Towards a Minimalist Account of <u>Quirky Case and Licensing in Icelandic</u>*

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1. Introduction

In this paper I account for a range of facts about the position and form of arguments in Icelandic using a theory that is based on Chomsky's (1993) Minimalist program, but that incorporates morphological case as well as positional licensing. The analysis both assumes and reinforces the view that positional licensing ("abstract Case") is independent of (morphological) case and all arguments must check both case and licensing features in order for a derivation to converge. It has been a central question in the analysis of Icelandic from various perspectives how these two phenomena interact, given that case does not correlate with position as straightforwardly as in other well-studied languages. Conversely, case and agreement do correlate very tightly in Icelandic, and this correlation should be capturable in the theory. The nature of "quirky case marking"¹ has been par-

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¹ "Quirky case" has been defined only once in the literature, as far as I am aware, by Levin and Simpson (1981), who describe it as "the displacement of structural case by non-NOM marking on subjects . . . and non-ACC markings on objects." Thus, "quirky" is not a synonym for "inherent," which refers to a case that is assigned in conjunction with a θ -role. (Neither of these terms is a synonym for "semantic case," which refers to case on a non-argument that takes a specific semantic interpretation, e.g. ACC can be used to express duration on an adverbial NP in Icelandic.) It will turn out under my analysis that not all quirky cases are inherent: specifically, a NOM object fits the definition of

ticularly controversial: what role, if any, does it play in the system of "abstract Case," and more generally, is it relevant to the syntax at all? I believe the answer to the latter question ought to be a firm "yes": there is a range of evidence that morphological cases affect syntactic processes, especially verbal and participial agreement, and vice versa, as in the complex interactions between ECM, case marking and agreement, so a strong theoretical stance demands an attempt to incorporate case into a general syntax of the language. The present work represents such an attempt. It relies on an existing account of the variety of positions where overt arguments are licensed in Icelandic, a problem that has been controversial in its own right, but that has been more satisfactorily addressed, within the Minimalist approach to syntax. Icelandic provides an ideal testing ground for any approach to case and licensing, since it demands an answer to the question of how morphological case, structural positions, and agreement are related; this is precisely the sort of question that the Minimalist theory strives to answer.

The remainder of this paper is organized as follows. I begin in §2 by laying out my major theoretical assumptions, proposing an account of case/licensing interactions in Icelandic, and comparing this approach with others in the literature. This proposal is first applied to the basic constructions of Icelandic syntax, e.g. non-quirky clauses, expletive constructions, etc., in §3. I then go on to give analyses of the phenomena where quirky case is "active" in the syntax. First, I consider quirky subjects of the various verb classes, including their interaction with nominative objects (§4); second, inherent-case objects and their behaviour (§5); and third, the major infinitival constructions where quirky case plays a role (§6). Finally, §7 recapitulates the major advantages of the proposed analysis, along with remaining open questions for the theory in general and for the description of Icelandic in particular.

2. Basic Analysis

In this section, I will lay out somewhat abstractly the ideas and proposals that underpin my analyses of the Icelandic phenomena. After establishing the theoretical backdrop ($\S2.1$), I summarize the observations that determined the nature of my proposal ($\S2.2$). The proposal is spelled out in detail in $\S2.3$, followed by comparisons with other accounts ($\S2.4$) and a brief discussion of what sort of parameterization the analysis might require ($\S2.5$).

2.1 Theoretical Framework

I will be working in the framework of the Minimalist Program (Chomsky 1993, hereafter *MPLT*), and more specifically, against the backdrop provided by Jonas and Bobaljik's (1993) account of subject positions in Icelandic. My primary reason for these choices is that Jonas and Bobaljik (hereafter, J&B) have

a quirky case, but I will argue that NOM is never inherent. I use the term "structural case" as the opposite of "inherent case," referring to case on an argument that is not assigned inherently, but rather, is checked by some functional head.

provided what I find to be the most satisfactory account to date of NP licensing in Icelandic (for reasons to be given in §2.4), and their account follows quite directly and without stipulations from Chomsky's framework. The choice of MPLT is crucial because it already embodies the notion that NP arguments must satisfy two different (feature-checking) requirements in order to be licit, and more importantly, that these requirements can be satisfied with respect to different feature-checking heads and at different stages of the derivation. This suggests that MPLT might well be on the right track in accounting for the kinds of phenomena that will be of concern here. Unfortunately, MPLT is explicitly not about morphological case (m-case), and as will become evident shortly, nothing helpful falls out of it when applied to m-case in Icelandic. Thus, I will propose additions and modifications to the theory. Finally, although I endeavour to present the descriptive facts of Icelandic syntax at least insofar as they are crucial to my proposals, the reader may wish to consult more comprehensive sources as background, such as Sigurðsson 1989, 1991, 1992a; Zaenen, Maling & Thráinsson 1985; Andrews 1982; Thráinsson 1979.

2.2 Guiding Generalizations and Principles

Since no existing work that I am aware of makes a specific proposal about integrating m-case into an *MPLT* analysis, I shall severely narrow down the numerous possibilities on the basis of a small number of empirical generalizations about the distribution of m-case in Icelandic.

The fundamental notion that underlies the entire analysis is one that is becoming increasingly prominent in the syntactic literature, namely that not only are overt morphological case and Chomsky's (1981) "abstract Case" not identical, they are in fact completely separate theoretical notions, although obviously displaying non-accidental correlations that must be accounted for. In order to underscore this separation, I am adopting the following terminology: the former will be referred to as "(morphological) case," "m-case," or simply "case," and the latter as "(positional) licensing." The need for such a separation has been argued for by Massam (1985), Cowper (1988), Belletti (1988), Freidin and Sprouse (1991), Marantz (1991a, b) and others. As Harbert and Toribio put it,

Past accounts have confused two quite distinct notions of 'case' morphological case, e.g., nominative, accusative and various kinds of oblique case (including 'lexical case,' a label for such case marking when it is selected for by particular predicates) and Structural Case, which is properly construed as a name for a class of configurational relationships. Only the latter plays a role in the so-called Case Filter. Thus, for example, an NP never satisfies the Case Filter, e.g., by having Nominative Case. It satisfies it, rather, by being in an appropriate relation with an appropriate head (which may also have the property of licensing morphological nominative case under largely overlapping conditions). (Harbert & Toribio 1993: 3)

In MPLT, the Case Filter is implemented by the requirement that certain features be checked by the relevant point in a derivation; thus, existing theories that use such features, e.g. J&B's, are about licensing in my terminology. Harbert and Toribio's point still holds: having a particular case in no way contributes to an NP having its licensing features checked. The motivation for making this separation is a simple descriptive generalization: the case that appears on an NP has no affect on which positions that NP may surface in, across a wide range of sentence structures, e.g. overt subjects of finite and infinitival clauses, covert subjects of control clauses, complements of unaccusative and passive verbs, etc. This generalization is rather too broad to demonstrate comprehensively by example here, so only a sampling of constructions is given below, but various additional instances will appear throughout the paper. The paradigms in (1) and (2) illustrate passivization for NOM and quirky subjects, respectively, while (3) and (4) show licensing under ECM and Raising verbs. Both sets of examples show that the positions where an NP may surface are in no way affected by a quirky case on that NP: (2a) shows that a quirky passive subject must raise overtly despite already having m-case (arguably at D-structure); thus, this movement is not motivated by case; rather, I claim it is motivated by a licensing requirement. On the other hand, the parallels between (3) and (4) show that it is not the assignment of structural NOM or ACC that licenses the NP three chairs in these sentenceso, since it can show up in the same positions while bearing DAT case.

1.	a.	*	Það höfðu verið seldir stólarnir á uppboðinu.
			there had(3pl) been sold the-chairs(N) at the-auction ²
	b.		Stólarnir höfðu verið seldir á uppboðinu.
			the-chairs(N) had(3pl) been sold at the-auction
2.	a.	*	Það hafði verið stolið stólunum á uppboðinu.
			there had(3sg) been stolen the-chairs(D) at the-auction
	b.		Stólunum hafði verið stolið á uppboðinu.
			the-chairs(D) had(3sg) been stolen at the-auction
			(Sigurðsson 1992a: 13–14)
3.	a.		Ég taldi hafa verið keypta þrjá stóla á uppboðinu.
			I believed to-have been bought three chairs(A) at the-auction
	b.		Það virtust hafa verið keyptir þrír stólar á uppboðinu.
			there seemed(3pl) to-have been bought three chairs(N) at
			the-auction
4.	a.		Ég taldi hafa verið stolið þrem stólum á uppboðinu.
			I believed to-have been stolen three chairs(D) at the-auction

 $^{^2}$ Given the similarity of Icelandic to English, sentence translations are provided only where the meaning is not obvious from the word-by-word gloss. In glosses, case and other inflections are indicated in parentheses, since they are not typically identifiable as invariant affixes. M-cases are glossed as N, G, D and A; these letters are never used as lexical category names.

 b. Pað virtist hafa verið stolið þrem stólum á uppboðinu.
 there seemed(3sg) to-have been stolen three chairs(D) at the-auction (Sigurðsson 1992a: 22–23)³

Thus, across a range of positions where previous theories (e.g. Chomsky 1981) said that "abstract Nominative Case" must be assigned, or could not be assigned, or "abstract Accusative Case" could or could not be assigned, we find NPs with any of the m-cases that occur in Icelandic, so the "abstract" cases must not be the same sorts of things as m-cases. This observation has also been made in the literature before: "NPs lexically Casemarked at D-structure have the same distribution as NPs structurally Casemarked at S-structure" (Falk 1990: 76); "lexical Case selected subjects in Icelandic have the same syntactic distribution and behavior as configurationally Case-marked subjects at S-structure" (Freidin & Sprouse 1991: 408–409). However, many authors (e.g. Freidin and Sprouse, Poole 1992, Watanabe 1993) have continued to allow some overlap between the two concepts, particularly for nominatives and accusatives, saying that having m-case might sometimes make an NP licensed (equivalently, check its features). I claim that no such overlap is ever possible: the two systems involve distinct features that can never be interchanged. I will show that this separation is empirically superior to a "mixed case" approach, as well as being conceptually simpler. The generalization motivating this approach can be re-stated as follows. Factors might conspire to put a particular m-case on a particular NP in a particular position, but they do not exclude NPs from positions because of their m-case. Where this generalization appears superficially to be violated, it is for independent reasons. For example, one can never passivize a verb with a quirky subject:

- 5. a. Mig vantar peninga.
 - me(A) lacks money(A) (Zaenen et al. 1985: 454–455)
 - b. * Peninga/*Peningar er vantað (af öllum stúdentum).
 - money(A)/*money(N) is lacked (by all students)

(Andrews 1982: 476)

I claim that the restriction is not due to the case of the NP per se, but rather its θ -role: it will be illustrated in §4.1 that quirky subjects are always non-agentive, and I will claim that their θ -roles are internal and hence cannot satisfy the external θ -role requirement of the passive morpheme. I implement the generalization by requiring each argument NP to check both a case feature and a licensing feature by LF in order for a derivation to converge.

The second guiding generalization is that at most one argument per clause ever bears nominative case,⁴ and this is the only argument the finite verb can agree

 $^{^3}$ A citation on an example sentence applies to all sentences that precede it, up to the previous citation.

⁴ I claim that predicative sentences, which can include two NOM NPs, involve only a single argument; see §3.4 for discussion. Also, clauses with expletive subjects may contain two NOM NPs, since the expletive in Icelandic appears to be NOM, but expletives are not true arguments, and at any rate will not generally require independent m-case marking; see §3.3.

with; in fact, with very few exceptions, it *must* agree at least in number with the NOM argument if there is one.⁵ This is illustrated in (6)–(8). (6a) shows that a NOM subject triggers both person and number agreement, while in (6b) a quirky subject triggers no agreement on the verb or on a passive participle. (7) shows number agreement with a NOM object. (8) shows that a DAT subject does not trigger even number agreement on the verb, confirming that (7) involves object agreement (and also showing that quirky subjects do not trigger agreement on predicate adjectives).

l)
ne)
lrews 1990b: 170–171)
ore
(Sigurðsson 1992a: 9)
neut_nl)
neut-pl)

(Sigurðsson 1991: 333–334)

This generalization suggests two features of a descriptively adequate account of NOM. First, NOM must in some sense be a property of a clause, rather than coming from particular verbs, i.e., there must be exactly one NOM source per clause, for instance a functional head. I assume that NOM is not a possible inherent case in Icelandic, and perhaps universally, otherwise we would expect verbs with two or three NOM arguments. (It will still turn out that particular verbs have properties that can cause NOM *not* to appear in a given clause.) Second, whatever mechanism is responsible for checking NOM should also be responsible for verbal agreement. Another conclusion is suggested once we consider the well-known fact that subjects in Icelandic need not be NOM (e.g. GEN in (6b), DAT in (7)), and NOM has quite a varied distribution:

Nominative subjects may precede or follow the finite verb or, in the case of unaccusatives and passives, appear in complement position. Objects may also bear nominative case: objects of oblique subject verbs and the theme object of passive participles of ditransitive verbs. (Jonas 1992: 175)

That is, there are at least three surface positions where NOM arguments can appear. Furthermore, as we shall see, non-NOM arguments can surface in these same three positions. Yet, only the former trigger agreement. Thus, agreement

⁵ The exceptions are a tiny class of verbs that accept default agreement with NOM objects; see §4.2.

shows no correlation with positional licensing, which strongly suggests that the two processes involve different features.⁶ These two conclusions obviously raise immediate problems for the *MPLT* approach, wherein (at least some) subjects are licensed by (feature checking with) T(ense), which is also responsible for verbal agreement. Thus, some aspect of the *MPLT* account will have to be abandoned.

