# ICELANDIC QUIRKY AGREEMENT RESTRICTIONS: EVIDENCE FOR PHI-DEFECTIVE T IN QUIRKY SUBJECT CONSTRUCTIONS

by

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## ABSTRACT

This thesis proposes a novel defective T analysis for explaining two facts about Icelandic quirky subject sentences. First, in Icelandic quirky subject sentences, the verb agrees with the nominative object rather than with the subject (1). Second, 1st and 2nd person nominative objects are blocked completely in Icelandic quirky subject sentences (2).

- 1. Henni leiddust strákarnir. her.DAT.3SG bored.**3PL** the boys.NOM.**3PL** 'She found the boys boring.'
- 2. \* Henni leidd-umst/-ust/-ist við. her.DAT.3SG bored.1PL/3PL/DFT we.NOM.1PL 'She found us boring.'

Based in a Minimalist Program framework, I argue that T in quirky subject sentences is  $\varphi$ -defective, lacking [Person]. I also describe three potential alternative Minimalist analyses of Icelandic: (i) a  $\varphi$ -stacking analysis based on Richards' case-stacking; (ii) a complex dependency analysis from López; and (iii) a split  $\varphi$  probe analysis supported by Sigurðsson and Holmberg. All of these alternatives come with additional theoretical baggage that makes them suboptimal for explaining the quirky Icelandic facts. I also show how previous analyses of Icelandic all fail to adequately explain the data.

In my novel defective T analysis, T in quirky subject sentences lacks [Person]. In quirky subject sentences, first T probes its  $\varphi$ -features. The quirky subject is inaccessible due to the Activity Condition, so the  $\varphi$  probe finds the nominative object. If the nominative object is 3rd person, T and the DP will be relatively  $\varphi$ -complete, and the derivation converges. If the nominative object is 1st or 2nd person, they are not relatively  $\varphi$ -complete, and the derivation crashes. While T being  $\varphi$ -defective in quirky subject sentences may seem stipulative, this could be explained by looking at the nature of quirky verbs in Icelandic, as well as the relation between the lexical verb and tense. In this thesis, I show that this defective T analysis is the best analysis for explaining the Icelandic quirky subject agreement patterns and restrictions and show how other Minimalist and pre-Minimalist analyses fall short.

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### CHAPTER 1

### INTRODUCTION

### 1.1 Case and Icelandic Quirky Case

Case is often classified as structural (determined by a particular structural configuration) or lexical (determined by the verb). Lexical case can be further divided into predictable thematic case and unpredictable idiosyncratic case. Thematic case, such as dative on Experiencers, is relatively common. It is found in languages such as Spanish, Russian, and English. Idiosyncratic lexical case is not predictable based on thematic roles, and is much less common crosslinguistically. Idiosyncratic lexical case is also sometimes called quirky case. Icelandic and Faroese (both Insular Scandinavian languages) exhibit quirky case phenomena. In a nominative-accusative language like Icelandic, subjects usually take nominative and direct objects usually take accusative. In these constructions, such as in 1, the finite verb always agrees in person, number, and gender with the subject.

(1) Einhver keupti bækurnar. someone.3sG bought.3sG the books.3PL 'Someone bought the books.'

Icelandic also has quirky case, which allows for other case and agreement configurations. Quirky case is often generalized as nonnominative markings on subjects and nonaccusative markings on direct objects (Schütze 1993). A more complete and accurate description would be idiosyncratic lexical case marking, as described above (Thráinsson 2007). The following examples show why this is so. In 2, dative case on the subject is quirky. In 3, both accusative case on the subject and accusative case on the object are quirky. In 4, genitive case on the object is quirky.

Mér líkar þessir bílar. me.DAT likes these cars.NOM
'I like these cars.' Schütze 1993: ex 32, p 351

- (3) Mig vantar peninga. me.ACC lacks money.ACC
  'I lack money.' Schütze 1993: ex 5a, p 325
- (4) Ég saknaði hans.
  I.NOM missed him.GEN
  'I missed him.'
  Schütze 1993: ex 33d, p 352

In 2, the nominative object is not considered quirky; it receives structural nominative case. In 3, the accusative object is quirky, despite accusative case on objects being standard in nominative-accusative constructions. This can be tested because quirky elements maintain their quirky case under passivization. Even though it is an accusative object, it stays accusative when passivized. This contrasts with nonquirky accusative objects which become nominative. These examples justify the use of Thráinsson's quirky description over Schütze's, which over- and undergenerates quirky examples. Schütze's framework would consider the nominative object in 2 quirky and the accusative object in 3 nonquirky. Thráinsson's framework does not encounter these miscategorizations.

In Icelandic quirky subject sentences, the finite verb does not agree with the quirky subject. Instead, it appears to agree with the nominative object, when one is present. I show this in 5.

(5) Henni leiddust strákarnir. her.3SG.DAT bored.3PL the boys.3PL.NOM
'She found the boys boring.' Sigurðsson 1993: ex 3, p 1

Another empirical fact about Icelandic quirky subject constructions is that they prohibit 1st and 2nd person nominative objects. No pattern of agreement, whether subject- object-, or default-agreement, allows a 1st or 2nd person nominative object in these constructions. Compare 6 below, with a 1st person nominative object, with 5 above, which has a 3rd person nominative object.

(6) Henni \*leiddumst/?\*leiddust/?\*leiddist við. her.3SG.DAT bored.\*1PL/?\*3PL/?\*DFT we.1PL.NOM
'She found us boring.' Sigurðsson 1996: ex 56, p 24 Although the verb appears to agree with the nominative object in examples like 5, agreement—at least for number—is optional in some configurations. Icelandic is a V2 language, and the subject or object can move to the clause-initial position (Thráinsson 2007). Number agreement is optional when the quirky subject is topicalized, as in 7, but not when the nominative object is topicalized, as in 8. This asymmetry does not exist for nonquirky sentences, as I demonstrate in 9–10, where number agreement is obligatory.

- (7) quirky, subject topic
  - a. Mér líkar þessir bílar.
    me.DAT likes.3SG these cars
    'I like these cars.'
  - b. Mér líka þessir bílar. me.DAT likes.3PL these cars
    'I like these cars.' Schütze 1993: ex 32, p 351
- (8) quirky, object topic
  - a. \* Þessir bílar líkar mér. these cars like.3SG me.DAT
    'I like these cars.'
  - b. Þessir bílar líka mér.
    these cars like.3PL me.DAT
    'I like these cars.'
- (9) nonquirky, subject topic
  - a. Einhver keupti bækurnar. someone bought.SG the books 'Someone bought the books.'
  - b. \* Einhver keuptu bækurnar. someone bought.PL the books'Someone bought the books.'
- (10) nonquirky, object topic
  - a. Bækurnar keupti einhver. the books bought.SG someone 'Someone bought the books.'
  - b. \* Bækurnar keuptu einhver. the books bought.PL someone'Someone bought the books.'

These three phenomena (object agreement, the 1st/2nd person nominative object restriction, and the number agreement asymmetry) all need to be explainable in a syntactic analysis of Icelandic. In this thesis, I focus primarily on the issues of object agreement and the 1st/2nd person object restriction. I ignore the issue of the number agreement asymmetry for now, but in future work, I hope to include it in a unified account of the Icelandic quirky case and agreement facts.

### **1.2** Research Questions

The research questions I investigate in this thesis address the issues of object agreement and the 1st/2nd person nominative object restriction in Icelandic quirky subject constructions: (i) Why does the finite verb show overt agreement with the nominative object rather than with the quirky subject?; (ii) Why are 1st and 2nd person nominative objects blocked in quirky subject constructions?

### 1.3 Thesis Roadmap

In this chapter, I provided a general description of Icelandic quirky case. I provided representative examples to illustrate the main phenomena in which I am interested, as well as the two research questions that I investigate in this thesis.

In Chapter 2, I will describe my theoretical framework, which is based in the Minimalist program. I will detail the necessary theoretical components that I adopt, as well as the remaining assumptions needed for my analyses.

In Chapter 3, I will review three early Minimalist analyses of the Icelandic quirky case data. I briefly discuss how these analyses attempted to explain the Icelandic data, as well as point out their theoretical shortcomings.

In Chapter 4, I will provide the details of the four main Minimalist analyses that I consider to answer my two research questions. I will start by describing a  $\varphi$ -stacking approach, based on Richards (2013). Next I will discuss López's (2008) complex dependency analysis. I then consider an analysis which splits [Person] into a separate probe, with independent support from an analysis by Sigurðsson and Holmberg (2008). Finally, I describe my defective T analysis, where T lacks a [Person] feature in quirky subject sentences. This defective T analysis is what I ultimately adopt to explain the Icelandic data.

In Chapter 5, I will provide a summary of the relevant Icelandic data, my theoretical framework, the four main analyses I have considered, and possible directions for future research.

### CHAPTER 2

### THEORETICAL FRAMEWORK

### 2.1 Introduction

The theoretical framework that I adopt as the basis for my analyses of the Icelandic quirky subject data is the Minimalist Program (Chomsky 1995, 2000, 2001, 2004). From the Minimalist Program, I adopt the operation AGREE, the use of probe-goal agreement, the ACTIVITY CONDITION on feature checking, and relative  $\varphi$ -completeness as a requirement for feature checking. Outside of the core of Minimalism, I adopt a few other assumptions. Most importantly, I adopt that only 1st and 2nd person DPs are [+Person], and also that T can be  $\varphi$ -defective. These assumptions and how they manifest combine in a way that can adequately explain the Icelandic quirky subject data.

