Life of Phi: Phi-features in West Germanic and the syntax-morphology interface

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CHAPTER 1

Introduction

1.1 Introduction

On a large and on a small scale, languages differ. It is evident that Dutch and Korean are entirely different languages, but many speakers of a language are equally aware that in the village 10 kilometres away, people speak very differently indeed. However, as the result of our innate ability to acquire any natural language, all languages must share some properties as well. An important question for linguistics is therefore: what kind of variation do we (not) find, and where in the grammar (e.g. syntax, lexicon) is it located?

In this thesis, I approach these questions by looking at φ-features. Φ-features (person, number, and gender features) provide us with a window onto our mental grammar, because they play an important role in several components of the grammar. Syntactically, φ-features trigger dependencies between elements. For instance, in example (1), both the subject *Anna* and the verb *sings* have third person singular features, as indicated. The verb acquires these features because it is in a dependency relation to the subject, that inherently has third person singular features. Syntactic dependencies of this kind are often morphologically realised as inflection. In the example, the verb inflects with the suffix *-s* to express the third person singular features. Because φ-features are central to both syntax and morphology, we can gain a further understanding of these components of the grammar, and their interactions, by studying φ-features.

(1)   Anna$_{[3SG]}$ sings$_{[3SG]}$

This thesis focuses on variation in the domain of φ-features in non-standard and minority varieties of continental West Germanic. These language varieties show an

abundance of variation related to φ-features. At the same time, they are well documented and well studied. This combination allows us to ask very specific questions about the nature and locus of linguistic variation.

I investigate three empirical phenomena in this thesis. The first is position dependent agreement: verbal agreement that varies depending on the relative order of the subject and the verb. A sentence illustrating position dependent agreement is given in (2): the form of the verb is *leewt* when the subject precedes the verb, but *leew* when the subject follows the verb. Based on a novel analysis of variation in position dependent agreement in Dutch dialects, I show that position dependent agreement provides insight into the representation of grammatical features at the syntactic and morphological components of the grammar.

(2)   As wie sober **leew-t**,   **leew-Ø** wie gelukkig.
      if   we frugal live-AGR, life-Ø   we happily
      'If we live frugally, we will live happily.'   Losser Dutch (DynaSAND)

The second phenomenon I investigate is complementiser agreement, illustrated in (3): in this sentence, the complementiser is followed by a morpheme that expresses the features of the subject of the embedded clause. By looking at what happens when adjacency between the complementiser and the subject is disrupted, I argue that complementiser agreement in Frisian and Limburgian is not agreement, but clitic doubling. Based on this analysis, I show that complementiser agreement informs us about structure building, and the requirements imposed on it by morphological spell out.

(3)   Jan sei dat-st   do fegetarysk ytst.
      Jan said that-2SG you vegetarian eat.2SG
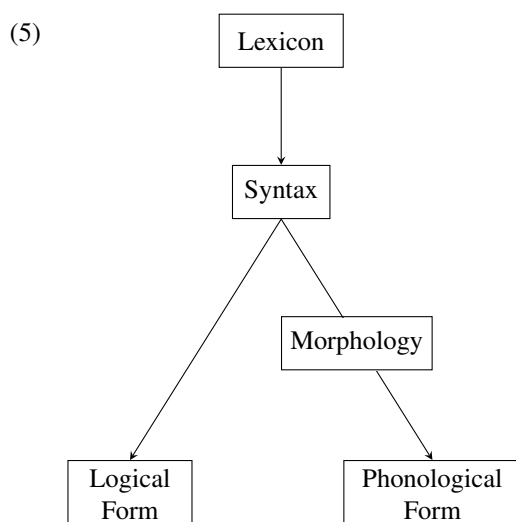   'Jan said that you eat vegetarian.'   Frisian

The final phenomenon I look at is word order in imperative clauses, with a particular focus on verb-second imperatives. An example is given in (4). By connecting verb-second imperatives to the morphology of the imperative verb, I demonstrate that what we traditionally consider (post-syntactic) morphology, can in fact have consequences for syntactic structure.