A third generalization concerns accusative case, and it is simply that ACC occurs on the vast majority of object NPs and ECM subjects. The associated intuition is that this ought not to be marked as a lexical idiosyncrasy of the relevant verbs, but rather, should also follow from the structure of the clause in some way. Fortunately, *MPLT* already contains a mechanism that might make this come out, namely the presence of a functional head that licenses objects, viz. AgrO. It might be reasonable to assume that this element is also implicated in ACC case, although three sorts of complications will arise. First, as already mentioned, objects need not be ACC (e.g. (6a)); second, non-objects can be ACC (see §4.1); and third, there can be more than one ACC argument per clause (again, see §4.1). Thus, AgrO cannot be the whole story of ACC, but I propose that AgrO can indeed check ACC, and say more later about the complications.

2.3 A Proposal

Let us now get down to implementing the intuitions presented in the preceding sub-section. This will require a specification of how the necessary features are involved in feature checking in MPLT. First, recall the basic dichotomy of V(erb) and N(oun) features: the former class includes tense and agreement features, the latter, case and agreement. Agr nodes have verbal and nominal agreement features, while T has verbal tense and nominal (subject) case features. Thus, by LF, a verb must have checked its two agreement features against Agr nodes and its tense feature against T, which is guaranteed to happen as long as it eventually raises, by successive adjunction, to AgrS. What must happen to an NP, however, is less clear and more interesting. In MPLT, each NP must check against either V or AgrS and either T or AgrO, to get both a case and an agreement feature checked, but there is nothing within the feature definitions that specifies how the checking heads must be paired; my analysis will exploit this lack of stipulation. In English transitive clauses, V+AgrO (head adjoined) check case and agreement on the object, while T+AgrS check case and agreement on the subject, but this need not be so. In fact, since V, T, AgrO and AgrS are all potentially mobile heads, other possibilities immediately suggest themselves. One that Chomsky himself mentions (MPLT, fn. 11) is that the subject could check its case against T in Spec-TP, before raising to Spec-AgrSP to check its agreement feature. But this is not the end of the story either: Chomsky already assumes that a head H can check its features with an XP in the specifier of the next higher head J to which H raises, and an XP can check its features with the

 $^{^{6}}$ This does not strictly follow from the facts, because *MPLT* allows arguments to surface in non-checking positions by the principle of Last Resort, so there could be some higher position that is never filled at the surface where both agreement and licensing features are checked. I will not pursue this possibility.

head Y of the phrase YP to which XP adjoins, without having to be in Spec-YP position (this follows from the definition of checking domain). It is reasonable to ask whether these possibilities are actually manifested in languages, and in particular whether we can exploit them to account for the generalizations discussed above.⁷

Stepping back for a moment, let us consider the relations between the three notions we are concerned with: m-case, licensing, and agreement. We established that m-case and licensing are completely independent, i.e., an NP with any mcase can be licensed in the subject position(s) or the object position; thus, NPs should have at least two different feature types, if both of these relations are to be formalized as feature checking. We also established that licensing and agreement are independent, i.e. the NP that triggers agreement can be in any of the licensed positions under consideration here; thus, these also must involve separate features. What about m-case and agreement? Here, there is in fact a one-to-one correspondence: only one m-case determines agreement. Thus, it is a priori possible to implement m-case and agreement by the same feature. If we now forget about clause structure and Chomsky's feature system for a moment, we can see how this would work. There are two types of N-features: call them Li (for 'Licensing')⁸ and C/A (for 'Case/Agreement'). A transitive clause must provide two heads for checking Li features, and it must also provide two heads for checking C/A features (not necessarily disjoint from the two Li checkers). The latter two are distinct in that only one of them will check the subject-agreement phi-features of V; the other could (vacuously) check object-agreement phi-features of V. Let us consider how to incorporate this into the MPLT framework.

The most direct implementation would be to posit four functional heads, each bearing one of the N-features listed above. This approach might well be viable, but I have not pursued it here.⁹ Instead, I ask whether there is any way of combining a pair of these features into a single functional head, so that we would not have increased the total number of functional projections in the clause, and would more likely be able to maintain J&B's account of licensing. In effect Chomsky has already proposed making using of V as a fourth head (in addition to the three functional heads) to check ACC case, which is only active in combination with AgrO; he thus combines an Li feature with a C/A feature. I propose

⁷ One can imagine various ways of relaxing the feature-checking mechanisms of *MPLT*. In particular, if Agr nodes are not necessary for the verb to check its agreement features, a slightly different approach to Icelandic from that taken here becomes available. This I leave for future work.

⁸ If it seems unintuitive to think of a positional requirement as being associated with a feature, one might find it useful to think of this feature as encoding visibility for θ -marking.

⁹ The four-head approach seems to require one of two substantial changes to the assumptions made in *MPLT*. Either one must abandon the Strict Cycle Condition, which is important to J&B's account of Icelandic word order, or one must situate the object case position (i.e., ACC-checking) above the subject case position (NOM-checking). Neither of these possibilities should be excluded a priori, but I have chosen to stick more closely to the approach outlined in *MPLT*.

a modification of this account whereby V does not have any C/A or Li features to check on the object; rather, AgrO contains both features. (See below for reasons.) This account predicts that not every combination of Li and C/A features can arise on an NP; the assumption that makes this prediction go through is that an NP cannot move through a checking position and only check a subset of the features of the checking head: feature checking is "all or nothing." Thus, an NP could not check ACC in Spec-AgrOP while leaving its Li feature unchecked and subsequently raising to subject position. Since it will turn out that subjects, while they can have ACC case, never get this case "structurally" (see §4.1), this appears to be a promising approach. Note that the Nominal features are now split in an intuitive way: licensing is an "abstract" feature, whereas case and agreement have realizations in the inflectional morphology. A consequence of this split, as opposed to Chomsky's case versus agreement split, is that it makes more sense to think of the labels for AgrS and T as being reversed, as shown in (9). Reasons for this will become clear as the feature content of the functional heads in Icelandic is spelled out.



(10) summarizes the possible feature combinations of AgrO. "Structural" ACC is a feature checked by AgrO, as is Li, a positional licensing feature. We want to say that AgrO is not a licensor unless the verb is transitive; if transitivity is reflected in a [±transitive] feature on the verb that it must check with AgrO then AgrO has a licensing feature iff it bears [+transitive], and that will only happen when the verb also bears that feature.

10.	a. V-features: N-features:	AgrO [+transitive] ([obj agrmt: α person [Li] [ACC/α person, β nu	,βnumber]) mber]	
	or b.	AgrO	or c.	AgrO
	V-features:	[+transitive] ([obj agrmt: dflt]) ¹⁰		[-transitive] ([obj agrmt: dflt])
	N-features:	[Li]		-

(10b) lacks ACC: this is for verbs with quirky objects. Inherent cases automatically take precedence over those from the functional heads, since they are linked to the assignment of a θ -role, thus checked at D-structure in VP, leaving no case feature to check when the NP raises.

In (11), two possible variants of the functional head T(ense) are shown. If the tense of a clause is finite, T bears a licensing feature that allows an overt subject; if non-finite, it only bears a "null Case" feature (see Chomsky & Lasnik 1991), notated " \emptyset ", which can license PRO but not overt NPs. (See §6.1 for more about this.)

11.	a.	Т	or b.	Т
	V-feature:	[+finite]		[-finite]
	N-feature:	[Li]		[Ø]

In (12), variants of AgrS are shown: one for clauses with a NOM argument and a verb that agrees with it, the other for clauses with no NOM argument (hence no C/A feature) and a verb with default agreement.

12.	a.	AgrS	or b.	AgrS
V-fea	ture:	[subj agrmt: α person, β nu	mber]	[subj agrmt: dflt (3sg)]
N-fea	ture:	[NOM/ α person, β number]	-	

These entries obviously depart from the conventional notion that NOM case is correlated with finiteness, for reasons to be discussed below. The intuition behind having TP above AgrSP, given their feature content, is that all subjects eventually end up in the same position, namely the highest Spec, because they must check a Li feature there; a NOM *object* must eventually get into the checking domain of AgrS to get NOM case, but should still end up lower than the subject, hence AgrSP is below TP.

Along with these functional heads, the following parameter is crucial:

 $^{^{10}}$ The entry in (10b) assumes that non-ACC objects would not trigger object agreement; this has no empirical consequence for Icelandic.

Accusative/Ergative Parameter: If only one of the AgrS case (NOM) or the AgrO case (ACC) can be checked in a given clause, it must be **the AgrS case**/ (the AgrO case).

(I am following without argument Chomsky's (1992) suggestion that Ergative languages differ from Accusative ones in the structure of their *intransitive* clauses rather than their transitive clauses.) A corollary of this parameter setting is that the AgrO case (structural ACC) can never appear on a surface subject.

Finally, (13) and (14) show the classes of features that NPs and verbs will bear.

13.		NP
	N-features:	[Li]
		[case/ α person, β number]
14.		V
	V-features:	[subj agrmt]
		[obj agrmt]
		[±transitive]
		[±finite]

Let us see how this proposal meets with the guiding principles of §2.2. First and most importantly, licensing and case are clearly separated. Second, there is only one NOM to be checked per clause, and it is guaranteed to be checked on the NP with which the verb agrees. Third, we have a head (AgrO) that can check ACC on objects when they do not come with some other case. Thus, the criteria of §2.2 are met.¹¹ In connection with the last of these, it is worth arguing why ACC should be exclusively a property of AgrO, and V be devoid of N-features. While a verb's transitivity is arguably a lexically idiosyncratic fact (hence the [transitive] feature), the generalization that most objects are ACC should be separated from any particular V. This also solves the problem under MPLT of why ACC does not get checked on the subject in Spec-VP. Given the types of AgrO in (10), ACC will be automatically unavailable for intransitives, which makes the right prediction for an Accusative language, but is wrong for an Ergative language, where Spec-TP will still be the licensed position in an intransitive clause, but the case canonically associated with transitive *objects* must appear on the NP there. Thus, Ergative languages employ an AgrO with an ACC feature but no Li feature.

¹¹ Heidi Harley (p. c.) has suggested that the proposed system is actually more powerful than necessary. Specifically, while the Li feature of T can be seen as implementing the Extended Projection Principle, the Li feature in AgrO has no corresponding function. However, it is not clear to me what the status of the Li feature on the *NP* would be under such an approach, since only one NP per clause would need to check that feature; it would have to be a purely optional feature of NPs. For this reason, I choose to retain the intuition that Li checking is something that all argument NPs require, and this forces us to posit a Li feature in transitive AgrO.

We must now examine in more detail the question of how AgrS and AgrO behave when an NP leaves VP with a case already attached, i.e. an inherent-case subject or object. First, regarding how inherent case works, the minimal assumption would be that all m-case is represented by the same sort of feature (at least on arguments), but inherent cases are checked, not by functional heads, but by the verb alone. I will have little to say about the mechanics of this process: clearly if it requires checking in a Spec-Head configuration, then inherent subject cases are checked in Spec-VP and inherent object cases in Spec-AgrOP after the verb raises, which means even non-finite verbs must raise at least that far (see §3.1 for a refinement of this idea). One could of course imagine that θ linked cases do not work this way. In any event, since case and licensing are separate, inherently-cased NPs still have a licensing feature that will need to be checked by T or AgrO, so they will be forced to raise to subject or object position.¹² Three things must then be said. First, the verb still has to raise to T to check its own features and allow the NP movement. Second, we have to worry about unneeded C/A features in AgrS and AgrO, since nothing might be available to check them. Therefore, we must say that these come in a variant with no nominal C/A features; we then get the default verbal agreement facts (cf. (8a)) by saying that there is only one AgrS node lacking nominal C/A features (12b), and its verbal agreement features are third person singular.¹³ This does not lead to an explosion of combinatorial possibilities, because derivations cannot converge with unchecked features lying around: thus, if no C/A features are needed from AgrS, then having them present will crash the derivation,¹⁴ and if they are needed, having them absent will also crash. The only potential problem arises when there is a single structurally case-marked argument—we want it to end up with NOM, not ACC. This is ensured by the Accusativity Parameter; see also §3.1. Third, since I am proposing that case and agreement features are checked as a unit, at least for Icelandic, verbs that take inherent-cased arguments must check the agreement features themselves as well. It is reasonable to complain that the lexical entry for a verb should not actually specify the phi-features of those arguments, but these could be underspecified, i.e., anything will match. On the other hand, AgrS nodes represent affixes in some abstract sense, so we can think of them as a category of lexical items, the set of which includes all the

¹² Thus, it is not the need for m-case that *forces* movement of arguments, but the need to check *licensing* features; it will turn out that there is only one situation where a licensed NP subsequently moves and checks m-case features, namely NOM objects, where the requirement *on the functional head* that NOM be checked forces the movement. Thus, an *NP's* need for case never forces movement.

¹³ Or, perhaps it lacks agreement features altogether. Elizabeth Cowper (p. c.) has pointed out to me that such an account would jibe well with current proposals that third person might actually represent the absence of person features, and singular might represent absence of number. Thus, the AgrS lacking NOM might lack features altogether, as would V with default agreement.