While this chapter describes the general theoretical framework I adopt, there are some analysis-specific assumptions. I discuss these in their respective sections. Furthermore, this theoretical framework does not necessarily apply to analyses which I did not create myself. For example, the complex dependency analysis from López (2008) makes use of different assumptions, and a modified split  $\varphi$  probe analysis from Sigurðsson and Holmberg (2008) uses a slightly different system than my split  $\varphi$  analysis. These differences are detailed in the descriptions of the relevant analyses.

#### 2.2 The Minimalist Program

The main goal of the Minimalist Program (Chomsky 1995, 2000, 2001, 2004) is to eliminate anything from our theory of syntax that is not explicitly required at our language interfaces (Articulatory-Perceptual and Conceptual-Intentional). This is referred to as the STRONG MINIMALIST THESIS (SMT). This theoretical framework eliminates many theoretically unnecessary components, such as the distinction between deep structure and surface structure, spec-head agreement configurations, and covert movement.

The core Minimalist components that I adopt for my analyses are Agree (Chomsky 2001), the use of the Activity Condition in feature checking (Chomsky 2001; Hornstein et

al. 2005), a probe-goal system of agreement (Chomsky 2001), and relative  $\varphi$ -completeness as a requirement for feature checking (Chomsky 2001).

#### 2.2.1 Agree

In the Minimalist system of feature checking that I adopt, only interpretable features are specified in the lexicon (Chomsky 2001; Hornstein et al. 2005). Uninterpretable features must acquire their values during the derivation. As Hornstein et al. describe, [Person] on a DP is lexically assigned a value, but [Person] on T or on a verb has no lexically specified value. In order to satisfy Full Sharing (López 2008), which states that uninterpretable features must be deleted from the derivation, I adopt the operation Agree (Chomsky 2001). Agree assigns values to unvalued features and simultaneously deletes uninterpretable features from the derivation for logical form (LF) purposes.

#### 2.2.2 Probe-Goal Agreement

The operation Agree operates in the form of a probe-goal relation (Chomsky 2001). A probe is a head with uninterpretable features, while a goal is an element with a matching interpretable feature. A probe will search its c-command domain for a suitable goal. In order to find a goal, however, there are some restrictions. First, there must not be any active intervening element that also has the relevant set of features; otherwise, the probe will find that element as its goal. Second, the goal must be active for purposes of Agree, which I will describe in the following section.

#### 2.2.3 Activity Condition

The Activity Condition on feature checking (Chomsky 2001; Hornstein et al. 2005) requires an element to be active in order to be found as a goal by a probe. That is, they need to have some unchecked/unvalued feature. A subject's unvalued Case feature keeps it active in standard nominative-accusative sentences, so it can be found as a goal by T's  $\varphi$ -feature probe.

#### **2.2.4** Relative $\varphi$ Completeness

I also adopt the necessity of relative  $\varphi$ -completeness in feature checking (Chomsky 2001). If T and a DP are not relatively  $\varphi$ -complete, they cannot establish a checking relation, and the derivation will crash. This is essentially the same as nonfinite T being  $\varphi$ -defective and failing to license nominative on subjects.

For my purposes, the requirement for relative  $\varphi$ -completeness only relates to the set

of  $\varphi$ -features on the DP. If all of the  $\varphi$ -features on a DP have a correlate on T, they are relatively  $\varphi$ -complete, even if T has additional  $\varphi$ -features. Thus, a 3rd person subject with a  $\varphi$ -complete T will not lead to a crash. The reverse of this is not true. If the DP has extra  $\varphi$ -features that T does not have, they will not be relatively  $\varphi$ -complete, and the derivation will crash. This definition of relative  $\varphi$ -completeness will allow me to explain both quirky and nonquirky data.

In some of the examples that I present, T will end up with an unvalued [Person] feature, due to the DP being 3rd person. Since  $\varphi$ -features are uninterpretable on T by assumption, this may raise some questions. This will not necessarily lead to a crash. Other sentence types suggest that T's  $\varphi$ -features may be able to acquire default values later in the derivation (or even postsyntactically) (Corbett 2006). For example, consider CP subjects (11) and infinitive phrase subjects (12).

- (11) [That he came so early] was very surprising.Corbett 2006: ex 4, p 37
- (12) [To err] is human.Corbett 2006: ex 5, p 37

These types of agreement controllers are not traditionally thought of as possessing  $\varphi$ features. Despite this, CPs and infinitive phrases can be subjects, and when they are they
induce what appears to be 3rd person singular agreement on the verb. In these sorts of
examples, T's  $\varphi$ -features are still uninterpretable, so they must get values somewhere. It
might be argued that T obtains default values for any unvalued  $\varphi$ -features left over at some
point in the derivation. This notion will recur throughout Chapter 4, and plays a large role
in the defective T analysis that I adopt for the Icelandic data.

### 2.3 $[\pm Person]$ DPs

Based on the observed agreement facts, we see an asymmetry between 1st/2nd person and 3rd person, with 3rd person behaving as an outlier. To address this, I follow Boeckx (2000) and Sigurðsson (1996) in adopting the notion that only 1st/2nd person is truly [+Person]. In these analyses, 3rd person DPs lack a [Person] feature entirely. DPs lacking [Person] is not completely novel. Further support for this notion comes from discussion of pronouns and R-expressions, which are often argued to lack  $\varphi$ -features.

Preminger (2014) provides additional support for 3rd person NPs or DPs lacking [Person]. Preminger describes an expanded  $\varphi$ -feature geometry, where a root may have further specifications beyond simply [Person] and [Number]. I show Preminger's expanded  $\varphi$ -feature geometry in 13.

(13) A simplified  $\varphi$ -feature geometry (Preminger 2014, ex 258)



Preminger's argument for his analysis of Sakha treats 3rd person NPs as "not quite empty," instead possessing the root  $[\varphi]$  and maybe the "metanodes" [Person] and [Number], but lacking [plural], [participant], and [author]. While Preminger focuses on Sakha, this analysis provides additional external evidence for 3rd person NPs or DPs lacking [Person], a necessary assumption for the analysis of Icelandic that I adopt in this thesis.

### 2.4 Defective T

T can be  $\varphi$ -defective; that is, T can lack certain  $\varphi$ -features. This is often seen in nonfinite clauses, where a defective T is said to license/assign null case on PRO (Hornstein et al. 2005). Corbett (2006) provides another description of defectiveness. Corbett says that "defectiveness depends on a notion of what can be reasonably expected." For example, Corbett notes that impersonal verbs are not expected to have a 1st person singular form. Because of support from  $\varphi$ -defective T existing in other arenas, I adopt the possibility of T being  $\varphi$ -defective in Icelandic quirky subject sentences. This theoretical component will only play a role in the defective T analysis that I adopt.

### CHAPTER 3

### PREVIOUS ANALYSES OF ICELANDIC

In this chapter, I will briefly overview a few previous analyses of the Icelandic quirky case data. I look at two early Minimalist analysis of Icelandic by Schütze (1993) and Sigurðsson (1996), along with an analysis by Boeckx (2000) that is based in Distributed Morphology.

### 3.1 Schütze (1993)

Schütze (1993) provides a relatively early Minimalist analysis of Icelandic quirky case and licensing. The analysis attemptes to account for the data using the Minimalist Program, but the version of Minimalism that Schütze uses relied on now-rejected theoretical components. Specifically, Schütze's system relies on AgrXPs and abstract subject and object licensing features [Li], which are not adopted in a more recent, stronger Minimalist framework, such as the one I adopt from Chapter 2.

#### 3.1.1 AgrXPs, Case, and Licensing

In Schütze's system, AgrS checks nominative case, T checks the abstract subject licensing feature, and AgrO checks both accusative case and the abstract object licensing feature. Schütze's separation of case from licensing features is twofold. First, it is to distinguish subjects from nominative case elements. Subjects can bear cases other than nominative, and nonsubjects can bear nominative case. Second, this separation is to distinguish objects from accusative case elements. Objects can bear cases other than accusative, and nonobjects can sometimes bear accusative case.

In order to achieve the observed patterns for Icelandic, Schütze rearranges the order of AgrS, T, and AgrO in the tree. In the contemporary standard Minimalist Program, AgrSP is higher in the structure than TP, which is higher than AgrOP. Now, with Schützes's reorganization, TP precedes AgrSP, which precedes AgrOP. Subjects (quirky or nonquirky) all need to end up in Spec, TP to check their abstract subject licensing feature. Nominative elements must move to Spec, AgrSP to check their nominative case. The subject, then, will

always be higher in the tree than the object. This leads to another assumption that Schütze makes for his analysis. That is, that the subject must c-command the direct object. His reordered tree structure accomplishes this, but this assumption is not necessary, as evidenced by the differing topicalization shown in 7–10. Icelandic allows sentences where the object precedes the subject, so this as a criterion for reorganizing the tree structure holds no water.

#### 3.1.2 Summary

While Schütze (1993) provides an analysis for the Icelandic quirky case data in a Minimalist framework, Minimalism has moved on. Many of the assumptions Schütze takes for granted are now unnecessary in a theory of syntax. His use of AgrS and AgrO, as well as the abstract subject and object licensing features, can all be eliminated from the theory on independent grounds. Furthermore, the assumption that the subject needs to c-command the object, a key assumption for Schütze's analysis and tree reorganization, has no motivation when considering other empirical data from Icelandic.

### 3.2 Sigurðsson (1996)

Sigurðsson's (1996) analysis for Icelandic relies on specifier-head agreement, AgrXPs, and a notion of featural complementarity. I will focus my discussion here on Sigurðsson's notion of featural complementarity.

#### 3.2.1 **F**-Government and Featural Complementarity

Sigurðsson argues that the quirky subject never controls verb agreement. On the contrary, the nominative nonsubjects discussed in the paper are the ones to trigger agreement on the verb. The quirky subject's failure to trigger agreement results from the idea of featural complementarity adopted by Sigurðsson, along with feature-/F-government.

