SPECIFICITY AND AGREEMENT IN STANDARD WESTERN ARMENIAN

by

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Abstract

This thesis is a study of specificity and agreement in Standard Western Armenian (SWA) within the framework of the Minimalist Program (Chomsky 1993). As it is a language that has a rich nominal and verbal morphology, SWA provides us with overt signs, in both the nominal and verbal domains, of the underlying structural relations that constitute agreement as it is understood in this theoretical model.

The thesis has two parts. In the first part I examine the distribution and interpretation of nominal suffixes, paying particular attention to bare singular count noun phrases, mass indefinites, bare plurals, and specific noun phrases, which bear the definite article suffix. I show that the definite article is in fact a marker of specificity and attribute this to its being associated with the φ-feature Person. I argue that bare (singular count and mass) NPs lack φfeatures altogether. Assuming the split DP structure proposed by Ritter (1992), I argue that φ-features are checked within DP and propose a feature-based characterization of the types of noun phrases distinguished by the nominal suffixes. In the second part I discuss the nonagreement construction, a construction in which nonspecific plural noun phrases do not trigger plural agreement on non-transitive verbs. I show that this can be accounted for using the feature checking mechanism of the Minimalist Program, by assuming that the subject is specified for Number only and not for Person and that number features are checked in the specifier position of TP. In this derivation AgrP is absent, as neither the subject nor the verb has person features to check there. Positing an Agr-less derivation allows us to account for the fact that transitives and unergatives are unacceptable in non-agreement constructions: In a derivation whose sole functional projection is TP, there is no place for a DP object to check its Case features, hence transitive non-agreeing derivations do not converge. Non-agreeing unergatives are ruled out on the assumption that their subjects are licensed in a position external to the predicate (following Hale and Keyser 1993). By assuming that the predicate is represented by TP rather than VP, I conclude that the subject of an unergative or transitive is licensed in an external position only, where this means specifier of AgrP. We see that the proposed Agr-less analysis of nonagreeing sentences permits an account of their interpretation based on Diesing's (1992) Mapping Hypothesis, a general account of the mapping of syntactic representation onto semantic representation.

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Abbreviations

SWA Standard Western Armenian

SEA Standard Eastern Armenian

N Nominative case; this will be indicated on pronouns only, as SWA

does not distinguish between nominative and accusative on non-

pronominal nouns.

ACC Accusative case; this will be indicated on pronouns only, for the

reason given above.

GEN

DAT, G/D Since dative and genitive case on non-pronouns is indicated with the

same morpheme (-i, -u, -van, -ean, etc.) I will gloss it as either DAT,

GEN, or as G/D.

ABL Ablative case

INSTR Instrumental case

dt Definite article

a, indef Indefinite article

1poss, 2poss First-, second-person possessive agreement (the possessed noun agrees

with its possessor in person and number in SWA)

that₂ ayt 'that,' sometimes described as being near the hearer, but not

exclusively; more appropriate with non-humans.

that3 ayn 'that,' sometimes described as being near neither speaker or

hearer; used with humans; less deictic than ayt (see sections 2.6.0.3,

2.6.1.1.2 for details).

s Singular

p Plural (verbs)

pl Plural (nouns)

1, 2, 3 First-, second- and third-person

3' this is used to gloss the third-person pronoun that is more restricted in its reference than the 3s pronoun an or the plural version anonk; it has

singular and plural forms and is fully declined.

inf Infinitive

imp Imperfect

aor Aorist

prog Progressive

pst Past

caus Causative

pass Passive

ppt₁ The participle ending in $-ad^z$ used to form one of the perfect constructions, it is not passive however (the passive participle requires the passive affix -v-). It is also used to form relative clauses where the head is a non-subject:

im kən-ad^z kirk-əs my buy-NSR book-1poss 'the book that I bought'

ppt₂ The participle ending in *-er*, used to form the second of the perfect constructions. Donabédian (1995) discusses its use, terming it the 'mediative'. According to her, it is used in contexts where the action described is alleged or doubted or is contrary to expectations.

neg.prtcp Negative participle; the form of the verb which is used when the imperfect is negated.

rel.prn The relative pronoun *vor* is used to introduce both relative clauses and clausal complements.¹

Maro-n gardze-Ø/g-əse-Ø te Ani-n čutag-ə lav gə-nəvake-Ø M -dt think-3s/says-3s/ comp A-dt violin good imp-play-3s 'Maro thinks/says that Ani plays the violin well'

¹Although it is considered better to use the complementizer te in contexts such as

SR The Subject-Relativizing morpheme, normally referred to as the present participle as in:

kirk d^zax-oz gin-ə book sell-SR woman-dt 'the woman who sells/is selling books' subject head

- x When a morpheme is present, but serves an unknown function, I gloss it as *x*.
- cx a connecting vowel, present in some compounds

Glosses of ungrammatical strings, where relevant, are put inside parentheses, e.g.

*Maro-n ir gadu-(i)-n sun-e-n vax-c-uc M -dt 3'gen cat-(DAT)-dt dog-abl-dt fear-caus-aor.3s ('Maro made her cat afraid of the dog') The letters of the Armenian alphabet will be transcribed as follows:2

```
= French 'r'
        a
                                                        η
ш
                                                         8
                                                                     = < j > in jump
۴
        p
                                                        ิป
                                                                m
        k
Գ
                                                                y or h<sup>3</sup>
        t
                                                         J
դ
                                                        u
ե
        e ([ye] word-initially)
                                                                n
                                                                    = \langle sh \rangle in cash
        Z
                                                         2
٩
                                                                 o (/vo/ word-initially)
                                                        n
Ł
        e
                                                                    = <ch> in chair
        \theta^4
                = <o>in lemon
                                                         ٤
r
                                                                 b
p
        t
                                                        щ
                                                                    = <ch> in chair
                                                                ۲
                = \langle s \rangle in measure
                                                         ٤
3
        3
ի
                                                        n
                                                                 r
        1
                                                         u
                                                                 S
                = <ch> in Bach
                                                         પ
խ
        Х
                                                                 v
        d^{z}
                                                                 ď
9
                                                         'n
Կ
                                                                 r
        g
                                                        p
                                                                     = < ts > in cats
h
        h
                                                                 C
                                                         9
                                                                     or [u] in combination with n
b
        C
                = <ts> in cats
                                                        L
                                                        nL
                                                                 u
                                                         ψ
                                                                 p
                                                                 k
                                                         Þ
                                                                 O
                                                         0
                                                                 f
```

In diagrams, the following symbols will be used:

²For a detailed discussion of the phonetics and phonology of Armenian the reader is advised to consult Vaux (1994, 1997).

I am aware that this transcription system is a mixture of different systems, and in particular that it does not use the traditional system used by many Armenologists, nor is it a homogeneous IPA-based system. However, I think that it is reasonably faithful to the pronunciation of SWA, provided the following rules are kept in mind. Voiceless consonants are aspirated and in word-final position voiced stops are devoiced and aspirated. Word final /r/ is also devoiced for many speakers.

This letter is pronounced /h/ word-initially, /y/ intervocalically or at the end of a syllable, except that in polysyllabic words it is not pronounced in word-final position. I transcribe it according to whether it is pronounced, so that hwj is transcribed [hay], while wnwj is transcribed [dera].

⁴Epenthetic schwas will also be transcribed as /ə/, so that, e.g., qptl krel 'to write' will be transcribed as [kərel].

Chapter One

1 Introduction

Much recent work in the Principles and Parameters framework has been devoted to explaining what specificity and agreement are and how they interact. This thesis is a study of these phenomena in Standard Western Armenian (SWA) within the framework of the Minimalist Program (Chomsky 1993). As SWA is a language that has a rich nominal and verbal morphology, it provides us with overt signs, in both the nominal and verbal domains, of the underlying structural relations that constitute agreement as it is understood in this model.

SWA is often referred to as the language of the Armenian diaspora. Speakers of this language are, or are descendents of, Armenians who lived in what was the Ottoman Empire. The official language of (former Soviet) Armenia, as well as the language of Armenians in communities in Iran and Georgia, is called Standard Eastern Armenian (SEA) and differs from the western dialect phonologically and syntactically.⁵

Before giving a preview of the thesis, a note on methodology is in order. As SWA today is spoken in communities in countries where the official language is not

⁵ See Tamrazian (1994) for discussion of some aspects of Eastern Armenian syntax in a Principles and Parameters framework, and Vaux (1994, 1997) for the phonology and morphology of a number of Armenian dialects. Donabédian (1991, 1993) reports corpus-based research on SWA nominals.

SWA, native speakers of SWA are almost always bilingual, at the very least. This means that there is a possibility that the judgements reported are influenced by the speaker's knowledge of another language. Speakers themselves seem to be concerned by this. I have been fortunate in finding native speakers to work with who are from different parts of the world,⁶ and have tried to report only judgements on which there is consensus, in the hopes of minimizing 'interference' from second languages. The backgrounds of these native speakers are all such that Armenian was their first language, they have all been educated in the language, and use it as adults with their family and (some) in their work. Since the data presented in this thesis is almost exclusively from speakers' judgements, there may be some discrepancies between what I report as grammatical and what an Armenian grammar teacher considers to be *makur hayeren*, 'clean Armenian'. Where this divergence occurs and I am aware of it, I have noted it.

The thesis consists of two parts. In the first part, chapter two, I examine the distribution and interpretation of nominal suffixes, paying particular attention to noun phrases that lack suffixes and to specific noun phrases, which bear the definite article suffix. I show that the definite article is in fact a marker of specificity and attribute this to its being associated with the φ-feature Person. Assuming the split DP structure proposed by Ritter (1992, 95), I argue that φ-features are checked within DP and propose a feature-based characterization of the types of noun phrase distinguished by suffixes. In the second part, chapter three, I discuss the fact that nonspecific plural noun phrases do not trigger plural agreement on non-transitive verbs. I show that this can be accounted for using the feature checking mechanism

⁶The native speakers of SWA who have worked with me are from Alexandria, Beirut, Cairo, Istanbul and Paris. Native speakers from Yerevan and Teheran provided me with judgements in SEA.

of the Minimalist Program, by assuming that they are specified for Number only and not for Person.

In chapter two I show that the interpretation and syntactic behavior of bare NPs can be characterized by assigning them no φ-features; that is they are unmarked for person and number. This has the consequence that they cannot move from their base-generated position, and that they are interpreted either as *mass indefinites* (i.e., as nonspecific and non-countable nouns) or as predicates. I do not analyze these bare NPs as incorporating into the verb, as has been proposed for other languages, since the evidence from interpretation indicates that these NPs are arguments in VP rather than modifiers of the verb, as is the interpretation of an incorporated noun in an analysis considered (Mohanan's (1995) analysis of Hindi nominative objects).

