

Nominative in non-finite contexts in child language*

Athulya Aravind, MIT

May 11, 2019

Abstract

This paper presents an argument from language acquisition against a prominent view, following classical case theory (Chomsky, 1981), that nominative is case assigned by finite T to a nominal under a relationship of agreement. Evidence comes from a previously unreported case error made by young English learners, where subjects of bare and *to*-infinitival complements are marked with nominative case, rather than accusative. I argue that this error pattern supports a dissociation of finiteness and nominative case, both in adult grammar and in development. Adopting instead a configurational approach to case, I provide an analysis of this error that ties it to the exceptional status of English nominative.

1 Introduction

1.1 Overview

This paper presents an argument from language acquisition against a prominent view, following *classical case theory* (Chomsky, 1981), that Nominative (NOM) case is uniformly assigned by finite T to a nominal under a relationship of agreement. The core data involve a

*For valuable feedback and discussion, thank you to Loes Koring, Jon Ander Mendia, Coppe van Urk, Ken Wexler, audiences at the Language Acquisition Workshop of New England and at MIT. The seed for this project was set during conversations with Jill de Villiers about case errors she had observed in young children.

previously unreported case error made by young English learners, where subjects of bare and *to*-infinitival complements are marked with with NOM case (1) - (3).

(1) **ECM complements**

I want she to get off (Lara, 3;02)

I want he to be up tree (Aran, 2;07)

(2) **Causative complements**

I won't let he have it (Aran, 2;9)

Let she sit still (Eleanor, 2;9)

(3) **Direct perception complements**

Wanna see I put my mask on? (Peter 2;10)

I argue that this error pattern supports a dissociation of finiteness and nominative case, both in adult grammar and in development. In turn, it presents an argument in favor of so-called *configurational models* of case (Baker, 2015; Baker and Vinokurova, 2010; Marantz, 1991; Yip, 1987), where case is seen fundamentally as a structural relationship between nominals to one another, rather than a relationship between a nominal and a nearby functional head.

1.2 Two models of Nominative case

Nominative case on subject DPs has long been linked to finiteness: finite clauses appear with NOM subjects and non-finite clauses lack NOM subjects. On classical case theory (Chomsky 1981, building on Jean-Roger Vergnaud's insight), this link falls out from the fact that finite T is the source of NOM case. A key tenet of this model is that DPs need to be case-licensed and this licensing is done by dedicated functional heads, finite T being such a dedicated case-licenser. Taken together, the ability of finite T to assign case to a DP in its specifier and the inability of non-finite T to do the same explains a number of otherwise puzzling facts.

For instance, the theory predicts that DPs cannot appear as subjects of non-finite clauses without the availability of a special licenser (4-b) and motivates the obligatory raising of infinitival subjects in the complements of verbs like *seem* (4-c)/(4-d).

- (4) a. She will write a letter to the editor.
b. [PRO/For her/*She to write a letter to the editor] would be a bold move.
c. She seems [____ to have written a letter to the editor].
d. *It seems [she to have written a letter to the editor].

A second important component of classical case theory is the *abstractness* of structural cases like NOM. Thus, NOM case reflects a structural relationship between a functional head and a nominal that results in its licensing, but the shape of the case morphology that surfaces on that nominal may or may not transparently reflect this relationship. So although English lacks non-zero case morphology outside the domain of personal pronouns, any DP in the subject position of (4-a) can be thought of as having NOM case. Correspondingly, any DP in the embedded subject position in (4-d) can be thought of as *not* having NOM case. This abstractness allows us to maintain that a unified system of structural NOM assignment is at work even in languages whose case systems look quite different on the surface. For instance, Legate (2008) argues that once we take morphological and abstract case to be distinct, albeit intimately linked, the same core system can be seen to govern case and licensing in both an ergative-absolutive language like Walpiri and a nominative-accusative language like English.

The finite-T-licensing model of NOM case makes strong predictions for non-finite contexts — specifically, abstract NOM case (and the corresponding case morphology) should not be available in the absence of finite T. A significant challenge for this view, therefore, comes from languages where apparent lack of the designated case-licenser leaves the case patterns in a non-finite clause entirely unaffected. Sundaresan and McFadden (2011) show

that non-finite clauses in Tamil can perfectly well have nominative subjects (5).

- (5) Champa-vukku [Sudha oru samosa-vai saappiD-a] veND-um
Champa-DAT Sudha.NOM a samosa-ACC eat-INF want-3NSG
'Champa wants Sudha to eat a samosa.'

Facts from Icelandic have also figured prominently in discussions about the role of finite T in NOM case assignment. Certain predicates in Icelandic mark their subjects with quirky dative case, and in such cases, it is the direct object that gets marked NOM (6-a). Crucially, NOM on the object is available — and obligatory — even when the clause is non-finite (6-b).

- (6) a. Honum mundu ekki líka þeir
him.DAT would.3PL not like.INF they.NOM
'He wouldn't like them.'
- b. Að líka svona fáránleiki/*fáránleika!
to like.INF such absurdity.NOM/*ACC
'To like such absurdity!' (Icelandic, Sigurðsson 2006)

These types of problems have led to the development of an alternative model of case, which dispenses both with the general notion that case reflects licensing and the more specific notion that NOM case is assigned by finite T. On this configurational approach (e.g. Bittner and Hale 1996; Marantz 1991; Yip 1987), case is assigned to nominals on the basis of their structural relationship to one another. That is, the case a nominal bears depends on the presence or absence of other nominals within a defined domain and crucially not on the presence or absence of dedicated functional heads. On a well known instantiation of this model in Marantz (1991), DPs are realized with the highest case available to them in the following hierarchy:

- (7) *Case realization disjunctive hierarchy*
- a. Quirky/lexically-assigned

- b. Dependent (accusative and ergative)
- c. Unmarked/elsewhere

Quirky cases are idiosyncratically assigned by specific lexical items to their arguments. Dependent case is that assigned to a DP under certain c-command relationships with other DPs. For instance, ACC on this view is dependent case assigned to a nominal c-commanded by another nominal in the same case-domain; ERG is dependent case assigned to a nominal that c-commands another in the same case-domain. Unmarked case is the catch-all case assigned to DPs that not received either lexical or dependent case at the time of spell-out. Typically, NOM is taken to fall under this category. Notice the crucial difference in the treatment of NOM case on the two approaches to case. On the finite-T-licensing approach, NOM is the result of a positively-specified operation in the syntax. In contrast, on the configurational approach, NOM is the *absence* of case-assignment.

The Icelandic facts are unproblematic for the configurational approaches. The case-calculus is such that quirky case is assigned first. The Icelandic counterpart of *like* assigns quirky dative to its subject, effectively taking it out of contention for subsequent case competition. The next step in the algorithm is the assignation of dependent case, but since only one caseless DP remains after lexical case assignment, dependent case is not assigned. Instead, the remaining caseless DP receives unmarked (NOM) case.

The configurational approach is not without empirical problems of its own. First, there seems to be tight correlations between NOM case and tense/agreement morphology on the verb across languages, which demands an account. This is so even in languages like Icelandic: as stressed by a number of researchers, (Sigurðsson, 1993; Zaenen et al., 1985), agreement tracks case. As (6-a) shows, even when the NOM-marked DP is unambiguously the object, its ϕ -features are what is cross-referenced on the finite verb.¹ Second, there are

¹One solution has been to say that verbal agreement can be *case-discriminating* (Bobaljik, 2008). Agree may selectively target DPs with certain types of case, regulated by the following implicational hierarchy:

languages, English being one, where the best explanation for how NOM morphology ends up on a nominal is assignment by finite T. Unmarked/elsewhere case in English is ACC, not NOM (Marantz, 1991; Schütze, 1997). Moreover, when we look at non-finite clauses in which the purported source of NOM case is unavailable, we find that NOM is also missing. All of these facts are consistent with saying that finite T is responsible for nominative case on the subject in English.

