CHAPTER 1 | Introduction

In my opinion, everything should be kept in view, form, function, and
meaning.

—Jespersen (1924: 60)

THE CENTRAL TOPIC OF the present study is, in the broadest sense, *transcategorial
shift* or *category change*: the phenomenon in which a linguistic item "shifts" or
"changes" categories. In a somewhat narrower sense, the main focus and aim
of this study is to offer a new perspective on perhaps the best-known types of
transcategorial shift, commonly referred to as *nominalization* and *verbaliza-
tion*, and to present the first elaborate attempt to determine what it "means" to
nominalize or to verbalize.

In essence, the terms *nominalization* and *verbalization* mean "turning into
a noun" and "turning into a verb," respectively. These definitions seem fairly
simple and straightforward, and yet, "turning into a noun/verb" comprises a
variety of different phenomena with different outcomes, and the terms refer to
different linguistic mechanisms when interpreted as a synchronic operation,
or a diachronic process. Consider, for instance, the examples in (1) and (2). The
construction in italics in (1) is an example of a "nominal gerund," which struc-
turally resembles a typical nominal structure in English. The construction in
italics in example (2), on the other hand, is an example of a "verbal gerund,"
which has the internal structure of a non-finite clause:

(1) Campaigns are being waged against the Republic of Korea, where
laws forbidding *the eating of cats and dogs*, the latter a traditional
source of medicinal potency, are openly flouted. (BNC)

(2) The population, though reduced to *eating cats and dogs*, fought back,
however, so long as their ammunition lasted. (BNC)

Nominal and verbal gerunds, while structurally very different, are both
instances of *synchronic* deverbal nominalization, i.e., the synchronic process
where a verbal stem is used in a nominal configuration. From a *diachronic*

perspective, however, the verbal gerund is in fact the result of diachronic *verbalization* of the nominal gerund, which existed long before its verbal counterpart (see Tajima 1985: 111–113; Fischer 1992: 252). Verbalization (and nominalization for that matter) in this diachronic sense is to be understood as a historical process in which a form gradually acquires verb-like (or noun-like) characteristics, often combined with the loss of features of its original category (Malchukov 2004: 119). Thus, it appears that there are different types of deverbal nominalizations, which can acquire different degrees of nominal or verbal/clausal "categoriality" as they change over time.

Transcategorial shift—in particular, nominalization, but also, to a lesser extent, verbalization—has been a "hot topic" in linguistics for decades (Malchukov 2004: 3), but the vast majority of studies seem to deal with the phenomenon only in its synchronic sense. Yet, transcategorial shift in its diachronic sense is a cross-linguistically well-attested phenomenon: constructions that are synchronically defined as deverbal nominalizations are fairly often subjected to diachronic verbalization, acquiring more verb-like features over time, or diachronic nominalization, acquiring more noun-like features over time (Disterheft 1981; Haspelmath 1989; Demske 2002; Malchukov 2004; Hartmann 2014; Givón 2015). In his monograph on nominalization and verbalization, Malchukov (2004) sets out several feature hierarchies that predict which properties of the nominal or verbal class will be lost or acquired first when a linguistic item shifts from one class to another. Subsequently, he explicitly places diachronic category shift on the map by suggesting that his proposed synchronic formal feature hierarchies can also be interpreted as steps in a diachronic process (Malchukov 2004: Ch. 12). Still, while the existing descriptions of diachronic nominalization/verbalization are quite exhaustive and satisfying in setting out the formal or *morphosyntactic* changes involved in the process, they tend to reveal very little about what the processes entail on a *functional* and *semantic* level. The contribution this study makes to the under-researched topic of diachronic nominalization and verbalization is to show that constructions can become more nominal or verbal (or clausal) over time in terms of their functional behavior as well.

More specifically, the aim of the present study is twofold, and can be divided into an aim of a more theoretical nature, and one of a more methodological and descriptive nature. The theoretical aim is to present a model that allows us to study diachronic nominalization and verbalization not just as morphosyntactic processes, but also as processes that involve changes in functional-semantic categoriality. In other words, the aim is to study nominalization and verbalization in a way that keeps "everything" in view: **form**, as well as **function** and **meaning**. The methodological and descriptive aim is to operationalize this form-function model and apply it to one of the most intriguing categorially hybrid structures in the history of English: the English gerund.