The definite article is the second focus of chapter two. I show that this suffix can be viewed as an agreement suffix, assimilating it to the possessive agreement suffixes found in the language. These are morphemes on the possessed noun that agree in person and number with the possessor. I argue that the article can be analyzed as a marker of an agreement relation between the noun and either an overt demonstrative or a null subject of DP. This DP-internal agreement analysis has much in common with analyses of possessor agreement in Hungarian, as well as genitive agreement in Miskitu.

Chapter three examines the *nonagreement construction*. Armenian verb morphology is rich in the sense that it shows person, number and tense marking, however, person-number marking is not overt in a certain environment, namely when the subject is not specific and the verb is not transitive. It has been shown that

specificity and agreement (where this includes Case relations as well) are correlated. By looking at the nonagreement facts I show that in fact for SWA at least we can pinpoint the feature Person as being responsible for specific interpretation of the subject and overt agreement on the verb. I argue that nonspecific plural subjects are NumPs, and show that their number features are checked when the subject moves to specTP. In this derivation AgrP is absent, as neither the subject nor the verb has person features to check there. Positing an Agr-less derivation allows us to account for the fact that transitives and unergatives are not acceptable in non-agreement constructions: in a derivation whose sole functional projection is TP, there is no place for a DP object to check its Case features, hence transitive non-agreeing derivations do not converge. Non-agreeing unergatives are ruled out on the assumption that their subjects are licensed in a position external to the predicate (following Hale and Keyser 1993). By assuming that TP is the extension of the predicate VP, I conclude that the subject of an unergative or transitive is licensed in an external position only, where this means specifier of AgrP.

Chapter Two

2 Specificity in the noun phrase

2.1 Introduction

This chapter is concerned with the structure and interpretation of nominal expressions in Standard Western Armenian (SWA). One of the things that makes SWA noun phrases interesting is the fact that bare singular count nouns can occur in argument position, e.g.

(1) Maro <u>zinvor</u> desav Mary soldier saw Maro saw soldier(s) hink <u>fif</u> ing-av five bottle fell-sg Five (nonspecific) bottles fell

These nouns are distinct in distribution and interpretation from nouns bearing the plural, indefinite article, definite article, and possessive agreement suffixes. The question is how to account for these in a framework that relies on ϕ -features to determine syntactic behavior. Can we rely on the standard Person and Number features or do we have to introduce additional features that others have proposed, such as $[\pm \text{specific}]$, $[\pm \text{definite}]^7$ or $[\pm \text{R}(\text{eferential})]$? It appears that Person and Number suffice to cover the facts in SWA. To account for the distribution of the

⁷Szabolsci (1994) uses the features [±specific] and [±definite] to account for the distribution of the definite article in Hungarian (see section 2.6.3.3). Longobardi (1994) uses the feature [±R] to explain the differences between Romance and Germanic languages with respect to the distribution of the definite article.

definite article and possessive agreement suffixes I propose to adopt a split DP structure (following Ritter 1990,91,95) in which NP arguments raise to check φ-features in a manner parallel to that of arguments in the verbal/inflectional domain.

My goal here is not to give an exhaustive description of the noun phrase, but rather to investigate the way that specificity is manifested in nominal expressions⁸ and how best to represent this structurally. The projection Ritter terms NumP is equivalent to the projection that Vangsnes (1995) calls QP. Both 'NumP' and 'QP' are labels for the projection where number features are checked. I will argue that in SWA, at least, there are three types of arguments, those that are unspecified for Number and Person, those that are specified for Number only, and those that are specified for both Number and Person. This is contrary to what is argued by Longobardi (1994), who assumes that the locus of number specification is D and it is the presence of a non-null head of DP that renders a nominal expression an argument.9 I agree with Longobardi that the presence of number specification typifies VP-external arguments, but I claim that for SWA the locus of number specification is Num rather than D. To account for the variation among languages, in particular, between those languages which cannot separate number from definiteness specification, I propose that there is a parameter in the nominal domain parallel to that in the verbal/inflectional domain proposed by Thráinsson (1994). The parameter Thráinsson proposes divides languages into those whose Infl is split into T and Agr (e.g., Icelandic, French) and those whose Infl is not split (e.g., English). The same kind of parameter in the nominal domain would distinguish a language such as Hebrew or Armenian, with D and Num distinct, from a language such as Italian, in which D contains the number specification.

⁹Longobardi (1994:620).

⁸I will use the term 'noun phrase' or 'nominal expression' to refer to NPs, NumPs or DPs.

In section 2.3 I outline Ritter's argument for the functional projection NumP and discuss in detail what it means to be specified for Number and Person and why these features rather than features such as [±specific] or [±definite] are sufficient for characterizing nominal expressions in SWA. I propose that both [±pl] and [±sg] values for Number, as well as [±deictic] for Person are necessary in order to account for the types of noun phrase found in SWA.

Beginning with bare NPs in section 2.4 I show that by assuming them to be NPs that are not specified for Number or for Person we can account for their syntactic behavior, namely that they must be strictly adjacent to the verb, and cannot serve as antecedents of pronouns. The adjacency constraint is the result of their lacking φ-features that trigger movement. The inability of bare NPs to corefer with pronouns is likewise due to their lacking φ-features, on the assumption that a pronoun is specified for person and number features and can only corefer with a nominal expression that is similarly specified. Semantically, bare NPs are seen to function both as nonspecific/non-countable indefinites, what I call *mass indefinites*, and as predicates. In other words, they can refer to masses or to properties, even though they might be considered count nouns in English, for example. Although bare NPs are often analyzed as being incorporated into the verb, I argue that there is no evidence for morphological, syntactic or semantic incorporation of bare NPs into tensed verbs in SWA. To explain the fact that bare NPs take narrowest scope I follow Vangsnes (1995) and attribute this to the absence of number specification.

Section 2.5 discusses the indefinite article. I claim that this morpheme is an indicator that the noun phrase is specified for number, [#-pl, +sg]. Since speakers' judgements indicate that indefinites bearing this morpheme can have either a

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specific or nonspecific interpretation, I conclude that in addition to Number, it is optionally specified for Person.

The discussion of covert plurals, noun phrases that are plural in reference yet morphologically singular, such as hink fif 'five bottle' in (1), is found in section 2.3 and in chapter 3, where their role in verbal/inflectional derivations is discussed. I propose that these noun phrases are specified for [#-pl, -sg] and are unspecified for Person. This accounts for the fact that they are not permitted in external subject position, specAgrSP (I assume that Person is checked in AgrP), and are restricted to internal subject position, specTP (where I will argue Number is checked). The semantic effect of being specified for Number is that it enables the noun phrase to refer to units of a type. By this I mean that the individuals that are referred to by

hink kirk
book
'[some] five books [or other]'

are like the individual amounts of sugar in the English expression *five cups of sugar*. They are countable, but not distinguishable. Thus the ϕ -feature Number plays the role of unit or individuator, and Person is required to further allow the noun phrase to refer to a distinct individual.

In section 2.6 we examine the definite article and possessive agreement suffixes. I propose to analyze these morphemes as agreement markers that are associated with the feature Person. This features has two values; in the case of the definite article [-deict]; in the case of first- and second-person possessive agreement, [+deict]. Having assumed a split DP structure, I argue for an analysis in which arguments generated inside NP raise to Num and to D to check their features in a

fashion parallel to that found in verbal/inflectional derivations. Semantically, the effect of being specified for Person is to enable the noun phrase to refer to particular individuals, rather than to indistinguishable units of a type, as is the case for noun phrases that have number specification only.

Overt plurals are discussed in section 2.7. They are distinguished from covert plurals, [-pl,-sg] in being specified [+pl]. Like the plural marker in languages such as Persian or Turkish, the plural suffix in SWA is used only when there is some particular focus on the individual referents and not simply when more than one thing is referred to. This leads us to expect that they are specific, and therefore are specified for Person, that they are DPs, in the scheme I propose. However, problems arise with bare plurals. On the one hand they are excluded from subject positions that can be characterized as 'external', these being subject of unergative or transitive verbs and subject position of generic statements. They seem to be acceptable only in object and internal subject position, specTP (subjects of passives or unaccusative verbs). On the other hand, bare plurals trigger plural agreement on the verb, a characteristic of DPs (as I argue in chapter three). Two solutions are considered to account for bare plurals. One, along the lines of Longobardi (1994): a bare plural is a DP that has a null D which must be licensed by being governed by the verb (hence they cannot occupy external subject positions). In this solution person specification is associated with a phonologically null morpheme. The other solution is to say that bare plurals do lack person specification and are [+pl] only. Since I assume that Number is checked in TP and person in AgrSP, this accounts for the fact that they cannot raise to external subject position, specAgrSP (if they have number features only they cannot move higher than TP). For this scenario to work I assume that overt plural agreement can be triggered by a [+pl] feature on an argument in specTP. Assuming that bare plurals lack person specification may also account for the fact that the bare plural form of *count* nouns in SWA often has a 'types of' interpretation (comparable to the plurals of mass nouns in English, for example).

Finally, in section 2.8 we examine the behavior of the word *had*, which functions like a classifier. I propose an analysis in which it is a clitic that spells out the Number specification [-pl, -sg].

2.2 Specificity

Throughout this dissertation the term *specific* will be used in the sense of Enç (1991).¹⁰ In this section I discuss very briefly the basic claims that Enç makes and how specific indefinites are distinguished from nonspecifics in SWA.

According to Enç's characterization of specific noun phrases, one of the ways an indefinite NP can be considered specific is if it refers to something that is part of the discourse. The specific NP's referent forms a subset of some set of things already referred to or understood by the speaker and hearer to exist. This contrasts with her characterization of definite NPs; the referent of a definite NP must be identical to something that has previously been referred to.¹¹ So for example, given the context in (1a), the noun phrases a poem and some poems in (1b,c) are specific when they refer to a subset of the set of writing samples introduced in (1a). The definite noun phrase in (1d) cannot refer to a subset of the poems in (1a) as the referent of a definite expression must be not identical with the some previously mentioned (or

¹⁰ This is also the formulation of specificity that Diesing (1992) among others, refers to.

¹¹According to Enc's definition of specificity, definite noun phrases are specific since the relation of identity is a special case of the subset relation.

understood) element in the discourse. The bare plural in (1d) can have only a nonspecific or generic meaning and thus is odd in the context of (1a).

- (1) a. Mary sent off a lot of samples of her writing.
 - b. A poem was accepted for publication.
 - c. Some/two/many poems were accepted for publication.
 - d. #The poem was rejected because it was not about Texas.
 - e. #Poems were accepted for publication.