¹⁴ This would still be true in a language like Korean (mentioned in Harbert & Toribio 1993), which allows "stacking" of m-cases. Each NP could have multiple case features (perhaps as a parametric option), but convergence would still require that all features of NPs and functional heads be checked by LF.

necessary feature combinations and their morphological realizations (again, in an abstract sense); thus, when both subject and object get case from V, the only convergent derivation will involve an AgrS node that does not contain any C/A feature. Then the fact that NOM always triggers agreement is determined by the (presumably parameterized) fact that there is no lexical entry of category AgrS that has a NOM case feature but lacks a verbal agreement feature.

Lastly, for the time being, consider how an object can get NOM from AgrS when a subject is quirky, as in (7). One can imagine several possibilities. First, harking back to previous theories of INFL, one could say that AgrS moves down to adjoin to AgrO in such cases, so the object will be in its checking domain. This is problematic on the general grounds that we seem otherwise to have eliminated the need for lowering from the theory. Second, we could suggest that the object raises to Spec-AgrSP to get NOM case. Of course, the subject may also have to move through that position at some point, since Spec-AgrSP is the only position it can move to from Spec-VP once the object has raised. But a quirky subject would not have any features to check against AgrS, since its C/A feature was already checked by the verb. We must allow that in such a circumstance, i.e. an NP passing through a checking position with no features left to check, nothing catastrophic happens, the derivation simply proceeds. (Note that I do wish to rule out instances of movement through a checking position where there is a *mismatch* between features of the checker and checkee; that is not the case here.) As long as all features have been checked by the relevant level, it should not matter that there was a stage of the derivation where no checking happened in a Spec-Head configuration. Of course, the absence of feature-checking means that there must be some other motivation for this movement to happen: in this case, it is the fact that the subject is being forced to raise higher, to Spec-TP, and due to Shortest Movement it can only get there through Spec-AgrSP. This will leave Spec-AgrSP containing a trace of the subject that serves no purpose, since nothing happened in that position. It does not seem unreasonable to say that such a trace can be deleted, allowing the object to move to that position.¹⁵ A third possibility is to say that the object adjoins to AgrSP, which will put it in AgrS's checking domain according to Chomsky's definition. This adjunction satisfies Shortest Movement, since Spec-AgrSP and AgrSP-adjoined positions are in the same minimal domain, hence equidistant from Spec-AgrOP. We would then need a theory of what happens when two NPs are in the checking domain of the same functional head (though perhaps not "simultaneously"). In the present case, it is clear enough: only one has the potential to check the features of that head, so it can do so happily, while the other does nothing. Perhaps if both NPs could check the head's features, the derivation would crash due to indeterminacy, which would explain why this configuration does not generally

¹⁵ I must assume that there is a mechanism for determining whether the position occupied by a trace was implicated in feature-checking. Also, this option appears to violate J&B's proposal that Spec-AgrSP (their Spec-TP) is not licensed at LF. I will have more to say about their argument later, but for now it suffices to say that it was based on an assumption that I will have to abandon.

arise: it is rare that an XP moves through a checking position and has no features that can be checked there.

Note that both of the potential NP-movements I am considering (trace replacement and adjunction) must happen at LF, and that they are motivated by the need for AgrS to check its C/A feature against the NP. At this point, there is little to choose between the two options. One potential difference, if J&B are correct in assuming that the Strict Cycle Condition (SCC) holds of LF movement, is that the substitution analysis cannot obey the SCC in sentences where the subject is still in Spec-AgrSP at SPELL-OUT, since it must raise to Spec-TP at LF before the substitution can happen. On the other hand, adjunction could proceed cyclically, or might never be subject to the SCC anyway. Although this advantage is minor, I shall adopt the adjunction approach for the remainder of this paper. It is worth also mentioning one appealing possibility that will not work: we cannot say that non-NOM subjects raise directly to Spec-TP overtly, then NOM objects move to Spec-AgrSP at LF, because NOM objects, just like all others, can undergo overt Object Shift. Thus, at least for Object Shift sentences, a NOM object can raise out of VP at S-structure to Spec-AgrOP, which will force the subject through Spec-AgrSP due to Shortest Movement and the Strict Cycle Condition.

It is crucial to either analysis of NOM objects to have a definition of A-position slightly different from that assumed by J&B. The definition of A-position is important because we want all movement for case and licensing to count as Amovement, to avoid improper movement violations. In particular, it cannot be a requirement for a Spec to be an A-position that feature-checking actually happen in that position. Under the second approach proposed above, where NOM objects replace the trace of the subject in Spec-AgrSP at LF, we can say that A-position is to be defined purely structurally as daughter of XP, sister of X', for relevant heads X (among other positions), while adjoined positions can never be Apositions, although they can perhaps be checking positions. On the other hand, under the adjunction approach above, we apparently have to extend that definition to include adjoined positions where checking takes place, as well as genuine Spec positions, regardless of checking. This is a minor parsimony argument in favour of the replacement approach, in that it does not require a disjunctive definition of A-position. The key, in either case, is to prevent non-checking adjunction positions from serving as intermediate landing sites for A-movement, since this would immediately void J&B's argument linking Object Shift to Transitive Expletive Constructions (TECs).

Under the approach proposed in this subsection, the explanation for the fact that there is a correlation (but not an absolute correspondence) between NOM arguments and subjects is due to the fact that NOM is a property of the projection (AgrSP) through which subjects must pass in order to reach subject (i.e., Spec-TP) position. The fact that there is a correlation (but not an absolute correspondence) between ACC arguments and objects is due to the fact that object position is also the only position outside VP where ACC can be checked. The fact that the correspondences are not 100% is explained by the availability of alternative feature-checking possibilities provided by the theory, viz. checking in ad-

joined positions and inherent case. The fact that there is a correspondence between NOM arguments and agreement features is due to the fact that NOM and agreement features are checked as a unit in the same position.

Obviously, many more details remain to be specified in order to deal with the full range of facts in Icelandic. However, this will more easily be accomplished through a systematic application of the proposal to the various constructions, which will be taken on in §§3–6. First, however, a few important points of comparison with other approaches will be presented.

2.4 Comparisons with Other Approaches

In this subsection I would like to point out some important respects in which the present work differs from previous accounts of the same phenomena, as well as some respects in which it follows directly from some earlier work.

First, it should be noted that J&B's account of surface positions of arguments differs radically from all previous accounts that I am aware of. These have included analyses by Belletti (1988), Platzack and Holmberg (1989)/Holmberg and Platzack (1988), Sigurðsson (1991), Vikner (1991), Falk (1989), and others, all of which took the following as their central principle: "An argument must be governed by a licensing head at S-structure" (Falk 1990: 80), where "licensing head" was potentially a parameterized notion, and tended to be defined by a heterogeneous list of lexical and functional elements of various sorts. In contrast, J&B essentially take the approach that an NP can surface in a subset of the positions through which it must pass to reach its LF destination, where the valid intermediate landing sites that can be overtly chosen are those where some feature-checking requirement is satisfied. (Note that this may be a requirement on the head doing the checking, and not necessarily on the NP doing the moving.) This change in orientation has provided for a much more elegant and homogeneous account of the facts, because the ad hoc hodge-podge of licensing heads has been replaced by the unified notion of feature-checking that serves an independent function in the theory, with no loss of descriptive coverage,¹⁶ so I am adopting it wholesale here.

Regarding the combination of a theory of licensing with an orthogonal theory of case, precedents also exist in the literature, as alluded to in §2.2. In particular, the suggestion that there be essentially two case filters (corresponding here to two feature sets that require checking) has been discussed by Freidin and Sprouse (1991), Mahajan (1990) and many others. But the theory to which the current account owes the most is that of Marantz (1991a, b), which like the present approach made the separation of case and licensing complete, and appealed to the Extended Projection Principle as a licensing mechanism (which is effectively what J&B do). Other GB accounts have failed to make the separation complete, leaving a residue of ad hoc and inelegant overlap between m-case and abstract Case.

¹⁶ There is one potentially problematic paradigm that J&B do not deal with—see §6.2.

Next, I wish to present some comparative notes concerning the only other Minimalist account of Icelandic NOM case that I am aware of, by Jonas (1992). While her paper lays the groundwork for the theory of licensing I have adopted, it seems problematic in its treatment of case. First, Jonas's treatment of passives with NOM subjects in complement position (e.g. (20b) below) is that NOM is checked in an AgrP projected directly above the main VP, as opposed to in AgrSP¹⁷; this provides no obvious account of why the finite verb can (and in most cases must) agree with this NP. It also seems to predict that in a passive of a ditransitive, one can find two instances of NOM: one on the subject (from AgrS), one on the object (from AgrP), but the predicted pattern never occurs. As far as I can see, there is no reason why a passive NOM object cannot raise across all the auxiliary VP shells, since they all lack specifiers under the MPLT approach where specifiers are only created when needed, and end up in Spec-AgrSP itself. (Of course, it might first go through Spec of the AgrP to yield participial agreement, but it must not lose its features there.) Also, Jonas's account of the agreement of NOM objects with oblique subject verbs is problematic. She proposes that this agreement will be checked in Spec-AgrOP, as will NOM case. It must then be explained why this happens precisely when the subject is quirky. Can AgrO check NOM in general? If so, why do structurally casemarked transitive clauses not have NOM on both subject and object? If not, i.e. if NOM is a lexical case that verbs can assign, why does no verb assign it to both arguments? And if verbal agreement can be checked in AgrO, why do verbs not have the option of agreeing with their objects all the time? (Incidentally, the same problems arise with Watanabe's (1993) account of NOM objects, which makes the same proposal.) A theory wherein AgrO and participial Agr can assign NOM will require an additional global condition to rule out the non-occurring scenarios. Furthermore, Jonas accounts for the absence of agreement with the DAT subject by saying that agreement has already been checked by V in AgrO before it gets to T, and cannot be checked again. But this predicts that in intransitive quirky-subject clauses, the verb can agree with the subject, and that is false. She takes as support for her analysis the fact that NOM objects occur in ECM clauses, where non-finite INFL supposedly has no NOM feature; it will be argued below that the presupposition of this argument is false: such INFLs do have NOM and do check it on objects in this configuration. Finally, she also suggests that NOM objects in active ECM clauses might be inherent, but I also deny that, for reasons discussed in §2.2. (Then we need some other explanation for the facts about object drop she cites from Rögnvaldsson 1990.) Under my account, there is only one potential NOM checker per clause, and which argument it surfaces on (if any) is determined by independently-needed inherent cases on other arguments of the verb.

The final theoretical issue I wish to touch on at this juncture is the status of Burzio's Generalization. Watanabe (1993) has proposed an account of this generalization according to which the two directions of the bi-conditional version follow from the theory in separate ways, both of which rely on case features: if a

¹⁷ Unless otherwise noted, I translate other researchers' category labels to match my tree in (9); e.g., for Jonas it is *T* that normally assigns NOM.

verb lacks a subject θ -role but checks ACC, the object has no reason to raise and the subject expletive fails to delete; if a verb does not check ACC but assigns a subject θ -role, the object cannot get case in subject position since the external argument consumes it. Under the current framework, it makes sense to ask whether the references to "case" in these arguments should be interpreted as mcase or as licensing. The answer is straightforward: we must be talking about licensing. We will see in §4.1 that unaccusative verbs in Icelandic, for example, can bear morphological ACC, which would contradict an m-case version of the generalization, but is fully consistent with a licensing version, i.e. such verbs lack the transitivity feature that allows AgrO to license an object, but it can be licensed by T and can be assigned morphological ACC as an inherent case by V. Watanabe's argumentation goes through with "ACC" replaced by "object licensing."¹⁸ (See Marantz 1991a for more on Burzio's Generalization in a bipartite case framework.)

2.5 Parametric Variation and Quirky Case

Although my methodology in this paper is to attempt a detailed analysis of a single language rather than attempting superficial analyses of multiple languages, I must say a few words before closing this section about why Icelandic has quirky subjects while certain other Germanic languages such as English and German do not. For English, J&B might already have provided the answer, by arguing that Spec-AgrSP is never available and AgrS always raises to T. This will force the subject to check NOM case there if it checks any case at all. Of course, if English had verbs that inherently case-marked their arguments, quirky subjects would still be possible, but NOM objects would not. German, however, does have inherent case, and still lacks true quirky subjects. This perhaps represents a conspiracy of two parametric choices: that NOM cannot remain unchecked, and that it cannot be checked on an object (see Sigurðsson 1992a for a similar proposal). The former could be implemented by excluding a lexical entry for AgrS of the kind we crucially need for Icelandic, viz. one with no C/A feature (12b). (A similar requirement on the ACC feature of AgrO would exclude quirky objects in English.) The latter could presumably not be explained in the way it is for English, since German has Object Shift, and so Spec-AgrSP must be available. Therefore, the mechanism of checking NOM on the object must be blocked in some other way, perhaps by disallowing the "exceptional" mechanism that Icelandic requires (substitution or adjunction for feature checking in AgrSP) as a parametric choice, just as for J&B, Spec-AgrSP is unavailable in English. Finally, in a split ergative language like Georgian (see Marantz 1991a) agreement is always with the subject, but the case of that subject varies. This would require the ability to check case and agreement features separately, e.g., case in Spec-AgrOP, agreement in Spec-AgrSP or Spec-TP. It appears, then, that Li features are universally associated with T and AgrO, but case and agreement features may vary in their distribution across the functional heads of

¹⁸ Colin Phillips (p. c.) has pointed out that the logic as described here does not go through if there are arguments that do not require licensing, e.g. clausal arguments, perhaps. Since the matter is not of central concern to my proposal, I shall not pursue it.

the clause; major differences among languages are implemented as differences in the feature content of their functional heads.

