

## 0 Introduction

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The title of this book is deliberately ambiguous. Shared by both readings is the notion of modality, referring to a prominent semantic concept in the study of language use. The ambiguity resides in the alternation between a general and a more specific reading of the title. In the general reading, the title indicates that the notion of modality is used as a source of inspiration for exploring wider perspectives. In the more specific reading, the title suggests a concern with the position of modality in the human mind. Both readings apply to this book, and the specific reading refers to just one, albeit crucial, element of the wider perspectives implied in the general reading.

The goal of this book is to offer an empirically grounded conceptual (re)analysis of the semantic fields covered by the traditional notion of modality and related concepts, in view of their position in the cognitive infrastructure for language use. This involves a few strongly interrelated and often inextricable subgoals, at different levels of theoretical abstraction.

At the most basic level, this book focuses on the analysis of what are commonly called the modal categories, often labeled epistemic, deontic and dynamic modality, and on their relationship with a number of neighboring and interacting notions, including, most prominently, evidentiality, subjectivity and directivity. It will argue for a thorough rethinking of the traditional analyses of several of these dimensions, and of the wider semantic field of which they are part, suggesting an organization of the categories in terms of a set of interrelated criteria: being attitudinal or not, being qualificational or not, and being conceptual versus speech act related or, more broadly, action related. Traditional notions such as modality and evidentiality ultimately evaporate in this reanalysis.

At a higher level, this book aims to contribute to the development of a wider analytical framework, in which the analysis of the modal/attitudinal and related notions is embedded in a more general concept of the system of what is traditionally called tense-aspect-mood (often abbreviated as TAM) marking, as an important dimension of the grammatical and semantic systems involved in language use. The categories in this wider system will be referred to as ‘qualifications of states of affairs,’ a term preferred over the traditional label for reasons that will emerge in the course of the discussions. Central in this

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analytical framework is the concept of the hierarchical or layered organization of the qualificational categories. This notion has been developed in the functionalist and typological literature in order to account for empirical facts concerning the semantic scope and the grammatical behavior of these categories and their expressions. But there is much more to it than meets the eye, and this study will be concerned with the question of how this system is organized and works, and how it should be handled in a cognitively and functionally plausible model of language use.

The latter issue brings us to an even higher, theoretical level of concern in this book: the question of what these matters contribute to our understanding of the cognitive systems involved in language use, and to the further development of a cognitive-functional theory of these systems. One of the most central issues to be addressed is the relative position in language processing of the linguistic/grammatical systems and the conceptual systems (the language and thought issue): what is the role of each, how are they organized and how do they function, and how do they relate and interact? This concern includes comparisons with views and models adopted in the functionalist tradition in linguistics and in cognitive linguistics, and beyond. A major point will be to argue for a dynamic view of language processing, of a kind absent in most functional and cognitive linguistic frameworks. Another major point will be to argue against a simplistic one-to-one concept of the relationship between meaning and form, prevalent (even if often implicitly or unwittingly) in many domains of current linguistic inquiry, from different theoretical perspectives, and surfacing in many different ways (in research on modality and related notions, e.g. in the failure to differentiate between semantic and formal aspects of a phenomenon).

In view of this cluster of goals, this book will feature both detailed analyses of specific linguistic phenomena in the domain of the modal/attitudinal and related categories, in part drawing on corpus data, and conceptual and theoretical discussions and considerations at different levels of abstraction. These parts do not stand apart, however: they are intimately intertwined. The cognitive-functional perspective on language and mind offers the framework for inquiring into the modal/attitudinal and related categories, and allows us to throw new light on this complex and evasive subject matter. Vice versa, the analysis of the modal/attitudinal and related categories serves as a substantial empirical case for improving our understanding of the cognitive infrastructure for language use. It offers a concrete illustration and testing ground for the discussions regarding the language and thought issue, and it allows us to implement in more detail some dimensions and aspects of the cognitive-functional approach.

The present study does not stand alone. It assumes, partly resumes and revisits, and takes further the ideas developed in two earlier books. Nuyts (1992) aimed to lay out the theoretical basis of a cognitive-functional approach

to language, contrasting it to the principles of the generative enterprise, with special focus on the (im)plausibility of this paradigm's cognitive claims, and to the praxis of a few functionalist approaches in linguistics, focusing on problems due to the absence of a clear cognitive perspective in them. Nuyts (2001a) set out to offer an illustration of the potential of the cognitive-functional perspective for the analysis of empirical phenomena, by focusing on the semantic category of epistemic modality and its linguistic expression in the West Germanic languages. It moreover aimed to use the findings of this analysis to substantiate elements of the theoretical framework. The present study broadens the phenomenological scope of the latter book, to include all categories traditionally called modal, as well as a number of associated categories, and beyond them the entire system of qualificational and related dimensions (such as illocutionary ones). It moreover deepens the theoretical perspective of both earlier studies, in that it aims to elaborate dimensions of the blueprint of a model of the cognitive systems for language use introduced in them, called Functional Procedural Grammar, which instantiates the principles of the cognitive-functional approach.