In this system, F-government is visualized on the F-governing head or on its F-governee, but not both. Applying this to the Icelandic quirky subject data, agreement is visible on the verb when F-government is realized on the head (the verb, adjective, and/or participial), and blocked when F-government is realized on the F-governee (the quirky subject).

This ties into Sigurðsson's claim of featural complementarity. That is, that "the featural specification of the two is visualized either on the head or the specifier." Nonagreeing/default verb forms are considered default or unspecified, and agreeing verb forms are specified. In addition, Sigurðsson treats structural case as unspecified, and inherent/lexical case as specified. Following from Sigurðsson's use of F-government and featural complementarity, this system will either allow feature specification on a head (verb agreement) or on its

specifier (nonagreement/quirky case).

Sigurðsson's system disallows both over- and under-specification, due to economy of representation (Taraldsen 1994). Expressing a feature on both the head and its specifier (quirky case with agreement on the verb) overspecifies, and is ruled out due to economy considerations. On the other hand, failing to express the feature on either the head or the specifier leads to an underspecification. While this seems to explain the Icelandic data in Sigurðsson's view, it does not hold crosslinguistically. Sigurðsson notes that Georgian allows verb agreement with an inherently case-marked NP. To get around this fact, Sigurðsson proposes that featural complementarity is a parametric option for languages to make, but provides no additional explanation.

#### 3.2.2 Summary

Sigurðsson (1996) provides an analysis of Icelandic quirky case by adopting a system reliant on specifier-head agreement, AgrXPs, and a notion of featural complementarity. As with the Schütze (1993) analysis, external motivations suggest that AgrXPs are semantically vacuous and have no place in a strong Minimalist theory of syntax. In addition, more recent iterations of Minimalism shy away from specifier-head agreement, instead opting for a probegoal system that does not rely on a special structural configuration. Finally, as Sigurðsson himself shows, the notion of featural complementarity is not universal. While this notion may describe the Icelandic pattern, the system as a whole that Sigurðsson adopts does not fit easily into the Minimalist system that I adopt.

### 3.3 Boeckx (2000)

Boeckx (2000) describes various agreement patterns in Icelandic quirky constructions. He posits that when a quirky subject is present, agreement with the nominative object is only partial (number but not person), despite this not being totally reflected in the empirical data. Because only 3rd person nominative objects are allowed, 3rd person agreement is the only observed agreement in Icelandic quirky subject sentences, but Boeckx ignores this. Boeckx adopts Bonet's (1994) Person-Case Constraint (PCC), the notion of Point-of-View (PoV), and a Distributed Morphology framework to account for these agreement patterns. Boeckx's analysis also relies on an AgrXP-based approach to explaining the Icelandic data.

#### 3.3.1 The Person-Case Constraint and Point-of-View

Boeckx's (2000) analysis of Icelandic quirky agreement patterns relies on Bonet's (1994) Person-Case-Constraint (PCC). The PCC states that when a dative element is present, 1st or 2nd person on another element is blocked. Using the PCC, when a quirky subject is present, a 1st or 2nd person object is prevented, yielding the Icelandic pattern detailed above. However, the PCC as Boeckx uses it is more of an observation than an explanation; it does not tell us why 1st/2nd person is blocked when dative is present, only that it is.

In order to attempt to explain why 1st/2nd person are blocked, Boeckx (2000) expands the PCC into something he describes as Point-of-View (PoV). PoV is encoded by [+Person], and must be checked by a PoV-checking head. Boeckx notes a handful of authors who make reference to a PoV-checking projection in the structure (Culicover 1992; Laka 1990; Uriagereka 1995a,b), but leaves the specifics vague. However, Boeckx notes that PoV must be checked, in effect forcing the DP to check an otherwise interpretable [Person] feature. Note that 3rd person has no [Person], so it will be unaffected by the PCC and PoV.

In an Icelandic quirky subject sentence, the quirky subject will move to the PoV-checking projection, since it must check PoV. Since this position is now filled by the quirky subject, the nominative object cannot move there. If the nominative object is 1st or 2nd person, it will have an unchecked PoV feature, which leads to a crash.

PoV appears capable of explaining the person restriction in quirky constructions. However, PoV does not seem to apply in other constructions. For example, in sentences with both a quirky subject and quirky object, one would expect both to need to check PoV. But with only one PoV-checking projection, that seems impossible. Despite this, these types of quirky sentences are grammatical, as I have shown in 3. Similarly, PoV as described by Boeckx only mentions 1st and 2nd person, not nominative objects specifically. If this is so, 1st or 2nd person accusative objects in nominative-accusative constructions should also need to check PoV. If the nominative subject also needs to check PoV, however, we would expect another crash. Icelandic does allow nominative-accusative sentences with both 1st or 2nd person subjects and 1st or 2nd person objects, though, so the idea of PoV as a general concept seems to fall short here.

#### 3.3.2 Distributed Morphology and Multiple Agreement

In addition to his use of the PCC and PoV, Boeckx bases his analysis of Icelandic in a Distributed Morphology framework (Halle and Marantz 1993). Using Distributed Morphology, Boeckx argues that the verb actually agrees fully with the quirky subject, but that this agreement is not realized morphologically. Due to the absence of morphological agreement from the quirky subject, there is room left on the verb for agreement morphology from the object.

In a quirky subject sentence, the finite verb will first try to agree with the quirky subject.

Boeckx argues that it does indeed establish a full agreement relation. However, due to what Boeckx describes as a "Generalized Doubly Filled Comp Filter," 3rd person agreement is forced on the verb. The quirky case morphology on the quirky subject already encodes the necessary information, so agreement does not need to be visible on the verb as well. This is similar to Sigurðsson's (1996) use of economy of representation. Because the relevant featural information is already encoded on the quirky subject, also expressing it on the verb would be an overspecification.

Since the quirky subject did not leave any morphology on the verb, the nominative object is free to add its morphology to the verb when it checks nominative case. This explains the apparent object agreement facts, even though Boeckx treats it as syntactic subject agreement.

#### 3.3.3 Summary

The analysis presented in Boeckx (2000) is able to explain the Icelandic quirky agreement facts at first glance. After digging deeper, we can see that many of his assumptions are insufficiently justified or fail to account for all of the relevant data. In this section, I will briefly explain a few of the areas where this analysis falls short.

First, as mentioned in the preceding two sections, AgrXPs have no place modern Minimalism. Boeckx relies on these projections for his analysis to work. Despite AgrXPs being eliminated from the theory, they are not Boeckx's greatest shortcoming.

Boeckx also fails to notice some important trends in the data. Specifically, Boeckx does not consider a uniform pattern of agreement with nominative objects, instead positing different agreement patterns depending on the person of the nominative object. Second, Boeckx relies heavily on the PCC and PoV to explain the Icelandic data. While these may prove fruitful, Boecxk does not provide an adequate explanation of these notions. He takes the PCC as a generalization without justifying or explaining it, and he adopts PoV without pointing to a specific functional projection in the structure.

Finally, and perhaps most importantly, Boeckx ignores huge swaths of data in formulating his analysis. Boeckx's use of PoV-checking with 1st and 2nd person DPs and quirky DPs leaves a large gap. Some ungrammatical sentences that Boeckx uses as representative examples for PoV become grammatical when reordered. This is despite the fact that in his system, the quirky DP should still need to check its PoV feature. Boeckx also ignores 1st and 2nd person DPs in nonquirky sentences. If 1st and 2nd person nominative objects are blocked in quirky subject sentences due to needing to move to a PoV projection that is occupied by the dative quirky subject, nonquirky sentences with 1st/2nd person subjects and 1st/2nd person objects should be ruled out for the same reason.

### 3.4 Chapter Summary

In this chapter, I have described three previous analyses of the Icelandic quirky subject data. Schütze (1993) provides an analysis that relies on AgrXPs, Case and Licensing features, and a reorganization of the standard syntactic tree structure to explain the Icelandic data. Sigurðsson's (1996) analysis also adopts AgrXPs, but further adds the notions of featural complementarity and economy of feature specification to explain the data. Boeckx (2000) takes a different approach. His analysis does adopt AgrXPs, but it is based primarily in Distributed Morphology, and also makes use of the Person-Case Constraint and Point-of-View.

As explained by their authors, all three of these approaches seem capable of explaining the Icelandic quirky subject data, but they all have their own serious shortcomings. In addition, the analyses presented in this chapter all predate the version of the Minimalist Program that I adopt as my theoretical framework in Chapter 2.

### CHAPTER 4

### PROPOSALS

In this chapter, I describe four potential analyses to account for the Icelandic quirky subject data. First, I look at a  $\varphi$ -stacking approached based in Richards's (2013) analysis of case-stacking in Lardil. Second, I consider a complex dependency account for the data from López (2008). Next, I analyze how split  $\varphi$  probing might be able to explain the data. Finally, I consider a defective T analysis, where T lacks [Person] in quirky subject sentences.

All four of these analyses seem initially capable of explaining the Icelandic data to some degree; however, all except the defective T analysis require undesirable or non-Minimalist assumptions that make them suboptimal. The defective T analysis can explain the data without relying on these undesirable assumptions. For this reason, I choose to adopt the defective T analysis for explaining the Icelandic quirky subject data.

### 4.1 $\varphi$ -Stacking

In this section, I will show how a  $\varphi$ -stacking approach to Icelandic quirky case might work. This analysis involves full agreement between the quirky subject and T. After T agrees with the quirky subject, the nominative object triggers agreement with T, overriding the agreement from the quirky subject. This  $\varphi$ -stacking is based on Richards (2013) analysis of case-stacking in Lardil.