(4)   Die pruuf   mar is!
      that taste.IMP PTCL PTCL
      'Taste that one!'   Veghel Dutch

1.2   Theoretical and empirical context

The theoretical framework I assume in this thesis is the Minimalist Program (Chomsky, 1993, et seq.). In this framework, syntactic structure is built from the bottom up through recursive application of the operations Merge and Move (or internal Merge). Merge combines two elements with each other to form a constituent. Move remerges an element or constituent that is already present in the syntactic structure. Syntactic dependencies between elements in the structure are created through the operation Agree:

an element with unvalued features (a Probe) looks downwards into the syntactic structure to find an element with matching, valued features (a Goal) that it can Agree with. When the syntactic structure is finished, it is sent off to the interface levels Logical Form and Phonological Form. At Logical Form (LF), the structure is semantically interpreted. At Phonological Form (PF), the structure is phonologically interpreted. Transfer of the syntactic structure to PF is mediated by Morphology, where syntactic feature bundles are replaced by morphemes (lexical items) (cf. Halle & Marantz, 1993). I assume that insertion of morphemes takes place according to the Superset Principle (Caha, 2009; Starke, 2010): a morpheme is inserted if its features match the features in the syntactic structure, or if its features are a superset of the features in the syntactic structure. I elaborate on the insertion mechanism of morphemes in Chapter 2. The architecture of the grammar is schematically represented in (5).

(5)

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        ┌─────────┐
        │ Lexicon │
        └────┬────┘
             │
             ▼
        ┌─────────┐
        │ Syntax  │
        └──┬───┬──┘
           │    \
           │  ┌────────────┐
           │  │ Morphology │
           │  └──────┬─────┘
           ▼          ▼
   ┌─────────┐   ┌──────────────┐
   │ Logical │   │ Phonological │
   │  Form   │   │    Form      │
   └─────────┘   └──────────────┘
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The Minimalist Program pursues the hypothesis that the syntactic component of the grammar is the optimal solution to requirements of the interfaces to LF and PF (*Strong Minimalist Thesis*, Chomsky, 2000, 2001, et seq.). A consequence of this approach is that there is no variation in the syntactic module of the grammar; instead, all surface variation that we see in different languages results from variation in the lexicon (the Borer-Chomsky conjecture, cf. Baker, 2008) or arises at the interfaces to LF and PF. As argued by Kayne (1996, 2005), comparing languages that are closely related to each other is the ideal method to discover the parameters that are responsible for cross-linguistic variation; the idea is that closely related languages are largely the same, and that variation is due to differences on one or a small number of points of variation in the grammar. Identifying these points of variation therefore gives us insight into the nature and locus of linguistic variation.

In this thesis, I apply the microcomparative methodology to continental West Germanic languages, with a focus on dialects of Dutch. In the last couple of decades, a wealth of data have been collected on syntactic and morphological variation in Dutch

and Frisian dialects, in the form of the *Dynamic Syntactic Atlas of Dutch Dialects* (DynaSAND, Barbiers et al., 2006) and the *Goeman, Taeldeman, van Reenen project* (GTRP, De Schutter et al., 2005). These databases form part of the empirical basis of this thesis. The DynaSAND contains data on syntactic and morphosyntactic variation in various empirical domains. In this thesis, I primarily use the data on verbal inflection, complementiser agreement, and topicalisation. The GTRP contains data on variation in the morphology of Dutch and Frisian dialects. I primarily use the data on verbal inflection in this thesis. Both the DynaSAND and the GTRP contain data that are systematically collected on a large scale. The majority of the data in the DynaSAND comes from interviews with two informants in 267 locations in the Dutch and Frisian language area. The GTRP is based on interviews with one informant in 613 locations. For both databases, the informants that were consulted were selected based on age, dialect proficiency, and socioeconomic status (education level or occupational prestige). For more information on the methodology of the DynaSAND and the GTRP, see Cornips and Poletto (2005), Barbiers and Bennis (2007) and Barbiers et al. (2007) (for DynaSAND) and Goeman and Taeldeman (1996) (for GTRP). The DynaSAND and the GTRP are publicly available on meertens.knaw.nl/sand and meertens.knaw.nl/mimore.

