essay in The Philosophy of Mind*. Cambridge University Press.

SHEPARD, ROGER N. 1978: The Mental Image. — American Psychologist 33: 125–137.

SHEPARD, ROGER N. & JACQUELINE METZLER 1971: Mental Rotation of Three-Dimensional Objects. — *Science, New Series* 171 (3972), 701–703.

SHORE, SUSANNA 1986: *Onko suomessa passiivia* [Is there a passive in Finnish]. Helsinki: Suomalaisen Kirjallisuuden Seura [Society of Finnish Literature].

——2008: Lauseiden tekstuaalisesta jäsennyksestä [The textual organisation of clauses]. — *Virittäjä* 112 (1), 24–65.

SIIROINEN, MARI 2001: Kuka pelkää, ketä pelottaa. Nykysuomen tunneverbien kielioppia ja semantiikkaa [On the syntax and semantics of the emotive verbs in present-day Finnish]. A doctoral thesis. Helsinki: Suomalaisen Kirjallisuuden Seura [Society of Finnish Literature].

——2005: An overview of mental verbs in Finnish. In J. Fernandez-Vest (ed.), Les langues ouraliennes aujourd'hui: approche linguistique et cognitive. Paris: Champion, 316–326.

SINHA, CHRIS: 2007: Cognitive Linguistics, Psychology and Cognitive Science. In Geeraerts, D. & H. Cuyckens. (eds.), *Handbook of Cognitive Linguistics*. Oxford University Press.

SINHA, CHRIS & CINTIA RODRÍGUEZ 2008: Language and the signifying object. From convention to imagination. In J. Zlatev, T. P. Racine, C. Sinha & E. Itkonen (eds.), *The Shared Mind. Perspectives on intersubjectivity*. Philadelphia: John Benjamins Publishing Company, 357–378.

SKINNER, B.F. 1957: Verbal behavior. Englewood Cliffs, NJ: Prentice-Hall.

SOKOLOWSKI, ROBERT 2000: Introduction to phenomenology. Cambridge University Press.

SLOBIN, DAN I. 1987: Thinking for speaking. — *Proceedings of the Thirteenth Annual Meeting of the Berkeley Linguistics Society*, 435–444.

——1996: From "thought and language" to "thinking for speaking". In J. J. Gumperz & S. C. Levinson (eds.), *Rethinking Linguistic Relativity*. Cambridge University Press, 17–70.

STERN, DANIEL N. 1971: A microanalysis of mother-infant interaction. — Journal of American Academy of Child Psychiatry 19, 501-517. —1977: The First Relationship. Cambridge, MA: Harvard University Press. -1985: The Interpersonal World of the Infant: A View from Psychoanalysis and Developmental Psychology. New York: Basic Books. STOCKWELL, PETER 2002: Cognitive Poetics: An Introduction. London: Routledge. STOLOROW, ROBERT D. 1997: Dynamic, dyadic, intersubjective systems: An evolving paradigm for psychoanalysis. — *Psychoanalytical Psychology* 14: 337-346. Intersubjective-Systems Theory: Α Phenomenological--2013: Contextualist Psychoanalytic Perspective. — Psychoanalytic Dialogues 23: 383-389. STOLOROW, ROBERT D., GEORGE E. ATWOOD & DONNA M. ORANGE 2002: Worlds of Experience: Interweaving Philosophical and Clinical Dimensions in Psychoanalysis. New York: Basic Books. TABAKOWSKA, ELŻBIETA 1993: Cognitive Linguistics and Poetics of Translation. Tübingen: Narr. TALMY, LEONARD 1972: Semantic structures in English and Atsugewi. A doctoral thesis. University of California, Berkeley. -1978: Figure and ground in complex sentences. In J. H. Greenberg (ed.), *Universals of human language, vol. 4: Syntax.* Stanford University Press. ——1988: Force dynamics in language and cognition. — Cognitive Science 12: 49-100. -2000a: Toward a Cognitive Semantics. Volume I: Concept Structuring Systems. Cambridge, MA: The MIT Press. -2000b: Toward a Cognitive Semantics. Volume II: Typology and Process in Concept Structuring. Cambridge, MA: The MIT Press. TAYLOR, JOHN R. 2003: Linguistic Categorization. Third edition. Oxford University Press. THOMPSON, EVAN 2007a: Mind in Life: Biology, Phenomenology, and The Sciences of Mind. Cambridge: The Belknap Press.