The definite NP in (2b), on the other hand, can be interpreted as identical to the poem introduced in (2a).

- (2) a. Mary submitted a poem to the New Yorker.
 - b. The poem is sure to be published because it's about Texas.

The indefinite NPs *a poem* and *some poems* in (3) are similar in form to those in (1),¹² but are nonspecific in their interpretation; they do not refer to any particular poem(s) that are a subset of a set of poems already mentioned.

- (3) a. Pat wants to write a poem about global warming.
 - b. Chris thought that poems/some poems would entertain the class.

In SWA, singular noun phrases that contain the indefinite article $-m\theta$ are similarly ambiguous. Consider the examples in (4)-(5).

 $^{^{12}}$ Stress plays a role in distinguishing the specific and nonspecific versons. Unstressed a and some (sometimes written sm) is nonspecific, stressed some is specific.

- (4)a. Maro-n ir kər-ad^z-ner-e-n mi-kani¹³ orinag-ner xərge-c-Ø

 M -dt 3'gen write-ppt1-pl-abl-dt a-few example-pl send-aor-3s

 'Maro sent a few examples of what she has written'
 - b. <u>panasderd²utyun-mə</u> əntun-v-ad² e-r dəb-v-el-u hamar poem-a accept-pass-ppt1 be-pst.3s publish-pass-inf-dat for 'A poem was accepted for publication'
- (5)a. Ani-n gard^z-e te/vor

 A -dt think-3s COMP/rel.prn

yete ink-ə <u>panasderd</u><u>zutyun-mə</u> kəre-Ø nəʃanavor bidi əlla-Ø if 3'-dt poem-a write-3s famous fut become-3s 'Ani thinks that if she writes a poem she will be famous'

Bare NPs on the other hand are unambiguously nonspecific in SWA:

- (6) a. Maro-n Jun gə-pəndre-Ø gor
 M -dt dog imp-look-3s prog
 'Maro is looking for a dog/dogs' [cannot be a particular dog or dogs]
 - b. hərabarag-i-n me**č** zinvor ga-r square/plaza-gen-dt in soldier exist-pst.3s

 'There were soldiers/was a soldier in the square' [cannot be a particular soldier or soldiers]

When a noun phrase is marked plural, however, it tends to be interpreted as specific. If (7) is uttered in the context of (4a), then the plural marker is required. Without the plural suffix, a nonspecific, out of the blue interpretation is preferred.

¹³Some speakers of SWA consider mi kani 'a few' to be Eastern Armenian (in SEA in general the indefinite article precedes rather than follows the noun as it does in SWA) and use only the expression kani-ma few-a to mean ambiguously 'few' and 'a few'. For the speakers that do use mi kani, it means 'a few', while kani-ma means 'few'.

(7) mi-kani/kani-mə panasderdzutyun-*(er) əntun-v-adz e-i-n
a-few/few-a poem-pl accept-pass-ppt1 be-pst.3p
'A few poems were accepted [of the writing samples Ani submitted]'

The noun phrases that refer to entities that are included in a previously established set are referred to as *partitive specifics*. Enç discusses a second class of specific noun phrases, *relational specifics*. These are NPs which are linked¹⁴ to familiar objects (Enç 1991:21). The linking can either be done explicitly or implicitly. In (8), the teacher explicitly assigns a task to the children, thereby creating the necessary link between the object denoted by the indefinite *a certain task* and the domain established by the expression *each child*.

(8) [Enç (1991:19)]

The teacher gave each child a certain task to work on during the afternoon.

The link established by the main verb, *give*, ¹⁵ is sufficient to license the specific noun phrase *a certain N*. This contrasts with the relation of *admire* which does not license a noun phrase containing *certain* ¹⁶. Without the addition of 'his mother,' the sentence in () sounds incomplete. With the addition of 'his mother', a relation is established

f could be any contextually relevant relation, 'mother of' for example.

 $^{^{14}}$ The link is established by means of an assignment function. This notion is attributed to Hintikka (1986), who proposes that the interpretation of NPs modified by *certain* be represented as in (ii), where f denotes a function that is recoverable from the context of the utterance:

i. Every true Greek adores a certain woman. [= Enç's (60), (61), which are simplified

ii $(\exists f)$ $(\forall y)$ $(y \text{ is a true Greek } \rightarrow y \text{ adores } f(y))$

versions of Hintikka's (20), (21)]

¹⁵Other verbs that create the necessary relation for licensing NPs of the form a certain NP are appoint, assign, pick, choose, and so on (Enç 1991:20).

¹⁶Enç 1991:20.

between the noun phrase every true Greek and the specific noun phrase a certain woman.

(9) [adapted from Enç (1991:19)]

Every true Greek admires a certain woman — his mother.

In some contexts a relative clause establishes a domain in relation to which the NP *a* certain song is interpreted, as in (10).

(10) [Enç (1991:xx)]

Every man wanted to dance to a certain song that he loved as a teenager.

Some native speakers of SWA report that a plural noun in object position sounds odd if it is not associated with a relative clause or adjectival modifiers, a fact which suggests that these plural nouns are relational specifics. Like the specific noun phrase in (9), the sentences in (11) are not ungrammatical if the relative clause is omitted, but they sound incomplete.

- (11)a. Maro-n kork-er kənec vor Ani-n barsgasdan-e-n per-ad^z e-Ø

 M -dt carpet-pl buy-aor-3s rel.prn Ani-dt Iran-abl-dt bring-pass-ppt1 be-3

 'Maro bought carpets that Ani brought from Iran'
 - b. menk zinvor-ner desa-nk vor karabak-e-n nor veratar-c-adz

 1p.nom soldier-pl see.aor-1p rel.prn Karabagh-abl-dt new return-aor-ppt1
 e-i-n
 be-pst-3p

'We saw soldiers that had just returned from Karabagh'

¹⁷This point is made by Vangsnes (1995) in his discussion of bare indefinite subjects in Scandinavian. If they are modified, then they are more acceptable in the intermediate, spec-TP, position.

2.2.1 Specificity and scope

Specific noun phrases are characterized by the fact that they take narrowest scope with respect to quantificational elements in the clause. The examples in (12) show that SWA patterns with English in that the bare NPs take narrowest scope with respect to the universal quantifier, negation, modals and verbs of propositional attitude:

- (12) a. amen usanow kirk gə-garta-r
 every student book imp-read-pst.3s

 'Every student was reading books'

 [cannot mean that there was a single book such that every student was reading it]
 - b. pare.paxd.apar mug &k-kada-v
 fortunately mouse neg-find.aor-3s
 'Fortunately s/he did not find a mouse/did not find any mice'
 [cannot mean there was a mouse that fortunately s/he did not find]
 - c. bedk e vor maro-n ∫un kədna-Ø
 must be.3s rel.prn M -dt dog find-3s
 'Maro must find a dog'
 [cannot mean that there is a dog such that Maro must find it]
 - d. maro-ə gə-gardze-Ø vor namag bidi əsdana-Ø

 M -dt imp-think-3s rel.prn letter fut receive-3s

 'Maro thinks that she will receive a letter/letters'

 [cannot mean that there is/will be a letter such that Maro thinks she will receive it]

2.2.2 Specificity and pronominal reference

¹⁸The suffix -ci forms an adjective appropriate for describing people, e.g., ameriga 'America' => amerigaci 'American [person]'; bolis 'Constantinople' => bolseci 'someone from Constantinople'.

Another standard way to determine whether an indefinite noun phrase is specific or not is to look at pronominal reference. The specific and non-specific readings of the noun phrase in (13a) can be teased apart by the sentence that follows: If the pronoun s/he is used, (13c) then the indefinite must be construed as specific; if one is used, (13b), then the indefinite must have a nonspecific interpretation for the second sentence to be appropriate.

- (13) a. sosig-ə pəʒifg-mə desna-l g-uze-Ø

 S -dt doctor-a see-inf imp-want-3s

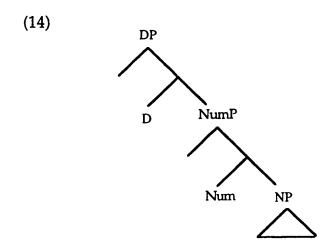
 'Sosig wants to see a doctor'
 - b. meg-e-mə xərad g-uze-Ø ir d^zung-i-n masin one-abl-a advice imp-want-3s 3'.gen knee-gen-dt abou 'She wants advice from one about her knee'
 - c. arten yergu 3am əsbas-ad² e <u>iren</u> hed xose-l-u hamar already 2 hour wait-ppt1 be.3s 3'.dat with speak-inf-dat for 'She's already been waiting for two hours to speak to <u>him/her</u>'

2.3 NumP

Ritter (1991, 1992)¹⁹ posits the existence of a functional category between NP and DP; she argues that it is the locus of number specification and accordingly calls it NumP, (14). As the concept of Number and NumP is central to the analysis of

¹⁹Ritter cites the following analyses of different languages that propose that number specification is associated with a functional head whose projection dominates NP: Bernstein 1991, 1992, 1993; Cardinaletti and Giusti 1991; Carstens 1991; Delfitto and Schroten 1991; Picallo 1991; Tonoike 1991, and Valois 1991. To this list I add Rouveret 1991.

specificity and agreement dicussed in this thesis, I present Ritter's (1992) argument in detail in this section. In the sections that follow we turn to the Armenian data and show that an articulated DP of the type Ritter proposes accommodates the facts of Armenian nominal morphology and provides a basis from which to explain the clause-level agreement facts.



2.3.1 Ritter (1992): the case for NumP

Ritter's argument for a split DP follows very much the same lines as Pollock's (1989) argument for splitting INFL into Agr and T. She assumes that adjectives are adjuncts whose position remains fixed during the course of the derivation and that the surface order in genitive DPs is the result of movement of N and its arguments. By positing an intermediate functional projection she is able to give a unified account of the three types of genitive constructions in Hebrew, the construct state genitive, the clitic-doubled construct state genitive and the free genitive.

The salient characteristics of the construct state (CS) genitive construction are that the determiner cannot appear in intitial position and there is no overt case marker/preposition associated with the genitive noun phrase. This construction is exemplified by (15a-c).