In addition to using data from databases, I have collected novel data whenever the available data were not sufficiently detailed to answer all questions about the phenomena I investigated. I will elaborate on the method of data collection in the chapters. Throughout the thesis, data points without a reference are the result of my data collection.

1.3   Overview of the thesis

In **Chapter 2**, I focus on position dependent agreement in Dutch dialects. An example was given in (2), and is repeated in (6). Looking at over 200 verbal paradigms, I show that the majority of the variation can be reduced to 6 different paradigms. To account for the variation between these 6 paradigms, I present a new analysis of position dependent agreement, that places the locus of variation on the features associated to the C head.

(6)   As wie sober **leew-t**,   **leew-Ø** wie gelukkig.
       if   we frugal live-AGR, life-Ø we happily
       'If we live frugally, we will live happily.'   Losser Dutch (DynaSAND)

Based on the analysis of position dependent agreement, I provide a novel argument that φ-features are uni-valent and organised in a φ-feature geometry. This is the first important result of the chapter, and shows that we can see the effect of linguistic universals in microvariation (cf. Harley & Ritter, 2002). I show that the φ-feature geometry is syntactic. However, patterns of syncretism suggest that the representation of φ-features is bi-valent in morphology. In order to resolve these conflicting results, I propose that the representation of φ-features differs across modules: φ-features are uni-valent and geometrically organised in syntax, but bi-valent in morphology. This

shows that syntax and morphology are distinct modules, operating on distinct structures.

In **Chapter 3**, I look at complementiser agreement, focusing on cases where an element intervenes between the complementiser and the subject it agrees with. In many languages, complementiser agreement is disrupted in this context. In Frisian, intervention of this kind leads to ungrammaticality (7). In Limburgian, intervention causes the agreement morpheme to be realised to the right of the intervener, instead of on the complementiser (8).

(7) * Jan sei dat-st   ek do fegetarysk ytst.
      Jan said that-2SG also you vegetarian eat.2SG
      'Jan said that you, too, eat vegetarian.'   Frisian

(8) Jan zei dat auch-s   tich waal ens   vegetarisch uts.
     Jan said that also-2SG you sometimes vegetarian eat.2SG
     'Jan said that you, too, sometimes eat vegetarian.'   Limburgian

Based on a detailed investigation of the complementiser agreement morpheme, I argue that it is not an agreement morpheme, but a clitic. I propose a novel analysis of complementiser agreement, arguing that it is clitic doubling. This analysis accounts for the intervention effects in (7) and (8): In Frisian, the intervening element occupies the position that the clitic wants to move to. Because there cannot be two elements in one position, this leads to ungrammaticality. In Limburgian, I show that the clitic moves to a position below the intervening element, which leads to the observed shift of the complementiser agreement morpheme.

Based on the analysis, I argue that clitic doubling is a two-step operation. Both steps of the clitic doubling operation can fail independently depending on the syntactic context, leading to different outcomes. The analysis of complementiser agreement as clitic doubling also has empirical implications for the typology of partial *pro*-drop, because the examples of partial *pro*-drop with complementiser agreement, should in fact be treated as involving a clitic pronoun.

In **Chapter 4**, I investigate word order in imperatives in varieties of Dutch, and German. In Eastern Dutch dialects and German, imperatives can have a verb-second word order, illustrated in (9).

(9) Die pruuf   mar is!
     that taste.IMP PTCL PTCL
     'Taste that one!'   Veghel Dutch

I show that all varieties that allow verb-second imperatives also have verbal umlaut. Based on an investigation of the properties and distribution of verbal umlaut, I argue that verbal umlaut is suppletion conditioned by person features. Because the form of the imperative verb is always the same as a verbal form from the umlauting paradigm, I propose that the imperative verb in varieties with verbal umlaut is specified for person features. I argue that the imperative verb can therefore license the silent imperative subject. In varieties without umlaut, the imperative subject is licensed by a covert element from the preverbal position, which causes the imperative to

be verb-first. In varieties with umlaut, the preverbal position is free, and can be taken by another element, leading to a verb-second imperative. In short, the analysis shows that φ-features on lexical items can be used to license the imperative subject, and as a result, restrict syntactic movement.

Chapter 5 contains a summary of the thesis, focusing on the results and implications.