–2007b: Look again: phenomenology and mental imagery. –

Phenomenology and the Cognitive Sciences 6(1-2), 137-170.

TREVARTHEN, COLWYN 1979: Communication and cooperation in early infancy. A description of early intersubjectivity. In M. Bullowa (ed.), *Before Speech: The Beginning of Human Communication*. London: Cambridge University Press, 99–136.

——1980, The foundations of intersubjectivity. In D. R. Olson, (ed.) *The Social Foundations of Language and Thought*. New York: Norton, 216–242.

——2008: Foreword. Shared minds and the science of fiction: Why theories will differ. In J. Zlatev, T. P. Racine, C. Sinha & E. Itkonen (eds.), *The Shared Mind. Perspectives on intersubjectivity*. Philadelphia: John Benjamins Publishing Company, VII—XIII.

TREVARTHEN, COLWYN & KENNETH J. AITKEN 2001: Infant intersubjectivity: research, theory, and clinical applications. *Journal of Child Psychology and Psychiatry* 42 (1), 3–48.

TURNER, KEN 2009: Semantics vs. Pragmatics. In F. Brisard, J-O Östman & J. Verschueren (eds.), *Grammar, Meaning and Pragmatics. Handbook of Pragmatics Highlights* 5. Amsterdam: John Benjamins, 250–267.

TURNER, MARK 1996: *The Literary Mind: Origins of Thought and Language*. New York: Oxford University Press.

Tye, Michael 1991: The imagery debate. Cambridge, MA: The MIT Press.

——1995: Ten Problems of Consciousness: A Representational Theory of the Phenomenal Mind, Cambridge, MA: The MIT Press

——1999: Phenomenal Consciousness: the Explanatory Gap as Cognitive Illusion. — Mind, 108, 705–725.

——2000: Consciousness, Color, and Content. Cambridge, MA: The MIT Press.

2003: Consciousness and Persons. Cambridge, MA: The MIT Press.

——2009: Consciousness Revisited. Cambridge, MA: The MIT Press.

VARELA, FRANCISCO, EVAN THOMPSON & ELEANOR ROSCH 1991: *The Embodied Mind: Cognitive Science and Human Experience*. Cambridge, MA: The MIT Press.

VERHAGEN, ARIE 2005: Constructions of Intersubjectivity: Discourse, Syntax, and Cognition. Paperback edition. Oxford University Press.

——2007: Construal and perspectivisation. In Geeraerts, D. & H. Cuyckens. (eds.), *Handbook of Cognitive Linguistics*. Oxford University Press.

——2008: Intersubjectivity and the architecture of language system. In J. Zlatev, T. P. Racine, C. Sinha & E. Itkonen (eds.), *The Shared Mind. Perspectives on intersubjectivity*. Philadelphia: John Benjamins Publishing Company.

VIOLI, PATRIZIA 2012: How our Bodies Become Us: Embodiment, Semiosis and Intersubjectivity. — *Cognitive Semiotics* 4 (1), 57–75.

VISAPÄÄ, LAURA 2008: Infinitiivi ja sen infiniittisyys. Tutkimus suomen kielen itsenäisistä A-infinitiivikonstruktioista [Infinitive and its infinity: A study of the independent A-infinitive constructions in Finnish]. A Doctoral Thesis. Helsinki: Suomalaisen Kirjallisuuden Seura [Society of Finnish Literature].

VYGOTSKY, L. S. 1978: *Mind in Society. The Development of Higher Psychological Processes*. Edited by M. Cole, V. John-Steiner, S. Scribner & E. Souberman. Cambridge, MA: Harvard University Press.

Wellman, Henry M. & Ann T. Phillips 2001: Developing Intentional Understandings. In B. E. Malle, L. J. Moses, & D. A. Baldwin (eds.), *Intentions and intentionality: Foundations of social cognition*. Cambridge, MA: The MIT Press, 125–148.

WITTGENSTEIN, LUDWIG 1969: *On certainty (Über Gewißheit*, translated by G.E.M. Anscombe). Oxford: Basil Blackwell.