Richards shows that languages like Japanese and Lardil can stack morphemes. When the original morpheme is semantically uninterpretable, it gets deleted. Only semantically interpretable morphemes remain. In this Japanese example, uninterpretable nominative/accusative case gets deleted when the TOP marker is added, but interpretable dative remains.

- (14) a. Taroo-(\*ga/o)-wa Taroo-NOM/ACC-TOP
  - b. Taroo-(ni/kara)-wa Taroo-DAT/from-TOP Richards 2013: ex 1, p 42

Like Japanese and Lardil, Russian replaces semantically uninterpretable case with new morphology. In contrast, Russian does not allow stacking new case morphology on a DP with interpretable case. Instead, the original semantically interpretable morpheme remains. In this example, uninterpretable accusative case is replaced by genitive, but interpretable instrumental case is not.

- (15) a. Anna pišet pis'mo ručkoj. Anna writes letter.ACC pen.INSTR 'Anna is writing a letter with a pen.'
  - b. Anna ne pišet pis'ma ručkoj.
    Anna not writes letter.GEN pen.INSTR
    'Anna isn't writing a letter with a pen.'
    Richards 2013: ex 2, p 43

The main idea from Richards (2013) that I adopt for this  $\varphi$ -stacking approach is that semantically interpretable morphology cannot be replaced, but semantically uninterpretable morphology can be. Before I go over the derivations for quirky and nonquirky sentences using this approach, I will first go over some key assumptions this proposal must make.

#### 4.1.1 Assumptions

The  $\varphi$ -stacking analysis that I describe in this section relies on major assumptions about agreement and movement. The first major assumption is that T can agree with two different DPs in quirky constructions. This assumption goes against standard analyses of agreement, which state that once T's uninterpretable  $\varphi$ -features are valued, they are deleted from the derivation, which prevents T from agreeing with another DP for  $\varphi$  (Chomsky 2001). In the  $\varphi$ -stacking analysis, however, T first agrees with the quirky subject and then agrees a second time with the nominative object. This leads to two other major assumptions.

First, the secondary agree relation between T and the nominative object is optional. Or, at least, the overt realization of the secondary agree relation must be optional. If T's  $\varphi$ -features are already checked by the quirky subject, there is no need to check them with a second DP. In this scenario, we would expect to see T agreeing always with the quirky subject, barring some economy restriction. This optionality here achieves the observed number asymmetry with topicalization in quirky subject sentences; for this section, however, I focus exclusively on sentences where agreement with the nominative object does occur. Independent support for a system with multiple agreement comes from Schütze (2003). Schütze argues that Icelandic has a restriction that requires the verb to agree with both the subject and the nominative DP, if any. In nominative-accusative sentences, these two criteria are satisfied by the same element (the nominative subject). In quirky subject sentences, however, this leads to multiple agreement, with the quirky subject fulfilling the subject requirement and the nominative object fulfilling the nominative requirement. Such a generalization may make multiple agreement more agreeable, but Schütze does not explain why this restriction might exist in Icelandic in the first place, nor how it would function.

Another assumption that the  $\varphi$ -stacking analysis relies on is that although T can agree with both the quirky subject and nominative object in quirky case constructions, T can only ever agree with the subject in nominative-accusative sentences. There is no data to indicate that T can agree with an accusative object in nominative-accusative sentences. The goal of these proposals is to explain the Icelandic quirky phenomena, yet these assumptions seem to create further unexplained asymmetries between quirky and nonquirky constructions unless we adopt Schütze's (2003) unexplained system of multiple agreement.

One final assumption that this analysis makes use of is the assumption that [Person], exclusively in quirky subject sentences or possibly generally, is semantically interpretable in the sense I adopt from Richards (2013). This assumption does create an asymmetry between [Person] and the other  $\varphi$ -features, but the empirical data seem to support such a distinction.

#### 4.1.2 Derivations

In this section, I will provide derivations for both quirky and nonquirky sentences in the  $\varphi$ -stacking analysis. I show why quirky subject sentences with 3rd person nominative objects are grammatical and why quirky subject sentences with 1st or 2nd person nominative objects are ungrammatical. I conclude by showing a derivation for two nonquirky sentences.

The following three examples (16–18) show the derivations for quirky subject sentences using this  $\varphi$ -stacking approach. In 16, T probes its  $\varphi$ -features for the first time and finds the quirky subject, where it checks [Person], [Number], and [Gender]. This will be the same no matter the [Person] specification on the nominative object.



(16)

In 17, we see what happens next when the nominative object is 3rd person. T probes its  $\varphi$ -features a second time, now finding the nominative object as the goal. T will attempt to replace its  $\varphi$  morphology from the quirky subject with new morphology from the nominative object. The [Person] feature on T that was acquired from the quirky subject cannot be replaced, being semantically interpretable, but this is not a problem. The nominative object, being 3rd person, has no [Person] feature at all, so it cannot even try to replace the irreplaceable [Person] on T. Instead, T only replaces its [Number] and [Gender] values with new values from the nominative object.



When the nominative object is 1st or 2nd person, as in 18, we encounter a problem. As in 17, T will probe  $\varphi$  for the second time and find the nominative object. This time, however, the nominative object does have a [Person] feature. Now, since the T cannot replace its [Person] morphology with new morphology, T and the nominative object cannot effectively establish an agree relation. T and the nominative object will be relatively  $\varphi$ -defective, the nominative object cannot value its abstract Case, and the derivation will crash.



Problems arise when the quirky subject is 3rd person in these constructions. If the quirky subject is 3rd person, it will lack a [Person] feature. Now, when T's  $\varphi$ -features probe the first time, they will not receive a value from the quirky subject for [Person]. When T probes its  $\varphi$ -features the second time, finding the nominative object, it should be possible to gain a

[Person] specification. Since there is no irreplaceable [Person] value from the quirky subject, nothing is stopping a 1st or 2nd person nominative object from imposing its [Person] value on T. If this were the case, we would see grammatical examples with 1st or 2nd person nominative objects, but we do not.

One potential way around this would be to tinker with the mechanism by which T gets its default agreement specifications, and by also assuming that [Person] generally is semantically interpretable (that is, irreplaceable). If the mechanism for T receiving default agreement precedes T's second  $\varphi$ -feature probe, perhaps the default specification for [Person] blocks a 1st or 2nd person nominative object. This account would require further explanation, but may prove fruitful.

Nonquirky sentences in this  $\varphi$ -stacking analysis do not seem to encounter any problems. Since T's  $\varphi$ -features only probe once in nonquirky sentences (if we do not adopt the multiple agreement suggested by Schütze 2003), we do not need to worry about replaceable morphology. I show derivations for nonquirky sentences in 19–20.

In a nonquirky sentence with a 1st or 2nd person nominative subject, such as in 19, T will probe its  $\varphi$ -features and find the subject as the goal. T will check all of its  $\varphi$ -features with the subject, and that will be that. There is no secondary agreement operation with the accusative object.



With a 3rd person nominative subject, things go smoothly. While T has [Person] and the 3rd person nominative subject does not, this is not a problem for this analysis. T will simply receive a default value for [Person], and the derivation will still converge. 20 shows an example of this. T will probe its  $\varphi$ -features and find the 3rd person nominative subject, agreeing for [Number] and [Gender].



In this section, I have shown derivations for all relevant combinations of both quirky and nonquirky sentences. In 16–18, I showed a derivation for quirky subject sentences with both 3rd person and 1st or 2nd person nominative objects. I showed that 17, with a 3rd person object, was grammatical specifically because it lacks a [Person] feature. This avoids an agreement mismatch due to T's irreplaceable [Person] specification from the quirky subject. I also showed why 18 is ungrammatical. Because T's [Person] specification from the quirky subject is irreplaceable, the 1st or 2nd person nominative object and T are relatively  $\varphi$ incomplete, which leads the derivation to crash.

In addition to the quirky subject examples, I also showed how the  $\varphi$ -stacking analysis might handle nonquirky sentences. For nonquirky sentences, T will only probe  $\varphi$  once, so we do not run into the problem of irreplaceable features with nonquirky sentences.

#### 4.1.3 Summary

The  $\varphi$ -stacking analysis presented in this section relies on the possibility for multiple agreement of T. In quirky subject sentences, T must agree with both the quirky subject and the nominative object. In addition, this analysis requires that the person valuation on T from the quirky subject is semantically interpretable, à la Richards (2013), so it cannot be replaced by a new specification. This irreplaceability of [Person] yields the 1st and 2nd person restriction. Because 1st and 2nd person nominative subjects have [Person], a mismatch will occur when T tries to probe  $\varphi$  a second time, leading to relative  $\varphi$ -incompleteness and a crash. For nonquirky sentences, T only probes  $\varphi$  once, so there is no problem with irreplaceable features.

Despite its moderate success, the  $\varphi$ -stacking analysis presented in this section has numerous shortcomings that make it insufficient. Primarily, the assumptions required for this analysis have weak theoretical backing. That T can agree with multiple DPs goes against

standard conceptions of  $\varphi$ -features on T, and treating [Person] as semantically interpretable does not gain anything. While we do see an empirical asymmetry between 1st/2nd person and 3rd person, the  $\varphi$ -stacking proposal leaves it unexplained. Finally, this proposal does not work well for all of the relevant data. Importantly, a 3rd person quirky subject causes problems that require a very nonstandard, yet still not fully explained solution. Due to these inelegant workarounds and the generally nonstandard assumptions that need to be made, this  $\varphi$ -stacking analysis is not sufficient to answer my research questions about Icelandic quirky subject sentences.