- (15)a. (*ha)-beyt ha-mora the house.cs²⁰ the-teacher.fem 'the teacher's house'
- c. beyt mora house.cs teacher.fem 'a teacher's house'

b. *ha-beyt mora the-house.cs teacher.fem

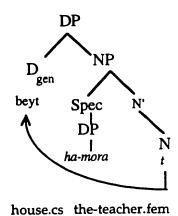
d. ha-bayit the-house 'the house'

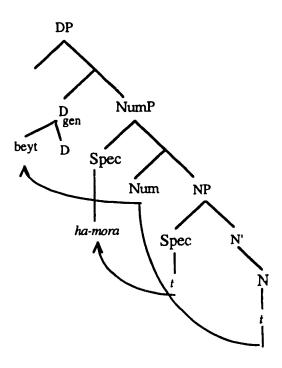
Using the DP hypothesis (Brame 1982, Abney 1987) and assuming that head, D, contains an abstract genitive case marker, D_{gen} , Ritter (1988) argues that the derivation of a simple construct state genitive involves movement of the construct state N to adjoin to D_{gen} , as shown in (16).²¹ Later, in Ritter (1992) she introduces NumP; the presence of this functional category allows straightforward analysis of the free genitive. In order to have the same underlying structure for all DPs, she updates the analysis of construct state genitives. (16b) shows the derivation of (15a) assuming this articulated DP. The construct state noun moves to D_{gen} as before, but now the genitive N moves to spec-NumP so as to be in a position to get case from D_{gen} .

²⁰I gloss beyt as 'house.cs' to distinguish it from bayit, 'house.'

²¹N raising to D parallels V movement to Infl in VSO languages. Irish (Guilfoyle 1988) and Arabic (Fassi Fehri 1989) have both been analysed a having clausal and nominal structures that result from movement of a lexical head, V or N, to a functional head Infl or D, respectively. Ritter points out that neither of these writers have posited NumP, or its counterpart in IP (Ritter 1992:198, fn 4).

(16) a. Construct state genitive [=(15a)]Non-articulated DP Ritter (1988) b. Articulated DP Ritter (1992)





Ritter proposes the additional functional category because the second type of genitive construction, the free genitive, cannot be analysed straightforwardly under the DP hypothesis in which NP is the complement of D. There are two reasons for this: one, the determiner, ha, can appear in initial position in the free genitive construction, in contrast with the construct state genitive; two, the subject of N asymmetrically c-commands the object.²² Taken together these two have the effect that in a free genitive noun phrase such as (17), N cannot move to D, because ha is

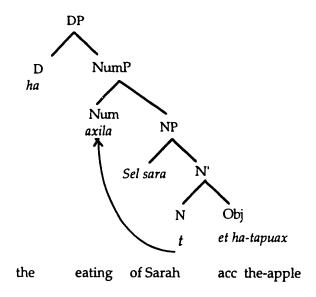
²²Binding facts such as those in (i)-(ii) indicate that the subject c-commands the object.

⁽i) ha-ahava fel sara et acma the-love of Sarah ACC herself

⁽ii) *ha-ahava sel acma et sara the-love of herself acc Sarah

there. N must raise however in order to end up with NSO word order. But given that the subject *fel sara* c-commands the object *et ha-tapuax*, N must raise to some functional projection that is lower than D but higher than NP (the alternative, lowering the subject, would give NSO order, but would give the wrong results with respect to binding).

(17) ha-axila sel sara et ha-tapuax the-eating of Sarah ACC the-apple Sarah's eating of the apple



Having shown that NumP is necessary for an analysis of the free genitive construction, Ritter then argues, on the basis of adjective placement, that all Hebrew noun phrases contain both NumP and DP projections. She assumes that AP is adjoined to NP and remains in this position throughout the derivation. The underlying SNO order surfaces as NSO due to head to head movement of N. The subject moves according to whether it needs to be in a structural Case position or not.

In a construct state genitive containing a nominalized verb, the adjective follows the subject and precedes the object, as shown in (18).

Construct State: N S AP O

- (18) [\approx Ritter 1992:201,(6)]
 - a. axilat <u>sara</u> ha-menumeset et ha-uga eating Sarah the-polite ACC the-cake Sarah's polite eating of the cake
 - b. *axilat sara et ha-uga ha-menumeset eating Sarah ACC the-cake the-polite

In constrast, the adjective precedes the subject in a free genitive construction:

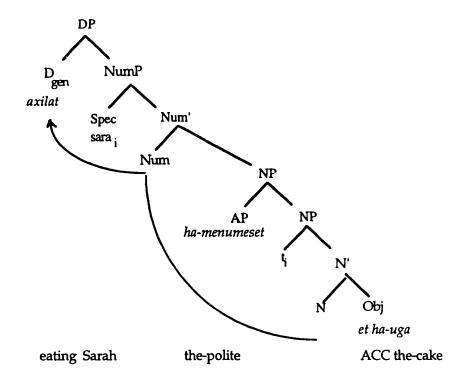
Free Genitive: Det N AP S O

- (19)a. ha-axila **ha-menumeset** <u>fel</u> <u>sara</u> et ha-uga the-eating the-polite of Sara ACC the-cake Sarah's polite eating of the cake
 - b. *ha-axila <u>fel sara</u> ha-menumeset et ha-uga the-eating of Sara the-polite ACC the-cake

The derivations in (20) and (21) below show how the two surface forms are derived. In (20), the nominalized verb in the construct state raises to adjoin to the case assigner D_{gen} by head movement. The subject must move to SpecNumP in order to be assigned case by D_{gen}^{23} . This movement for Case reasons results in the correct word order: N S Adj O.

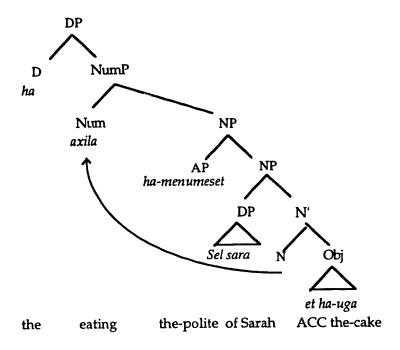
²³Ritter assumes a theory of Case in which Case assignment in a given language can be right- or leftwards, as in Travis (1984).

(20) Construct state genitive [= (18a)]



The free genitive construction begins with the same NSO underlying structure, and, as in the construct state genitive, N moves to Num, but because the subject is assigned Case by the preposition *fel*, the subject remains in situ, thus giving the surface word order N Adj S O.

(21) Free genitive [= (19a)]



Having established that a second functional category is required to provide a position for N to raise to, Ritter then proposes that this second functional head is the locus of number specification. Support for this claim comes from the apparent mismatch of number-gender marking in irregular nouns in Hebrew. In Hebrew there are two plural markers: -im, masculine plural, and -ot, feminine plural. In addition to being attached to nouns, these suffixes attach to adjectives and to verbs (in the present tense) according to whether the noun is masculine or feminine. Ritter's argument turns on the fact that it is the noun stem that determines how the form of plural marking on the adjective or verb associated with the noun, and not the noun's plural marker. Consider the examples in (22)-(23). The agreement pattern for regular nouns, adjectives and verbs is shown in (22); irregular nouns are given in (23).

(22)a. ha-yelad-ot ha-nexmad-ot gar-ot be-tel aviv [Ritter 1992:204, (10]]

the-girl-f.pl the-nice-f.pl live-f.pl in-Tel Aviv 'The nice girls live in Tel Aviv'

b. ha-yelad-<u>im</u> ha-nexmad-<u>im</u> gar-<u>im</u> be-tel aviv the-boy-m.pl the-nice-m.pl live-m.pl in-Tel Aviv 'The nice boys live in Tel Aviv'

(23)a. ∫an-im tov-ot *∫an-im tov-im year(f)-pl good-f.pl year(f)-pl good-m.pl

b. xalon-ot gdol-im *xalon-ot gdol-im window(m)-pl big-m.pl window(m)-pl big-m.pl

According to Ritter these facts are explained under an analysis in which gender and number features are independent and only number features are base-generated under Num. If both gender and number features were associated with the functional head Num, we would incorrectly predict that agreeing verbs and adjectives would agree with the gender of the plural marker. Likewise, if both N and Num were specified for gender, the gender of Num would determine the gender of the whole noun phrase, assuming Hebrew nouns are right-headed, and we would again predict that nouns bearing the feminine plural marker would trigger feminine plural agreement marker on verbs and adjectives and nouns bearing the masculine plural suffix would trigger masculine plural agreement adjectives and verbs. Since this is clearly not the case, these irregular nouns support the claim that Num is specified for [±plural] only and [±feminine] is associated with N as a lexical property.

Finally, Ritter examines the Hebrew pronominal paradigm and shows that by positing NumP we are able to account for the behavior of third-person pronouns that distinguishes them from first- and second-person pronouns.

36

According to Ritter, Brame (1982) first proposed that pronouns should be analyzed as determiner phrases. This idea has been subsequently elaborated upon by Abney (1987) and many others since. One piece of evidence for this idea is that in general pronouns do not cooccur with determiners:²⁴

(24) *the I, the you, the we, etc.

This generalization holds in Hebrew except in the case of third-person pronouns (25). The article *ha*- can attach to any of the third-person pronouns, creating a demonstrative.

- (25) a. *ha-ani *ha-anaxnu *ha-ata *ha-at *ha-atem *ha-aten the-I the-we the-you.m.sg the-you.f.sg the-you.m.pl the-you.f.pl
 - ha-hen ha-ze ha-zot ha-ele ha-hi ha-hem b. ha-hu the-they.f the-it.f the-it.pl the-they.m the-it.m the-he the-she 'this(f)' 'these' 'that(m.pl)' 'that(f.pl)' 'this(m)' 'that(m)' 'that(f)'

Maro-n gardze-Ø te ink-ə/*Ø bidi ʃahi-Ø M -dt think-3s comp 3'-dt fut win-3s 'Maro_i thinks that she_i will win'

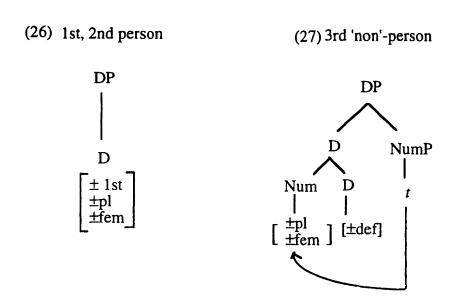
The other third-person pronoun, an, on the other hand cannot bear the article:

Maro-n gardze-Ø te an (*→) bidi ∫ahi-Ø M -dt think-3s comp 3-dt fut win-3s 'Maro_i thinks that she_i will win'

We discuss this in section 2.6.1.1.3.