Proponents of configurational approaches have approached these challenges in two ways. One is to say that a hybrid account is needed, where a configurational system of case assignment can live alongside the functional head strategy, even within one and the same language (Baker and Vinokurova, 2010). Thus, case assignment strategies are parametrized, such that a given language may make use of the configurational strategy, the functional head strategy, or both. Another option is to take the facts about languages like English at face value, but treat them as language-specific. So, there may very well be a link between certain varieties of T and NOM case morphology in e.g. English, but like Icelandic quirky case, the link may result from idiosyncratic morphological requirements certain heads (e.g. finite T in English) place on nominals in their vicinity (Preminger 2017; ideas along the same vein found in Sundaresan and McFadden 2011). On either story, the system of subjective case assignment in a language like English has to be more complex than that of e.g. Tamil. On the hybrid account, English is seen to employ a finite-T-licensing strategy exclusively for subjects of finite clauses. On the quirky case account, there are special, language-specific conditions that apply to subject DPs in this subset of environments.

(i) unmarked case $\prec\prec$ dependent case $\prec\prec$ idiosyncratically assigned case

What one would have to say then for Icelandic is that only unmarked case is accessible for Agree. Consequently, though NOM may appear independently of finite T, as in (6-b), when an agreeing T is present, it must agree with the highest DP with unmarked case; this happens to be the object in (6-a).

1.3 Objective of the paper

The current picture, then, is the following. Two competing theories of case aim to explain the distribution of NOM case in fundamentally different ways. They have similar empirical coverage and both encounter significant empirical problems. My goal in this paper is to bring a new kind of evidence to bear on this theoretical standstill. Specifically, I will show that evidence from language acquisition can arbitrate between the two models. On the assumption that possible child grammars are UG-constrained, the space of possibilities that the learner contends with will be shaped differently on finite-T-licensing versus configurational approaches to NOM case.

If indeed NOM is assigned by finite T, and moreover, this relationship is abstract — i.e. the morphological case that surfaces is only an imperfect diagnostic of structural case — the learner might be predisposed to assume this contingency. After all, this link must be assumed even for those languages where there is little to no surface-evidence that could guide the learner. If this is the case, in the absence of direct evidence to the contrary, children should not hypothesize a different system for NOM-licensing. On configurational models, children are free to entertain systems like Icelandic and Tamil, where NOM is available in the absence of finite T, a plausible hypothesis additionally supported by the relative parsimony of such systems.

The empirical evidence bearing on this issue comes from patterns of case-marking on non-finite subjects in child English. I present novel data from child productions of raising-to-object (RtoO) structures, where children mark DPs of non-finite clauses with NOM case. I show that these data are difficult to accommodate on a finite-T-licensing model. In contrast, the data are largely unproblematic for the configurational model, once certain minor assumptions are made. From an acquisition standpoint, then, there are non-trivial empirical gains to be had in adopting a configurational model of case.

The rest of the paper is organized as follows. I begin in the next section by presenting the core data on what I will refer to throughout as children's **infinitival-NOM** errors. §3 presents a series of further arguments that the data cannot be made consistent with a finite-T-licensing model. In §4, I show how a configurational model can account for these data. In §5, I discuss the merits and setbacks of this account, before closing in §6.

2 Infinitival NOM errors in child language

A subset of non-finite clauses, which includes complements of verbs like *want*, *see* and *make*, license overt subjects. In English, these DPs surface with ACC case. Throughout the paper, I refer to such constructions as Raising-to-Object (RtoO) constructions.²

Some English-acquiring children go through a developmental stage where they mark the subjects of RtoO complements with NOM case ((8)-(10), repeated from above).

(8) ECM complements

I want she to get off (Lara, 3;02)

I want he to be up tree (Aran, 2;07)

(9) Causative complements

I won't let he have it (Aran, 2;9)

Let she sit still (Eleanor, 2;9)

(10) Direct perception complements

Wanna see I put my mask on? (Peter 2;10)

Prima facie, these data point to a developmental stage where a principled link between

²There are important distinctions among the various types of constructions that I am lumping together here as RtoO. For instance, complements of what is usually categorized as ECM verbs, e.g. *believe*, *want*, are *to*-infinitives whereas perception (*see*, *hear*) and causative (*make*, *let*) verbs take small clause complements. There are within- and across- class differences in the syntactic behavior of the embedded subjects. I will gloss over these differences as they are not immediately relevant for the present discussion.

finite T and NOM case is *not* assumed. Below, I discuss the relevant data in more detail.

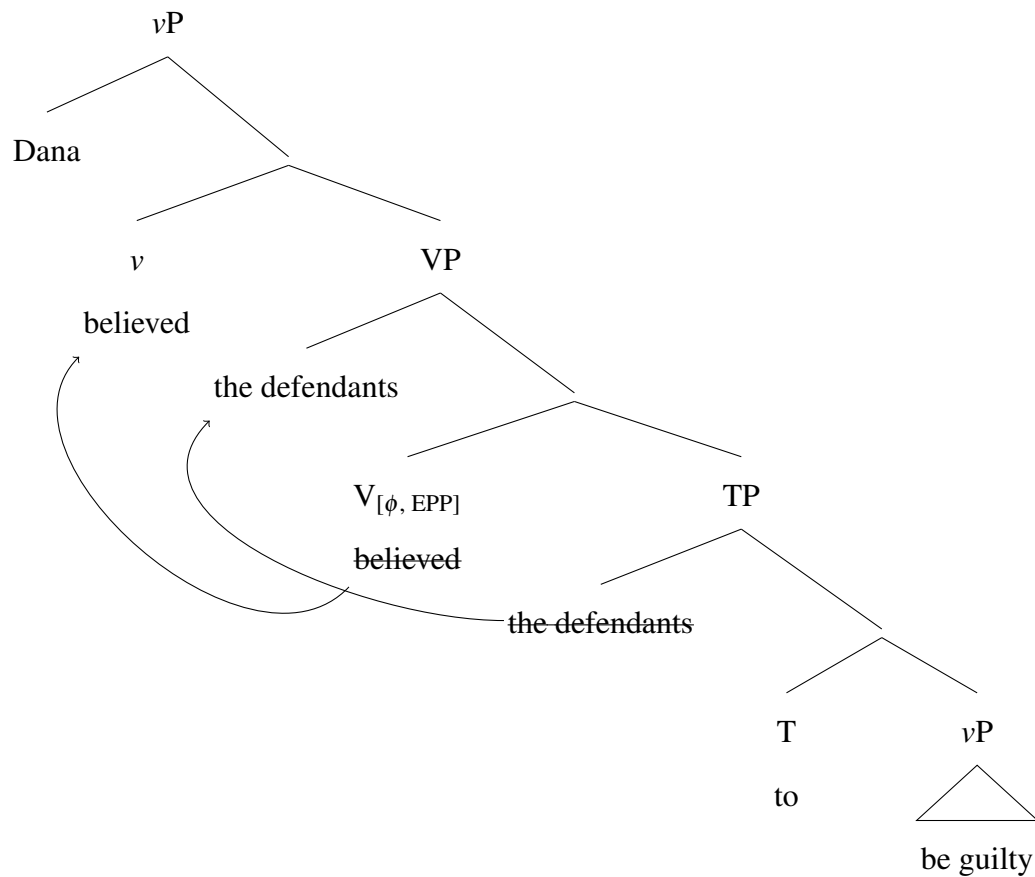
2.1 Background on RtoO

Despite being arguments of the embedded verb, subjects of RtoO constructions behave in crucial ways like matrix clause elements, sharing important traits with higher clause direct objects. They can, for instance, precede matrix adverbs (11-a), bind low elements in the higher clause (11-b), and undergo movement to the higher subject position when the embedding verb is passivized (11-c).

- (11)
- a. Dana believed the defendants with her heart to be guilty.
 - b. The DA proved [the defendants_{*i*} to be guilty] during each other's_{*i*} trials.
 - c. The defendants were expected to go to prison.