3. Basics of Licensing within Clauses

Having seen the basic mechanics of the proposal, we now turn our attention more systematically to the various phenomena of Icelandic syntax that are relevant to it. The importance of all the phenomena in this section is that they determine where NPs can show up in a sentence, but are not affected by m-cases, thus they are all in effect corroborating arguments for the separation of m-case and licensing proposed in §2.2. My goal in this and following sections is *not* to provide complete analyses of the phenomena in question, but only to show how the licensing and m-case facts fit into my theory.

3.1 Actives

A number of features of the proposed analysis must be made more explicit before we will have a full account of how a basic transitive sentence like (15a) or an intransitive sentence like (15b) is derived; the LF structures of these sentences are sketched in (16) and (17), respectively.¹⁹ In (16), the object raises from complement position to Spec-AgrOP where it checks both ACC case and licensing feature; in both (16) and (17), the subject raises from Spec-VP to Spec-AgrSP where it checks its NOM case and agreement feature, and then raises further to Spec-TP to check its licensing feature.

- 15. a. Verkamennirnir breikkuðu veginn. the-workers(N) widened the-road(A)
 - b. Vegurinn breikkaði. the-road(N) widened

(Zaenen & Maling 1990: 142)

¹⁹ In these and all subsequent trees, verb movement is ignored in order to avoid obscuring the NP movements, which are more important for our purposes here; verbs are shown in their final position. Features on NPs are not explicitly shown, but the way they were checked is indicated by arrows from the corresponding Agr and T features. A pair of person and number features is abbreviated as ϕ ; other abbreviations should be transparent.



One set of questions concerns the valency of the various features for Icelandic that will make the surface facts come out correctly. A second concerns how intransitivity is to be implemented, and a third deals with extending the account to sentences with auxiliary verbs. I will take these in turn.

On the question of feature valency, let us see whether we can simply adopt the settings proposed by Jonas (1992) and J&B. According to Jonas, the V features of T and AgrO are strong, in order to force verb raising in main and embedded clauses. The N feature of AgrO was claimed to be strong, in order to allow for overt Object Shift, but since that process is not obligatory (except for pronouns), J&B no longer assume that. Note that we can still say that the N-feature of T is strong, since Spec-TP appears always to be filled at S-structure; this will correspond to the Extended Projection Principle (EPP) requirement. The V feature of AgrS is weak, according to Jonas, but J&B cite Thráinsson (1993) as suggesting it should be strong; neither choice seems to affect my argumentation. The N feature of AgrS is strong for J&B, forcing something to check it in Spec-AgrSP by S-structure; this allows for expletive constructions where the full NP is in Spec-AgrSP at S-structure, but will obviously be problematic for a quirkysubject clause; see §3.3 for discussion. Jonas does not mention the features of N and V. The valency of an inflected verb's features seems to have no effect, given strong V-features on T. Uninflected verbs presumably come from the lexicon without features that require checking, except perhaps transitivity (see below). As for features on NPs, these clearly must be weak, at least on indefinites, since they are free to stay in the VP at S-structure if the requirements of the functional projections are met by an expletive. Jonathan Bobaljik (p. c.) has suggested that Object Shift could be accounted for using an optionally strong Nfeature on definite objects, otherwise it would always be blocked by the Procrastinate principle.

While we are on the topic of the checking of functional features, it is worth pointing out the possibilities for head raising. If AgrO were to raise to AgrS for some reason, the consequences are obscure, but let us assume that Spec-AgrOP is always available when AgrO is [+transitive], so there would never be any motivation for such movement. What about AgrS raising to T? This would force a particular correlation between position and m-case, i.e. the subject must be NOM and the object must be ACC, respectively, if they are not inherently case-marked. This seems to yield the right result for English, if J&B are right that AgrS raises to T in English, because it lacks quirky subjects, as discussed in §2.5. But for Icelandic, head raising of this kind would mean that the resulting structure was no longer neutral on the case–licensing relationship, and it is a major goal of this paper to argue that there are no such constructions in Icelandic. Thus, we should not expect to find instances of head raising of this kind in Icelandic.

Turning now to the second question, let us determine how intransitives are to be handled, expanding upon the discussion in §2.3. I suggested there that the feature that V checks in AgrO is a transitivity feature; if this feature is negatively valued, AgrO lacks a licensing N-feature. There is a complication, since the relevant main verb might be several auxiliaries away from AgrOP: therefore, the inflected verb must acquire the transitivity feature of the main verb by some

mechanism; this is needed for the MPLT system also.^{20,21} Does it matter whether ACC case is available from AgrO in an intransitive clause? One might at first think that AgrO could case-check an ACC subject of an unaccusative verb, for instance; these certainly exist (see §4.1).²² But under my proposal, there would be no way to guarantee that the NP would go through Spec-AgrOP as opposed to Spec-AgrSP, or vice versa, so that suggestion must be abandoned. Non-NOM subjects of intransitives (just like transitives) must get their m-case feature inherently from V. This does not mean that the ACC feature must be explicitly made inactive in intransitive clauses, as in (10c), however, because we already have the Accusativity Parameter to give NOM priority over ACC on the subject, so this result will simply fall out anyway. However, note that in order to implement an Ergative language, the opposite priority must obtain, i.e. the canonical transitive object m-case must remain available (or have higher priority) for intransitives while the transitive subject case is de-activated; AgrO is still not a licensor. Thus, as in MPLT we have a parameter for accusativity versus ergativity, and the fact that NOM takes precedence over ACC even in transitive clauses follows directly: in an Accusative language, if only one of the AgrS case or the AgrO case can be checked, it must be the AgrS case.

Since I have alluded just now to the additional complexities that arise when auxiliary verbs intervene between the functional heads of the clause and the main VP, let us tackle them more directly as the third topic in this sub-section. Suppose, as is standardly assumed, that auxiliaries head VPs with no specifiers underlyingly. Due to the absence of their Specs, the subject can raise directly to Spec-AgrSP from its base position; the object must stop off at the lowest auxiliary Spec-VP in order to escape from the main VP (since the nearest Spec is full), and can then also "leap up" to Spec-AgrOP.²³ Passives, which show participle agreement, might send their internal argument through Spec of an AgrP projected by the participle (as suggested in Jonas 1992 and shown in (18)); using

²⁰ Actually, whether *MPLT* requires transitivity percolation depends on additional assumptions. Suppose that it is always the main verb that *assigns* case to an object, and that the Case Filter will be violated if no case is assigned to an argument, regardless of whether case *checking* occurs. Then one could allow an auxiliary to freely check case on the object in AgrOP and still rule out transitive clauses with intransitive verbs on the basis of lack of case *assignment*.

²¹ Alec Marantz (p. c.) has suggested that transitivity actually ought to be viewed as a property of constructions rather than of verbs, so it is possible that neither the main nor the auxiliary verb is actually involved here, and AgrO is simply chosen as a function of the clausal construction.

 $^{^{22}}$ See Marantz (1991b) for an attempt to implement the same intuitive idea. There is a difference in empirical predictions between his approach and mine; see §4.1.

²³ This sequence of moves would violate the Strict Cycle Condition if they all occurred overtly, but recall that Object Shift is not possible when there are auxiliaries, so the movement of the object can be delayed to the post-SPELL-OUT component. We cannot allow a "leap-frogging" derivation where the object moves first and the NPs raise alternately, because which one would end up in Spec-AgrOP would be determined by the number of auxiliaries in the clause. This can be ruled out because the main verb does not raise through the auxiliary V heads.

such an AgrP in all cases as an escape hatch for active objects would not hurt either, except that the agreement would not be overt in these cases; using the extra AgrP would also avoid having the main V head-adjoined to an auxiliary.



Both of these proposals require the main V to raise one hop and adjoin to the next higher head before the object can raise, but that should not cause any problems, although we need a motivation for it to do so. In the case of participles that agree, we clearly need such a motivation anyway, in order to get V into a Spec-Head relationship with its internal argument. An alternative approach would be to say that the main verb's transitivity feature is still present (in addition to having been "transmitted" to the highest verb of the clause by whatever means), and V must check this feature by head-raising to an Agr head; this buys us the result that only transitive verbs demand such an AgrP, which is ideal because they are exactly the ones that need to create an escape hatch for the object. This configuration will differ from that of the inflected V+AgrO complex in that the latter has an N licensing feature, but participial Agr does not. Recall also that the NP does not get its agreement features checked off by virtue of this rela-

tionship, since it must check them at the head of the clause; this then is a kind of secondary agreement that involves feature "transmission" or "concord," but not checking with deletion. Crucially, of course, the highest auxiliary must raise through the functional heads of the clause to facilitate case and agreement, as well as checking its own features. Chomsky suggests that since auxiliaries are semantically vacuous, this must happen at S-structure, a suggestion we can adopt.

One potential problem in this account is the interaction with Object Shift: as J&B (fn. 37) note, Object Shift is blocked in a clause with auxiliaries, a fact they wish to derive by saying that the participial V does not raise high enough to allow the object to raise to Spec-AgrOP. Given the analysis of objects and auxiliaries just proposed, that explanation is no longer open to me: all objects must be able to raise at least to Spec-AgrOP by LF. However, they must raise *after* the subject, for reasons discussed in fn. 23, so the SCC will prevent that raising from being overt. Thus, the generalization is maintained, but by somewhat different means.

Before closing this sub-section, I would like to consider the question of whether all transitive subjects originate in Spec-VP. It is arguably a fact about Icelandic that all Agent subjects take NOM case, quirky subjects all being non-agentive (see §4.1), which leads one to wonder whether the syntax is implicated in this generalization. Suppose we were to adopt the Koopman and Sportiche (1991) clause structure, wherein there are two "external" argument positions, Spec-VP and (effectively) VP-adjoined, and say that the latter is reserved for Agents.²⁴ The intuition behind this is that the Agent θ -role is somehow "more external," perhaps more a compositional function of the internal argument(s) plus the verb, than an Experiencer, and parallel to that, inherent case is somehow a "local" property of a verb that can extend as far as its Spec, but not further to the adjoined position, so that arguments that originate in the latter position must get case from a clausal head, hence NOM. (Belletti and Rizzi (1988) make a similar argument for Italian.) While MPLT does not directly provide the machinery to implement this suggestion, the distinction between narrowly and broadly L-related positions comes close, although we do not expect to find arguments basegenerated in adjoined positions under the MPLT theory. Nonetheless, it would seem to be an idea that is worth pursuing further.

3.2 Passives

Icelandic has a productive process of passivization, which normally takes an ACC object of a transitive verb to subject position and makes it NOM; sometimes places the former subject in a PP with the preposition *af*; converts the main verb to a passive participle agreeing with the new subject in gender, number and case; and inserts an auxiliary that agrees with the subject in person and number.

 $^{^{24}}$ J&B give evidence that all subjects originate within the maximal projection of V, based on the position of floated subject-oriented quantifiers.

19. Drengirnir voru kysstir af stúlkunum. the-boys(N-masc-pl) were(3pl) kissed(N-masc-pl) by the-girls(D) (Andrews 1990b: 170)

Most of the machinery for accounting for passives is already in place. Following the spirit of Baker, Johnson & Roberts (1989), we will say there is a passive morpheme that consumes the external argument of the verb and, effectively, a licensed position, by erasing its transitivity feature, making AgrO inert. Then, the remaining argument will have to be licensed by T, since AgrO is not available; this will account for its subject properties. It gets NOM because that is the only case available. As suggested in §3.1, the participial agreement might be mediated by an AgrP projected by the passive participle, but as we now see, the motivation for the participle to raise to Agr cannot be checking its [+transitive] feature, since the passive morpheme has consumed it. The only questionable aspect of this translation of the standard story is the motivation for this consumption; notice that this cannot be equivalent to the passive morpheme itself being licensed in the way regular NPs are: the transitivity feature of V checks against Agr(O), not against NPs; it is AgrO that contains the feature that NPs must check. We might make sense of this mechanically by saying that the passive morpheme has the properties of a head, rather than an X^{max}, so that it "checks" the verb's transitivity feature in the same way that AgrO would do, i.e. in a head-adjunction configuration. This leaves the actual motivation just as obscure, except that, as discussed in §2.4, a convergent derivation could not result otherwise, in line with Burzio's Generalization.

3.3 **Expletive Constructions**

This sub-section will deal only with clause-internal expletive constructions; for cross-clausal ones, see §6.2. I will also have nothing to say about the definiteness and heaviness requirements on NPs associated with expletives—on that topic, see Vikner 1991 and Sigurðsson 1989. My intent here is essentially to show to what extent J&B's account of Icelandic expletives can be translated into the present framework. First, remember that expletive constructions do not distinguish quirky from non-quirky NPs for purposes of surface distribution (contrary to the claim of Freidin and Sprouse (1991: 405)), as shown again in (20) versus (21).

a.	Einhver leikari var kosinn í forsetaembættið.
	some actor(N) was elected to the-presidency
b.	Það var kosinn einhver leikari í forsetaembættið.
	it was elected some actor(N) to the-presidency
	a. b.