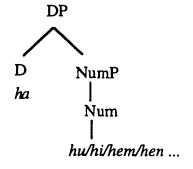
²⁴One of the third-person pronouns in Armenian is an interesting exception to this rule. This pronoun, *ink*, glossed as 3′, requires the article when it is in subject position (although the plural form does not take the article, neither do any of the case-marked forms):

Ritter proposes that the distinction between the two sets of pronouns is the result of a difference in structure as well as features. The first- and second-person pronouns are spell-outs of features attached to D, (26). The third-person pronouns are more complex; their features are attached to both D and Num as shown in (27). In this analysis the the third-person pronouns would be the result of Num raising to D.



Demonstratives, shown in (25b), are derived from the underlying structure shown in (28), where the definite article is base-generated under D.

(28) demonstrative pronouns



2.3.2 NumPs in SWA

In this section I outline how the split DP proposal just outlined gives us the basis for explaining the morphology and interpretation of noun phrases in SWA.

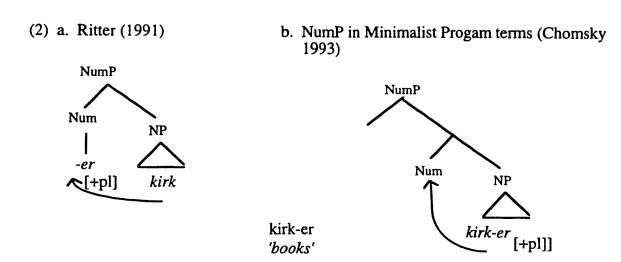
Two types of noun phrase in SWA motivate us to look for further distinction between NP and DP. These are bare count nouns (i) and covert plurals (plurals that do not bear the plural suffix -(n)er), (ii):

- (i) Maro-n pik des-av
 M -dt elephant see.aor-3s
 'Maro saw an elephant/elephan's'
- (ii) yerek pir pərne-c-in three elephants catch-aor-3p 'They caught three elephants'

Their syntactic behavior will be discussed in detail in chapter 3, respectively. Here we look at how the split DP hypothesis and the feature checking strategy of the Minimalist Program allow us to capture the distinctions among the various types of noun phrase in SWA, which include, in addition to bare NPs and covert plurals, nouns bearing definite or indefinite article suffixes, overt plurals, and nouns that bear suffixes showing agreement with their possessor or demonstrative.

Given Ritter's compelling argument for the existence and location of NumP, I will assume that the functional projection NumP intervenes between NP and DP, as described above. Having made this assumption, however, the principles of the MP force us to make the hypothesis that raising of elements inside DP should follow the same rules as raising of V in the sentence. This means, given the feature

checking mechanism in the Minimalist Program (Chomsky 1993), that we cannot generate suffixes under functional heads, as Ritter does, (2).

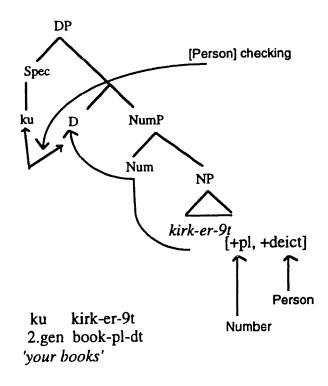


Rather, according to the principles of the MP, the noun phrase bearing Number featurs raises to the functional head Num to check them against the features associated with Num, (29b).

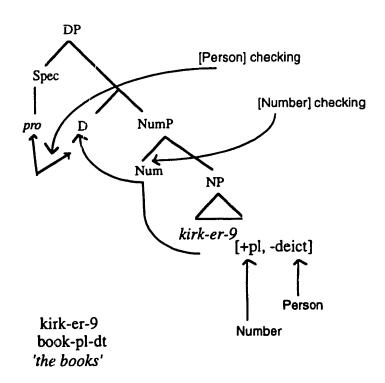
If N movement inside DP is parallel to V movement in IP,²⁷ then along with Num to D raising of N we should expect to find raising of an XP to specNumP and specDP. We will see (section 2.6.2) that in the case of genitive constructions, the relation between the possessor and the possessed N, (30), can be characterized very plausibly as an agreement relationship. I will also argue that this checking mechanism can account for the definite article as well, (31). In both cases the arguments raise to check number features in NumP and person features in DP.

²⁷The goal of much research into the structure of nominals is motivated by the goal of analysing DP and IP so that there is minimal difference between them (Abney 1987, Szabolsci 1987, 1994).

(30) Possessive agreement:



(31) Num-Person agreement



2.3.3 Φ-features: Number and Person

I assume that the specifications for the ϕ -feature Number are [\pm pl, \pm sg] and designate the values of Person as [\pm deictic]. I further assume that Person is checked in DP and is the reature responsible for specificity of the noun phrase. In this section I will try to show that these are plausible and useful assumptions.

Both values [±pl] and [±sg] are required to account for SWA noun phrases for the following reasons. In SWA there are two types of plurals, those with overt plural marking and those without, (32).²⁸

- (32) a. yerek yerkič three singer
 - b. yerek yerkič-ner three singer-pl

The difference between them seems to be that in (32a) the speaker is not interested in the individual singers, but in the number and type of person, and in (32b), the speaker is interested in the singers individually (see discussion of plurals in section 2.7). In terms of ϕ -features, I will assume that both covert plurals, (32a), and overt plurals, (32b) are specified for Number. This distinguishes them from bare NPs that lack Number specification altogether. 'Covert plurals' such as (32a) have the

²⁸Persian (Ghomeshi 1996) and Turkish (Underhill 1972) have similar plural facts. Ghomeshi addresses the connection between plurality and specificity/definiteness; in Persian the default reading for overtly plural nouns is definite. To account for this she proposes that noun phrases that have overt plural marking are necessarily DPs (Ghomeshi 1996:123).

number specification [-pl]. A [-pl] feature specification is incomplete, however, as it is also part of the feature specification of singular noun phrases. So I assume that singular noun phrases are [-pl, +sg] and covert plurals are [-pl, -sg].

These assumptions allow us to make precise what is meant by saying that a noun phrase has the ϕ -feature Number and permit us to distinguish in terms of features NumPs that are legitimate complements of D and those that are not; [+pl,-sg] and [-pl,+sg] can be complements of D, [-pl,-sg] cannot. To justify this, I can only say that it makes a certain amount of intuitive sense to say that a [-pl, -sg] count noun cannot be specific. This is because, if a nominal expression is indeterminate as to whether it refers to one or many things, it cannot at the same time be specific, where being specific means that its referent is a subset of some contextually relevant set.

We have then the following person-number possibilities in SWA. (I list them here without justifying the feature assignments, which are discussed in the sections that concern each type of noun phrase. Here I would just like to show that there is justification for assuming the values [±pl], [±sg] and [±deict]):

(36)	ØPerson	[-deict]	[+deict]
ØNum, ØPers	N	n/d ²⁹	n/d
[-pl, -sg]	yerek N three	n/d	n/d
[+pl, -sg]	yerek N-er three -pl	N-er-ə -pl-dt	N-er-s, -t, -(ə)n -pl-1poss, 2poss, -3.s
[-pl, +sg]		N-ə, N-mə -dt, -indef	N-s, -t -1s.poss, -2s.poss

Examples of each type of noun phrase are given in (37):

(37) ØNumber, ØPerson: BARE NPS

- a. maro-n <u>yerk-ič</u> e M -dt sing-agen be.3s 'Maro is a singer'
- b. ani-n <u>veb</u> gə-kəre-Ø

 A -dt novel imp-write-3s

 'Ani writes novels'

[-pl, -sg] ØPerson: COVERT PLURALS

c. yerek <u>pir</u> pərne-c-in three elephants catch-aor-3p 'Three elephants were caught'

[-pl, +sg] \varnothing person: SINGULAR, (NON-)SPECIFIC³⁰

 $^{^{29}}$ n/d = not defined.

³⁰We will see (in section 2.5.1) that the indefinite article is actually ambiguous between a specific and nonspecific interpretation.

d. gentan.a.pan.agan bardez-i-n meč <u>pik-mə</u> desna-l zoo.o.log.ical garden-gen-dt in elephant-indef see-inf g-uze-nk imp-want-1p 'We want to see an elephant at the zoo'

[-pl, +sg], [-deictic]: SINGULAR, SPECIFIC

e. <u>piʁ-ə</u> anoti e-r elephant-dt hungry be-pst.3s 'The elephant was hungry'

[+pl, -sg], [-deictic]: PLURAL, NON-SPECIFIC

f. yerek həntgasdan-e-n per-v-ad² <u>piʁ-er</u> pax-a-n
three India-abl-dt bring-pass-ppt1 elephant-pl escape-aor-3p
'Three elephants that were brought from India escaped'

[+pl, -sg], [-deictic]: PLURAL, SPECIFIC

g. yerek <u>pix-er-ə</u> pax-a-n three elephant-pl-dt escape-aor-3p 'The three elephants escaped'

[-pl, +sg], [+deictic]: SINGULAR, SPECIFIC - WITH DEMONSTRATIVE/POSSESSOR

h. ayt/ku <u>pir-ə/-ət</u> pax-ad^z e-Ø that₂/your elephant escape-ppt₁ be-3s 'That/your elephant has escaped'

2.3.3.1 The ϕ -feature NUMBER

2.3.3.2 The interpretation of NUMBER specification

In the inventory of noun phrases given in (37) we see that noun phrases that are specified for number differ from those with no such specification in that the former are capable of referring to individuals, while the latter are not. I propose that it is the feature Number, associated with Num, that minimally 'individuates' the predicate denoted by the NP with which it is associated. This operation of individuation is minimal in the sense that all it does is enable the NumP to refer to a 'unit' or units of a type, but not to distinguish among them. Muromatsu (1995) discusses the notion of individuation in her analysis of the role of the classifier, which she argues "individuates the concept expressed by the bare noun with which it is associated." Rather than attributing the operation of individuation to a particular type of word, e.g., classifier, I have assigned it to a \$\phi\$-feature, the idea being that depending on the language, this feature can be spelled out as a plural suffix or as a classifier, or as in the case of SWA, both.

Without going into a detailed semantic analysis of the feature number, in this section I set out a description of the difference in interpretation that exists between SWA nominal expressions that are not specified for number, bare NPs, and nominal expressions that are specified for number, NumPs.

Intuitively, in its non-predicative use, a bare NP in SWA is like a mass noun. That is, it denotes an entity that has subparts, but these subparts are not distinguishable from each other. Consider the pairs of sentences in (38)-(39) in

³¹Muromatsu (1995a:1).

which the (a) sentences contain a mass nouns and the (b) sentences contain a bare indefinite count noun. In the translations of the (b) examples I use a bare plural to indicate that the most likely interpretation of the bare singular count noun is as a nonspecific plural indefinite. There are contexts, however, where the same noun could refer to a single, nonspecific object.