These facts have been taken as evidence that in RtoO constructions, the embedded subjects overtly raise to the higher verbal domain, presumably to the same position that object shift targets (Lasnik and Saito 1991; Postal 1974; see also Johnson 1991). Following conventional assumptions, I adopt the following structure for RtoO constructions in a language like English:

(12)



Some higher clause probe within the verbal domain — here for simplicity I have assumed it is *V* — bears an EPP feature that triggers movement of the closest nominal in its scope to its specifier. In the relevant constructions, the closest accessible goal is the embedded subject. On both classical case theory and the configurational model, the moved RtoO subject receives case in the same way as direct objects. On the classical approach, a functional head like little *v* assigns structural ACC case to a caseless nominal it c-commands. On the configurational view, the DP in question receives dependent ACC case, as a result of having raised to a position where it competes for case with the higher clause subject.

With these syntactic assumptions in hand, let us now turn to the acquisition facts.

2.2 Methods

All of the data discussed in this paper are taken from CHILDES (MacWhinney, 2000). Transcripts of 20 children ages 2;0 to 3;6 were examined from the following corpora of English-acquiring children: Bloom, Brown, Kuczak, Lara, Manchester, MPI-EVA-Manchester, Thomas. Manchester and MPI-EVA-Manchester corpora included learners of British English, but there are no known dialectal differences in the grammar of the relevant constructions.

Every child's production of RtoO constructions, broadly construed, were examined. Search was limited to those words produced by > 75% of children by 48 months according to summaries from the Wordbank database (Frank et al. 2016). This resulted in the inclusion of 2 ECM verbs *want*, *need*, 4 causatives *get*, *help*, *let*, *make* and 3 perception verbs *see*, *hear*, *watch*. Furthermore, only pronouns that are unambiguous with respect to case, i.e. 1st and 3rd person pronouns, are tabulated here. We exclude from the counts full or partial imitations or self-repetitions and clearly rote or formulaic expressions (including the causative frame *lemme*, which was frequent in early child language).

2.3 Results

Informative contexts (1st/3sg pronouns + RtoO predicates) are extremely rare in child speech — 405 out of 756254 total utterances. In fact, not all children's transcripts contained uses of RtoO constructions, let alone infinitival-NOM errors. A subset of 5 children (*i*) produced 72% of the RtoO utterances, and (*ii*) sometimes marked the embedded subjects with NOM.³ Patterns from the entire group of 20 and the subset of 5 are given in Tables 1 and 2, respectively. More in-depth analyses were conducted only on data from the error-makers.

What we observe from Tables 1 and 2 is that infinitival-NOM errors are rare: NOM was

³Two other children have been reported to make similar errors in the literature: Laura (Landau and Thornton, 2011) and O. (Garmash 2017; Jill de Villiers p.c.). Both, however, involved diary data so are not included in this analysis.

	ECM	Causative	Perception	All
Opportunities	244	142	19	405
Accusative	229	133	15	377
Nominative	15	9	4	28

Table 1: **Patterns from all children**

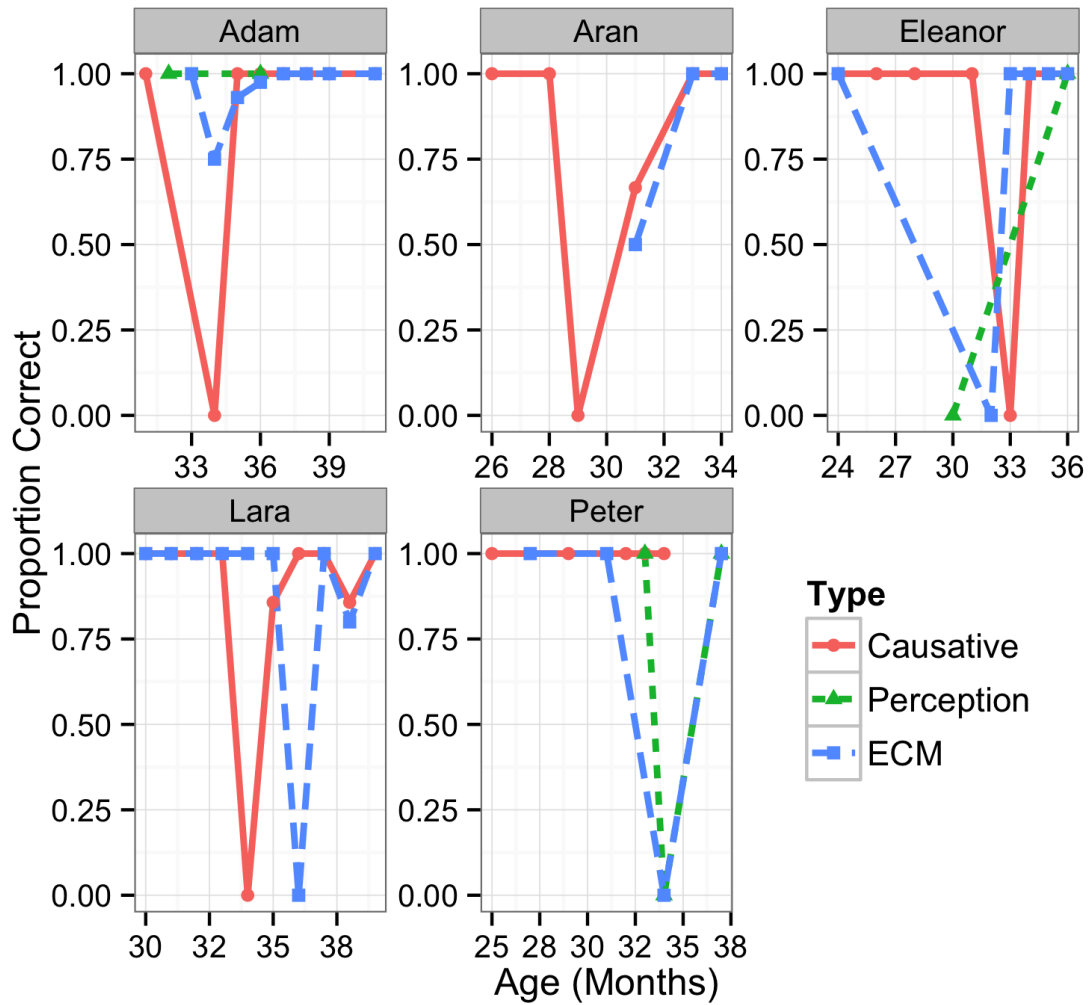
	ECM	Causative	Perception	All
Opportunities	194	88	9	291
Accusative	181	80	6	267
Nominative	13	8	3	24

Table 2: **Patterns from the error-makers**

overused only about 8% of the time. There are, however, certain tendencies across children that signal systematicity. First, errors are clustered within a brief window of time, usually a period of two to three months, which is also around the time when the constructions are first produced (Figure 1/Table 3). During this window, all 5 children make errors on more than one type of construction. The generalization is that if a child produces NOM subjects in the complement of an ECM verb like *want*, they are also likely to produce NOM subjects in the bare infinitive complement of a verb like *see*. Thus, the errors are not item specific or reproductions of lexicalized chunks. Moreover, errors are localized to **subjects of infinitives**. During the error period, children do not over-extend NOM to objects of surface similar object-control verbs (*ask, tell*) (0 out of 31 opportunities). In other words, a child who produces an utterance like ‘I want he to go’ never produces ‘I tell he to go’. Furthermore, during the error period, children do not make errors with embedded subjects of finite complements (0 out of 204 opportunities; complements of *think, say, pretend, tell* were examined to this end). Finally, errors are concurrent with adult-like ACC forms, which gives preliminary indication that aspects of the target syntactic representation may in fact be in place.

Together, these facts point to a genuine developmental stage, where children’s grammar allows for non-finite subjects to receive NOM case.

Figure 1: Proportion of adult-like ACC-use over time



2.4 Upshot

Recall the relevant components of NOM case assignment under classical case theory (Chomsky 1981 *et seq.*). Structural case on a nominal is determined by its syntactic licenser. The syntactic licenser of NOM case is finite T. Structural NOM is *abstract*, i.e. not directly "read-off" from morphology, but in the absence of third-factors (e.g. idiosyncratic requirements of individual lexical items; lack of a morphological correlate of this abstract case feature), structural and morphological NOM should closely correspond.