21. a. Nokkrum strákum var bjargað af fjallinu. some boys(D) were rescued from the-mountain b. Það var bjargað nokkrum strákum af fjallinu. it was rescued some boys(D) from the-mountain

(adapted from Andrews 1990a: 191–192)

Now recall that, even independent of expletive constructions, J&B give evidence for there being two subject positions in an Icelandic clause, Spec-TP and Spec-AgrSP. Under my account, every subject must pass through Spec-AgrSP, whether or not it can check features there, so this is not problematic. The difficulty is that J&B wish to implement the EPP by saying that the N-feature of AgrS is strong. But that would force NOM to be checked at S-structure, which cannot happen in a clause with a quirky subject and a NOM object in a transitive expletive construction (TEC): the object can only get into the checking domain of AgrS at LF (it clearly cannot replace the actual subject in Spec-AgrSP, and if it adjoined to AgrSP at S-structure, we would have the object preceding the subject, which is not a possible word order,²⁵ so that adjunction must be excluded somehow).²⁶ Therefore, we seem to have to say that the EPP is implemented by the N-feature of T being strong, not the N-feature of AgrS. We will then have to explain how TECs satisfy Procrastinate, given that the position to which the subject raises at S-structure, Spec-AgrSP, does not check strong features of AgrS. Regrettably, I have nothing to offer on this point at the moment.²⁷ In fact, the problem is more general. J&B state that the reason all transitive subjects must raise out of Spec-VP at S-structure²⁸ is because Spec-AgrSP cannot be generated at LF: by virtue of its N-features being strong, they were checked and erased before SPELL-OUT, and if there are no features left, nothing can meet the criteria for being in a Spec relation with the head AgrS. Furthermore, if the SCC holds in the post-SPELL-OUT component, as J&B assume, the object raises to Spec-AgrOP before the subject leaves Spec-VP, so the only place the subject can go is Spec-AgrSP, but that is ruled out as just shown. Again, I wish to avoid the assumption of strong N-features of AgrS, so that NOM objects can check their features with AgrS at LF, so I am left with no explanation for the obligatoriness of transitive subject raising.

Turning finally to the nature of expletives themselves, it seems that they can check the Li N-feature of T but not the C/A feature of AgrS, i.e. they must be licensed but not case-marked, for the same reason that AgrS's N-feature cannot

- there like someone(D) not the-cars(N) (Thráinsson p. c.)
- ²⁶ Perhaps XP-adjunction before versus after SPELL-OUT has a different status.

²⁷ Aside from a feature-checking requirement, the other possible motivation provided in MPLT for overt movement is for it to be crucial to convergence, i.e. the impossibility of all requirements being satisfied via movement after SPELL-OUT. I have not seen any obvious way in which this could apply to the present question.

²⁸ As predicted but not illustrated by J&B, even subjects of unergative verbs can apparently remain in VP if indefinite:

²⁵ Here is the relevant contrast:

 ⁽i) a. * Það líka bílarnir einhverjum ekki. there like the-cars(N) someone(D) not
 b. Það líka einhverjum ekki bílarnir.

⁽i) Pað sungu ekki bärn í kirkjunni í dag. there sang not children in the-church today (Thráinsson p. c.)

be strong: if an expletive were in Spec-AgrSP, it would check a case feature that a NOM object that was not its associate would need later.²⁹ J&B do not address the question of how the subject checks its N-feature if an expletive checks the feature on AgrS at S-structure, but presumably they would say that since the expletive and the subject are "united" in some way (replacement, adjunction, etc.) at LF, this would somehow suffice to check the subject's feature. Such a story can be modified to work for us, if we say that the expletive's Li feature can be "shared with" or "transferred to" the subject at LF. What we then say about the fact that the expletive is in a NOM form is that it is not an argument, so NOM need not have come from AgrS, but could be a default case (cf. the discussion in §3.4 below). The rest of the story is straightforward. Verbal agreement will come out right simply by saying that it is determined at LF, which is necessary under the *MPLT* feature-checking approach to agreement anyway. Agreement patterns as if the expletive were not present and the clause had regular word order, which is what we expect since the NPs at LF will be in exactly the same positions for both expletive and non-expletive clauses. Like J&B, we can say that the expletive raises from Spec-TP to Spec-CP to explain why it must be first in the clause when it appears at all, appealing to null expletive pro in Spec-TP for cases where something other than an expletive fills Spec-CP, e.g. (22).

22. Það var dansað í gær. it was danced yesterday 'There was dancing yesterday.' (Zaenen et al. 1985: 445)

For sentences like these where there is no NP "associated" with the expletive, perhaps it can simply delete at LF for some reason.

3.4 Predication

The central issue in the analysis of predication that is relevant to this paper concerns the source of the NOM case on the predicate NP in a sentence like (23a):

23. а.	Hún er kennari/*kennara.	
	she(N) is teacher(N/ $*$ A)	
b.	Henni leiðist Haraldur/*Harald.	
	her(D) is-bored-by Harald(N/*A)	(Maling & Sprouse 1992: 10-11)

Specifically, is it assigned in the same way as the NOM on the object in a transitive sentence like (23b)? The standard answer in the literature (e.g. Sigurðsson 1992a) has been "no," but recently, Maling and Sprouse (1992) have suggested that the answer should be "yes." They say that the NOM on *kennari* in (23a) comes from INFL, claiming there is "nothing to gain" by saying that such NPs

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²⁹ A seemingly less desirable alternative is to say that the expletive does get NOM from AgrS at S-structure, but since it is erased at LF, that NOM feature becomes "available" again, either for the subject or the object, by virtue of the chain of AgrS, which has both Spec-AgrSP and Spec-TP in its checking domain. This would lose the generalization that the expletive must be non-distinct in features from the associate NP that moves to it (Chomsky 1986).

are outside the regular (argumental) case mechanisms. I would like to argue that there is indeed something to gain, namely the generalization stressed in §2.2 about there being only a single NOM feature available per clause. Since predication represents the only apparent exception, it is worth looking for an alternative analysis, especially considering that Maling and Sprouse's only motivating data come from English.

What, then, is the alternative? There is nothing original in suggesting some sort of case concord between subject and predicate, but that does seem to be what is going on (although some complications arise in cross-clausal situations). A remaining problematic fact, illustrated in (24), is that the verb agrees in number with the predicate nominal if the subject is a pronoun.

24. Petta eru/*er hestar. this(N-sg) are/*is horses(N-pl) 'These are horses.'

(Thráinsson 1979: 466)

All I can offer on this point is a speculation that whatever mechanism allows case to be transmitted from subject to predicate also allows number to be transmitted in the opposite direction, perhaps along the lines of expletive replacement; I do not take this as sufficient reason to abandon the 'single NOM theory.'

There are other instances of NOM on NPs where I also do not wish to implicate INFL (AgrS), e.g. certain dislocated and vocative nominals (see Sigurðsson 1992a). These are instances of what Marantz (1991a) calls "environment-sensitive unmarked case," i.e. a case that shows up in a particular syntactic environment when no other case is assigned. Just as GEN seems to be the unmarked case within NP,³⁰ NOM seems to be unmarked for material outside CP. The need for unmarked cases of this sort is uncontroversial, although the mechanisms that implement it are unclear. Still, it seems reasonable to say that these clause-external NOMs are unrelated to AgrS, since, among other things, they do not trigger verbal agreement.

4. Quirky-Subject Verbs

(i)

We have already seen the mechanics for dealing with quirky-subject verbs in the abstract. This section will make the analysis more concrete. §3.1 presents the basic facts and analysis, while §3.2 covers the details of nominative objects.

a. Pétur kennir þroskaheftum börnum. Peter teaches handicapped children(D)
b. kennsla þroskaheftra barna teaching handicapped children(G)
c. * kennsla þroskaheftum börnum teaching handicapped children(D) (Yip et al. 1987: 235)

 $^{^{30}}$ This can be seen in nominalizations, where quirky cases are never preserved:

This section does not deal with quirky subjects of passives, which will be covered in §5.3.

4.1 Quirky Subjects

Here is a collection of examples of quirky subjects, organized by their case.

25.	a.	Mig langar að fara til Íslands.		
	1	me(A) longs to go to Iceland		
	b.	Mig velgir við setningafræði.		
		me(A) is-nauseated at syntax	(4 1 1000 4(1)	
		Syntax turns my stomach.	(Andrews 1982: 461)	
	c.	Skessuna vantar mat.		
		the-giantess(A) lacks food(A)	(Andrews 1990b: 169)	
	d.	Mig vantar hníf.		
		me(A) lacks knife(A)		
	e.	Peningana vantar.		
		the-money(A) lacks		
		'The money is lacking.'	(Yip et al. 1987: 230–232)	
26.	a.	Honum mæltist vel í kirkjunni.		
		him(D) spoke well in the-church		
	b.	Barninu batnaði veikin.		
		the-child(D) bettered ('recovered from')	the-disease(N)	
	c.	Stúlkunni svelgdist á súpunni.		
		the-girl(D) mis-swallowed on the-soup(D))	
	d.	Mér býður við setningafræði.	·	
		me(D) is-nauseated at syntax		
		'I abhor syntax.'		
	e.	Honum svipar til frænda síns.		
		him(D) resembles to cousin self's (his)		
		'He resembles his cousin.'		
27.	a.	Konungs var þangað von(N).		
		the-king(G) was thither expectation(N)		
		'The king was expected there.'	(Andrews 1982: 462–463)	
	b.	Vindsins gætir ekki.	、	
		the-wind (\mathbf{G}) matters not	(Andrews 1990b: 169)	

I will not summarize the well-known arguments for the subjecthood of quirky subjects or their potential defects here; see Thráinsson 1979, Sigurðsson 1989, and others. In light of the discussion in §3.3, it should be noted that none of these arguments implies that there is a *single* position where all subjects surface; that seems to be completely untrue. Rather, they show that the surface positions of NOM versus quirky subjects *in the same construction* are not distinct, by which I mean they might both be in Spec-TP, or both in Spec-AgrSP.

The trees below contrast the analysis of (26b) with a NOM object, (25d) with a quirky object, and (25e), with no object.³¹ (For arguments that the ACC cases are inherent in the latter two sentence types, see Schütze 1993.)



³¹ In these trees, "Exp" is the Experiencer θ -role, and "Th" is the Theme; the case following the θ -role is assigned inherently with it.



As mentioned in §3.1, several authors have pointed out that quirky subjects are always non-agentive (e.g. Yip, Maling & Jackendoff 1987, Andrews 1990b; see

Foley 1991 for other possible semantic correlates of quirky subjecthood).³² As discussed there, that does not necessarily imply that they are underlying objects. I am assuming that Experiencers originate in Spec-VP.³³ Hopefully, the domain that is relevant for case (and θ -assignment, if external arguments do not receive a simple θ -role directly from V) will exclude the D-structure position of Agents (and perhaps other external arguments) while including that of Experiencers, Themes and other internal arguments.

We can dispense rather quickly with the passives of quirky-subject verbs, since these are totally impossible, as illustrated in (5) above, repeated here as (31):

- 31. a. Mig vantar peninga.
 - me(A) lacks money(A) (Zaenen et al. 1985: 454–455) b. * Peninga/*Peningar er vantað (af öllum stúdentum).
 - * money(A)/*money(N) is lacked (by all students)

(Andrews 1982: 476)

Impersonal passives of such verbs are equally impossible (Levin & Simpson 1981). I claim this is due to the lack of an external θ -role to assign to the passive morpheme.

4.2 Nominative Objects

The major facts of nominative objects in quirky-subject sentences have already been accounted for (see (28)), and the quirks of NOM objects in D/NcI constructions are delayed to §6.2. Here I merely wish to tie up a few loose ends. First of all, it is worth noting that NOM objects could not be "subjects in disguise"—triggering number agreement on the verb is the only property they have in common with subjects (Jonas 1992; Zaenen et al. 1985). Second, as noted also by Jonas (1992), there are a couple of verbs that take NOM objects where agreement with the object is optional:

 32. Mér líkar/líka þessir bílar. me(D) likes(3sg)/like(3pl) these cars(N-pl)
 'I like these cars.' (Thráinsson 1979: 466)

³² As Andrews (1982) points out, the non-agentivity of some of these is arguable, e.g. (26a) above; this example is apparently part of a "dative of success" sub-paradigm where it can be argued that one's success is not entirely under one's own control, hence a lack of complete agentivity. Levin and Simpson (1981) characterize the possible θ -roles for quirky subjects as experiencer of physical or mental condition or undergoer of involuntary movement or change of state, hence the generalization that quirky subject verbs are psych-verbs or unaccusatives. Thráinsson (1979) claims that such verbs generally express mental processes, sensations or feelings. There are some semantic trends among the three cases: ACC subject verbs often relate to physiological states, DAT to psychological states; the contrast of gradual vs. sudden motion might be represented. Still, it is clear that there is no collection of θ -roles unique to each subject case.

³³ By contrast, Cowper (1988) assumes they are sisters of V', and Sigurðsson (1991) claims that all quirky subjects are D-structure objects.

I take this to be a phenomenon that is outside the core grammar, because, as Thráinsson (p. c.) indicates, agreement with a NOM object is obligatory in all other constructions, e.g. passives of double object verbs. This seems to point towards an idiosyncratic property of the verbs that allow optional agreement, rather than a structural generalization. It is basically the verbs *líka* 'like' and *leiðast* 'be bored by' that only optionally agree with a NOM object, and even for these verbs most speakers now prefer the agreement.

Third, what clearly is a fact within the scope of the grammar is that agreement with NOM objects, unlike with NOM subjects, is restricted to number agreement, not person agreement; for many speakers first and second person NOM objects are not possible, and for those who get them, third person agreement is preferred (Sigurðsson 1991). It seems plausible to attribute the constraints to the fact that agreement checking for NOM objects happens in a non-canonical way, whichever of the three options for implementing it we choose (cf. §2.3). Additionally, one might say that only number agreement is checked by AgrS, while person agreement is checked by T; NOM objects never get a chance to check features with the latter head. See Sigurðsson 1990–1991 for yet another alternative.