1.1. Theoretical Aim: Modeling and Measuring What It "Means" to Nominalize/Verbalize

In the simplest terms, the first theoretical aim is to underscore that the concepts of *nominalization* and *verbalization* are not just synchronic operations; they can also describe diachronic processes. The second aim is to show that these diachronic processes can comprise morphosyntactic changes as well as functional-semantic changes.

In trying to achieve the first theoretical aim, as briefly pointed out in the preceding, we already find ourselves in good company: while nominalization and verbalization are indeed most frequently described as synchronic operations, there is a reasonable number of studies that have described *nominalization* and *verbalization* as the diachronic processes of becoming more like a "typical" noun or verb respectively (for a general, typological study, see Malchukov 2004; for specific case studies, see, among others, Disterheft 1981; Haspelmath 1989; Demske 2002; Hartmann 2014; Givón 2015; and the long list of accounts of the verbalization of the English gerund, including Jespersen 1940; Mustanoja 1960; Emonds 1973; Visser 1973; Tajima 1985, 1996, 1999; Donner 1986; Jack 1988; Houston 1989; Van der Wurff 1993; Fanego 1996a, 1996b, 1998, 2004a; Tabor and Traugott 1998; Miller 2002).

Achieving the second aim of this study, on the other hand, appears to pose a much meatier challenge, because it involves describing the relation between the formal characteristics and the functional-semantic or "notional" properties of lexical categories like noun and verb. The issue with describing form-function relations in a process of diachronic nominalization/verbalization is that it relies on the (quite controversial) idea that the formal features of lexical categories correlate with—or even systematically "reflect"—their functional and semantic properties. Still, the only successful recipes to describe nominalization and verbalization as functional-semantic diachronic processes must contain at least two crucial ingredients: first, we should start from the assumption that lexical categories have a "notional basis" of some sort; and second, we should aim at description of what that "notional basis" entails.

The idea that morphosyntactic variation within lexical categories reflects different degrees of functional-semantic extension from the categorial prototypes (and, by extension, that morphosyntactically "hybrid" elements that show features of two different categories reflect functional-semantic hybridity) has been programmatically posed in a great number of cognitively and functionally oriented approaches to grammar (e.g., Langacker 1987a, 1987b, 1991; Croft 1991, 2001; Taylor 1995, 1998, 2003). Langacker (2008b: 572), for instance, argues that nominal and clausal structures do not simply differ in terms of their formal features, but also reflect two different types of "construal" or "moment-to-moment experience": when the language user opts for a nominal structure they aim to represent the concept as something that is "holistically" or "summarily scanned" (like a photograph capturing a single point in time),

whereas clauses present "processually" or "sequentially scanned" situations (comparable to a film capturing a dynamic experience with a temporal dimension). Interestingly, Langacker (2008b: 576) also briefly suggests that "scanning" is gradient in nature when he states that a processual conception "is fully manifested" with a finite clause, but can be "diminished" or even "wholly suppressed" in non-finite structures (e.g., *to*-infinitives, gerunds, participial clauses, etc.). Unfortunately, at present, more in-depth discussions on the relation between structural and functional-semantic categoriality have mainly taken a quite general and coarse-grained perspective, positing relatively sharp conceptual distinctions between lexical categories (Croft and Baker 2017: 180–181), and sometimes lumping all "categorially intermediate structures" in a single group to describe "categorially hybrid function" (Croft 1991, 2001).