	Adam	Aran	Eleanor	Lara	Peter
24	0/0	0/0	0/3	0/0	0/0
25	0/0	0/0	0/0	0/0	0/1
26	0/0	0/1	0/2	0/0	0/0
27	0/0	0/0	0/0	0/0	0/1
28	0/0	0/1	0/1	0/0	0/0
29	0/0	1/1	0/0	0/0	0/3
30	0/0	0/0	1/1	0/3	0/0
31	0/1	2/5	0/1	0/6	0/1
32	0/1	0/0	1/1	0/9	0/2
33	0/2	0/2	1/2	0/4	0/2
34	5/17	0/3	0/2	2/4	2/5
35	3/45	NA	0/3	1/9	0/0
36	2/42	NA	0/10	1/6	0/0
37	0/35	NA	NA	11/11	0/4
38	0/9	NA	NA	2/10	NA
39	0/2	NA	NA	6/6	NA
40	0/0	NA	NA	NA	NA
41	0/7	NA	NA	NA	NA

Table 3: **No. of infinitival-NOM errors by Age (months)**

The theory makes certain predictions for language acquisition. First, the abstract nature of NOM case means that surface morphology cannot solely be relied upon to learn the workings of the system. This is true especially of languages like English, where subjective and objective cases are most often morphologically realized as \emptyset . Given that children nevertheless converge on the target grammar of NOM case assignment, the knowledge that NOM is assigned by finite T must be a principle of UG that doesn't need to be learned from input. If this is the case, modulo superficial performance errors, children's earliest productions should demonstrate target knowledge of the distribution of NOM.

The core finding here runs counter to this prediction: English-acquiring children do not initially know this contingency between finite T and NOM case. They erroneously produce NOM case in environments where the functional head that is supposed to assign NOM — finite T — is decidedly missing. This suggests that at a stage in development, children are

considering other hypotheses regarding NOM case assignment. One the assumptions (*i*) that it is a principle of UG that finite-T licenses NOM and (*ii*) that child grammars are UG-constrained, these data pose a significant explanatory challenge.

3 Ruling out alternatives

The insurmountability of the challenge posed by the acquisition data depends in part on whether or not there are viable alternative explanations of the infinitival-NOM errors. There are two alternative explanations that could help make these data compatible with a finite-T-licensing model. One possibility is that children in this stage simply do not know when a given construction is actually missing finite T. If so, over-productions of NOM need not signal a lack of knowledge of the finite-T/NOM link, but rather, a lack of knowledge of the distribution of finite T in English. After all, English has impoverished overt markers of finiteness. A second possibility is that children may not have figured out the morphological case forms that realize the various structural cases in the language. If so, the infinitival-NOM errors could simply be seen as a more superficial error that does not bear in significant ways on underlying knowledge of abstract NOM licensing. Both these alternatives gain plausibility from the fact that English-learners do in fact make errors with case and tense-marking in other main clause environments (Gruber, 1967; Rispoli, 1994; Schütze, 1996, 1997; Vainikka and Young-Scholten, 1994; Valian, 1991; Wexler, 1998, 2011). In this section, I will examine these other errors and their relationship to the infinitival-NOM errors as a way of exploring and ultimately ruling out these two alternative possibilities.

3.1 Case and tense errors in main clauses

In addition to the infinitival NOM errors that are the focus of this paper, there is another, better-known type of case error that young children make. Between ages of 2 and 3, English-acquiring children sometimes mark subjects of finite verbs with accusative case (ACC),

producing utterances such as in (13) (Gruber, 1967; Rispoli, 1994; Schütze, 1996, 1997; Vainikka and Young-Scholten, 1994; Valian, 1991).

- (13) Me get John (Adam, 2;3.05, Brown Corpus)
Her sing it (Adam, 2;10.30, Brown Corpus)

The erroneous ACC subjects are interspersed with adult-like NOM subjects, a pattern of optionality that is similar to what we see with infinitival NOM errors. These main-clause ACC errors, furthermore, correlate with another type of error. Around the same age, children pass through what is often called the *Optional Infinitive* (OI) stage (Haegeman, 1995; Hoekstra and Hyams, 1998; Phillips, 1996; Pierce, 1992; Platzack, 1990; Sano and Hyams, 1994; Weverink, 1989; Wexler, 1994a, 1998), where they produce main clauses with infinitival verb forms. Main-clause ACC errors, crucially, are restricted to the main-clause infinitives. The set of utterances from Nina (Suppes, 1973) in (14) illustrates the pattern:

- (14) a. He has six (2;2.6)
b. He fall down (2;1.29)
c. Her have a big mouth (2;2;6)

The utterance in (14-a) is adult-like: it contains a correctly inflected verb and a NOM-marked subject. (14-b) shows an optional infinitive utterance with NOM subject: these look like adult utterances with some verbal morphology omitted. In (14-c), we find both the omission of verbal morphology and incorrect ACC case on the subject. Significantly, utterances of the form *Him has six* are conspicuously absent (Loeb and Leonard 1991; Schütze 1996, 1997 a.o.; cf. Pine et al. 2005).

A dominant approach to this observed link between Optional Infinitives and erroneous ACC subjects has been to treat them as part of the same underlying phenomenon, namely a

single deficit in the realm of finiteness (Radford, 1995; Rizzi, 1994; Schütze, 1996, 1997; Vainikka and Young-Scholten, 1994; Wexler, 1994b, 1998, 2011). The T that appears in main clauses possesses featural content that sets it apart from infinitival T; as a shorthand for the moment, let us call them "finiteness features". Following classical case theory, NOM case is thought to be assigned to subject DPs via Agree with finite T (Chomsky, 2001). At the heart of children's errors is the fact that child grammar allows for optional underspecification of finiteness features, which results not only in the omission of the corresponding inflection on the main verb, but also a lack of NOM.

Two pieces of evidence seem to support this analysis. First, children who make subject case errors do not make similar errors with objective or oblique cases. This follows from a theory on which there is a localized problem with the functional element responsible for subjective case. Secondly, among those languages whose learners display an OI stage in development, English is unique in concurrently having a main-clause ACC stage. Children acquiring languages like Russian (Babyonyshev, 1993), Dutch (Powers, 1995), German (Schütze, 1995) and Faroese (Jonas, 1995) all go through an OI stage, but invariantly produce adult-like NOM subjects. This pattern follows from a theory on which, in the absence of the designated case-licenser (e.g. finite T), a DP must surface with default case. What makes English crucially different from the other languages mentioned is that the default case in English is ACC, whereas in the others, it is NOM (Schütze, 1996, 1997).

To sum up, we find the following patterns: English-acquiring children show a NOM/ACC alternation on subjects of main clauses. They also alternate between producing adult-like finite verb forms and non-adult infinitival verb forms in main clauses. Moreover, the two errors are intimately related: the NOM/ACC optionality manifests itself only in children's OI productions. This systematic link between verbal inflection and case-marking is *prima facie* evidence that children know something about the contingency between NOM case and finiteness in English. In fact, children's case errors have been taken to furnish a strong

argument in support of a classical, finiteness-contingent theory of NOM case, as made explicit in Schutze and Wexler (1996): "despite superficial errors, we find strong evidence for young children's knowledge of syntactic case mechanisms. [They] know that when the verb takes agreement, the case on the subject must be NOM." (p.670).

Children's Optional Infinitival errors show that their grammatical structures do not always consist of the same set of finiteness features as those of adults, and this mismatch could have further ramifications for subjective case. Given this state of affairs, we might ask: could infinitival-NOM errors be the flip-side of the same issue? That is, could children be *over-specifying* finiteness features on clauses that are infinitival for adults? If so, the NOM/ACC alternation could be subsumed under the same phenomenon as the main-clause ACC errors, simply in embedded environments. The infinitival-NOM errors may occur precisely in those cases where the representation erroneously includes the relevant subset of finiteness features that license NOM.