### 4.2 Complex Dependency

In this section, I will describe an analysis for Icelandic that treats T, the quirky subject, and the nominative object as a complex dependency. This analysis is described by López (2008). López claims that this analysis explains the observed object agreement facts, as well as the 1st and 2nd person restriction on nominative objects. First, I will go over López's theoretical assumptions for this analysis, which differ markedly from those I adopt and describe in Chapter 2. After my description of López's theoretical framework and assumptions, I will provide a brief derivation for an Icelandic quirky subject sentence using López's system. Finally, I will conclude this section by explaining the shortcomings of López's complex dependency analysis, and ultimately why it is suboptimal in explaining the Icelandic quirky subject agreement facts.

#### 4.2.1 Assumptions

I will first explain the theoretical framework and assumptions that López (2008) adopts in his complex dependency analysis of Icelandic object agreement and the 1st/2nd person restriction. Because this analysis is not my own, it does not align exactly with the theoretical framework I detailed in Chapter 2. Having said that, López's analysis is still based in a Minimalist framework, with some modifications and additions.

López adopts Full Sharing for his system of feature valuation, defined in 21:

(21) Full Sharing

Take a,b to be features of the same type. If a,b are involved an an Agree (p,g) dependency, feature sharing is mandatory. López 2008: ex 17, p 136

This essentially states that when two features of the same type enter into an Agree relation, they must share the same value. What is interesting in López's system is what happens when two unvalued features [a],[b] enter into an Agree relation with each other. Full Sharing will require them to have the same values; however, since the two features have no values yet, they enter into an open dependency. Instead of becoming co-valued, the features become co-indexed. Now, if a head H probes and values [a], the dependency between [a] and [b] forces [b] to have the same valuation as [a] and H. This Agree relation between H and the open dependency formed between [a] and [b] forms a complex dependency.

In addition to Full Sharing, López adopts Minimal Compliance, defined in 22:

#### (22) MINIMAL COMPLIANCE

For any dependency D that obeys constraint C, any elements that are relevant for determining whether D obeys C can be ignored for the rest of the derivation for purposes of determining whether any other dependency D' obeys C. López 2008: p 141

López does not explain Minimal Compliance in detail, but he seems to suggest that if two elements are in a dependency D, it only minimally needs to obey Full Sharing. If two elements a and b enter into an Agree relation, they only need to satisfy Full Sharing once. For each additional feature on a and b that agrees, Full Sharing does not need to apply.

Next, López assumes that the quirky subject has an extra layer K above the DP. K has no  $\varphi$ -features. This will ultimately lead to the 1st/2nd person restriction, as I will show in the derivations. López also assumes that [Person] and [Number] probe separately and in a specific order. Specifically, López argues that [Person] probes first. This will also contribute to the 1st/2nd person restriction and the observed object agreement facts more generally.

López makes assumptions about the nature of  $\varphi$ -features on T. He adopts that [Person] on T probes separately and first, though he does not give an explanation for this. While this issue is somewhat unresolved, the standard Minimalist framework that I adopt treats  $\varphi$ -features as a bundle.

Finally, López assumes that unvalued Case can act as a probe. This is somewhat unorthodox. Typically it is only phasal heads that act as probes. López's suggestion that something that is not a phasal head which is also a maximal category acts as a probe goes against the standard theory. These assumptions allow two nominals to enter into an Agree relation with each other and form an open dependency. Specifically for the Icelandic analysis, this assumption allows the quirky subject to form an open dependency with the nominative object while having their features remain unvalued.

Next, I will provide a derivation for Icelandic using the López's complex dependency analysis and the assumptions detailed in this section.

#### 4.2.2 Derivations

Now I will provide a derivation using López's complex dependency analysis to show how it attempts to explain the object agreement facts and the 1st/2nd person nominative object restriction in Icelandic quirky subject sentences. López only discusses the quirky case examples, so I only include a derivation for a quirky subject sentence here.

First, the quirky subject probes its unvalued Case feature and finds the nominative object as its goal. This is shown in 23a. Due to establishing an Agree relation, their Case features then become co-indexed, as I show in 23b.

$$\begin{array}{rcl} (23) & \text{a.} & \mathbf{K}_{[uC]} & \mathbf{OB}_{[uC]} \\ & & \mathbf{Probe} & \longrightarrow & \mathbf{Goal} \\ & & \mathbf{b.} & \mathbf{K}_{[uiC]} & \mathbf{OB}_{[uiC]} \end{array}$$

Next, T's [Person] feature probes and finds the open dependency formed by the quirky subject and nominative object. Due to Full Sharing, T, the quirky subject, and the nominative object all need to share the same [Person] value. Since K does not have a specification for [Person], the nominative object similarly cannot have a specification for [Person]. If the nominative object is 1st/2nd person, the derivation will crash, due to a feature mismatch. In 24a, the nominative object is 3rd person, so it has no [Person] specification. So, the derivation converges without problems, since both K and the nominative object is 1st or 2nd person. When T's [Person] probe finds the open dependency as its goal, the feature mismatch between K and the nominative object causes the derivation to crash.

(24) a. 
$$T_{[p]}$$
  $K_{[u_iC]} + OB_{[u_iC, n, g]}$   
Probe  $\longrightarrow |$ —Goal— $|$   
b.  $* T_{[p]}$   $K_{[u_iC]} + OB_{[u_iC, p, n, g]}$   
Probe  $\longrightarrow |$ —Goal— $|$ 

After [Person] probes, T's [Number] feature will probe. Since Full Sharing has already been satisfied, Minimal Compliance comes into effect. It is grammatical for K, lacking [Number], and the nominative object, possessing [Number], to form a complex dependency with T. This is shown in 25, where a singular or plural nominative object will both be acceptable, as long as the object is 3rd person.

The object agreement facts derive here due to the formation of the open dependency between K and the nominative object. when T probes its  $\varphi$ -features, the nominative object will be a part of the goal. In addition, López assumes that K has no  $\varphi$ -features. When T finds the open dependency, then, the quirky subject cannot share any  $\varphi$ -features with T. The only place for T to receive a  $\varphi$ -feature specification is then from the nominative object.

The 1st and 2nd person nominative object restriction derives from López's assumptions about Full Sharing and the  $\varphi$ -featureless layer K that makes up the quirky subject. Due to Full Sharing, the layer K and the nominative object must have the same specification for  $\varphi$ -features. Since K has no [Person] feature, then, in order for the sentence to be grammatical and satisfy Full Sharing, the nominative object must also not have a [Person] feature. The way to guarantee this is by only allowing [Person]-less 3rd person nominative objects and blocking 1st or 2nd person nominative objects.

#### 4.2.3 Summary

In this section, I described the complex dependency analysis for Icelandic quirky case as detailed in López (2008). This analysis requires the quirky subject and nominative object to form an open dependency. Due to Full Sharing, their features become co-valued. When T probes its  $\varphi$ -features, it finds this open dependency to agree with, forming a complex dependency. Since López assumes that the quirky subject has an additional layer K with no  $\varphi$ -features, the only way to satisfy Full Sharing is to have a 3rd person nominative object (lacking [Person]). Otherwise, there will be a feature mismatch between K and the nominative object, violating Full Sharing.

While López's analysis is couched in a general Minimalist framework (making use of Full Sharing and Minimal Compliance, for example) it requires a number of nonstandard assumptions to get the desired results. Importantly, López assumes that the quirky subject's unvalued abstract Case feature can act as a probe, and that it will find the nominative object. This is crucial to form the open dependency between K and the nominative object in the first place, but López does not explain how or why this would work. From a Minimalist perspective, Case is generally valued as a result of  $\varphi$ -agreement (see Preminger 2014 for a dissenting opinion on this). This being the case, along with my previous discussion on the standard Minimalist theory on probes generally being phasal heads, makes this crucial assumption less than desirable.

Furthermore, the complex dependency analysis makes stipulations about  $\varphi$ -features on the quirky subject. That is, López assumes the  $\varphi$ -featureless layer K. This is important for achieving the 1st/2nd person nominative object restriction, but López fails to address a number of alternative possibilities. Importantly, he discusses Full Sharing violations in the context of feature mismatches. However, he does not consider the possibility that Full Sharing might be satisfied vacuously in the event that K lacks  $\varphi$ -features. If K has no [Person] feature, any specification for [Person] on the nominative object will not lead to a feature mismatch, since K has no competing specification for [Person]. López ignores this possibility.

Another, minor shortcoming of this complex dependency analysis is López's failure to address nonquirky sentences. His use of Full Sharing and Minimal Compliance allows us to derive the observed patterns for quirky subject sentences, but it remains unclear how these components interact in nominative-accusative sentences. If [Person] still probes first, we would expect Full Sharing and Minimal Compliance to force [Person] agreement always, but optionally ignore [Number] and [Gender] agreement.

Due to the nonstandard and unexplained assumptions required by this complex dependency analysis, along with the large gaps in the data that López ignores, the complex dependency analysis is not an optimal analysis for answering my research questions regarding the Icelandic quirky subject construction data. For these reasons, I do not adopt the complex dependency analysis.

# 4.3 Split $\varphi$ Probing

The next analysis that I will describe involves split  $\varphi$  agreement. In this analysis, T agrees with the quirky subject for [Person], but with the nominative object for [Number] and [Gender]. This requires T's  $\varphi$ -features to probe separately. External support for split  $\varphi$  checking more generally comes from Sumerian (Jagersma 2010) and Yucatec. External support specific to Icelandic comes from Sigurðsson and Holmberg (2008), who provide a similar (yet crucially different) analysis of Icelandic quirky constructions that involves [Person] probing separately from [Number] and [Gender]. The split  $\varphi$  probe analysis described in this chapter was developed independently from the analysis of Sigurðsson and Holmberg (2008).