As will become evident as its narrative progresses, the present study will present a theoretical model that is functionalist, in that it assumes that lexical categories have a functional-semantic basis. The way in which this functional-semantic basis is defined in that model is considerably informed by the previously mentioned "contrastive" accounts, like Cognitive Grammar, but at the same time it also brings in perspectives from typologically oriented functionalists who more explicitly posit "a continuum of finer-grained semantic categories ranging from the most 'nouny' to the most 'verby'" (Croft and Baker 2017: 181). This model can serve as the foundation for the study of functional-semantic (diachronic) transcategorial shift of nominalized constructions, as it sets out what can be considered the functional-semantic basis for the nominals and clauses, and provides a way of studying (and "measuring," if you will) functional-semantic nominality and verbality/clausality. By extension, it also allows one to examine the relation between (diachronic changes in) a construction's degree of morphosyntactic categoriality (i.e., the extent to which it *formally* resembles prototypical members of a category) and its degree of functional-semantic categoriality (i.e., the extent to which it takes on the *functional-semantic* features exhibited by prototypical members of a category). In the spirit of contemporary cognitive linguistics and probabilistic grammar (see, among many others, Bod et al. 2003; Hoffmann 2006, 2010; Bresnan et al. 2007; Gries 2013; Szmrecsanyi 2013), the model takes "meaning" to be multifaceted and, crucially, multidimensional. Thus, the model decomposes the schematic notional definition of nouns and verbs (as offered by, for instance, Langacker 1989) into a number of abstract functional-semantic features, i.e., conceptual dependence, stativity, persistence, sequentiality, and discourse-manipulability. In a first attempt to elaborately tackle the issue of how to model and measure categorial gradience on the semantic-conceptual level, then, it will be suggested that a construction's degree of functional-semantic nominality or verbality/clausality has to do with the probability or likelihood that it will occur with nominal or verbal/clausal functional-semantic values for these abstract features. As such, the model offers a way to scrutinize the functional-semantic features of the large and structurally diverse group of nominalized constructions headed by non-finite verbs in English, and takes the

first steps toward bringing about more fine-grained observations about form-function relations in categorical gradience. These observations, in their turn, can feed into our understanding of gradual diachronic changes in categoriality.

1.2. *Methodological Aim: Operationalizing the Model*

Of course, theory means very little without data to apply it to. Besides the sparsity of detailed claims regarding the functional-semantic properties of categorially hybrid structures, we are also confronted with the fact that, thus far, no in-depth attempts have been made to empirically verify or examine such claims in corpus data (cf. Rosenbach 2006: 112). The methodological novelty of this study, then, is that it offers a way of **empirically testing** a construction's nominal or clausal functional-semantic values by determining in which kinds of "symptomatic" usage patterns it occurs, and applies it to an authentic case of diachronic categorial shift.

The case addressed in the present study is the well-known (and ever-intriguing) history of the English gerund. As already illustrated in examples (1) and (2)—repeated in the following—the present-day system of gerunds is made up of two major subtypes: the "nominal gerund," which structurally resembles the class of nominals, and the "verbal gerund," which has the internal structure of a non-finite clause.

(1) Campaigns are being waged against the Republic of Korea, where laws forbidding *the eating of cats and dogs*, the latter a traditional source of medicinal potency, are openly flouted. (BNC)

(2) The population, though reduced to *eating cats and dogs*, fought back, however, so long as their ammunition lasted. (BNC)

Before 1250, however, deverbal nouns in *-ing(g)(e)* were all structurally unambiguously nominal (Kisbye 1971: 55). Around 1300, the English gerund started showing the first signs of clausal syntax, taking adverbial modification and true direct objects instead of periphrastically realized participants. This "morphosyntactic verbalization" of the English gerund has been studied extensively over the past decades, leaving us with a relatively clear picture of which formal changes occurred at what time (Jespersen 1940; Mustanoja 1960; Emonds 1973; Visser 1973; Tajima 1985, 1996, 1999; Donner 1986; Jack 1988; Houston 1989; Van der Wurff 1993; Fanego 1996a, 1996b, 1998, 2004a, 2004b; Tabor and Traugott 1998; Miller 2002; Malchukov 2004: 119–121; Kranich 2006).

Interestingly, a number of more recent approaches to synchronic variation and diachronic change in the English gerund have convincingly shown that much can be gained from systematically comparing the structural variants in the English gerundive system from a functionally oriented perspective. Until recently, comparative accounts of nominal and verbal gerunds did not devote much attention to the "function" or "meaning" of the two different forms, or they came up with vague semantic labels—such as "action" for nominal

gerunds and "fact" for verbal gerunds—which fail to distinguish between them (Heyvaert 2008). Heyvaert (2003, 2008; see also Schachter 1976) suggested a more fine-grained functional-semantic classification for Present-Day English gerunds based on a more cognitive, "conceptualist" approach to meaning. Approaching the changing variation between nominal and verbal gerunds in Middle and Early Modern English in a similar spirit, De Smet (2008a, 2008b, 2013) made a first suggestion as to what motivates the rise of verbal gerunds. He argued that the rise and spread of verbal gerunds basically consisted in the large-scale replacement of their functional competitor (also see Nevalainen et al. 2011), i.e., nominal gerunds that functionally behaved as bare abstract nouns, by highlighting that verbal gerunds are more economic (i.e., shorter) and syntactically more versatile. Thus De Smet (2008a, 2008b) sets out the first functional explanation of why verbal gerunds emerged, and why they came to replace nominal gerunds.