3.2 Results

One way of ruling out the possibility that infinitival-NOM errors are not simply another fall-out of a generalized problem with finiteness is to show that it is temporally dissociated from these other errors. To this end, a set of further analyses were conducted on the transcripts of the error-makers. Simplex utterances involving 1st and 3rd person pronouns were extracted for each of the five children who made infinitival NOM errors. These utterances were coded for (i) verbal inflection (finite/non-finite/can't-tell⁴) and (ii) subject case (NOM/ACC). If the infinitival-NOM errors fall under the same umbrella of errors as OI/main-clause-ACC errors, simply in embedded environments, we should find that the main-clause errors and infinitival-NOM errors temporally coincide.

⁴There were many such cases, as the present tense finite form of verbs with 1st person subjects is indistinguishable from the non-finite form.

The results revealed that all five children produced main clauses with non-finite verbs at the time they were making infinitival-NOM errors, i.e. they were all in the Optional Infinitive stage.

- (15) a. He fly like that (Adam, 2;10.30)
b. She have two raisins (Adam, 2;11.28)
- (16) a. He want some bones (2;6.10)
b. He jump in (Aran, 2;6.17)
- (17) a. She make me a hat (Eleanor, 2;8.04)
b. He want to sit next to me (Eleanor, 2;11.04)
- (18) a. He eat it all up (Lara, 2;10.28)
b. He hurt herself (Lara 3;0.16)
- (19) a. He want some people to talk with him (Peter, 2;10;19)
b. He catch the fish (Peter, 3;1.20)

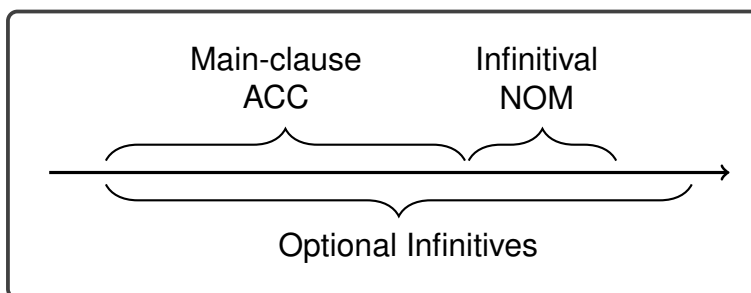
All five children also go through a stage of producing ACC on subjects of main clauses. Corroborating earlier findings regarding the links between OI and main-clause ACC errors, we find no erroneous ACC subjects in conjunction with finite verbal morphology. The key finding, though, is that main-clause ACC errors and infinitival NOM errors *do not* occur during the same time window. Rather, infinitival-NOM errors tended to occur immediately after or towards the tail end of the main-clause ACC errors (Table 4). The timeline of the three errors is schematized in Figure 2.

The systematicity in the error patterns, reported in earlier work and replicated here, rules out deflationary accounts on which children's case errors reflect a generalized confusion about the case and tense systems of English. It also demonstrates that children distinguish

Child	Last ACC-overuse	First NOM-overuse
Adam	2;10;6	2;10;00
Aran	2;4;13	2;5;24
Eleanor	2;10;4	2;06;00
Lara	2;10;00	2;10;21
Peter	2;8;13	2;10;00

Table 4: **Age of last ACC and first NOM errors**

Figure 2: Timeline of errors



between finite and non-finite environments, at least in main clauses: ACC subjects are restricted to their productions of root infinitives. The lack of coincidence between infinitival NOM errors and main clause ACC errors points away from a treatment of the infinitival-NOM errors as resulting from the same underlying issue as the main-clause ACC errors. If children were simply reproducing the OI phenomenon in embedded clauses, with the NOM/ACC alternation signaling finiteness of the embedded clause, we would expect to find NOM/ACC alternations in main and embedded environments at the same time. This is precisely what we fail to find.

It is worth bearing in mind that the timeline in Figure 2 remains unaccounted for on existing theories that tie Optional Infinitives and main clause ACC errors to a single factor—the optional underspecification of finiteness features. As they stand, these accounts cannot explain the fact that children stop producing ACC on main clauses well before they exit the OI stage, only to start alternating between NOM/ACC in certain embedded clauses.

4 Interim summary

On classical case-theoretic approaches to NOM case, nominals receive NOM via Agree with finite T. This link between finite T and NOM case is seen to follow from principles of UG, which children presumably never have to learn. There is developmental evidence that at least at first blush supports this view: children's omissions of finiteness-related morphology and productions of non-NOM subjects go hand-in-hand (Schütze, 1996). The data presented in this paper, however, cast doubt on this picture. Children assign NOM case to subjects of clauses in which finite T is clearly absent. That is, they produce utterances that stand in clear violation of the finiteness-NOM contingency. Two alternative explanations having been eliminated, we are thus left to take the infinitival-NOM errors as existence proof of a stage in development where children fail to treat NOM case as assigned by finite T.

How does the existence of such a developmental stage bear on our theorizing about NOM case? One option, of course, is to simply accept that children go through stages where they entertain UG-inconsistent hypotheses. However, this line of interpretation is not entirely satisfactory. It entails abandoning the Continuity Hypothesis (Macnamara 1982, Pink 1984, Crain 1991, Crain and Pietroski 2001), the idea child language can differ from the local adult language only in ways that adult languages can differ from each other — i.e. at any given time, children are speaking a possible human language, even if not the particular language spoken around them — something that has proven quite fruitful in investigations of child language acquisition.

An alternative is to take these child data as constituting evidence against the finite-T-licensing model of NOM case and in favor of a configurational approach. Recall that on the configurational approach to case, the surfacing of NOM case on a nominal is not dependent on a dedicated head like finite T. A link between NOM case morphology and finiteness may very well be a property of English, but it is, if anything, an idiosyncratic property. Children's

infinitival-NOM errors do not, therefore, constitute a problem for such theories.

We might still take issue with a wholesale abandonment of finiteness-based theories at this point. Indeed, it appears that the classical case-theoretic approach to NOM case fails to account for the infinitival-NOM errors, but is it possible to refine the model in ways that make it compatible with the infinitival-NOM stage while preserving its core insights?

One such refinement may involve complicating our notion of *finiteness* and in turn, what constitutes an T with NOM-assigning capacities. Suppose, for instance, that the specifications of the core "finiteness" features [\pm Tense] and [\pm Agr] on T are independent of each other, such that in addition to ordinary finite clauses ([+Tense, +Agr]) and ordinary infinitives ([−Tense, −Agr]), we can have mixed T-heads with the featural composition [−Tense, +Agr] or [+Tense, −Agr]. Suppose also that languages vary parametrically with respect to which feature licenses NOM (see e.g. Haegeman 1986). On this more complex notion of finiteness, the core assumption that a certain variety of T is the source of NOM is maintained, but the parametric space is broader.

Most importantly for us, this variant of the theory leaves space for genuine learning and thus, potential errors: even a learner who is biased to presuppose a finiteness-NOM contingency must figure out what subset of features in the language counts as "finite" in the relevant sense. To explain the infinitival-NOM errors, we might then postulate that children go through a stage where they assume that in addition to ordinary finite T, certain variants of infinitival T in English also have the ability to assign NOM case. Though this solution has initial appeal and plausibility, when we consider the relevant data in its entirety, the tenability is lost. The problem is that a "non-finite-T-assigns-NOM" phase is a non-starter once we look beyond the ECM complements. Causative and perception complements are smaller than TP, most likely consisting of just *vP* or *AspP* (Felser, 1999). These clauses do not contain *any* variety of T, finite or non-finite, yet we find infinitival-NOM errors in these environments. There is at least tentative evidence that children distinguish between these

small clause complements and genuine infinitives: we never find over-productions of the infinitival *to* in the complements of causative and perception verbs.⁵ Thus, the hypothesis that young children may be treating certain non-finite T heads as NOM-assigners will need to be supplemented with another theory for how in child grammar NOM is licensed in environments lacking T altogether.

I submit, then, that the key idea within a classical case-theoretic approach to NOM case — that it is uniformly assigned by a species of T — needs to be dispensed with. In the next section, I show how the infinitival-NOM stage in development can instead be accounted for on a configurational model of case.