This book is organized as follows. Chapter 1 presents the preliminaries of the cognitive-functional approach adopted in this study. Section 1.1 recapitulates the basic ideas on which it is grounded, and Section 1.2 situates it in the field of current linguistics, with special focus on the differences and correspondences with traditional functional linguistics on the one hand, and with cognitive linguistics on the other hand. In this context, the basic theoretical issues prevailing in this study, including the matter of the complex and dynamic relations between meaning and form, will emerge. Section 1.3 sketches the blueprint of a Functional Procedural Grammar, a model-in-outline of the cognitive systems for language use which implements the cognitive-functional approach, and which will serve as the frame of reference for the discussions in this book.

Chapter 2 introduces the preliminaries for the analysis of the modal and related categories, and addresses a few conceptual issues pertaining to their study from a cognitive-functional perspective. Section 2.1 introduces the concept of the hierarchical organization of qualifications of states of affairs. Section 2.2 sketches the basic orientation adopted in this study in the empirical approach to semantic categories such as the modal/attitudinal ones – a function to form approach. It also discusses the related concept of a semantic paradigm, as a set of expressions of different types/parts of speech (grammatical as well as lexical) offering a functionally diversified range of alternatives for expressing the same basic semantic dimension. Section 2.3 reflects on what the phenomenon of a semantic paradigm implies for the position of qualificational dimensions in human cognition, situating them in the conceptual rather than the

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linguistic systems (*pace* most or all earlier concepts of the qualificational system in the functional and typological literature).

Chapters 3 and 4 zoom in on the question how to define and analyze the semantic category – or the set of categories – traditionally labeled modality, as well as a few related dimensions, situating the matter in the context of the qualificational hierarchy.

Chapter 3 deconstructs the traditional concept of modality, by revisiting current views on it in the functional linguistic literature. In view of the difficulty apparent in the literature to find an acceptable definition of the general notion of modality, sketched in Section 3.1, Section 3.2 offers a detailed scrutiny of the individual modal subcategories. It reviews current views of the traditional core categories of dynamic, deontic and epistemic modality, resulting in a detailed definition and semantic characterization of each of these dimensions. The analysis of deontic modality, especially, results in a characterization that differs substantially from tradition. The section also considers a number of alternative divisions of the traditional field of modality (e.g. the root vs. epistemic distinction), arguing why the basic division in dynamic, deontic and epistemic is the more adequate one. Section 3.3 scrutinizes the most common motivations for considering these categories to form a cluster, arguing that none of them holds water, hence questioning the overarching concept of ‘modality’ as a semantically relevant dimension.

Chapter 4 offers an alternative view of the organization of the field, situated in the context of the qualificational hierarchy. Central to this approach is the question of whether categories express types and grades of speaker commitment to a state of affairs – hence can be called ‘attitudinal’ – or not. The chapter also offers empirical facts and observations in support of this analysis. On the basis of the analysis of their semantic properties, Section 4.1 categorizes epistemic and deontic modality (in its present definition) along with boulomaic attitude (largely absent in the traditional literature) and inferential evidentiality as attitudinal categories, situated in the upper part of the qualificational hierarchy. It classifies dynamic modality, along with categories such as time and aspect, as non-attitudinal, situated in lower zones of the hierarchy. Section 4.2 discusses the issue of the performativity versus descriptivity of categories, which discriminates between the attitudinal and non-attitudinal categories in that it is structurally present in expressions of the former but not of the latter. Section 4.3 analyzes a remarkable observation, which also differentiates between the attitudinal and non-attitudinal categories: the existence of strong restrictions on the combinability of expressions of any two of the attitudinal dimensions in a clause. The search for an explanation leads into an exploration of the cognitive status of the qualificational hierarchy, and of what the conceptual processing of the dimensions at different levels in it might involve. (Another property distinguishing the attitudinal from the non-attitudinal

categories, viz. their special sensitivity to the dimension of subjectivity vs. intersubjectivity, is discussed in Chapter 6.)