5. Quirky-Object Verbs

We now turn our attention to quirky case appearing on objects, focusing on inherent case, since NOM on objects was covered in §4.2 above. We first look briefly at simple transitives (§5.1), then we add the ditransitives (§5.2) and consider more general issues, especially passivization (§5.3).

5.1 Transitives

Given four possible cases for each of subject and object, there are 16 theoretically possible combinations, of which nine are attested: NN, NA, ND, NG, AN, AA, AG, DN, GN; these are exemplified in (33). Note that NN always represents predication.

33. a.	Hún er vitlaus.	
	she(N) is crazy(N)	(Yip et al. 1987: 243)
b.	Hann lamdi hana.	
	he(N) hit her(A)	(Yip et al. 1987: 225)
с.	Þeir björguðu stúlkunni.	-
	they(N) rescued the-girl(D)	(Andrews 1982: 466)
d.	Ég saknaði hans.	
	I(N) missed him(G)	(Yip et al. 1987: 223)

e.	Mig sækir syfja. ³⁴	
	me(A) seeks sleepiness(N)	(Yip et al. 1987: 230)
f.	Henni áskotnaðist bíll.	
	her(D) lucked-into a-car(N)	(Andrews 1982: 462)
g.	Þess er enginn kostur. ³⁵	
	this(G) is no chance(N)	
	'There is no chance of this.'	
h.	Mig vantar hníf.	
	me(A) lacks knife(A)	
i.	Mig iðrar þess.	
	me(A) repents this(G)	(Yip et al. 1987: 230)

We have already seen the structure of a quirky-object sentence, in (29) above. The most striking fact about quirky objects is that they retain their quirky case marking under passivization:

Stúlkunni var bjargað.	[cf. (38c)]
the-girl(D) was rescued	
Mín var beðið.	
me(G) was awaited	(Andrews 1982: 467)
	Stúlkunni var bjargað. the-girl(D) was rescued Mín var beðið. me(G) was awaited

The subjects in (34) behave just like quirky active subjects with respect to feature checking.

Given an analysis of quirky subjects, quirky objects are relatively straightforward: they involve a case feature associated with the θ -role of the object in the verb's lexical entry. Since object position is not in the checking domain of V, we might have to say that V raises to the next higher head before checking that case, if indeed it requires checking at all. We must then address the issue of why only nine of the 16 combinatorial case possibilities occur in transitive clauses. First, recall that NN is a special case, occurring only in copular constructions, where I claim case transmission is involved, rather than checking of two NOMs, which I disallow by stipulating that only AgrS can check NOM (see §3.4). Next, it is almost true that GEN cannot appear on a transitive subject: the few instances of GN all involve predicate nominals with the verb 'to be' (Yip et al. 1987), e.g. (33g), where it would be hard to argue that the verb is assigning a θ -role to the subject anyway, and thus some other analysis is called for. Unfortunately, the theory does not seem to provide any mechanism for excluding a particular inherent case from appearing in a particular structural position, but descriptively this appears to be required if the gaps are not ac-

³⁴ This is apparently the only verb exhibiting AN, at least in Modern Icelandic (Yip et al. 1987), and the example given is a fixed expression. Thus it is hard to verify the prediction that the NOM object ought to trigger verbal agreement. Thráinsson (p. c.) has the intuition that, in a joke context where the object could be pluralized, plural agreement sounds better than the default verb form. If so, this would contradict the assumption of Marantz 1991b and be problematic for his analysis of ACC subjects, which claimed that they were structural and not inherent.

³⁵ Like AN, the GN class is very rare (Yip et al. 1987).

cidental. This leaves the following four non-occurring patterns: AD, DA, DD, DG. Interestingly, as we will see in §5.3, these case combinations can all occur on the two objects in (the passive of) a ditransitive clause, so there is no obvious way to exclude them in simple transitives, except perhaps by disallowing particular combinations of cases and θ -roles. I will not pursue such an approach, assuming instead that these gaps are accidental—I thus predict that they might be instantiated in the older recorded forms of Icelandic.

Given that ACC can be inherent, as on a quirky subject, it should occur as an inherent case on *objects* too. The AA pattern (e.g. (33h)), which is fairly common, is a candidate for having an inherent ACC object. In fact, the object case *must* be inherent, given that the Accusativity Parameter requires that if only one NP in the clause lacks inherent case, it must get NOM. Thus, AA verbs have both arguments case-marked by V alone. For more on inherent versus structural ACC, including learnability considerations, see Schütze 1993.

5.2 Ditransitives

Space limitations prevent me from conducting a detailed survey of the possible theories of double objects for Icelandic in the Minimalist framework. Two proposals I am aware of are those of Collins (1993) and Watanabe (1993); there have also been numerous earlier GB accounts: Holmberg (1991), Falk (1990), Ottósson (1991), Marantz (1992, 1991b), etc. What I shall attempt to do here is merely highlight the important empirical facts that bear on the licensing and case patterns for these verbs.

(35) shows the possible case patterns in double object sentences. It will be evident that what we think of as the indirect object, be it Goal, Recipient, etc., precedes the direct object/Theme quite consistently. This first object is almost always human.

35.	a.	Siggi sagði barninu söguna.
		Siggi(N) told the-child(D) the-story(A) (Yip et al. 1987: 223)
	b.	Ráðherrann duldi forsetann sannleikans. ³⁶
		the-minister(N) concealed the-president(A) the-truth(G)
	c.	Stjórnin svipti fólkið borgararéttindum.
		the-government(N) deprived the-people(A) civil-rights(D)
		(Andrews 1990a: 189)
	d.	Þeir kölluðu hann Ólaf.
		they(N) called him(A) Olaf(A)
	e.	Ólafur lofaði Maríu þessum hring.
		Olaf(N) promised Mary(D) this ring(D)
	f.	María óskaði Ólafi alls góðs.
		Mary(N) wished Olaf(D) all the-best(G) (Thráinsson 1979: 21–22)

I will argue that there is no functional head that would provide a "default" case for a second object, parallel to ACC for single objects. One might be inclined to

³⁶ Thráinsson (p. c.) finds this sentence ungrammatical, or at least archaic.

posit another functional category, AgrIOP, as a case checker for the indirect object, by analogy to AgrO. Based on frequency, we would have to conclude that DAT was the case it checked. (See Van Valin 1991 and Marantz 1991b for treatments along these lines.) I will not advocate such an approach, because it would require making all instances of ACC on a *first* object (like (35c)) inherent in order to "override" DAT, which then leaves unexplained the fact that they do not preserve ACC under passivization. Instead, I claim that ACC in a double object verb is *never* inherent (see Schütze 1993 for discussion).

For the sake of concreteness, I shall adopt Collins's (1993) proposed structure of Icelandic double objects, shown in (36) applied to an NDA verb,³⁷ and proceed to examine feature checking in this kind of structure.

 $^{^{37}\,}$ For the sake of consistency, I have re-labeled the two highest projections in this tree to match my terminology.



As compared to a monotransitive clause, another head must appear that can check the licensing feature of a second object. This could be implemented by giving double-object verbs a second [+transitive] feature,³⁸ which can be checked in the AgrOP directly above the main VP; that AgrOP in turn will house the Li feature that the second object needs to check against, and can also have an ACC feature; that is, higher and lower AgrO's are truly members of the same category. One obvious problem with Collins's approach is the presence of

 $^{^{38}}$ I have said nothing so far about where these transitivity features come from, but there is clearly no need for them to be lexically stipulated: their number is predictable from the polyadicity of the verb in a given usage, i.e., it is one less than the total number of arguments.

a TP node above the lowest AgrOP; it apparently has no feature-checking content at all, although it may have temporal semantics, but must be present in order to allow the required NP movements. Since this problem is not special to the present analysis, I will put it aside.

NDA ditransitives are unique in three respects: first, they allow the order of their arguments to be reversed in active usages, as in (37), contrasted with (38); second, they allow the Theme to bind into the Goal in this order ((39) versus (40)); and third, they alone allow both objects to passivize, as in (41), as opposed to (42).³⁹

37.	a. b.		Jón gaf konunginum ambáttina. John gave the-king(D) the-maidservant(A) Jón gaf ambáttina konunginum. John gave the-maidservant(A) the-king(D)
38.	a.	*	Jón skilaði ambáttinni konunginum. John returned the-maidservant(D) [to-]the-king(D)
	b.	*	Jón svipti ambáttinni konunginn. John deprived [of-]the-maidservant(D) the-king(A)
39.			Jón gaf ambáttina _i konungi sínum _i . John gave the-maidservant(A) king(D) self's 'John gave the maidservant _i to her _i king.' (Ottósson 1991: 92–93)
40.		*	Sjórinn svipti manninum _i gömlu konuna sína _i [cf. $(35c)$] the sea deprived the-husband(D) old wife(A) his(refl) 'The sea deprived of the husband _i his _i old wife'
			(Holmberg 1991: 151)

a.	Þeir leyndu mig sannleikanum.
	they concealed me(A) the-truth(D)
b.	? Peir leyndu sannleikanum alla sem tillheyrdu ekki flokknum.
	they concealed the-truth all who belonged not the-party
с.	Sannleikanum var *leynt míg/*leyndur ég.
	the-truth was concealed me(A)/concealed(pl) me(N)

(i)

(Holmberg 1991: 151)

 $^{^{39}}$ This is the standard judgement. Levin and Simpson (1981) claim that not all verbs with the same case frame behave the same. They give examples of NDD and NDG verbs that supposedly have two passives (contradicting Andrews (1982) and Zaenen et al. (1985), who claim such verbs do not exist), on top of the NDA class shown above. However, Thráinsson (p. c.) finds their examples ungrammatical, and I will assume that judgement. Also, care must be taken to factor out Heavy NP Shift, which does marginally allow inverted order for other classes of double object verbs (ib), but does not allow passivization of the theme (ic) or binding from the theme into the postposed indirect object, as shown in (40).

41.	a.		Konunginum voru gefnar ambáttir.
			the-king(D) were given(fem-pl) maidservants(N-fem-pl)
			'The king was given female slaves.'
	b.		Ambáttin var gefin konunginum.
			the-maidservant(N-sg) was given(fem-sg) the-king(D)
42.	a.		Ég skilaði henni peningunum.
			I returned her(D) the-money(D)
	b.		Henni var skilað peningunum.
			she(D) was returned the-money(D)
	c.	*	Peningunum var skilað henni.
			the-money(D) was returned her(D) (Zaenen et al. 1985: 459–460)

These verbs raise difficult issues of analysis: in particular, is the "inverted" NAD order for NDA verbs to be base generated or derived? (See Falk 1990 for several compelling arguments that it is base-generated, and Holmberg 1991 and Ottósson 1991 for somewhat less compelling arguments that it must be a derived order.) And what is responsible for the restrictions on the "inverted" order, e.g. the fact that, according to Thráinsson (p. c.), it is best when both objects are human and the second is heavier than a pronoun? (See Holmberg 1991 and Ottósson 1991 for other interpretations of the restrictions.) Regrettably, I cannot delve into these questions here.

I follow Collins (1993) in assuming that the "inverted" order of NDA verbs is base-generated as an NP-PP structure with a null preposition governing the indirect object. The verb will then look featurally like a simple transitive. We can then say with full generality that passivization in double object configurations is only possible from the higher object position. There might be an issue as to how to get the surface word order correct when the ditransitive verb is embedded under auxiliaries. Specifically, something must force the main verb to raise to the higher empty V slot before SPELL-OUT; unless [+transitive] on AgrO is a strong feature, there seems to be no feature-theoretic reason for this to happen, although there might be reasons particular to the nature of the two V slots involved.

5.3 Passives

Thráinsson provides some examples of passive sentences with quirky subjects (we have already encountered some):

- 43. a. Þeim var hjálpað.
 - they(D) were helped
 - b. Peninganna var aflað. the-money(G) was earned
 - c. Haraldi voru gefnir hestarnir.
 - Harold(D) were given the-horses(N) d. Henni var lofað því.
 - she(D) was promised it(D)

e.	Henni var synjað þess.
	she(D) was denied it(G)

(Thráinsson 1979: 465)

The same standard arguments for the subjecthood of active quirky subjects can be used to illustrate the subjecthood of quirky passive subjects. Zaenen et al. (1985) provide the data for these diagnostics.

The first auxiliary in a quirky passive is uniformly third person singular when there is no NOM object, just as with active quirky subjects; the participle then shows no agreement, appearing instead in the "supine" form.

44.	a.	Hann bjargaði mér.
		he(N-masc-sg) saved(3sg) me(D-1sg)
	b.	Mér var bjargað.
		I(D-1sg) was(3sg) saved(supine)
45.	a.	Við vitjuðum sjúklinganna.
		we(N-1pl) visited(1pl) the-patients(G-masc-pl)
	b.	Sjúklinganna var vitjað.
		the-patients(G-masc-pl) was(3sg) visited(supine)
		(Andrews 1990b: 170–171)

The lack of agreement on the supine cannot merely be attributed to the subject being non-NOM, because passive participles do agree with passive subjects that have subsequently undergone ECM to become ACC:

46. Peir telja drengina hafa verið kyssta. they(N) believe the-boys(A) to-have been kissed(A) (Andrews 1982: 469)

It seems to be the inherence of the case itself that causes lack of agreement, because an inherent ACC in exactly the same position as a regular ECM ACC does not trigger agreement:

47. a. Peir segja drengina vera talda/*talið elska stúlkurnar. they(N) say the-boys(A-masc-pl) to-be believed(A-masc-pl)/ *believed(supine) to-love the-girls
b. Peir segja drengina vera talið/?talda vanta peninga. they say the-boys(A-masc-pl) to-be believed(supine)/ ?believed(A-neut-sg)⁴⁰ to-lack money (Andrews 1982: 469)

That is, the passive participle agrees with the derived subject iff it lacks inherent case, as seen in (48) and (49), which seems to implicate a link to the C/A checking by functional heads at the top of the clause. (See §6.2.)