5 Accounting for infinitival-NOM errors on a configurational model of case

5.1 Ingredients

I argue that children's infinitival nominative errors are the joint result of two orthogonal problems:

- (i) A generalized problem of optional underspecification of features on heads (e.g. Schütze 1996; Wexler 2011).
- (ii) A localized problem in identifying the mechanisms for subjective case assignment in English in the parametric space provided by the case realization disjunctive hierarchy

Before demonstrating how these two problems lead to the observed patterns of errors, let me spell out some of the key assumptions crucial to the analysis.

Underspecification of features on heads: Many theories of children's Optional Infinitives posit that child grammar allows for optional underspecification of features on heads.

⁵There are some errors in the other direction: omission of *to* in ECM complements.

In the case of OI, the omission of finiteness features or heads results in the corresponding omission of verbal inflection (Boser et al., 1992; Rizzi, 1994; Schütze, 1996; Wexler, 1994b, 1998). Though certain aspects of these theories regarding the relationship between finiteness and NOM case must be abandoned in light of the new data presented here, the general idea that Optional Infinitives result from featural omission has strong empirical motivation. It has been shown to offer a broad solution to a range of seemingly unrelated phenomena, including object clitic omission (Tsakali and Wexler, 2004), scrambling (Wexler et al., 2004) and short-form negation in certain languages (Baek and Wexler, 2008).

An enriched configurational case model: The analysis here assumes the following model of configurational case assignment:

- (20) Modified Disjunctive Case Hierarchy: X^0 -assigned \prec dependent \prec unmarked/elsewhere
- a. **X^0 -assigned case:** Case may be assigned under closest c-command between (i) a selecting head and its argument DP (quirky/lexical case) or (ii) a functional head and a DP (e.g. *for*-complementizer in English)
 - b. **Dependent cases:** Assigned to DPs under certain c-command relationships with other DPs within the same case-domain (VP, ν P, CP, DP)
 - (i) ACC: assigned to a DP c-commanded by another DP
 - (ii) ERG: assigned to a DP that c-commands by another DP
 - (iii) marked-NOM: assigned to a DP that is *not* c-commanded by another DP
 - c. **Unmarked/elsewhere case:** assigned to DPs that are caseless at the time of spell-out; what we typically call NOM or ABS

The model above involves certain emendations to the standardly assumed configurational

models (e.g. Marantz 1991). First, following Baker (2015), the dependent case module is extended beyond ACC/ERG to also include the category of marked Nominative. Marked-NOM case is case assigned to an XP that is *not* c-commanded by any ZP in the case-competition domain. This differentiates it from ERG case, assigned only to the higher of two DPs in a configuration with more than one DP, and also from unmarked NOM, which is elsewhere case. Second, following Preminger (2017), the notion of lexical/quirky case is amended to include also case idiosyncratically assigned by functional heads. This broadening is motivated by sentences like (21). As pointed out by Preminger (2017), the relationship between the prepositional complementizer and the subject pronoun *vis-à-vis* case cannot readily be captured in Marantz's (1991) configurational theory: (i) the nominal cannot be receiving dependent ACC, as *him* is the only DP in (21) and (ii) it cannot be receiving lexical case because *him* is not an argument of *for*.

(21) For him to be late would be surprising.

As mentioned earlier, there seems to be an intimate link in English between NOM case and T, a challenge for configurational models of case where "Nominative" is taken to correspond to UNMARKED case. In English, the *configurationally* UNMARKED case is homophonous with "Accusative" case, which has the elsewhere distribution in the language. However, given the above enrichments to the configurational model, we are in a position to say something about English Nominative. Specifically, English "Nominative" can be treated as a species of **X⁰-assigned** case, assigned by certain varieties of T (finite/subjunctive) (Preminger, 2017). English NOM is thus a species of "quirky" case. Children, I argue, start out by hypothesizing more general mechanisms for subject case assignment. In particular, children go through a stage where they treat English NOM as **dependent marked-nominative case**, assigned to the highest DP in a given case-competition domain. Infinitival-NOM errors occur at such a

stage.⁶

5.2 Deriving the patterns

Children's infinitival NOM errors co-occur with adult-like ACC forms. A satisfactory account of the errors, therefore, must derive both. A key assumption about the syntax of RtoO constructions is that an EPP feature on a verbal element in the matrix clause is responsible for triggering the movement of the embedded subject to the higher clause. On the present account, the case form of the embedded subject will crucially depend on whether or not this feature is omitted in the structure that the child builds.

When this EPP-feature is present on the higher verbal head, the embedded subject will raise to the higher domain. The raised subject will now be in the right configuration to receive dependent ACC case. Children in this stage make no errors with objective case in English, which on the configurational model is dependent ACC. We can thus reasonably assume that they know the conditions under which ACC is assigned in the language. Accordingly, they mark the raised embedded subject with ACC.

However, child grammar at this stage, unlike that of adults, allows for structures where the EPP feature is omitted, as evidenced by the fact that children who make infinitival-NOM errors are firmly within the OI stage. Because the EPP-feature on the higher verbal element is responsible to RtoO, in its absence, the embedded subject will stay in-situ. Thus, we end up with an infinitival subject that stays within that infinitival clause, with no obvious exceptional case-licenser (like, e.g., the prepositional complementizer).

Such circumstances present us with a unique window into understanding children's hypotheses about English subjective case. A child may have already identified the contin-

⁶An alternative analytic approach would be to adopt the hybrid account in Baker and Vinokurova (2010), where English adopts an agreement-based strategy *à la* classical case theory for NOM case. Empirically, the two approaches do not make fundamentally different predictions for the data here. Positing two distinct modalities of case assignment for subjects in different environment might very well not be the starting hypothesis for the learner. Ultimately, the choice comes down to what one finds more conceptually elegant.

gency between NOM and finiteness in the language, in which case, the infinitival subject should surface with unmarked/default ACC case. Notice that such productions would be indistinguishable from adult-like forms. However, a child who has not yet figured out that English NOM is T-assigned case may hypothesize other possibilities. One hypothesis that would be consistent with the vast majority of the child’s input is to take English to be a marked-NOM language. Thus, the same case morphology — in particular, what we call Nominative case morphology — will surface on any DP that *not* c-commanded by another in its case domain. Notice that such a model of subjective case is simpler and more general than the one operative in adult English (22).

(22) **TARGET GRAMMAR:**

DPs in the subject position of finite/subjunctive T → X⁰-assigned

DPs in other subject positions → Unmarked/elsewhere

CHILD GRAMMAR:

DPs in any subject position → Marked-NOM

Crucially, a child who has misanalyzed English Nominative as marked-NOM will assign NOM to the subject of an RtoO construction when that subject fails to raise to the matrix. In other words, this type of misanalysis would result in the observed infinitival-NOM errors.

What type of evidence does the child need to eschew with such a hypothesis and exit the infinitival-NOM stage? Informative environments, though limited, exist. Cases like (23), where an infinitival subject is in the right configuration for marked-NOM, but surfaces with unmarked case, provide a few such informative environments.⁷

(23) a. Mad magazine sentences:

⁷Infinitival-complement environments, of course, are confounded due to RtoO.

*Me/*I lie to you? Never!*

- b. Small clauses in subject position:

*Her/*She at a karaoke bar is what we must avoid.*

- c. Small clauses in adjunct position:

*Him/*He exhausted already, they decided to camp for the night.*

6 Discussion

6.1 Summary and assessment

Children's erroneous productions of NOM case on infinitival subjects present a problem for theories that posit a principled link between finite T and NOM case. I have provided an account of these infinitival-NOM errors that moves away from such theories and instead capitalizes on the exceptional nature of English Nominative. Errors of precisely this sort are expected, if children are biased to first posit more parsimonious, but perhaps non-target, algorithms for subject case assignment.

The proposed analysis explains facts about case acquisition in English and beyond. One of the key observations about the acquisition trajectory of English-acquiring children (see Figure 2) is that they make infinitival-NOM errors once they have exited the main-clause ACC stage. On the present account, this is unsurprising. If at a certain point, English children switch to a marked-NOM analysis of subject case, main clause subjects — by virtue of being the highest DP in their case domain — will invariantly surface with NOM case morphology.