#### 4.3.1 Assumptions

This analysis makes use of the theoretical framework that I adopt in Chapter 2, with some variation and additions. These additions include that the quirky subject remains active after valuing its abstract Case feature, that  $\varphi$ -features on the quirky subject behave differently than on the nominative object, and that T's  $\varphi$  features do not probe as a single bundle, but rather act as separate probes.

This split  $\varphi$  probe analysis requires that the quirky subject remain active even after

valuing its Case with the verb. This means that the quirky subject still needs to have some uninterpretable, unchecked feature after valuing Case. I label this unknown feature [f]. It may be tempting to treat this unknown feature as the abstract Case feature, and claim that the quirky case on the subject from the verb results from some other arrangement. However, Preminger (2014) makes an argument against abstract case on lexically-case-marked DPs. While Preminger adopts a rather different framework from the one I adopt, I agree with his point about abstract Case on lexically-case-marked DPs such as quirky subjects. In addition, the Minimalist framework that I adopt treats Case as a reflection of  $\varphi$  agreement. Relative  $\varphi$ -completeness is a requirement for feature checking and Case licensing, but in this analysis, the quirky subject only checks [Person]. Unless I adopt a version of López's assumption whereby the quirky subject only has [Person], this will not work. Thus, for this analysis, I resort to the mysterious [f].

This analysis also requires an unorthodox treatment of  $\varphi$ -features on quirky subjects. As I will demonstrate in the derivations, only [Person] gets checked with the quirky subject, with [Number] and [Gender] checking with the object. Relative  $\varphi$ -completeness makes ungrammatical a configuration where the object has [Person], [Number], and [Gender], but T only has the latter two. This is what will derive the 1st/2nd person restriction. If we come back to the quirky subject, however, we would expect a crash in a similar configuration. If a 1st or 2nd person nominative object is ungrammatical because it cannot check all of its  $\varphi$ -features with T, we would expect a quirky subject will a full  $\varphi$  set to be ungrammatical if it only checks T's [Person] feature.

This issue could possibly be resolved by treating quirky subjects as only having [Person], or even by fully adopting López's (2008) assumption that quirky subjects have no  $\varphi$  features whatsoever. Whether we adopt that quirky subjects have all, some, or no  $\varphi$ -features, this will cause the analysis to encounter problems similar to the  $\varphi$ -stacking analysis when we have a 3rd person subject, quirky or not. If the subject has no [Person] feature, T's [Person] feature cannot receive a value from it. Now we would run into the conundrum of default agreement timing that I discussed previously.

Another unorthodox treatment of  $\varphi$ -features this analysis uses relates to the realization of  $\varphi$  feature specifications from the quirky subject. This split  $\varphi$  analysis argues that T expresses [Person] agreement from the quirky subject. However, this agreement looks the same, regardless of the person specification of the quirky subject. This requires  $\varphi$ -features to manifest differently, depending on if the subject is quirky or nonquirky. While this would create another quirky/nonquirky asymmetry, potential support for this idea comes from the notions of featural complementarity and economy of feature specification as described by Sigurðsson (1996) and Boeckx (2000) that I discussed in Chapter 3.

Finally, the key assumption that the split  $\varphi$  probe analysis relies on is that T's  $\varphi$ -features probe separately to begin with. The Minimalist framework that I adopt treats  $\varphi$ -features as a bundle that probes as a whole, but this is not uncontroversial. As I described in the previous section, López's (2008) complex dependency analysis relies on T's  $\varphi$ -features probing separately. Sigurðsson and Holmberg's (2008) independent analysis for Icelandic also requires split  $\varphi$  probing. While the issue of how T's  $\varphi$ -features is not unanimously agreed on, the split  $\varphi$  probe analysis that I describe here is nonstandard in the sense that the Minimalist framework I adopt in Chapter 2 treats  $\varphi$ -features as a bundle.

Next, I will show how the split  $\varphi$  probe analysis attempts to derive the Icelandic quirky subject facts using these assumptions.

#### 4.3.2 Derivations

In this section, I will provide derivations for all relevant quirky and nonquirky sentence types using the split  $\varphi$  probe analysis. I will first show how quirky sentences are derived, followed by how this analysis works for nonquirky sentences.

First I will show the derivation for a quirky subject sentence with a 3rd person nominative object. T's [Person] feature will probe first, as shown in 26. The quirky subject will still be active at this point, due to [f], so it acts as an intervening element for the [Person] probe. This probe will find the quirky subject as its goal, valuing [f] on the subject and valuing [Person] on T. Since the quirky subject has no more unvalued, uninterpretable features, it becomes inactive. Note the possible issues if the quirky subject is 3rd person, as I briefly touched upon before.





Next, T's [Number] and [Gender] features will probe. Since the quirky subject is now inactive, these two features will find the nominative object as their goal. If the object is 3rd person, as in 27, it will only have [Number] and [Gender]. Since T's probe only consists of [Number] and [Gender] at this point, when these two features find the 3rd person nominative object as their goal, they will be relatively  $\varphi$ -complete with respect to each other, and agreement will obtain.



If the nominative object is 1st or 2nd person, it will have [Person], [Number], and [Gender]. when T's [Number] and [Gender] features probe and find the 1st or 2nd person nominative object as their goal, they will not be relatively  $\varphi$ -complete. Agreement will not obtain between T and the nominative object, the object's abstract Case feature will not be valued, and the derivation will crash. I demonstrate this in the ungrammatical example 28.



As I have demonstrated in the preceding examples, the object agreement facts in quirky subject sentences arise due to the quirky subject's inactivity, which makes the nominative object the only accessible goal for T's [Person] probe. As for the 1st and 2nd person restriction on nominative objects in quirky subject sentences, this results from the failure to achieve relative  $\varphi$ -completeness between T and the nominative object when the nominative object is 1st or 2nd person.

In addition to deriving quirky subject sentences, this split  $\varphi$  probe analysis can also derive nonquirky sentences, which I will demonstrate in the following four examples.

As in the quirky subject examples that I have just described, in nonquirky sentences, what will happen first is T's [Person] feature will probe. When the nominative subject is 1st or 2nd person, things go smoothly. T's [Person] probe will find the subject as its goal. T will receive its [Person] value from the nominative subject. This is all shown in 29.



After [Person] probes and finds the nominative subject, T's [Number] and [Gender] will probe. The nominative subject remains active, since it has not yet valued its abstract Case feature. When [Number] and [Gender] probe, they will be able to find the nominative subject as their goal. T will receive specifications for [Number] and [Gender] from the nominative subject, and the nominative subject will value its abstract Case.



Things become less clear when the nominative subject is 3rd person. If the nominative subject lacks [Person] (being 3rd person), we might expect T's [Person] probe to skip over it and find the accusative object as its goal. The empirical data disagree with this result; in nonquirky sentences, the verb agrees with the nominative subject for [Person], unless we decide to adopt the controversial assumptions about the representation of  $\varphi$ -features that I touched on previously.

To avoid these kinds of assumptions, we want T's [Person] probe to agree with either the nominative subject or nothing at all (receiving a default specification). One possible way to do this is by treating the notion of an intervener as something that possesses the same kind of feature, rather than needing the specific feature itself. By treating all  $\varphi$ -features as the same type of feature, we can cause the nominative subject to be found by T's [Person] feature, and things will go more smoothly. However, we have already seen an asymmetry between [Person] and the other two  $\varphi$ -features, and treating  $\varphi$ -features the same way moves us away from treating them separately to begin with.

When T's [Person] feature probes, it will still find the nominative subject as its goal, even though the 3rd person subject lacks a [Person] feature. In this case, T's will receive a default specification for [Person], rather than receiving a value from the subject (Corbett 2006). This is demonstrated in 31.



Following the [Person] probe, T's [Number] and [Gender] features will probe and find the 3rd person nominative subject as the goal, just as with 1st or 2nd person nominative subjects. The nominative subject will also value its abstract Case feature, and the derivation will converge. This is all shown in 32.



4.3.3 Summary

As I have demonstrated, the split  $\varphi$  probe analysis is capable of representing both quirky and nonquirky sentences with some success. The object agreement facts arise due to the quirky subject's inactivity after checking with T's [Person]. The only accessible goal for T's [Number] and [Gender] probes then becomes the nominative object. The restriction on 1st and 2nd person nominative objects arises due to relative  $\varphi$ -incompleteness. When T probes [Number] and [Gender], a nominative object that also has [Person] will lead the derivation to crash.

While I have attempted to show how the split  $\varphi$  probe analysis can represent the Icelandic quirky and nonquirky data, there are some caveats. As I discussed in §4.3.1, this analysis requires some questionable and nonstandard assumptions with regards to unchecked features on the quirky subject. The analysis I describe here requires the quirky subject to value T's [Person] feature, but requires an unvalued, uninterpretable feature of its own to remain active. While abstract Case might be the go-to choice, arguments from Preminger (2014) suggest that lexically-case-marked DPs do not have an abstract Case feature. To get around this, I simply call the unknown uninterpretable feature on the quirky subject [f].

In addition, numerous problems pop up when the subject (quirky or nonquirky) is 3rd person. Resolving them requires further nonstandard assumptions about the timing of default agreement, the treatment of  $\varphi$ -features and interveners, and the representation of  $\varphi$ -features on DPs.

One way around some of these problems might be to abandon the Activity Condition.

Sigurðsson and Holmberg (2008) provide an independent split  $\varphi$  probe analysis, with one of the key differences being their rejection of the Activity Condition. After checking [Person], the quirky subject simply moves out of the way, becoming an impossible goal for T's [Number] and [Gender] probes. This may solve the problem of the mysterious feature [f], which will no longer be needed, but may not resolve issues related to a 3rd person subject. Furthermore, although it remains controversial, their use of the Activity Condition goes against my adopted theoretical framework. While this may prove fruitful for future research, I do not investigate it further at this time.