——2009 [1953]: *Philosophical investigations (Philosophische Untersuchungen*, translated by G.E.M. Anscombe, P.M.S. Hacker, and Joachim Schulte.) Revised 4th edition by P.M.S. Hacker and Joachim Schulte. Chicester: Wiley-Blackwell.

WOELERT, PETER 2011: Human cognition, space, and the sedimentation of meaning. — *Phenomenology and the Cognitive Sciences* 10 (1), 113–137.

Wundt, Wilhelm 2007 [1912]: Elements Of Folk Psychology: Outline Of A Psychological History Of The Development Of Mankind. (Elemente der Völkerpsychologie: Grundlinien einer psychologischen Entwicklungsgeschichte der Menschheit, translated by Edward Leroy Schaub.) Leipzig: Kröner.

ZAHAVI, DAN 1997: Horizontal Intentionality and Transcendental Intersubjectivity. *Tijdschrift voor Filosofie* 59 (2), 304–321.

——2001a: *Husserl and Transcendental Intersubjectivity: A Response to the Linguistic-Pragmatic Critique*. Athens: Ohio University Press.

——2001b: Beyond Empathy: Phenomenological Approaches to Intersubjectivity. In E. Thompson (ed.), *Between Ourselves: Second-Person Issues in the Study of Consciousness*. Thorveton: Imprint Academic, 151–167.

423-450.

-2002: Metaphysical Neutrality in Logical Investigations. In One Hundred Years of Phenomenology. Dordrecht: Kluwer Academic Publishers, 93-108. ——2003a: *Husserl's phenomenology*. Stanford University Press. -2003b: Husserl's Intersubjective Transformation of Transcendental Philosophy. The New Husserl: A Critical Reader. Bloomington: Indiana University Press, 233-254. ZAHAVI, DAN (ED.) 2012: The Oxford Handbook of Contemporary Phenomenology. Oxford University Press. ZLATEV, JORDAN 2005: What is in a schema? Bodily mimes is and the grounding of language. In B. Hampe (ed.), From Perception to Meaning: Image Schemas in Cognitive Linguistics. Berlin: Mouton de Gruyter, 323-342. -2007a: Embodiment, language and mimesis. In T. Ziemke, J. Zlatev & R. M. Frank (eds.), Body, Language and Mind. Vol 1: Embodiment. Berlin: Mouton de Gruyter, 297-337. -2007b: Intersubjectivity, mimetic schemas and the emergence of language. — Intellectica 46-47 (2-3), 123-152. -2008a: The Dependence of Language on Consciousness. — Journal of Consciousness Studies 15, No. 6. 2008, pp. 34–62. Exeter: Imprint Academic. -2008b: The co-evolution of intersubjectivity and bodily mimesis. In J. Zlatev, T. P. Racine, C. Sinha & E. Itkonen (eds.), The Shared Mind. Perspectives on intersubjectivity. Philadelphia: John Benjamins Publishing Company, 215-244. -2010: Phenomenology and Cognitive Linguistics. In D. Schmicking & S. Gallagher (eds.), Handbook of Phenomenology and Cognitive Science. Dordrecht: Springer, 415-446. -2013: The Mimesis Hierarchy of semiotic development: Five stages of intersubjectivity in children. — The Public Journal of Semiotics IV(2), 47-70. ZLATEV, JORDAN, JOHAN BLOMBERG & ULF MAGNUSSON 2012: Metaphor and subjective experience. A study of motion-emotion metaphors in English, Swedish, Bulgarian, and Thai. In A. Foolen, U. Luedtke, T. P. Racine & J. Zlatev

ZLATEV, JORDAN, TIMOTHY P. RACINE, CHRIS SINHA & ESA ITKONEN 2008: *The Shared Mind. Perspectives on intersubjectivity*. Philadelphia: John Benjamins Publishing Company.

(eds.), Moving Ourselves, Moving Others: Motion and emotion in consiousness, intersubjectivity and language. Amsterdam: John Benjamins,

ÖSTMAN, JAN-OLA 2005: Construction Discourse: A Prolegomenon. In J-O Östman & M. Fried (eds.), *Construction Grammars: Cognitive grounding and theoretical extensions*. Amsterdam: John Benjamins.