- (38)a. siran-ə fakar kəne-c-Ø S -dt sugar buy-aor-3s Siran bought sugar
 - b. maro-n zinvor des-avM -dt soldier see-aor.3sMaro saw soldiers
- (39)a. are ig-ner-a avaz ga-nede-i-n gor girl-pl-dt sand imp-throw-pst-3p prog

 The girls were throwing sand
 - b. gadu-ner-ə mug gə-pəndre-i-n gor cat-pl-dt mouse imp-look.for-pst-3p prog

 The cats were looking for mice/a mouse

What the number feature does when it is associated with a noun phrase is to create an expression comparable to a *unit+mass noun* expression. So, for example the sugar that Siran buys in (40a) is divided into kilo units that are fungible (i.e., they are interchangeable, nondistinguishable). Likewise the group of soldiers in (40b) are divided into units of individual soldiers (with or without the classifier *had*).³² Speakers' judgements indicate they are as indistinguishable from one another as the

³²The classifier is not optional in at least one dialect that I know of. In the Homshecma dialect of Armenian the expression *hadig* is required after numerals (this dialect is spoken in Turkey on the Black Sea coast near the Georgian border). See Vaux (in prep.) for discussion of this dialect.

kilos of sugar are.³³ I assign such noun phrases the feature [# -pl], to indicate that they are individuated, but are not syntactically plural. This feature specification sets them apart from bare NPs that refer to properties or to unindividuated masses, and from [# +pl] noun phrases that refer to groups whose members' individuality is salient.

- (40)a. siran-ə čors kilo ʃakar kəne-c-Ø S -dt four kilo sugar buy-aor-3s Siran bought four kilos of sugar
 - b. maro-n čors (had) zinvor des-avM -dt four CL soldier see-aor.3sMaro saw four soldiers
- (41)a. aʁ̞čig-ner-ə kani-mə kavat avaz gə-nede-i-n gor girl-pl-dt few-a cup sand imp-throw-pst-3p prog The girls were throwing a few cups of sand
 - b. gadu-ner-ə yerek (had) mug gə-pəndre-i-n
 cat-pl-dt 3 CL mouse imp-look.for-pst-3p
 The cats were looking for three mice

Thus, although English speakers categorize soldiers as countable entities, an intuition reflected in the grammar by the fact that the noun *soldier* must bear the plural marker when referring to more than one, the grammar of SWA treats a collection of them as a mass if the individual indentities are unimportant in the context. It is for this reason that I call bare NPs mass indefinites and not simply nonspecific indefinites. This difference has been described as being a matter of

³³Evidence that the individuals are not accessible to the syntax is discussed in section 2.7.4. This evidence includes, for example, the fact that a reciprocal or plural pronoun cannot be anteceded by expressions such as *cors* (had) zinvor / four (CL) soldier.

where the count/mass distinction is made, whether in the Lexicon (as in English), or in the Syntax (as in Armenian, apparently).³⁴

If the individual identies of the referents are important in the context, then the noun phrase is marked plural in SWA. I will assume that being overtly marked plural means having the feature [#+pl]. I argue in section 2.7 that bare plurals are not specified for Person, based on the fact that bare plurals are not permitted in external subject position nor in the subject position of generic statements.

This distinction that SWA makes for all nouns, namely that nominals that refer to groups where the individuals are fungible are syntactically different from nominals that refer to groups where the individual members are distinct, is syntactically 'active' whether the nouns are count or mass. In a language such as Italian or English where this distinction is syntactically 'inert' in the case of count nouns, it is still active when the noun phrase contains a mass noun. For example, it is well known that either plural or singular verb agreement is acceptable when the subject is a numeral-unit-noun expression, (42). Singular verb agreement is associated with the interpretation where the nominal refers to an amount of sugar (42a), while plural is associated with an interpretation where the individual cups are distinct entities, (42b). Let us call the former the 'amount interpretation' and the latter the 'individual interpretation.'

- (42) a. Four pounds of sugar is plenty for this recipe.
 - a. Four pounds of sugar were inadvertently seized by the police.

³⁴See referencess in Muromatsu (1995).

In addition to affecting agreement, the difference between the amount interpretation and the individual interpretation also affects subsequent pronominal reference.³⁵ On the amount reading, the referent is referred to in a subsequent sentence by a singular pronoun. This is not possible with the individual reading, where a plural pronoun is required. The examples in (43)-(45) demonstrate these differences in verb agreement and pronominal reference.

- (43)a. This recipe calls for **four cups of sugar**. [amount]

 You add **it** all at once, before the butter melts.

 You melt some of **it/*** one of **them/**one of the cups of sugar/ to make a syrup.
- b. Pat put four cups of sugar on the table. [individual]

 They/each of them/*it / *some of it/ will be inspected for traces of the poison.

Italian

- (44)a. due litri di vino è/?sono abbastanza per questa ricetta

 2 liters of wine be.3s/3pl enough for this recipe

 Two liters of wine is/?are enough for this recipe

 [amount]
- b. Due litri di vino sono/*è stat-i/*- o
 2 liters of wine were/*is be.ppt.3pl.masc/3.sg.masc

confiscat-i/*- o dalla finanza.

confiscated.masc.pl/ *- sg by.the.fem customs

Two liters of wine were/*was confiscated by customs

[individual]

- (45)a. Bisogna far-lo/?li sobollire prima di aggiungere l'arrosto need.3s make-it/-them to simmer before of to add the roast

 You must bring it/?them to a simmer before adding the roast [amount]
- b. Maria li/*lo aveva comprati/#comprato dalla vicina di Anna M them/*it had bought.pl.masc/#sg.masc from.the neighbor of Anna

³⁵This is not surprising given the connection between agreement and pronominals. It has been proposed that AGR is a pronominal functional category (Rizzi 1982).

Others have proposed the idea that the number feature is responsible for the fact that some indefinites do not refer to individual entities and therefore play a role in syntax that is different from the role played by indefinites that do refer to individual entities. Vangsnes (1995) for example defines Number with reference to scope. Mass terms, he states, are non-quantificational, that is, they do not enter into scope relations. He argues that the indefinites that differ minimally from bare indefinites, by bearing the plural marker, indefinite article or by being modified by a numeral, contain the number feature, and it is this feature that enables them to participate in scope relations. The difference between indefinites that are unspecified for number and indefinites that have the number feature is important in his discussion of types of subject in Scandinavian expletive constructions. In particular according to Vangsnes Ø-number subjects are restricted to the lowest, VP-internal, subject position at s-structure, while subjects that bear the number feature move to spec-TP.

Muromatsu (1995) discusses the concept of individuation in the context of an anlysis of classifiers and their role as primitives in the grammar. She claims that "a classifier *individuates* the concept expressed by the bare noun with which it is associated. Accordingly, the classifier makes it possible" for the noun phrase to refer.³⁶ According to Muromatsu it is the ability to refer, by virtue of being individuated, that gives a nominal expression the status of argument.³⁷ She goes on

³⁶Muromatsu (1995).

³⁷Ghomeshi and Massam (1994) make essentially the same claim, that non-referring noun phrases are more like modifiers than arguments. I argue to the contrary in section 2.4, that in tensed VPs bare NPs do have argument status. That is, they are not incorporated into the verb and so are properly considered arguments rather than modifiers of the verb.

to argue that the classifier-noun relation is an instance of predication, in particular the part-whole predication relation *Integral* of Hornstein, et al. (1994).

I maintain that the number feature, [±pl, ±sg], rather than the category classifier is the grammatical element responsible for individuation of the type described by Muromatsu and is also the feature that permits a noun phrase to enter into scope relations, as claimed by Vangsnes. However, a noun phrase does not have to be specified for number in order to be an argument of the verb. Such NPs are mass indefinites. They can be assigned a theta-role by the verb but do not have Case features (by virtue of the fact that they are NPs and not DPs). The data from SWA to support this proposal is presented in the sections where we examine the classifier *had*, bare NPs and plural NPs.

2.4 Bare NPs

By "bare NP" I mean a noun phrase that has no article, either definite $-\Theta(n)$ or indefinite, $-m\Theta$, and no plural suffix, -(n)er, (50). In these examples I use bare plurals in the English translation where this seems to capture the meaning best, (50a,e).

- (50) a. maro-n <u>tuz</u> g-ude-Ø Maro-the fig imp-eat-3s 'Maro eats figs'
 - b. seran-e-n fif ing-av table-abl-dt bottle fall.aor-3s 'From the table there fell bottles/a bottle'
 - c. bardez-i-n me**č** <u>e</u>ſ ga-Ø garden-gen-dt in donkey exist-3s

'There are donkeys in the garden'

- d. mart & eg-av man/person neg-come-3s 'No one came'
- e. Maro-n misd <u>azkagan</u>-i <u>nə ver</u> gu-da-Ø
 M -dt always relative-DAT gift imp-give-3s
 'Maro always gives gifts to relatives'38

Many authors have investigated the properties of bare nouns and the syntactic, semantic and pragmatic constraints on their use.³⁹ Longobardi (1994) begins his discussion of bare nouns in Italian by noting that singular countable nouns may not occur in any of the "major positions suitable for arguments (e.g., subject, direct object, prepositional object, inverted subject of either ergative or unergative predicates) without being introduced by an overt determiner."⁴⁰ I will begin by noting that bare singular count nouns in Armenian do occur in some of these argument positions, namely subject, direct object, and indirect object, as well as in case-marked NPs.⁴¹ However, the appearance of bare NPs in these positions is restricted. Bare NP subjects and objects must be to the left of and immediately adjacent to the verb. As far as subject and direct object positions are concerned, bare NPs seem to be restricted to being subjects of unaccusative or passive verbs, and are excluded from subject position of transitive or unergative verbs. The goal of this section is to determine what constrains the occurrence of bare NPs and what determines how they are interpreted in subject and object positions.

³⁸If the sentence can also mean that Maro gives 'relative presents' to friends, in this case the -i suffix on azkagan is understood to be genitive.

³⁹Many discussions of the syntax of bare nouns can be found, including: Persian (Ghomeshi 1996 and Ghomeshi and Massam 1994), Hindi (Mohanan 1990, 1995; Dayal 1992), Hebrew (Borer 1994), Turkish (Knecht 1986, Kennelly 1993), Japanese (Muromatsu 1995), Hungarian (Szabolsci 1994), Italian (Longobardi 1994, 1995), Scandinavian (Vangsnes 1994).

⁴⁰Longobardi (1994:612).

⁴¹Genitive/dative, ablative and instrumental case suffixes are found on non-pronominal nouns.