Chapters 5 and 6 widen the perspective, by addressing a series of categories and dimensions that have often been associated with the attitudinal categories and/or show clear interactions with them yet can arguably not be considered to belong in the qualificational hierarchy but must be assumed to pertain to other dimensions of the cognitive systems for language use.

Chapter 5 deals with three (sets of) notions and phenomena drawing in very different dimensions of the cognitive systems. Section 5.1 is devoted to the analysis of a few categories that in traditional analyses are often/usually considered part of modality: directivity, as the central concept in nearly all traditional definitions of deontic modality (i.e. as cast in terms of the notions of permission and obligation), and volition and intention, as more controversial members of the traditional notions of deontic or dynamic modality. These are argued to pertain to action planning, as a separate cognitive system that deals with illocution and the conception of speech acts. The section also sketches how these three notions can be taken to concern consecutive steps in the action planning process. Section 5.2 addresses the phenomenon of linguistic expressions seemingly combining different attitudinal meanings, which thus challenge the discussion regarding the combinability of attitudinal dimensions in Section 4.3. The main focus is on one such expression, Dutch *vrezen* (fear). By means of a corpus investigation this form is shown not to involve two attitudinal dimensions, but only one (boulomaic or deontic modality) combined with an element of discourse contrast (countering an expectation raised in the preceding discourse). This draws in the cognitive mechanisms of discourse organization and planning. The discussion extends to comparable expressions (such as *threaten*) and notions, however, which are argued to be explicable in terms of only one attitudinal dimension as well. Section 5.3 disassembles the traditional notion of evidentiality, arguing that the dimensions of experienced and hearsay are, unlike inferentiality, not attitudinal or even qualificational, but deserve a separate semantic, hence cognitive, status. It moreover discusses the dimension of (recollecting from) memory as a – in the literature – largely disregarded category of the same type as experienced and hearsay.

Chapter 6 is devoted to the concept of subjectivity, as a notion that figures centrally in analyses of modality, and to its ties with related dimensions including mirativity. Section 6.1 scrutinizes traditional views of the distinction between subjective and objective modality and proposes an alternative analysis in terms of the concept of subjectivity versus intersubjectivity, defined along different lines. Section 6.2 compares this alternative notion with two other concepts of subjectivity prominent in the current literature, Traugott's and Langacker's. It argues that they address different phenomena, even if they intersect, notably in the range of the modal/attitudinal categories. Section 6.3

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addresses the semantic status of the present notion of (inter)subjectivity, arguing that it is an independent category, which is quite comparable to mirativity. These dimensions are both argued to have a special position as conceptual categories that are not part of the qualificational hierarchy, even if they are closely related to it. The discussion also addresses the position of experienced, hearsay and memory as non-qualificational conceptual categories with yet another status as compared to (inter)subjectivity and mirativity.

Chapter 7, finally, takes us full circle: it returns to the basics of the cognitive-pragmatic approach and of Functional Procedural Grammar, with a focus on the principles of depth and dynamism and the issues emerging from them for functionalist and cognitive linguistic approaches as defined in Chapter 1. It considers some consequences from the analyses in the preceding chapters for these issues. Section 7.1 ties together the lines of argumentation in this book regarding the crucial role of conceptualization in the analysis of qualificational and related categories, and by extension for the analysis of any linguistic phenomenon (cf. the principle of depth, and the disregard for it in many traditional functionalist approaches). It reflects on the implications for our understanding of human conceptualization, and on the role research on language can play in the further exploration of this issue. It argues moreover why it is necessary to separate linguistic and conceptual semantics in a model of language use, *pace* the tendency in at least some cognitive linguistic approaches not to do so. Section 7.2 rounds up the considerations in the book regarding the position of the qualificational hierarchy in cognition. It argues why the system must be assumed to be exclusively conceptual, hence is not (also) part of the linguistic systems (*pace* traditional views in the functionalist literature). The discussion further underscores the need for a dynamic and interactive concept of grammar, going far beyond the types of processing commonly assumed in traditional functionalist models (cf. the principle of dynamism). This matter is also central in Section 7.3, which focuses on the contrast raised in Chapter 1 between a processual concept of grammar (assumed in most traditional functionalist approaches, and in Functional Procedural Grammar) and a constructionist concept of grammar (predominant in cognitive linguistic approaches). The discussion reviews the main arguments put forward in the cognitive linguistic literature against a process concept and in favor of a constructionist concept, and reflects further on the implications of the analyses in this book for our view of grammar.

## 1 The Cognitive-Functional Approach

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### Overview

This first chapter offers an overview of the essentials of the cognitive-functional view adopted in this book and situates the approach in the wider field of language studies. In the course of this it also introduces the general theoretical issues of concern in this book.