#### 4.4 Defective T

In this section, I will describe the analysis that I adopt to explain my research questions regarding the Icelandic quirky subject agreement facts and restrictions: the defective T analysis. In this analysis, T is  $\varphi$ -defective in quirky subject sentences, where it lacks a [Person] feature. When T probes its  $\varphi$ -features in a quirky subject sentence, it checks only [Number] and [Gender] with the nominative object. The object agreement facts result from the quirky subject's inactivity. The restriction on 1st and 2nd person nominative objects results from relative  $\varphi$ -incompleteness.

In this section, I will start by going over the remaining assumptions necessary for the defective T analysis outside of my Minimalist theoretical framework as described in Chapter 2. After that, I will show detailed derivations for all relevant Icelandic sentence types. I conclude this section with a summary of the defective T analysis and the remaining issues that this analysis leaves to be solved.

#### 4.4.1 Assumptions

The defective T analysis makes use of the Minimalist theoretical framework and assumptions that I describe in Chapter 2. The only major assumption that the defective T analysis requires is that T be  $\varphi$ -defective in quirky subject sentences in the first place.

In order to address why it is the case that T is [Person] defective in quirky subject sentences, I turn to the standard assumptions about defectiveness and the nature of quirky subjects more generally. While this explanation is only tentative for the time being, these theoretical components can be combined in such a way as to potentially explain this remaining assumption while staying within the bounds of a Minimalist framework.

Quirky subjects are standardly assumed to never be agentive (Schütze 1993). If T is strongly linked to the lexical verb by being a part of the verb's extended projection, this specification of nonagentivity may be reflected on T as well. Returning to my earlier discussion of defectiveness in Chapter 2, Corbett describes defectiveness as relating to what can be reasonably expected. If T is linked to the verb, then in quirky subject sentences, if the quirky verb has the expectation of being nonagentive, T may also have this expectation.

Relating T's expectation to lack agentivity to specific  $\varphi$ -features is somewhat stipulative, but it may get the job done. As I explain in Chapter 2, [Person] may have further specifications such as [participant] and [author] (Preminger 2014). 3rd person NPs have been argued to lack [Person], or at least the subnodes [participant] and [author]. The notion of agent could relate to these deeper specifications of [Person]. If [agent] can be related to [participant] or [author], the absence of agentivity can correlate with the absence of [participant] and [author]. As for a DP, this would signal 3rd person. This could manifest the same way on T. If quirky verbs are never agentive, and T is tied to the lexical verb, then T cannot be expected to specify [participant], [author], or even the entire [Person] feature. That is, T lacking [Person] in quirky subject sentences results from the same featureal structure whereby 3rd person DPs lack [Person]. While this link may be tenuous, the relation between T, the lexical verb, and the prohibition on agentivity may be able to explain why T lacks [Person] in quirky subject constructions.

Another potential explanation for defective T is stipulating a selection restriction on quirky verbs. Certain functional elements can restrict the complements with which they appear, so this may extend to Icelandic quirky verbs and T. Simply put, quirky verbs cannot appear with nondefective T. One independent example of this is the restriction of progressive aspect appearing with certain stative verbs, as in 33. This is a complex issue, and I put a full description of it aside for the time being.

- (33) a. He is climbing the tree.
  - b. \* He is believing in ghosts.

I have shown two tentative explanations for the existence of defective T in quirky subject sentences, but additional work needs to be done to claim either of these with any certainty.

#### 4.4.2 Derivations

Now that I have gone over the remaining theoretical assumption that needs to be made for the defective T analysis, I will show derivations using this analysis for both quirky subject sentences and nonquirky sentences. As before, I will start by showing derivations for the quirky subject sentences. I provide examples with both 3rd and 1st or 2nd person nominative objects. Unlike some of the previous analyses, the [Person] specification of the quirky subject will not cause any problems. Next, I will show how the defective T analysis runs smoothly for nonquirky sentences, no matter the [Person] specification.

In 34, the quirky subject checks Case with the verb, making the subject inactive. T then probes to check its  $\varphi$ -features. Since the quirky subject is inactive, T will find the 3rd person nominative object as its goal. T, lacking [Person], and the 3rd person nominative object, also lacking [Person], are relatively  $\varphi$ -complete, so T checks its  $\varphi$ -features and the object checks Case, and the derivation converges.



In the ungrammatical 35, things start to proceed as before. The quirky subject checks Case with the verb, and T probes to check its  $\varphi$ -features. However, if the nominative object is 1st or 2nd person, it will have a [Person] feature. When T finds the nominative object as its goal, T and the object will not be relatively  $\varphi$ -complete, so the derivation crashes.



My defective T analysis also derives nonquirky sentences. T is only  $\varphi$ -defective in quirky subject sentences. T in nonquirky sentences will have a full  $\varphi$ -feature set. In 36, T's  $\varphi$ -features will probe and find the 3rd person nominative subject as its goal. Even though T has [Person] and the nominative subject does not, this still meets the requirements of relative  $\varphi$ -completeness as I define it in Chapter 2. All of the subject's  $\varphi$ -features have a correlate



With a 1st or 2nd person nominative subject, as in 37, things go even smoother. T's  $\varphi$ -features will probe and find the nominative subject as its goal. T and the nominative subject are relatively  $\varphi$ -complete, so the derivation will converge. T will get its values for [Person], [Number], and [Gender] from the nominative subject.



In the preceding four examples, I have shown how my defective T analysis can derive the observed patterns for both Icelandic quirky subject sentences as well as nonquirky sentences.

For the quirky subject sentences, object agreement obtains because the quirky subject is inactive, and therefore inaccessible to T. When T probes its  $\varphi$ -features (only [Number] and [Gender] in quirky subject sentences), the only accessible goal is the nominative object. If the nominative object is 3rd person, it will be relatively  $\varphi$ -complete with respect to T, and the derivation will converge. If the nominative object is 1st or 2nd person, it will not be relatively  $\varphi$ -complete with respect to T; the 1st or 2nd person nominative object DP will have an extra  $\varphi$ -feature that does not have a correlate on T (that is, the [Person] feature), which causes the derivation to crash.

For nonquirky sentences, T has a complete set of  $\varphi$ -features, and the derivations go much more smoothly. With a 1st or 2nd person nominative subject, T will check [Person], [Number], and [Gender] with the nominative subject. The nominative subject will value its abstract Case with T, and the derivation will converge. With a 3rd person nominative subject, T will check [Number] and [Gender] with the nominative subject. T will receive a default value for [Person] later in the derivation (Corbett 2006). The nominative subject once again will value its abstract Case with T, and the derivation will converge.

#### 4.4.3 Summary

My defective T analysis involves a  $\varphi$ -defective T that lacks [Person] in quirky subject constructions. As I have demonstrated with the examples, this analysis is capable of deriving both quirky and nonquirky Icelandic sentences with any specification for [Person] on the subject or object. The important assumption that remains to be explained is that T is  $\varphi$ -defective in quirky subject constructions in the first place. As I tentatively described in §4.4.1, this may relate to T being in the extended projection of V. Quirky verbs are never agentive, so if T is in the projection of V, then perhaps this lack of agentivity translates into the absence of [participant], [author], or even the entire [Person] feature on T, à la Preminger (2014). If this is the case, however, we may run into problems with unergative verbs that still allow 1st and 2nd person subjects. A possible alternative explanation for defective T in quirky subject sentences could be in a selection requirement on quirky verbs or in a semantic restriction on quirky verbs, rather than something syntactic.

#### 4.5 Chapter Summary

In this chapter, I have described four possible analyses to explain the Icelandic quirky subject data. First, I showed a  $\varphi$ -stacking analysis based on Richards's (2013) case-stacking. This analysis seems capable of representing the Icelandic data, but requires a number of undesirable assumptions about how  $\varphi$ -features function on T and on DPs. In addition, this

analysis creates a new asymmetry between quirky and nonquirky sentences.

Second, I described an analysis from López that treats T, the quirky subject, and the nominative object as a complex dependency. Once again, this analysis seems generally capable of deriving the Icelandic patterns, but it suffers from similar problems as the  $\varphi$ -stacking analysis. The assumptions required for this analysis to work are not fully explained and generally nonstandard, and the analysis glosses over some potential alternatives without discussion.

Third, I considered an analysis based on splitting the [Person] probe from [Number] and [Gender]. This sort of analysis reasonably derives both quirky and nonquirky data, but relies on some unfounded stipulations, for example, that the quirky subject remains active after valuing its Case with the verb, and that [Person] behaves differently than other  $\varphi$ -features.

Finally, I described an analysis where T is  $\varphi$ -defective in quirky subject constructions, specifically lacking [Person]. Like the previous three analyses, this analysis can explain the Icelandic data. It derives the empirical patterns for both quirky and nonquirky sentences, and it does not require the nonstandard assumptions and stipulations that the other analyses rely on to function. While the key assumption of the defective T analysis—that T is defective in the first place—needs explanation, I have provided two tentative explanations that are built from a standardly Minimalist framework.

The defective T analysis derives both the object agreement facts and the 1st and 2nd person nominative object restriction in a more elegant, Minimalist manner than the other three analyses presented in this chapter.