 $^{^{40}}$ See Andrews (1982) for a possible explanation of why an agreeing form is not entirely impossible here. In Andrews 1990a, he claims that both forms are equally acceptable. However, Thráinsson (p. c.) finds the agreeing form ungrammatical. See also §6.2.

48.	a.		Þeir sýndu honum drengina. they(N) showed him(D-masc-sg) the-boys(A-masc-pl)
	b.	?	Drengirnir voru sýndir honum.
	C		the-boys(N-masc-pl) were(pl) shown(N-masc-pl) him(D-masc-sg)
	с.		he(D-masc-sg) was(pl) shown(N-masc-pl) the-boys(N-masc-pl) (Andrews 1990b: 179)
49.		*	Honum var gefið peningarnir.
			he(D) was(sg) given(supine) the-money(N-masc-pl) (Andrews 1990a: 211)
Sun (48) (48) und	nma c)), b)) a ergo	rizin AC and one	ng, DAT and GEN are always preserved under passivization (e.g., C on a monotransitive or ditransitive object reverts to NOM (e.g., must trigger agreement (49), but inherent ACC of a subject that has ECM before passivization is preserved ((50) versus (51)).
50.	a.		Bátana hefur brotið í spón.
	h		the-boats(A) has broken in pieces Allir telia hátana hafa brotið í spón
	υ.		all believe the-boats(A) to-have broken in pieces
	c.		Bátana er talið hafa brotið í spón.
			the-boats(A) is believed to-have broken in pieces
51.	a.		Krakkarnir hafa brotið bátana í spón.
			the-kids(N) have broken the-boats(A) in pieces
	b.		Allir telja krakkana hafa brotið bátana í spón.
			all believe the-kids(A) to-have broken the-boats in pieces

c. Krakkarnir eru taldir hafa brotið bátana í spón. the-kids(N) are believed to-have broken the-boats in pieces

(Zaenen & Maling 1990: 145–146)

These facts all follow from positing the correct lexical entries of the verbs in question, i.e. making the appropriate cases inherent. The generalization that only the higher object may passivize has received varied accounts in the literature: Freidin and Sprouse (1991) suggest that *inherently* case-marked trace must be strictly adjacent to a governing head; Harbert and Toribio (1993) suggest that the ECP requires all passive traces to be adjacent, so "long" passive of an ACC object of an NDA verb must be derived from the "inverted" word order; Falk (1990) suggests that the passive morpheme can only absorb the closest licensed position to the head. (I am assuming, contra Harbert and Toribio (1993), that it certainly cannot absorb both transitivity features.) Under my account, the facts will follow automatically if the passive morpheme simply absorbs one of the verb's [+transitive] features. The remaining feature will be checked in the lower AgrO, making the lower AgrOP the licensing position; only the second object can move to that position; the higher AgrO will be inert, forcing the higher object to raise to Spec-TP. NOM will take precedence over ACC on the subject as usual. Falk notes that there is no possibility of leaving both objects in situ post-verbally with an expletive subject (52). This fact seems

to follow from J&B's theory of licensing: since the passive participle does not raise to T, or even to AgrS, at S-structure both objects must be in VP in (52), so the "strong" requirements of AgrS are not met. Again, I do not have a corresponding explanation in my theory.

52.	a.	*	Það var gefin manni bók.	
			There was given(N) a-man(D) a-book(N)	
	b.	*	Það var skilað manni peningum.	
			there was returned(N) a-man(D) money(D)	(Falk 1990: 81)

6. Infinitival Constructions

In this section I examine the two most heavily studied types of infinitival constructions in Icelandic, Control (§6.1) and ECM/Raising to Object (§6.2), in order to analyze their case and licensing properties. (For more on the structure of such clauses, see Thráinsson 1993.) Before beginning, a general word about NOM objects in the infinitival clauses that appear in this section is called for. I claim that they must get NOM from AgrS, just as in the cases alluded to in §4.2, as opposed to inherent case, as some have suggested (e.g. Jonas 1992). This is based on the simple fact that the same verbs take NOM arguments in finite clauses, and there they control verbal agreement. A significant generalization would be missed in saying anything else about these objects. (See Maling & Sprouse 1992 for essentially the same argument.)

6.1 Control

Quirky null subjects, both active and passive, can occur under certain control verbs and can be understood as arbitrary PRO, as shown in (53) and (54). Note that in the case of control, the controlling matrix subject need not agree in case with the controllee. In fact, it is clear that PRO in Icelandic receives its own case, because floated quantifiers in the subordinate clause show the case that the missing subject would have taken, as in the (b) sentences of (55)–(58), i.e. they agree with PRO rather than the (overt) matrix subject.

- 53. a. Mig vantar peninga.
 - me(A) lacks money(A)
 - b. Ég vonast til að vanta ekki peninga. I(N) hope for(prep.) [PRO(A)] to(inf.) lack not money(A)
 c. Að vanta peninga er alltof algengt.
 - [PRO(A)] to(inf.) lack money(A) is all-too common (Zaenen et al. 1985: 454–455)
- 54. a. Ég vonast til að verða hjálpað. I(N) hope for(prep.) [PRO(D)] to be helped
 b. Að vera hjálpað í prófinu er óleyfilegt. [PRO(D)] to be helped on the-exam is disallowed

(Zaenen et al. 1985: 457)

55.	a.	Strákarnir komust allir í skóla.
		the-boys(N) got all(N-masc-pl) to school
		'The boys all managed to get to school.'
	b.	Strákarnir vonast til að komast allir í skóla.
		the boys(N) hope for to $[PRO(N)]$ get all(N) to school
56.	a.	Strákana vantaði alla í skólann.
		the-boys(A) lacked all(A-masc-pl) in the school
		'The boys were all absent from school.'
	b.	Strákarnir vonast til að vanta ekki alla í skólann.
		the-boys(N) hope for to [PRO(A)] lack not all(A) in the-school
57.	a.	Strákunum leiddist öllum í skóla.
		the-boys(D) bored all(D-masc-pl) in school
		'The boys were all bored in school.'
	b.	Strákarnir vonast til að leiðast ekki öllum í skóla.
		the-boys(N) hope for to [PRO(D)] bore not all(D) in school
58.	a.	Strákanna var allra getið í ræðunni.
		the-boys(G) was all(G-masc-pl) mentioned in the-speech
		'The boys were all mentioned in the speech.'
	h	Strákarnir vonast til að verða allra getið í ræðunni
	5.	the boys(N) hope for to $[PRO(G)]$ be all (G) mentioned in
		the speech (Sigurðsson 1001; 221, 222)
		(312010880111991:331-332)

Under my proposal, the facts above demonstrate that PRO can check C/A features (as argued in detail by Sigurðsson (1991)). Further, I would like to make the strong claim that NOM PRO does not arise by default, but rather that NOM is checked by AgrS in these cases; see Harbert and Toribio 1993 for cross-linguistic evidence that non-finite INFL can assign NOM. Thus, there must be four PROs in the lexicon of Icelandic, one for each case (or perhaps eight, factoring number in as well). Verbal agreement features work exactly the same way as in finite clauses, it is simply a morphological fact about Icelandic that agreement is not overtly realized on infinitives; Portuguese "inflected infinitives" would be an instance of the opposite option. The obvious issue left to address is the licensing status of PRO: what allows it to occur in the subject position of infinitivals, where overt NPs cannot, and what prevents it from occurring in other positions? For a pre-Minimalist answer to this question specific to Icelandic, see Sigurðsson 1991. The division of labour between AgrS and T in my approach seems to force the following conclusion: infinitival clauses (of all sorts, not just control clauses) contain AgrS nodes identical to the AgrS nodes in finite clauses. The only possible locus of the licensing differences, then, is T. It is intuitively plausible to suggest that T is either absent altogether, or at least lacks its Li feature, in [-finite] clauses, because T is also responsible for checking the finiteness feature of V. The conclusion about PRO must be that it lacks an Li feature, i.e. it does not need to be licensed. This jibes well with standard accounts of PRO, but perhaps less well with more recent suggestions, e.g. that of Chomsky and Lasnik (1991), who argue that PRO does need some kind of "Case" (licensing, in our terms), but a different kind from

overt arguments, something they call "null Case." The goal of their proposal is apparently to explain why PRO cannot occur in just any ungoverned position. My proposal seems at least amenable to a similar approach, whereby infinitival T is present, but has a special value for the Li feature, one that is only compatible with PRO, which would obviously also have such a feature that required checking.⁴¹ If this is the right way to think about the problem, then the reason PRO cannot appear under an ECM verb is not that it would be governed or case-marked per se, but that it would not get the right kind of licensing: as I will argue in §6.2, ECM verbs take AgrO with a mandatory regular Li feature, which is incompatible with PRO.

6.2 ECM/SOR

In this sub-section I will consider whether the account of infinitival clauses just proposed can be extended to include ECM clauses as well. (The split title of this sub-section is intended to convey that I am agnostic on the question of whether these necessarily involve overt raising of the lower subject into the matrix clause, i.e. Subject to Object Raising—see Thráinsson 1979 for discussion; I will use the more current term "ECM" in the rest of the discussion for the sake of familiarity only.)

The central questions that a theory of Icelandic ECM must answer are, Why do ECM subjects surface in the positions they do, and why do they show the case-marking they do? The basic paradigms are shown in (59)–(61):

59.	a.		Krakkarnir hafa brotið bátana í spón.	[=(51)]
			the-kids(N) have broken the-boats(A) in pieces	
	b.		Allir telja krakkana hafa brotið bátana í spón.	
			all believe the-kids(A) to-have broken the-boats(A) in pieces	s
	c. Kral		Krakkarnir eru taldir hafa brotið bátana í spón.	
			the-kids(N) are believed to-have broken the-boats(A) in piec	ces
			(Zaenen & Maling 1990: 1	45–146)
60.	a.		Hún taldi einhveria báta hafa verið kevpta.	
			she believed some boats(A) to-have been bought(A)	
	b.	*	Hún taldi hafa einhverja báta verið keypta.	

she believed to-have some boats(A) been bought(A)

⁴¹ A similar account could be applied to the phenomenon of Stylistic Fronting (Poole 1992, Maling 1990), a process whereby certain elements, arguably heads but not phrases, can front to a position near subject position in clauses lacking overt subjects in situ. Under my framework, the generalization is that Spec-TP is not a possible position for overt NPs prior to SPELL-OUT when Fronting has applied. A way to implement this is to say that the fronted head adjoins to T and "absorbs" its ability to license overt material, while still allowing it to license null elements (*wh*-trace, null expletives). The intuition is that a head-adjoined element other than a finite verb requires licensing of some sort in this position. This looks very similar to the absorption of a [+transitive] feature from V by a passive morpheme head-adjoined to it, as proposed in §3.2. This could imply a "weakening" of the Li feature of T, similar to what I have suggested for control clauses.

	c.	*	Hún taldi hafa verið einhverja báta keypta. she believed to-have been some boats(A) bought(A)
	d.		Hún taldi hafa verið keypta einhverja báta.
			she believed to-have been bought(Å) some boats(A)
61.	a.	*	Það voru taldir einhverjir bátar hafa verið keyptir.
			there were believed(N-masc-pl) some boats(N-masc-pl) to-have
			been bought(N-masc-pl)
	b.	*	Það voru taldir hafa einhverjir bátar verið keyptir.
			there were believed to-have some boats been bought
	c.	*	Það voru taldir hafa verið einhverjir bátar keyptir.
			there were believed to-have been some boats bought
	d.		Það voru taldir hafa verið keyptir einhverjir bátar.
			there were believed to-have been bought some boats
			(Sigurðsson 1991: 355–356)

In answer to the first question, note that the lower subject can surface either at the beginning of the lower clause or, in the case of unaccusatives and passives, in complement position (e.g., (60d)). In the latter case, there is no overt expletive in the lower clause, which is not surprising if ECM clauses are TPs rather than CPs, as standardly assumed, and if the overt expletive in Icelandic is only needed to fill a Spec-CP topic position, while null expletives suffice to fill Spec-TP, as suggested in $\S3.3.^{42}$ Then, the two positions of ECM subjects receive an account parallel to that of main clauses: the strong N-feature of T requires something to be in Spec-TP at S-structure, which could be either the ECM subject, which must eventually raise through that position anyway, or a null expletive pro. This account is consistent with ECM clauses having some sort of "impoverished" T licensing, like control clauses. Notice that when the ECM verb itself is passivized, the position at the front of the lower clause ceases to be a possible site for the overt subject (61a). Furthermore, the position that is available, namely complement position, surfaces with NOM case, whereas with an active ECM verb, the NP shows up with ACC in that position. Clearly what is relevant for case, then, is the eventual location of Li-checking of the lower subject. In (59b) the active ECM verb is dominated by AgrOP with a transitivity feature and ACC case feature, just like ordinary transitives. This means that the ECM subject is licensed by AgrO of the matrix clause, which also checks ACC on it, as diagrammed in (62),⁴³ because the lower T, being [finite], cannot license it.44

 $^{^{42}}$ I follow J&B in assuming that null expletives, unlike their overt counterparts, do not trigger the definiteness effect.