Given the fact that ample attention has been devoted to the changing degree of nominality and verbality/clausality of the English gerund on the *formal* level, the analyses presented here will predominantly continue to elaborate on the functional-semantic side of the story in a number of case studies, in order to reveal whether the observed morphosyntactic changes that affected the English gerund are accompanied with functional-semantic changes. Besides the specific descriptive contributions of each individual case study, the overarching value of these case studies is that they all contribute to attaining the theoretical aims of this study: each case study adds a puzzle piece to the first elaborate attempt to define the abstract functional concepts associated with the nominal and verbal/clausal class as concrete "symptomatic" usage patterns that can be tested in corpus data.

At the same time, the case studies also illustrate the value of adopting a multilayered approach to function and meaning. Precisely because the present study considered the functional-semantic profile of linguistic items (whether they be abstract concepts like "noun," "noun phrase," "verb," or "clause," or highly specific instantiations like *Kim's meticulous cutting up of the strawberry cheesecake*) as multifaceted and multidimensional, it helps address remaining unanswered questions pertaining to, on the one hand, the historical development of the English gerund, and more general questions concerning the functional-semantic principles governing (diachronic) language change and (synchronic) language structure, on the other. While perhaps not explicitly named as such, the English gerundive system used to comprise a "syntactic alternation" (Fonteyn 2017), in that it contains (broadly speaking) two structurally different patterns that can be used to say the same thing (*the eating of cats and dogs* vs. *eating cats and dogs*). In recent decades, such cases of syntactic alternation (most famously, the genitive alternation *a girl's smile* vs. *the smile of a girl* and the dative alternation *She gave him the last copy* vs. *She gave the last copy to him*) have been scrutinized from a diachronic perspective, often leading to the conclusion that "unconditioned" variation in the language system is undesirable and evokes a restructuring of form meaning-mappings so that the

functional-semantic overlap between forms is reduced. However, if nominal and verbal gerunds "compete" (Berg 2014) over the same functional domain (De Smet 2008), and, if languages ideally strive for system minimization (pursuing the goal of having one—and only one—linguistic form linked to one unique meaning, following the principle of contrast; see Croft 2000), one would expect that the more economic and syntactically more versatile verbal gerund would eventually have replaced the nominal gerund entirely, which, apparently, has not happened. As such, even the most recent functional accounts do not fully explain why the structural variation in the English gerunds persists into Present-Day English.

1.3. *Chapter Overview*

The present study is structured as follows: Part I contains two chapters that address the more general topic of transcategorial shift. First, Chapter 2 discusses and problematizes the literature dealing with the formal and functional features of the major grammatical categories noun and verb. This discussion will lead to the presentation of a theoretical model of functional-semantic nominality and verbality/clausality, which will serve as the basis for further investigation of the functional-semantic organization of the English gerundive system. Chapter 3 gives an overview of the history of the English gerund, describing the attested morphosyntactic developments and assessing the functional explanations that have been provided to explain the observed changes in its structural makeup. At the end of Chapter 3, a different functional approach to the history of the English gerund will be presented, which is based on the functional-semantic model of categoriality presented in Chapter 2. Here, it will be set out how the abstract nominal and verbal/clausal functional values can be defined as testable symptomatic usage patterns.

Part II, the empirical part of this study, will further define and examine these symptomatic usage patterns in a number of case studies. The first case study, presented in Chapter 4, investigates how nominal and clausal constructions differ in terms of their reference and grounding strategies. In earlier stages of English, both nominal and verbal gerunds could rely on so-called indirect clausal grounding to establish their referent, receiving a specified subject as well as a temporal location from the matrix clause in which they are embedded (e.g., both *He closed the deal* [*by signing the contract*] as well as [*by signing of the contract*] were possible). While present-day verbal gerunds still frequently rely on indirect clausal grounding, nominal gerunds lost this grounding strategy in Modern English and presently exclusively use nominal grounding mechanisms (i.e., (in)definite articles, possessives, demonstratives) to establish reference (e.g., [*The/His*] *signing of the contract*).