The account also sheds light on why the acquisition trajectory for English subjective case looks so different from the acquisition trajectory of case elsewhere. Children seemingly do not have trouble with other "structural" cases, like ACC in English and beyond, as well as NOM in languages other than English (Narashimhan, 2013; Pye, 1990; Rispoli, 1994; Schütze, 1997). But on the view advanced here, English "Nominative" is *not* structural case

in the same way; it is "quirky". Accordingly, its acquisition trajectory should resemble what we find with quirky cases elsewhere. There is tentative evidence supporting these predicted parallels: Eisenbeiss et al. (2006) shows, for instance, that German-acquiring children who are proficient in all other types of cases in the language nevertheless show a protracted acquisition trajectory for quirky case.

6.2 A potential issue

The analysis in the previous section leaves several questions open, but one is particularly pressing. As pointed out in §3.1, there is evidence for a developmental stage at which children *do* seem to know the finiteness-NOM contingency at work in English. Puzzlingly, this stage *precedes* the infinitival NOM stage where, if the account here is on the right track, children are not grasping this contingency. Together, then, these data point to a non-monotonic learning trajectory — children seem to get worse at English subject case assignment only to get better again, i.e. they display a U-shaped learning trajectory. In this section, I offer some speculative suggestions about how such an acquisition trajectory could plausibly obtain.

U-shaped learning curves have been observed in other areas of morphosyntactic development, most famously the development of the English past tense (Marcus et al. 1992 *et seq*). The facts about the development of past tense morphology can be summed up simply: after a period in which children's productions of irregular verbs in the past tense are all adult-like, they systematically begin to produce forms like *goed* and *holded*. Crucially, the development of the English tense system on the whole seems to be the harbinger of such overregularizations, suggesting that the errors are a reflex of some critical grammatical reanalysis. The same might be true of the case errors. More specifically, hypothesis-revisions about how the case system works may be triggered by shifts in an understanding of clausal complementation.

We can think of the child's learning task in the realm of case as involving two independent but interacting domains, case and clausal complementation, each of which involves various smaller learning tasks. What the child needs to figure out vis-à-vis the case system of her language include general alignment properties (NOM/ACC vs. ERG/ABS etc.), as well as more idiosyncratic aspects of the language (e.g. quirky case). With respect to complementation, the learner has to identify, among other things, the range of complement-types available in her language. Like case (on the configurational model), clausal complementation is also an area where the child has to figure out from input, perhaps piecemeal, the facts about her particular language.

Previous research suggests that English-acquiring children start producing their first infinitival complements between the ages of 2 and 3 years with PRO-infinitives preceding those taking overt subjects by at least half a year (Bloom et al., 1989, 1984; Diessel, 2004). During this period, the child may in fact hypothesize that overt subjects are restricted to finite contexts, i.e. that English is an [-INF-SUBJ] language. Note that this is an erroneous assumption about nominal licensing, which, on the configurational model of case adopted here, is orthogonal to case. At this stage, the learner's task is delimited to figuring out how subjects of finite clauses get case. One candidate hypothesis — that finite subjects received unmarked case — should be ruled out fairly quickly, given the pervasive evidence that ACC is unmarked case in English.⁸ The child who has identified the correct unmarked case in English, but believes it to be a [-INF-SUBJ] language, may in fact posit a link between finite T and NOM case. If so, during this stage, we would observe the verbal-inflection/NOM-case correlation noted in the literature.

Bear in mind, however, that while this stage emulates target grammar, the data children are considering is a proper subset of the full range of environments. For them, every subject

⁸Informative environments include: fragment answers, predicate nominals, coordinated subjects, dislocated topics, modified pronouns, etc. It has been suggested that children know English elsewhere case by the two-word stage (Abdulkarim and Roeper, 1997; Schütze, 1997).

is the subject of a finite T. But at some point, the child will be faced with indisputable evidence that English is a [+INF-SUBJ] language. When that happens, the model for subject case assignment must also be reevaluated and updated accordingly, in light of the new data. The child is faced with two options:

1. Maintain current hypothesis about finite clause subjects; figure out independently how subjects of infinitives get case.
2. Switch to a more parsimonious system, in which all subjects get assigned case in a uniform fashion

The infinitival-NOM errors suggest that at least some children choose the second option. For those children, the trajectory will look U-shaped, as in (24).

(24) **STAGE 1:**

Subjects of finite clauses → NOM case

Subjects of infinitival clauses → N/A

STAGE 2:

Subjects of any clause → Marked-NOM

STAGE 3, TARGET GRAMMAR:

Subjects of finite clauses → NOM case

Subjects of infinitival clauses → unmarked

The switch to a marked-NOM grammar will result in: (i) error in analysis, but not in form, for finite clauses, and (ii) error in both analysis and form for infinitives. Acquisition of the syntax of case, as schematized above, is protracted and roundabout. But given the complexity of both case and complementation in a language like English, this should not surprise us.

7 Conclusion

This paper developed an argument against a classical case-theoretic approach to NOM case where it is assigned by finite T, based on novel data from language acquisition. The data showcased an intriguing stage in English-learners' acquisition of case, during which subjects of non-finite clauses are erroneously assigned with NOM case. Given that in English, NOM case is available only when finite T is present, children in the infinitival-NOM stage must be entertaining non-adult hypotheses about the conditions under which NOM is licensed. The existence of such errors cannot readily be accounted for on a theory where UG endows children with a bias to treat NOM as contingent on finite T.

As an alternative, I presented a variant of a configurational model of case, where case is assigned on the basis of a disjunctive case realization hierarchy (in ((20))). I suggested that the space of parametric variation made possible by this hierarchy also constitutes the child's hypothesis space. The child needs to learn, among other things, which DPs receive which sort of dependent case (ACC/ERG/marked-NOM) and whether there are special cases assigned to DPs by dedicated heads. Children's errors with subject case in English thus serve as illustration of how the predicted space of parametric possibilities plays out over the course of language acquisition.

References

- Abdulkarim, L. and Roeper, T. (1997). Economy of representation: Ellipsis and np reconstructions. In Shillcock, R., editor, *Language Acquisition: Knowledge representation and processing*. Human Communication Research Center, Edinburgh, UK.
- Babyonyshev, M. (1993). Acquisition of the Russian case system. In Phillips, C., editor, *Papers on case and agreement II*, volume 19, pages 1–43. MIT Working Papers in Linguistics.

- Baek, J. Y.-K. and Wexler, K. (2008). The acquisition of negation in Korean. In Li, P., Lee, C., Kim, Y., and Simpson, G., editors, *Handbook of East Asian Psycholinguistics, Part III*. Cambridge University Press, London.
- Baker, M. (2015). *Case: Its principles and parameters*. Cambridge University Press, Cambridge, United Kingdom.
- Baker, M. C. (2011). When agreement is for number and gender but not person. *Natural Language and Linguistic Theory*, 29(4):875–915.
- Baker, M. C. and Vinokurova, N. (2010). Two modalities of case assignment: case in Sakha. *Natural Language and Linguistic Theory*, 28(3):593–642.
- Bittner, M. and Hale, K. (1996). The structural determination of case and agreement. *Linguistic Inquiry*, 27(1):1–68.
- Bloom, L., Rispoli, M., Gartner, B., and Hafitz, J. (1989). Acquisition of complementation. *Journal of child language*, 16(1):101–120.
- Bloom, L., Tackeff, J., and Lahey, M. (1984). Learning "to" in complement constructions. *Journal of child language*, 11(2):391–406.
- Bobaljik, J. D. (2008). Where's Phi? Agreement as a postsyntactic operation. In Harbour, D., Adger, D., and Béjar, S., editors, *Phi Theory*, pages 295–328. Oxford University Press, Oxford.
- Boser, K., Lust, B., Santelmann, L., and Whitman, J. (1992). The syntax of CP and V2 in early child German: The strong continuity hypothesis. In *NELS*, pages 55–63. Graduate Linguistics Student Association.
- Chomsky, N. (1981). *Lectures on government and binding*. Foris Publications, Dordrecht, The Netherlands.
- Chomsky, N. (2001). Derivation by phase. In Kenstowicz, M., editor, *Ken Hale: A Life in Linguistics*, pages 1–52. MIT Press, Cambridge, Massachusetts.