I will use the term 'bare noun' to refer to morphologically bare singular nouns, and 'bare NP' to refer to nominal expressions that lack overt plural marking or determiners but may have prenominal modifiers or case suffixes. Bare overtly plural noun phrases will be referred to as 'bare plurals.' I propose an analysis in which bare noun phrases are unspecified for the φ-feature Number and therefore differ in distribution and interpretation from noun phrases that are specified for Number and Person. In this analysis of the Armenian data, number is the feature that enables a noun phrase to refer to a unit of a type and to enter into scope relations, as has been proposed in Muromatsu (1995) and in Vangsnes (1995), respectively. Once it can refer to an individual (or more than one), it can then be further determined to be plural or singular, specific or definite. But without number specification, plurality, definiteness and specificity are undefined.

Most of the authors who have discussed bare nouns conclude that bare NPs are incorporated into the verb, where incorporation can be morphological, syntactic or semantic.⁴² In section 2.4.8 I discuss the SWA data in relation to the Hindi data analysed by Mohanan (1990, 1995) who argues for an incorporation analysis of bare NP objects (nominative objects). I propose that there is no reason to say that bare NPs are incorporated in Armenian morphologically or syntactically. Rather, I rely on the assumption that bare NPs are not specified for the φ-features Number or Person to account for the fact that bare NPs must be left-adjacent to the verb. I assume that this is their base position and that without φ-features to motivate movement, they must remain there.

The interpretation of bare NPs is influenced, although not fully determined, by their ϕ -features. Being ØNumber/ØPerson means that they can refer either to

⁴²Borer (1994), Mohanan (1990, 1995), Knecht (1986), Ghomeshi & Massam (1994).

the property of being N, and so function like a predicate, or to a nonspecific and non-countable individual(s) of type N, what I call *mass indefinites*. As far as the syntax is concerned, however, what is significant is that they do not have person or number features. In other words I am proposing that the class of bare NPs is not uniform with respect to interpretation, (i.e., they can refer to a predicate or to a nonspecific mass) but is uniform with respect to the elements that in part determine interpretation that are visible to the Syntax, namely the ϕ -features of the NP.

2.4.1 Scope and bare NPs

One of the characteristics of nonspecific indefinites is that they take the narrowest possible scope. Bare NPs in SWA are no exception. Consider the examples in (51). When there is a quantifier in the clause, as in (51b)-(d), the only reading available is the interpretation where the bare NP takes narrow scope with respect to the quantifier or with respect to negation, (51e).

- (51)a. maro-n namag gə-kre gor

 M -dt letter imp-write.3s prog

 'Maro is writing letter(s)'
- b. kani mə gin-er namag gə-kre-i-n gor
 few a woman-pl letter imp-write-pst-3p prog
 'A few women were writing letters/were letter writing'
 [cannot mean that there was a letter such that a few women were writing it.]
- c. amen usanow kirk gə-garta-r gor
 every student book imp-read-pst.3s prog
 'Every student was reading books'
 [cannot mean that there was a single book such that every student was reading it]

- d. polor kiser-ner-ə kirk gə-garta-i-n
 all evening-pl-dt book imp-read-pst-3p
 'All the evenings they would read books'
 [cannot mean that there was one book that they read every evening]
- e. pare.paxd.apar mug &-kəda-v

 fortunately mouse neg-find.aor-3s

 'Fortunately s/he did not find a mouse/did not find any mice'

 [cannot mean that there was a mouse that fortunately s/he did not find, or fortunately there was a mouse that she did not find]

Compare this with (52), where the indefinite article following the object allows the wide scope interpretation, that is, there was one particular book that each student read:

(52) amen usanow kirk-mə gə-garta-r every student book-indef imp-read-pst.3s 'Every student read a [certain] book'

2.4.2 Bare NPs and pronominal reference

Morphologically unmarked nouns can be used to refer to more than one object, as in (53) for example, which can be true if the speaker saw many soldiers or just one.

(53) hərabarag-i-n me**č** zinvor desa square-gen-dt in soldier see.aor.1s
'I saw soldier(s) in the square'

This means that pragmatically, zinvor is either singular nor plural. The question arises as to whether it is syntactically singular or plural. Can it, for example, be

referred to using a plural pronoun or the *pro* subject of a plural verb? It seems that a bare NP cannot be the antecedent of a plural pronominal, either overt or null. Nor can it be referred to using a singular proform. I argue that this is due to the fact that pronouns in SWA, like agreement morphology, are specified for both person and number and that bare nouns lack person and number specification altogether. The examples in (54) are unacceptable, because of this incompatibility in ϕ -feature specification: bare NPs are [#Ø] [PERS-Ø] and third-person pronouns are [#+pl,-sg] [PERS-deict] or [#-pl,+sg] [PERS-deict]. The only way to refer back to the referent of a bare NP is to repeat the noun, adding the definite article, as shown in in (54d).

- () a. gentan.a.pan.agan bardez-i-n meč <u>pik</u> desa-nk zoo.o.log.ical garden-gen-dt in elephant see.aor-1p 'We saw elephants at the zoo'
 - b. *bəzdig-ner-ə <u>adonc/ador</u> kit-er-ə/kit-i-n foye-l g-uze-i-n small-pl-dt 3p.gen/3s.gen nose-pl-dt/nose-dt pat-inf imp-want-pst-3p ('The children wanted to pat their noses/its nose/the nose')
 - c. {*adonc kit-er-ə /*ir kit-ə / *amen meg-u-n kit-ə } sad
 3p.gen nose-pl-dt/3'.gen nose-dt/ each one-gen-dt nose-dt very
 yergar e-i-n / e-r
 long be-pst-3p / be-pst-3s
 ('Their noses were very long / its nose was very long / each one's nose was ...')
 - d. ayn pik-er-u-n kit-er-ə sad yergar e-i-n that3 elephant-pl-gen-dt nose-pl-dt very long be-pst-3p 'The elephants' noses were very long'
- (55) a. \(\int \text{ad} \) \(\text{hay} \) \(\text{ga-}\Q \) \(\text{hon} \) \(\text{much Armenian}_{[Person]} \) \(\text{exist-3s} \) \(\text{there are many Armenians there} \)
 - b. *payc pro hay.a.xos č-e-n

but Armenian.cx.speak neg-be-3p
'But they do not speak Armenian' [lit. 'they are not Armenian-speaker(s)']

- c. *anonk irenk-irenc amerigaci gə-nəgade-n
 3p.nom 3'p.nom-3'p.gen American[person] imp-consider-3p
 'They consider themselves American'
- d. ayn hay-er-ə irenk-irenc amerigaci gə-nəgaden
 that3 Armenian-pl-dt 3'p.nom-3'p.gen American[person] imp-consider-3p

 'Those Armenians consider themselves American'

2.4.3 Bare NPs in object position

(56) gives typical examples of bare NPs in direct object position. As we have seen, count nouns in SWA can be bare nouns. In most of the following discussion I will give examples of bare count nouns, but the facts are the same for mass nouns unless otherwise indicated.

- (56)a. Maro-n tuz gə-d^zaxe-Ø

 Maro-the fig imp-sell-3s

 'Maro sells figs'
- b. (menk) pik desa-nk

 1p.nom elephant see.aor-1p

 'We saw elephant(s)'
- c. Hasmig-ə yev Aram-ə čutag gə-sire-n
 H -the and A -the violin imp-like-3p
 'Hasmig and Ani like violin(s) / the violin'43
- d. Ani-n hamperutyun č-uni-Ø

⁴³Note that in English *Mary plays violin* is grammatical, but *Mary likes violin* is not.

A- the patience neg-have-3s 'Ani does not have patience'

b. menk surj xəme-c-ink
we coffee drink-aor-1p
'We drank coffee'

There is a strict adjacency requirement on bare NPs: They must be to the left of and adjacent to the verb. If we add an adverb or a PP to the examples in (56), they cannot intervene between the bare NP and V, as (57) shows.

- (57)a. <[PP]uga-n]> Maro-n tuz <*[PP]uga-n]> gə-dzaxe-Ø <[PP]uga-n]> market-dt Maro-the fig imp-sell-3s 'Maro sells figs at the market'
- b. <[pp gentan.a.pan.agan bardez-i-n meč]> pir <*[pp ...]> desa-nk
 zoo.o.log.ical garden-gen-dt in elephant see.aor-lp
 'At the zoo we saw elephant(s)'
- c. Hasmig-ə yev Aram-ə <[ADV havanapar]> čutag <*[ADV ...]> gə-sire-n

 H -the and A -the probably violin imp-like-3p

 'Hasmig and Ani probably like the violin'
- d. Ani-n <[ADV pənav]> hamperutyun <*[ADV pənav]> &-uni-Ø

 A- the never patience neg-have-3s

 'Ani never has patience'
- e. menk <[PP xohanoc-i-n meč]> surj <*[PP ...]> gə-xəme-nk gor

 we kitchen-gen-dt in coffee imp-drink-1p prog

 'We are drinking coffee in the kitchen'

In fact the requirement that the bare NP argument be adjacent to the verb can be further refined to require adjacency with the inflected part of the verb. In

constructions that involve an inflected auxiliary verb and an uninflected stem, the bare NP argument must be left-adjacent to the auxiliary. These constructions include the negation of the imperfect and the tenses that require the participle. Consider the following examples.

- (58) a. bəzdig-ner-ə <tuz> č-e-n <*tuz> sire-r little-pl-dt fig neg-be-3p like-neg.prtc 'The children don't like figs'
 - b. dan-dir-uhi-s <baduhan> &-e-Ø <*baduhan> makr-adz house-lord-fem-1p window neg-be-3s clean-ppt1 'My landlady hasn't cleaned windows'

The examples in (59) show that adjacency alone is not enough; the bare NP must be to the left of the verb. Only OV order is allowed when O is a bare NP, while either SOV or SVO is permissible when the object is a DP (although SOV is the 'ground state'). Compare the examples in (58) in which the object is a bare NP with those in (59), in which the object is a specific or definite nominal expression.

- (59)a. Maro-n ger-av ays tuz*(-\(\frac{1}{2}\)) payc vo\(\frac{1}{2}\) myus-\(\frac{1}{2}\)

 Maro-the eat.aor-3s this fig-dt but no(t) other-dt

 'Maro ate this fig but not the other'
- b. Hasmig-ə yev Aram-ə gə-sire-n čutag*(-ə) yev voč sərink-ə
 H -the and A -the imp-like-3p violin-dt and no(t) flute-dt
 'Hasmig and Ani like the violin and not the flute'
- c. Ani-n č-uni-Ø zavag med^Z-cə.nel-u hamperutyun-ə
 A- the neg-have-3s child big.caus.inf-g/d patience
 'Ani does not have the patience to raise a child'

b. menk xəme-c-ink sur J-*(-ə) yev vo kini-n we imp-drink-aor-1p coffee-*(dt) and not wine-dt 'We drank the coffee and not the wine'

2.4.4 Interpretation of bare NPs as mass indefinites

As the translations in (50) (repeated below) indicate, a bare NP object can be indeterminate as to whether it refers to one or many, despite the fact that it does not bear plural marking.