### CHAPTER 5

### CONCLUSION

There have been numerous different analyses of Icelandic quirky case and agreement facts. In this thesis, I have described seven: three legacy and four modern analyses. Most of these analyses come with their share of theoretical shortcomings. Many of the earlier analyses of Icelandic, three of which I describe in Chapter 3, predate the current version of Minimalism, and thus do not make use of the same Minimalist components that I adopt in Chapter 2. While the analyses that I describe in Chapter 4 adhere to more Minimalist ideals, three of them are still suboptimal for a variety of reasons. In this final chapter, I will provide a review of the relevant Icelandic data, my Minimalist theoretical framework, and a recap of the four potential modern analyses of the Icelandic data that I describe in full detail in Chapter 4, as well as pointing out possible areas for future research.

### 5.1 Review of Data and Research Questions

The Icelandic construction that I focus on in this thesis is the quirky subject sentence with a nominative direct object. In these constructions, the finite verb agrees with the object, rather than with the subject, unlike in nominative-accusative sentences. Furthermore, 1st and 2nd person nominative objects are blocked entirely in this construction, even though they are allowed as quirky subjects, nominative subjects, and as accusative objects.

In 36 (repeated from 5), I show the object agreement facts that arise in Icelandic quirky subject sentences. Here, the finite verb agrees with the nominative object for number, rather than with the quirky subject.

(38) Henni leiddust strákarnir. her.3sg.DAT bored.3PL the boys.3PL.NOM
'She found the boys boring.' Sigurðsson 1993: ex 3, p 1

In 39 (repeated from 6), I show the 1st and 2nd person restriction on nominative objects. Here, no kind of agreement on the verb will be grammatical. A 1st or 2nd person nominative object will always be blocked in these Icelandic quirky subject sentences.

(39) Henni \*leiddumst/?\*leiddust/?\*leiddist við. her.3SG.DAT bored.\*1PL/?\*3PL/?\*DFT we.1PL.NOM
'She found us boring.' Sigurðsson 1993: ex 56, p 24

These representative pieces of data led me to my two research questions. First, why do we observe object agreement in quirky subject sentences? Second, why are 1st and 2nd person nominative objects blocked? I address both of these questions within a Minimalist theoretical framework, which I discussed in detail in Chapter 2, and will review briefly in the following section.

### 5.2 Review of Theoretical Framework

For the analyses that I describe in Chapter 4, including the defective T analysis that I adopt, I adopt a syntactic framework based in the Minimalist Program (Chomsky 1995, 2000, 2001, 2004). Minimalist theoretical components that I adopt include the operation Agree, a probe-goal system of agreement, the Activity Condition, and relative  $\varphi$ -completeness. Other theoretical notions that I adopt outside of the core of the Minimalist Program include the notion that 3rd person DPs lack a [Person] feature (adopted by Sigurðsson 1996, Boeckx 2000, and Preminger 2014), and that T can be  $\varphi$ -defective (supported by Hornstein et al. 2005 and Corbett 2006).

### 5.3 Summary of Analyses

In Chapter 4 of this thesis, I considered four potential Minimalist analyses of the Icelandic quirky subject data: (i) a  $\varphi$ -stacking analysis based on Richards (2013); (ii) an analysis by López (2008) that treats T, the quirky subject, and the nominative object all as a complex dependency; (iii) a split  $\varphi$  probe analysis where [Person] probes separately from [Number] and [Gender]; and (iv) a defective T analysis where T lacks [Person] in quirky subject sentences. While all four of these analyses are couched in a Minimalist framework and can generally derive the observed patterns, the defective T analysis best explains the Icelandic data. I provide an overview of the extra assumptions required beyond my adopted Minimalist framework for each analysis in 40. As 40 shows, while each of the analyses that I have described comes with their share of extra assumptions, the defective T analysis that I adopt for Icelandic requires the fewest stipulative assumptions beyond my Minimalist framework that I adopt in Chapter 2. Furthermore, the lone remaining assumption of my defective T analysis may be tentatively explainable while staying within the bounds of my Minimalist syntactic framework.

- (40) a.  $\varphi$ -Stacking
  - i. T's  $\varphi$ -features can agree with two different DPs in quirky subject sentences
  - ii. The secondary agree relation between T and nominative object is optional
  - iii. T only agrees once in nonquirky sentences
  - iv. [Person] on T is semantically interpretable
  - b. Complex Dependency
    - i.  $\varphi$ -featureless layer K on quirky subjects
    - ii. [Person] probes first and separately
    - iii. Unvalued Case can act as a probe
  - c. Split $\varphi$ Probe
    - i. [Person] probes first and separately
    - ii. Mystery feature [f] on the quirky subject
    - iii. Only [Person] checks with the quirky subject
    - iv. [Person] from the quirky subject always realized the same
  - d. Defective T
    - i. T lacks [Person] in quirky subject sentences

While I argue for my defective T analysis for Icelandic, there is still more work to be done to fully understand the various Icelandic quirky case and agreement phenomena. I will briefly discuss some future research directions in the following section.

### 5.4 Further Work

Out of the four modern Minimalist analyses I have presented in this thesis, my defective T analysis derives and explains the Icelandic quirky subject data the best. However, Icelandic quirky case is by no means solved; there is always more work to be done in order to more completely understand the Icelandic facts. In this section, I will give a short overview of a few possibilities for future research in this area.

#### 5.4.1 Other Quirky Sentence Types

The analyses that I describe in this thesis only consider one type of quirky construction in Icelandic. That is, the quirky subject construction with a nominative direct object. There are a variety of other quirky constructions in Icelandic that I would like to investigate in the future.

In Chapter 1 of this thesis, I explained how number agreement is optional in quirky subject sentences, depending on if the subject or object becomes topicalized (see 7–10). As I said then, I chose to ignore these constructions for the purposes of this thesis. However, a complete analysis of the Icelandic facts should incorporate these different structures. One avenue for future work is to expand my defective T analysis to accommodate these other sentence patterns.

In addition to the topicalization facts from Chapter 1 that need to be accounted for, Icelandic has other patterns of quirky case that need to be addressed. Icelandic has quirky sentences with both a quirky subject and a quirky object, and sentences with a nominative subject and quirky object. A complete analysis of Icelandic quirky case needs to consider all of these quirky sentence types.

#### 5.4.2 Defective T Explanation

The remaining nonstandard assumption of my defective T analysis is that T is [Person]defective in quirky subject sentences in the first place. I provided two tentative explanations for this fact. First is that T's [Person] deficiency ties into its relation with the quirky lexical verb. Alternatively, T's defectivity could result from a semantic selection restriction on the quirky lexical verb. In order for the defective T analysis to be totally complete, a detailed description of this phenomenon is necessary. For future work, I hope to analyze how these mechanisms might function in these Icelandic quirky subject sentences.

#### 5.4.3 'Future' Work

While my defective T analysis is based in a strong Minimalist theory, the Minimalist Program is constantly evolving and updating, as evidenced by the outdated Minimalist analyses I described in Chapter 3. Two examples of this that relate directly to my work are the use of the Activity Condition and the notion that  $\varphi$ -agreement conditions Case.

The Minimalist theoretical framework that I adopt for this thesis relies on the Activity Condition as a requirement for feature checking (Chomsky 2001). While this has been fairly standard, it is not universally adopted. As I briefly touched upon earlier, Sigurðsson and Holmberg (2008) provide a split  $\varphi$  checking analysis similar to the one I describe in §4.3. One of the main differences between their version and mine is that they reject the Activity Condition, whereas I adopt it. In the future, I would like to investigate how dispatching the Activity Condition from my theoretical framework would benefit or encumber my defective T analysis.

Another, much more recent development comes from Preminger (2014). The Minimalist framework that I adopt traditionally accepts that  $\varphi$ -agreement conditions Case checking. It is by agreeing with T for  $\varphi$ -features that a subject values its abstract Case feature, not the other way around. Preminger provides a system whereby the opposite is true. In Preminger's analysis of Sakha, he argues that Case checking actually conditions  $\varphi$  agreement. In doing so, Preminger rejects Bobaljik's (2008) analysis that treats  $\varphi$ -agreement as a postsyntactic operation. The account that Preminger sketches is very recent, and as far as I am aware it still has not become the standard. However, adapting my defective T analysis into a Premingerian system might be able to provide further support for defective T in Icelandic quirky subject sentences.

### 5.5 Conclusion

In this thesis, I have analyzed Icelandic quirky subject sentences and their agreement restrictions. Icelandic quirky subject constructions exhibit interesting phenomena beyond just the case that surfaces. In quirky subject sentences, the finite verb agrees with the nominative object rather than with the quirky subject. This goes counter to the pattern of agreement in nominative-accusative sentences, which show agreement between the subject and the verb. In addition, 1st and 2nd person nominative objects are totally blocked in quirky subject sentences. Once again, this goes against the pattern of nominative-accusative sentences, where all person specifications are allowed on subjects and objects. There is also a number agreement asymmetry with object topics not present in nonquirky examples.

In order to attempt to explain two of these phenomena, I considered four modern Minimalist analyses: (i) a  $\varphi$ -stacking analysis based on Richards's (2013) case-stacking; (ii) an analysis that treats T, the quirky subject, and the nominative object all as a complex dependency (López 2008); (iii) a split  $\varphi$  probe analysis where [Person] probes separately from [Number] and [Gender]; and (iv) a defective T analysis, where T in quirky subject sentences lacks a [Person] feature.

While all of these analyses are moderately capable of deriving the Icelandic data patterns, only my defective T analysis does so without relying on non-Minimalist or otherwise stipulative assumptions. Future work in this area involves a more detailed explanation of why T is  $\varphi$ -defective in quirky subject sentences, an extension to account for other Icelandic quirky constructions, and an expansion of my analyses to accommodate more recent developments in the Minimalist Program. Until then, the defective T analysis that I have described in this thesis is the best way to explain the Icelandic quirky subject data.

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