 $^{^{43}}$ In (62) and (63), the VP associated with the lower auxiliary is omitted for space reasons.

⁴⁴ I am glossing over a detail here. It is not clear why the subject can move to the lower Spec-TP overtly, if it is not checking an Li feature there. Perhaps a "strong" requirement on T can be met by an NP being in its Spec even if T lacks the kind of Li feature the NP needs. This makes the requirement look more like EPP and less like strong feature checking. This problem looks parallel to that encountered with TECs in §3.3, but



perhaps fortunately, it is not at all clear that the overt position *is* Spec-TP, as opposed to a position in the matrix clause, so the problem might disappear in this case. In general, the position of arguments in ECM clauses is hard to diagnose because of independent restrictions on adverbs therein.

On the other hand, a passive ECM verb like (59c) (diagrammed in (63)), just like other passive verbs, loses its transitivity feature, and thus AgrO will be inert in the matrix clause. This forces the ECM subject to be licensed (and case-checked) in matrix *subject* position, which may be filled by an expletive at S-structure if the ECM subject does not raise there overtly (61d); the case checked in that position is NOM.



In contrast to (59), quirky subject verbs embedded under an ECM verb show no change of subject case (64b), even under subsequent passive in the matrix clause (64c), because their inherent case overrides the structural case of the higher clause; quirky subjects are still forced to raise in order to check Li features.

64. a. Mér líkar við hann. I(D) like him(N)
b. María telur mér/*mig líka við hann. Mary believes me(D)/*me(A) to-like him(N) (Thráinsson 1979: 352)
c. Mér er talið líka við hann. me(D) is believed to-like him(N) (Thráinsson p. c.)

What remains to be explained is why in the active case, lower subject position is a possible intermediate landing site at S-structure, while in the passive case it is not. J&B discuss a similar phenomenon from English, viz. the ungrammaticality of **There seemed three men likely to arrive*. Their explanation is that there is no motivation for movement to the intermediate subject position. In general, such movement would be motivated by feature-checking, but there is no plausible difference in the features of the embedded clauses in (60a) versus (61a) that could allow raising only in the former. There is, however, an additional difference between these two sentence types, namely that (61a) contains an expletive subject. Since it does not need a θ -role from the matrix verb (unlike the full NP subject of (60a)), nothing prevents us from positing its D-structure position as Spec-TP of the lower clause. Then the two sentences work as follows. In the active sentence (60a), Spec-TP of the lower clause is empty at D-structure, so raising the lower subject will meet the strong feature-checking requirements of T;⁴⁵ alternatively, they can be met by a null expletive, leaving the subject in its base position. In the passive version (61a), however, Spec-TP of the lower clause *must* contain (the trace of) the expletive that surfaces in matrix subject position; this satisfies the feature-checking requirements of the lower T, as well as the upper T, and thus there is no motivation for overt movement of the lower subject. At LF, it will have to move in order to check its own features, and raising to the matrix Spec-TP is forced because that is the only "fully" licensed position in the sentence (aside from the lower object position in transitives).

Some details of course remain to be worked out. Specifically, in order to really show why (61a) is out, we must explain why the expletive *has* to occupy the lower subject position at D-structure, and why there could not be separate expletives in the higher and lower clauses. In answer to the first question, perhaps since the ECM subject is the associate of the expletive, they must be clause-mates at D-structure (as suggested by Chomsky (1986: 212)). The second question is more difficult, since unlike English, in Icelandic impersonal passives have expletives without any apparent associate (§3.3). In a standard analysis, a single expletive chain between the two subject positions is required because an expletive could not get Case in infinitival subject position. Adapting that account to our framework, we must say that the null expletive requires "full-

⁴⁵ But see the previous footnote.

fledged" licensing, i.e. a regular Li feature to check against, although it *can* check an "impoverished" infinitival one as well. This forces raising of the expletive to matrix subject position in a sentence like (61d). We then must say that in (60d) the expletive is licensed by AgrO of the matrix clause before being "erased" at LF.

This account could explain an additional fact about case in these constructions, namely what happens to arguments that stay behind in the lower clause. The fact is that, despite NOM never surfacing on the subject of the ECM clause (in the active variant), it is not free to surface on just any objects of ECM clauses either, as might be expected if the NOM feature of AgrS were lying around, waiting to be checked. Rather, NOM objects show up only with those verbs that allow them in finite clauses, namely those with inherent-case subjects and non-inherent-case objects (like (64), but not (59b)). This behaviour appears to violate the Accusativity Parameter, because in the lower clause of (59b) it appears that structural ACC is being assigned while NOM is not. However, if a non-quirky subject (as in (59b)) passes through the lower Spec-AgrSP position as shown in (62),⁴⁶ it could check the NOM case feature there as usual, but since there is no position in the lower clause where licensing can be checked, it must raise to the matrix Spec-AgrOP. That position checks not only Li features, but also ACC C/A features. Apparently, in such a situation the ACC feature of AgrO is not omitted, as it would be when a quirky subject raises, but rather it gets checked too. Clearly we have to say something about how that is possible; I suggest that structural cases are not mutually incompatible on an NP, at least when they get checked in different clauses, and the morphology can specify which takes precedence and surfaces phonologically. However this is accomplished, NOM is not available to check against some other argument of the lower clause, as desired, and the Accusativity Parameter is maintained. On the other hand, if the subject of the ECM clause has an inherent case, it cannot check any features of the lower AgrS. Thus, at LF a lower *object* can check features by adjoining to AgrSP in the usual way and get NOM, as shown in (65), with the structure in (67).

65. Ég taldi henni leiðast Haraldur.
I believed her(D) to-bore Harold(N)
'I believed her to be bored by Harold.' (Maling & Sprouse 1992: 10)

⁴⁶ Once again, the motivation for this is not clear.



Corroboration for this analysis is found in the behaviour of inherent ACC (67a) embedded under ECM. Not surprisingly, it appears unchanged in the active ECM sentence (67b), and ACC *is* preserved by subsequent passive in the higher clause—compare (67c) with (59c). (67c) represents the only situation under which ACC does not revert to NOM under passive, and it follows straightfor-

wardly under my analysis, because only inherent ACC on a *subject* can ever undergo passivization. (See also Schütze 1993.)

67. a.	Bátana hefur brotið í spón.	[=(50)]
	the-boats(A) has broken in pieces	
b.	Allir telja bátana hafa brotið í spón.	
	all believe the-boats(A) to-have broken in pieces	
с.	Bátana er talið hafa brotið í spón.	
	the-boats(A) is believed to-have broken in pieces	
	(Zaenen & Malin	g 1990: 146)

More strikingly, as mentioned in §5.3 we find a minimal pair with respect to agreement of a passive participle with an ACC ECM subject, depending on whether ACC is structural or inherent. Inherent ACC (on a quirky ACC subject) does not trigger agreement on a lower passive participle (68b), while a "raised" NOM NP, which gets ACC from AgrO, does (68a).

68. a.	Þeir segja drengina vera talda/*talið elska stúlkurnar.	[=(47)]
	they say the-boys(A-masc-pl) to-be believed(A-masc-pl)/	
	*believed(supine) to-lov	e the-girls
b.	Þeir segja drengina vera talið/?talda vanta peninga.	
	they say the-boys(A-masc-pl) to-be believed(supine)/	
	?believed(A-masc-pl) to-lack money (Andrews 1	982: 469)

The generalization to capture is that passive participles agree only with NOM arguments or ECM ACC arguments (Sigurðsson 1989: 308). This can be explained if a checking relationship with AgrS is the trigger for agreement features to be transmitted to the participle, an alternative to Jonas's (1992) approach of local checking, which would not seem to get this contrast. Non-inherently case-marked subjects check NOM in AgrSP in the lower clause and trigger agreement,⁴⁷ whereas quirky subjects cannot check NOM and do not trigger agreement. (69a) shows that NOM *objects* in the lower clause also do their case checking in AgrSP, because they too trigger participial agreement.

69. a. % Ég taldi henni hafa verið gefnir bílarnir.⁴⁸

I believed her(D) have been given(N-pl-masc) the-cars(N-pl-masc) b. % Ég taldi henni hafa verið gefna bílana.

I believed her(D) have been given(A-pl-masc) the-cars(A-pl-masc) (Sigurðsson 1992b: 60)

⁴⁷ There is a slight complication in this account. In (68a), the ECM subject triggers agreement on the passive participle of the middle clause, hence I predict that it must have passed through Spec-AgrSP of the middle clause, in addition to that of the lowest clause. While movement through that position is perhaps forced by locality, feature-checking is harder to motivate: why can the NP check NOM more than once? The question is left for future work.

 $^{^{48}}$ $\,$ The annotation "%" indicates that some percentage of speakers allow the form that follows.

Various details concerning agreement still await explanation, e.g. the possibility of ACC on the object in (69b) for some speakers, or that fact that a matrix passive participle can agree with an embedded NOM object:⁴⁹

- 70. a. Honum er talið hafa verið gefnir peningarnir. he(D) is(sg) thought(supine) to-have been given(N-masc-pl) the-money(N-masc-pl)
 b. Honum eru taldir hafa verið gefnir peningarnir.
 - b. Hondin etu taldi hafa verto gerini peningarini. he(D) are(pl) thought(N-masc-pl) to-have been given(N-masc-pl) the-money(N-masc-pl) (Andrews 1990a: 211–212)

(70b) might arise by the lower object raising to adjoin to the higher AgrSP at LF in order to check its NOM case feature (which the raised subject did not do), because NOM "tries" to be assigned whenever possible, but the details are problematic. Other agreement facts come out as expected, for instance, the contrast between (71) and (65): in (71), the predicate nominal gets case by agreement with the ECM subject and cannot get NOM because that subject checked NOM in AgrSP on its way up, but in (65) *Harold* is a true object, and is therefore eligible for NOM, since the DAT subject of the lower verb did not check it.

71. Ég taldi hana/*hún vera kennara/*kennari. I believed her(A/*N) to-be teacher(A/*N)

(Maling & Sprouse 1992: 11)

Finally, I must say a few words about Dative and Nominative with Infinitive (D/NcI) constructions like (72) and (73), which have received numerous ad hoc treatments in the literature.

- 72. a. Mér mundu virðast margar bækur hafa verið lesnar. me(D) would(3pl) seem many books(N) to-have been read(N) 'It would seem to me that many books had been read.'
 b. Mér mundu virðast hafa verið lesnar margar bækur.
 - me(D) would(3pl) seem to-have been read(N) many books(N) (Sigurðsson 1991: 356–357)
- 73. Mér virðist/virðast þeir vera skemmtilegir. me(D) seems(3sg)/seem(3pl) they(N) to-be interesting 'It seems to me that they are interesting.' (Sigurðsson 1989: 99)

The key to understanding these is to realize that this use of the verb has a different lexical entry from the usual raising use. (It would be more perspicuously glossed as 'perceive' rather than 'seem' in (72) and (73).) In particular, it has a subject θ -role with an associated DAT case, and thus parallels simple DAT-NOM verbs exactly, except that it takes infinitival clause complements. Just as in standard ECM, the lower subject must be licensed in the higher clause, which

⁴⁹ Such agreement is obligatory according to Thráinsson (p. c.), i.e. (70a) is out for him.

has a licensing AgrO available since the verb is transitive.⁵⁰ The only difference is that, since NOM does not check against the matrix subject (it being quirky), it is available for checking the raised ECM subject, and must do so (taking precedence over a possible ACC) for precisely the same reason that regular DAT-NOM verbs do not have ACC objects: the Accusativity Parameter. Thus, the ECM subject will get NOM by the same mechanism that mono-clausal NOM objects do, while being licensed by AgrO. The optionality of agreement in (73) suggests an alternative derivation wherein NOM on the lower subject comes from the embedded AgrSP, thus checking agreement features that are invisible on the infinitive; raising to the higher clause then checks only the licensing feature of this NP.⁵¹

7. Concluding Remarks

In this paper, I have proposed an extension to the Minimalist theory of case to encompass morphological case as well as positional licensing in Icelandic. The proposal allows an account of generalizations concerning case and agreement to be incorporated in the theory, and is empirically more adequate in its coverage of the case facts than previous proposals. In addition, this account has been shown to be compatible with most aspects of an existing, well-motivated theory of licensing for Icelandic (and other languages) (J&B), and yields the right results when extended to certain cases beyond those that motivated the original theory. Both the case and licensing facts of several quite complex constructions have been shown to follow from this approach, lending support to the account of case and licensing as independent feature-checking complexes, and to the Minimalist framework more generally. The key notion that has allowed these analyses is the idea that there is a way for an object to check case and agreement features with the AgrS head of AgrSP. Thus, the obvious next step in the research program is to look for explicit motivation and evidence, both internal to Icelandic and cross-linguistically, that one of the mechanisms for accomplishing that is actually attested. More generally, the possibility of accounting for diverse languages by parameterizing the theory presented here must be explored. There can be no doubt that Icelandic displays some of the most complex case behaviour of any language, and progress in explaining it can only lead to a more comprehensive universal theory of case, agreement and licensing systems.

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 $^{^{50}}$ Sigurðsson (1991: 356–357) shows that this verb displays the same word order possibilities as other ECM verbs.

⁵¹ In this alternative derivation, it is not clear why the NP does not get ACC, since in terms of its movement chain it is identical to a normal ECM subject.

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