Section 1.1 formulates the basic insights underlying the cognitive-functional approach and the principles drawn from these for developing a theory of language. Section 1.2 situates this perspective in the field of functionalist and cognitive approaches in current linguistics. It highlights the importance in language research of an active concern with conceptualization and of assuming a dynamic relationship between conceptual and linguistic structures and processes, and it points out the different practices in this regard in the two strands. Section 1.3 presents the rudiments – a blueprint – of a model called Functional Procedural Grammar, which will serve as our guide and blackboard throughout this book, and which will be elaborated later on the basis of the findings and discussions in the course of the investigations.

### 1.1 Basic Principles

#### 1.1.1 *Language as a Cognitive System for Communication*

Let us first summarize in a nutshell the essence of the cognitive-functional approach (discussed more elaborately in Nuyts 1992, 2001a), as the theoretical perspective underlying this study.<sup>1</sup> The starting point is the realization that understanding language inevitably means accounting for two elementary facts about its nature. They are both essential for the characterization of the phenomenon of language and should therefore be taken as the basis for all aspects of the

<sup>1</sup> The labels ‘cognitive-functional’ and ‘cognitive-pragmatic’ are gaining popularity in current linguistics, but they are used to refer to quite different and sometimes even hardly compatible approaches. A prominent example of an approach often called ‘cognitive-pragmatic’ yet fundamentally different from the present is Relevance Theory (e.g. Sperber and Wilson 1986, Carston 2002). The present approach should not be confused with any of the other approaches sailing under this flag.

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scientific concern with it, from the level of the analysis of individual linguistic phenomena up to the level of the development of a general theory and model of language and language use. These two facts, and their most direct implications, are:

- *A functional system:*

Language is a functional system, primarily meant to allow communication among humans. Hence the linguistic system must be organized and operate such that it can be used for that purpose.<sup>2</sup>

- *A cognitive system:*

Language is a highly complex type of systematic purposeful behavior produced by the human organism. Hence it must be caused by a sophisticated cognitive apparatus, which is somehow implemented in the brain.

These facts are not unrelated, however: they are two sides of the same coin. They concern complementary, equally important, gestalt characteristics of one and the same phenomenon. Hence they should go hand in hand in setting the goals for and in guiding the development of a theory and a theoretical model of language use. In other words:

- *A functional and cognitive system:*

Language is a behavioral system for communication among humans. Hence it must be caused by a cognitive apparatus that is organized and operates such that it can serve this purpose.<sup>3</sup>

A theoretical model of language must reveal how this works. This is what a cognitive-functional approach aims to do.

<sup>2</sup> Language is used for other, what may be called noncommunicative, purposes as well, such as artistic language play or talk to self. But these are secondary uses. From the perspective of phylogenesis and ontogenesis, and even in terms of real-time performance, they are derived from the basic communicative use. Some have argued that language is also used for the purpose of thought (cf., e.g., Chomsky 1975, Harman 1975, Dascal 2002, 2003, or, very recently, Everett 2012; see also Dascal 1996). Yet this claim is highly questionable, as argued in Nuyts (2012b) (see also Sections 2.3 and 7.1). Whatever one's view on these issues, however, the basic fact remains that language is also, and very heavily, used for communicative purposes, hence must be built such that it is suited for this kind of usage. (See Nuyts 1993a, 2012b.)

<sup>3</sup> This is a fact irrespective of the question of the origins of the cognitive systems at stake. There are compelling reasons to assume that the characterization 'be organized' in the previous discussion is not only a state description, but also a resultative description: the cognitive systems for language most probably emerged due to, and in their evolution were molded by, pressure from the functional needs of communication, phylogenetically and ontogenetically (cf. Nuyts 1992, Hurford 2007, Tomasello 2008). This is not the only imaginable scenario, though. No matter how unlikely it sounds, in principle one could assume that preexisting cognitive systems at one moment were found suitable for the purpose of communication and were put to use for it. Even in the latter scenario, however, the systems must be suitable for, hence must be shaped and function such that they allow, this kind of usage. The correlate between the function and the system is inevitable and must be accounted for by a model of the cognitive systems for language use.



## 1.1 Basic Principles

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The use of the term ‘facts’ to refer to these basic tenets is deliberate: it concerns straightforward, commonsense observations about language. Hence making a point of them may seem trivial. It is not, however, if one considers that through the history of language research there have been scholars and traditions that have disregarded or even explicitly denied either or both of them,<sup>4</sup> and if one observes that few research traditions live up to the full range of demands that the combination of the two facts imposes on the scientific study of language (see Section 1.2).