- Diessel, H. (2004). *The acquisition of complex sentences*. Cambridge Studies in Linguistics. Cambridge University Press, Cambridge, UK.
- Eisenbeiss, S., Bartke, S., and Clahsen, H. (2006). Structural and lexical case in Child German: Evidence from language-impaired and typically developing children. *Language Acquisition*, 13(1):3–32.
- Felser, C. (1999). *Verbal complement clauses: A minimalist study of direct perception constructions*, volume 25. John Benjamins.
- Gruber, J. S. (1967). Topicalization in child language. *Foundations of Language*, 3:37–65.
- Haegeman, L. (1986). INFL, COMP and nominative case assignment in Flemish infinitivals. In Muysken, P. and Riemsdijk, H. v., editors, *Features and Projections*, pages 123–138. Foris Publications, Dordrecht, The Netherlands.
- Haegeman, L. (1995). Root infinitives, tense, and truncated structures in Dutch. *Language Acquisition*, 4(3):205–255.
- Hoekstra, T. and Hyams, N. (1998). Aspects of root infinitives. *Lingua*, 106(1-4):81–112.
- Johnson, K. (1991). Object positions. *Natural Language and Linguistic Theory*, 9(4):577–636.
- Jonas, D. (1995). On the acquisition of verb syntax in child Faroese. In *MIT Working Papers in Linguistics*, volume 26, pages 280–285.
- Landau, I. and Thornton, R. (2011). Early child control. *Lingua*, 121(5):920–941.
- Lasnik, H. and Saito, M. (1991). On the subject of infinitives. In Dobrin, L. M., Nichols, L., and Rodriguez, R. M., editors, *Chicago Linguistics Society 27*, volume 27, pages 324–343, Chicago University.
- Legate, J. A. (2008). Warlpiri and the theory of second position clitics. *Natural Language and Linguistic Theory*, 26(1):3–60.
- Loeb, D. F. and Leonard, L. B. (1991). Subject case marking and verb morphology in

- normally developing and specifically language-impaired children. *Journal of speech and hearing research*, 34(2):340–346.
- MacWhinney, B. (2000). *The CHILDES project: Tools for analyzing talk. Transcription format and programs*. Psychology Press.
- Marantz, A. (1991). Case and licensing. In Westphal, G., Ao, B., and Chae, H.-R., editors, *Eastern States Conference on Linguistics*, pages 234–253, Cornell University, Ithaca, NY. Cornell Linguistics Club.
- Marcus, G. F., Pinker, S., Ullman, M., Hollander, M., Rosen, J. T., Xu, F., and Clahsen, H. (1992). Overregularization in language acquisition. In *Monographs of the society for research in child development*, pages i–178.
- Narashimhan, B. (2013). Ergative case-marking in hindi child-caregiver speech. In Bavin, E. and Stoll, S., editors, *The acquisition of ergativity*, volume 9. John Benjamins Publishing Company.
- Phillips, C. (1996). *Order and Structure*. PhD thesis, Massachusetts Institute of Technology, Cambridge, Massachusetts.
- Pierce, A. (1992). *Language acquisition and syntactic theory: A comparative analysis of French and English child grammars*. Dordrecht, Kluwer.
- Pine, J., Rowland, C., Lieven, E., and Theakston, A. (2005). Testing the Agreement/Tense Omission Model: why the data on children’s use of non-nominative 3psg subjects count against the ATOM. *Journal of child language*, 32(2):269–289.
- Platzack, C. (1990). A grammar without functional categories: A syntactic study of early Swedish child language. *Nordic Journal of Linguistics*, 13(2):107–126.
- Postal, P. (1974). *On raising*. MIT Press, Cambridge, Massachusetts.
- Powers, S. (1995). The acquisition of pronouns in Dutch and English: The case for continuity. In *Proceedings of BUCLD 19*, pages 439–450. Cascadilla Press.
- Preminger, O. (2017). No case for agreement (as a causer of case). Talk given at NELS 48.

- Pye, C. (1990). The acquisition of ergative languages. *Linguistics*, 28(6):1291–1330.
- Radford, A. (1995). Children — architects or brickies? In *Proceedings of BUCLD 19*, pages 1–19, Somerville, MA. Cascadilla Press.
- Rispoli, M. (1994). Pronoun case overextension and paradigm building. *Journal of child language*, 21:157–72.
- Rizzi, L. (1994). Early null subjects and root null subjects. In Hoekstra, T. and Schwartz, B. D., editors, *Language Acquisition Studies in Generative Grammar*, pages 151–176. John Benjamins Publishing Company, Amsterdam.
- Sano, T. and Hyams, N. (1994). Agreement, finiteness and the development of null arguments. In González, M., editor, *Proceedings of the North East Linguistic Society 24*, volume 2, pages 543–558. Graduate Linguistic Student Association.
- Schütze, C. T. (1995). Case, verb morphology & argument structure in Choctaw: a minimalist account. In Beckman, J., editor, *Proceedings of the North East Linguistic Society 25*, pages 441–456, University of Pennsylvania. Graduate Linguistic Student Association.
- Schütze, C. T. (1996). Korean “case stacking” isn’t: unifying noncase uses of case particles. In Kusumoto, K., editor, *Proceedings of North East Linguistic Society*, pages 351–366, Harvard University and MIT. Graduate Linguistic Student Association.
- Schütze, C. T. (1997). *INFL in child and adult language: Agreement, case and licensing*. PhD thesis, Massachusetts Institute of Technology, Cambridge, Massachusetts.
- Sigurðsson, H. Á. (1993). Agreement as head visible feature government. *Studia Linguistica*, 47(1):32–56.
- Sigurðsson, H. Á. (2006). The Nominative puzzle and the low Nominative hypothesis. *Linguistic Inquiry*, 37(2):289–308.
- Sundaresan, S. and McFadden, T. (2011). Nominative case is independent of finiteness and agreement. BCGL Brussels.

- Suppes, P. (1973). The semantics of children's language. *American Psychologist*, 88:103–114.
- Tsakali, V. and Wexler, K. (2004). Why children omit clitics in some languages but not in others: New evidence from Greek. In van Kampen, J. and Baauw, S., editors, *Proceedings of GALA 2003*, pages 493–504, Utrecht. LOT.
- Vainikka, A. and Young-Scholten, M. (1994). Direct access to X'-theory: Evidence from Korean and Turkish adults learning German. In Hoekstra, T. and Schwartz, B. D., editors, *Language Acquisition Studies in Generative Grammar*, pages 265–316. John Benjamins Publishing Company, Amsterdam.
- Valian, V. (1991). Syntactic subjects in the early speech of American and Italian children. *Cognition*, 40:21–81.
- Weverink, M. (1989). *The Subject in Relation to Inflection in Child Language*. PhD thesis, Utrecht.
- Wexler, K. (1994a). Finiteness and head movement in early child grammars. In Lightfoot, D. and Hornstein, N., editors, *Verb Movement*, pages 305–350. Cambridge University Press, Cambridge.
- Wexler, K. (1994b). Optional infinitives, head movement and economy of derivation. In Hornstein, N. and Lightfoot, D., editors, *Verb Movement*, pages 305–350. Cambridge University Press.
- Wexler, K. (1998). Very early parameter setting and the unique checking constraint: A new explanation of the optional infinitive stage. *Lingua*, 106:23–79.
- Wexler, K. (2011). Grammatical computation in the optional infinitive stage. In de Villiers, J. and Roeper, T., editors, *Handbook of generative approaches to language acquisition*, pages 53–118. Springer.
- Wexler, K., Schaeffer, J., and Boll, G. (2004). Verbal syntax and morphology in typically

- developing Dutch children and children with SLI: How developmental data can play an important role in morphological theory. *Syntax*, 7(2):148–198.
- Yip, M. (1987). English vowel epenthesis. *Natural Language and Linguistic Theory*, 5(4):463–484.
- Zaenen, A., Maling, J., and Thráinsson, H. (1985). Case and grammatical functions: the Icelandic passive. *Natural Language and Linguistic Theory*, 3(4):441–483.