In Chapter 5, nominal and verbal gerunds are considered in light of their discourse-functional behavior. It is argued that, due to their different status in discourse, nominals are anaphorically tracked in their entirety, while clauses

are anaphorically accessed for their internal participants (e.g., *Helping refugees is important.* [*It is the right thing to do*] vs. [*They need your help*]). Nominal gerunds seem to increasingly resemble prototypical nominals in this respect, while verbal gerunds retain a clause-like internal accessibility.

Chapter 6 investigates the differences between nominal and verbal gerunds in terms of their aspectual potential, showing that, compared to verbal gerunds, nominal gerunds prefer a temporally bounded or "completed" construal (e.g., *What happened after [the taking of Berlin] at the end of WWII?*) over ongoing or "sequential" construal (e.g., *She is working on* [*writing her first book*] vs. ? *She is working on* [*the writing of her first book*]), which is in line with their nominal categorial status.

In Chapter 7, it is shown that nominal and verbal gerunds differ in terms of their preferences for the type of verb that forms the head of nominal and verbal gerunds, with the more clause-like verbal gerund being more likely to be formed with a semantically light—and hence highly conceptually dependent—verb (e.g., *Taking a shower* vs. **The taking of a shower*). Chapter 7, finally, also considers the semantic differences and similarities between *ing*-nominals with nominal and clausal structure from a broader perspective, including deverbal nominalizations in *-ing* that do not refer to events (and hence are not traditionally considered as nominal gerunds).

The final part of this study, Part III, contains its concluding chapter (Chapter 8), which synthesizes the results of the preceding analyses. Somewhat surprisingly, the most important functional-semantic categorial shift that has taken place within the English gerundive system did not affect the morpho-syntactically verbalizing component; instead, it affected the "original" nominal gerund, which started to functionally assimilate to more prototypical members of the nominal class. The concluding chapter will highlight that, in fact, in earlier stages, the English gerund exhibited considerable functional hybridity, using an exclusively nominal form to realize more nominal as well as more clausal functions. With the rise of the verbalized gerund, this functional hybridity started to be gradually sorted out (cf. Van der Wurff 1993), as the verbalized gerund occurs more frequently in more clause-like functional domains, while the nominal form continues to be used in nominal functional domains. What this suggests is that the observed development bends toward a greater *tendency* of diagrammatic iconicity (Haiman 1980), or, at least, a system where classes of similar forms also behave similarly (cf. Haspelmath (2014: 198) on "system pressure").

The overarching picture that will emerge from the various analyses and reflective discussions is that, if we develop and adopt a model of functional-semantic categoriality, we are able to tackle the remaining lacunae in our understanding of this history of the English gerund, and perhaps, in the not-so-distant future, of "categoriality in language change" more generally. However, the model and approach presented and adopted in this study should be understood as a *fleshed-out* first attempt to develop a methodology for studying (changes in) functional-semantic categoriality, but a first attempt nonetheless.

I wish to note here, at the outset, that I by no means believe the proposed model to be fully comprehensive, or the list of investigated usage patterns to be exhaustive.[1] The model and its application are rather intended to breathe fresh air into the idea that lexical categories are functional-semantic concepts. In addition, the present study is also intended to bring the idea that "functional efficiency" in language always means that languages aim to be non-redundant systems consisting of a series of one-to-one form-function pairings. Instead, this study regards a language as a network of constructions, naturally consisting of a variety of structurally different elements that can fulfill the same function and vice versa, and substitutes the concept of *one-to-one* form-meaning mappings with *many-to-many* form-function relations (cf. Beckner et al. 2009; Van de Velde 2014). Taken together, the perspective on the historical development of the English gerund (and, more generally, on language change) offered here is one that aims to fully embrace the multidimensional nature of form-meaning relations, and, in doing so, awards a central position to the concept of categoriality.

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[1] For reflections on expanding the model to include differences between individual grammars and genres, see Fonteyn (2017) and Fonteyn and Nini (2018).