### 1.1.2 *The Principles of Depth and Dynamism*

The cognitive-functional perspective as characterized in the preceding section defines in very broad terms what a theory and model of language should assume and be about. This characterization is pre-theoretical. It only sets the stage from where the development of a plausible theory and model can start. The combined fact that language is a functional and a cognitive system has numerous consequences and implications, which considerably narrow down the possibilities for such a theory/model.

Two fairly immediate consequences are particularly relevant in view of the current state of the art in language research. It still concerns very general, phenomenological and prototheoretical concepts. In principle, they appear to be accepted fairly widely in current language research, at least among scholars who adhere to the basic tenets of language as a cognitive and a functional system. But they are probably not accepted by all such scholars, and/or not all scholars who accept them are fully aware of, or agree on, their implications for linguistic theorizing and modeling. They are cornerstones of the present approach, however, and they determine the way the linguistic phenomena at stake in this book are analyzed. For ease of reference, they will be called ‘principles,’ a label that renders the fact that they should be considered basic guidelines and evaluation criteria for developing a theory/model of language. Specifically, they will be called the ‘principle of depth’ and the ‘principle of dynamism,’ respectively. Here is a brief preliminary definition. (A more detailed view of what they involve will gradually emerge in the course of this study. See also Nuyts 2001a: 5–21 for elaborate discussion.)

#### *The Principle of Depth*

Language – and ipso facto the cognitive machinery dealing with linguistic structures – is not an isolated, stand-alone system. Language is a means to communicate, and communication is a matter of transferring information (in a

<sup>4</sup> Two examples that immediately come to mind are the Bloomfieldian structuralist tradition, which denied the cognitive reality behind linguistic behavior, and the Chomskyan generative tradition, which denied the functional nature of language. Both concern paradigms that have dominated the field of linguistics for considerable periods in its history.

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very broad sense) between human minds.<sup>5</sup> Consequently the linguistic systems in cognition must inevitably closely interact and collaborate at least with the (in metaphorical terms) ‘deeper’ cognitive systems responsible for making sense of the world and for handling acquired information and knowledge about it – in other words, the cognitive systems for conceptualization and thought (defined as reasoning with conceptual knowledge).<sup>6</sup> For language research this means that one cannot afford to concentrate exclusively on linguistic form and how it is handled by the linguistic systems in cognition. One is forced to also actively deal (at least) with how the mind handles information and meaning, and how the linguistic systems relate to and interact with the conceptual systems doing this.<sup>7</sup> This is the only way to ensure that one achieves a balanced theory of all subsystems involved in communicative behavior.

*The Principle of Dynamism*

Communicative activity, hence language use, is a dynamic phenomenon in many respects. Communication is a complex problem solving activity involving several different, often conflicting concerns, such as pursuing one’s intentions, adjusting to the hearer and the communicative setting, and dealing adequately with the information (world knowledge) relevant for the interaction (cf. Nuyts 1993a). Moreover, communicative situations all differ, some only minimally, others substantially, and each time the communicator has to readapt to the new and changing circumstances. Hence the cognitive apparatus for language use, as a device used to perform the communicative acts, is inevitably a highly context-sensitive, flexible and adaptive usage system. Using the system is, in itself, not selfevident either, however: communicating is often hard labor, not only in terms of interpreting the situation correctly and deciding how to act adequately, but also in terms of getting the shape of the linguistic acts right in view of what one wants to communicate, and how one wants to do this. Hence this can go wrong (and in practice it often does go wrong, to varying degrees) in the sense that, in spite of an adequate assessment of the situation and of what to do, speakers do not always

<sup>5</sup> Communication is much more. It is a way for speakers to pursue their wider intentions, to build and maintain social structure, etc. These facts are not incompatible with the fact that communication is a matter of information transfer, though. They concern the role of communication at a higher level of analysis. It is through the transmission of information, or through making meaning, that communication serves these higher, more fundamental, purposes. See Nuyts (1993a, 1994).

<sup>6</sup> The conceptual systems are metaphorically deeper in the sense that they, or their output, only surface in human behavior through the mediation of symbolic systems such as language, or only result, without really surfacing, in motor action. Hence, from a scientific observational perspective, they are only indirectly accessible.

<sup>7</sup> There are yet other – albeit from a theoretical perspective maybe not equally critical – cognitive systems that need to be taken into account in order to achieve a full-fledged theory of the cognitive systems involved in linguistic behavior, though. An obvious one is the gestural, which also closely interacts with the linguistic systems in language use (cf. McNeill 1992, 2000, Kendon 2004).