- (60)a. Maro-n tuz gə-dzaxe-Ø

 Maro-the fig imp-sell-3s

 'Maro sells figs'
- a'. Maro-n tuz d^zaxe-l-ov gə-spax-v-i-Ø

 M -dt fig sell-inf-instr imp-busy-pass-x-3s

 'Mary is engaged in fig-selling'
- b. (menk) pik desa-nk

 1p.nom elephant see.aor-1p

 'We saw elephant(s)'
- c. Hasmig-\(\text{\text{\text{c}}}\) yev Aram-\(\text{\text{\text{\text{\text{C}}}}\) tag g\(\text{\text{\text{\text{c}}}}\) sire-n

 H -the and A -the violin imp-like-3p

 'Hasmig and Ani like the violin'
- d. Ani-n hamperutyun &-uni-Ø

 A- the patience neg-have-3s

 'Ani does not have patience'
- e. menk surj xəme-c-ink
 we coffee drink-aor-1p
 'We drank coffee'

In (60a) for example real world factors would make it more likely that *tuz* would be interpreted as referring to many figs, since the sentence means that Maro generally sell figs. However the sentence does not seem to be ambiguous between a meaning where Maro is asserted to be engaged in the activity of fig-selling and where she is asserted to habitually sell indefinite quantities of figs.⁴⁴ The first interpretation, where the NP modifies the verb, giving something like 'to fig-sell', I call the predicative use. This interpretation is not available in (60a); to get this meaning, something like (60a') would be used. The second interpretation where there is an unknown quantity of figs being sold, is the mass indefinite reading of the NP *tuz*.⁴⁵ In (60b) the speaker may be understood to mean that she saw one or more elephants, and again the predicative reading is not available. In (60c) as in (60a), the sentence is interpreted to mean that Hasmig and Aram like violins in general; either they like them as objects, or they like playing or hearing the violin played. So, again it seems more accurate to call the interpretation of *čutag* nonspecific rather than predicative, which would give a meaning like Hasmig and Aram are violin-lovers.⁴⁶ In (60d),

Maro-n pix g-ude-Ø M -dt elephant imp-eat-3s

i. Maro eats elephants

ii. *Maro is eating elephant meat

To get the (ii) interpretation one would say:

Maro-n pix mis g-ude-Ø M -dt elephant meat imp-eat-3s

maro-n tuz-*(*) g-ade-Ø M dt fig-dt imp-hate-3s

⁴⁴Note that SWA does not officially distinguish between progressive and habitual in the imperfect, so there is actually an interpretation where the verb has a progressive interpretation as well, but since in spoken SWA this interpretation is usually only available when the particle *gor* follows the verb, we will ignore it.

⁴⁵Note that one interpretation that is not available is the mass interpretation where the bare NP is interpreted as in 'they usually don't eat lion' where 'lion' refers to lion meat. In SWA, the bare NP form of an animal's name cannot be used toorefer to the meat of that animal:

⁴⁶Interestingly the verb *adel* 'to hate' does not allow bare objects; the definite article is obligatory:

since patience is an abstract mass noun it does not make sense to apply the notions of plural or singular to it. Likewise with the mass noun *surj* 'coffee', except when used in the sense of 'a cup of coffee', *surj* is not countable and thus neither singular nor plural.⁴⁷

We see, then, that bare count nouns share with mass nouns the property of referring to individuals or groups of individuals that cannot be distinguished and counted. Moreover, when they lack an article such nominal expressions are also indefinite, hence the label *mass indefinites*. I assume that the feature specification that corresponds to this description is $[\#\emptyset]$, $[P_{ERS}\emptyset]$. NPs that are interpreted predicatively are sometimes called non-referential or non-referable, which I take to mean that they do not refer to individuals in the real (or imagined) world but to the set of properties that define being a fig, for example. I will assume that the feature specification $[\#\emptyset]$ $[P_{ERS}\emptyset]$ is compatible with the predicational interpretation of a bare NP. In other words, tuz $[\#\emptyset]$ $[P_{ERS}\emptyset]$ denotes what is called the intension of the term, while tuz $[\#\pm p],\pm sg]$ denotes the extension of the term. We return to the discussion of the interpretation of bare NPs and whether bare they incorporate into the verb in section 2.4.8.

The normal way to say 'I opened the door and saw chairs' would be to use the bare singular noun.

^{&#}x27;Maro hates figs'

This contrast between *like* and *hate* (pointed out to me by C. Dobrovie-Sorin) can be observed in Italian, Greek and French.

⁴⁷Of course mass nouns can be made plural in English as well as in SWA. Such plurals have a *types of* interpretation. Interestingly, some native speakers of SWA judge bare plurals of <u>count</u> nouns to have the same *types of* interpretation. So that in (i) a possible interpretation is that types of chairs were seen.

⁽i) tur-ə pa-c-i yev ator-ner desa door-dt open-aor-1s and chair-pl saw.aor.1s 'I opened the door and saw types of chairs' '...... to my surprise saw chairs'

⁴⁸Longobardi (1994), Muromatsu (1995), Ghomeshi & Massam (1994), Knecht (1986), Vangsnes (1995).

2.4.5 Bare NPs in internal subject position

If the reason that bare nouns are found in pre-verbal object position is that this is the position which is governed by the verb, then we might expect that subjects of unaccusative verbs and passives could also be bare nouns. This is the reasoning behind Longobardi's (1994) analysis of bare nouns in Romance.⁴⁹ We do in fact find examples of this type of bare NP subject in SWA. Consider the examples in (65)-(68) below. Each of the (a) sentences does require some context, which is supplied in the (b) examples.

- (65) a. derev inga-v $leaf[\#\emptyset] \quad fall.aor-3s/[\#\emptyset]$ 'Leaf/leaves fell'
 - b. hov-ə pəče-c-Ø derev inga-v wind-dt blow-aor-3s leaf[#Ø] fall.aor-3s/[#Ø]

 'The wind blew; leaf/leaves fell'
- (66) a. nav g-əngərmi hon

 ship[#Ø] imp-sink[#Ø] there

 'Ship/ships sink/could sink there'
 - b. ayt d^zov-u-n mas-ə ayn.kan vədankavor e vor miʃd that2 sea-gen-the part-the so dangerous is that always nav g-əngəɪmi hon ship imp-sink there

⁴⁹According to Longobardi (1994), bare nouns have a null element in D which is licensed by being governed by V.

'That part of the sea is so dangerous that ships always sink there'

- (67) a. mart yega-v
 man[#Ø] come.aor-3s/[#Ø]
 'People came/showed up'
 - b. zank-ə hənče-c-Ø mart yega-v
 bell-dt sound-aor-3s man[#Ø] come.aor-3s/[#Ø]
 'The bell rang; people came'
- (68) a. sud badmə-v-ec-av lie tell-pass-aor-3s
 'Lies were told'
 - b. med^z kawakagan 30wov-mə ga-r sovorutyan ...
 big political meeting-a exist-pst.3s custom.g/d
 'There was a big political meeting; as usual lies were told'

Similar facts are observed in Standard Eastern Amenian. Although excluded from subject position of most verbs, bare singular and bare plural nouns can appear in the subject position of unaccusative or stative/locational verbs.

- (69) a. gərič e ənk-ac sexan-i-n
 pen is fall-ppt₁ table-GEN-dt
 'There fell onto the table pen(s)'
 - b. karak-um ayd or-ə zinvor yerevac city-loc that day-dt soldier appear.aor.3s
 'On that day soldier(s) appeared in the city'

65

Given the Minimalist Program's feature checking theory of movement assumed here, the fact that the bare NP subject remains in VP in its original position can also be explained on the assumption (justified by the interpetative facts mentioned above) that these NPs do not have the ϕ -features Person and Number. Without any features requiring checking, the NP must remain in its base-generated position. In the case of unaccusatives and passive verbs, I take the base subject position to be the sister of V. If an external subject is required in the derivation, as for example by the Extended Projection Principle (Chomsky 1982), then we can assume that there is a null expletive in SpecTP.⁵¹

2.4.6 Bare NPs are not permitted in external subject position

Unergative and transitive verbs, whose subject is base-generated in a position external to VP,⁵² generally do not permit bare count nouns as subjects, (70).⁵³

(70) a. *anor kəlx-i-n meč kawapar bare-c-Ø

3gen head-gen-dt in idea dance-aor-3s

('Ideas danced in her head')

b. *30xov-mə gazmagerb-v-ad² er, meeting-indef.art organize-pass-pprt be.pst.3s

⁵²I assume that unergatives are underlyingly transitive constructions, following Hale and Keyser (1993). See section 3.4.3.1 for discussion of their analysis of unergatives.

amen.a.lav gadag-ner-es badme-c-i payc mart Č-e- xenta-c-Ø best joke-pl-1poss tell-aor-1s but man neg-laugh-aor-3s 'I told my best jokes but no one hughted'

⁵¹Positing the existence of such a dummy element seems to go against the spirit of Economy or Minimalism. It may serve a semantic purpose however, as the syntactic representation of the event argument (Higginbotham 1985,7). However, this is mere speculation on my part.

⁵³Exceptions to this involve negation and the use of nouns like *mart* 'man, person', or *pan* 'thing', as in the following example:

sovorutyan karakaked səde-c-Ø kord^zavor kankade-c-Ø, gin tradition.DAT politician lie-aor-3s worker complain-aor-3s woman bora-c-Ø shout-aor-3s

('A meeting was organized, as usual, politicians lied, workers complained, women shouted')

c. *kar baduhan-ner-ə godre-c-Ø stone window-pl-dt break-aor-3s ('Stones broke the windows')

2.4.7 Bare NPs as predicates

In the previous section we saw examples of bare NPs in object position. Here we see that they can occur in non argument positions, that is in vocative, predicative and exclamatory expressions (72).

- (72) a. Maro-n Krikor-i-(n) paregam-(*ə/*-mə) gə-sebe-m/gə-nəgade-m

 M -dt K -gen-dt friend-(dt/-indef) imp-consider-1s

 'I consider Maro a friend of Krikor's'
 - b. Hasmig-ə lav xax-c-ox g-erevi-Ø

 H -dt good play-aor-ppt1 imp-seem-3s

 'Hasmig seems a good player'
 - c. irenk-irenc turk gard^ze-c-in
 3p.nom-3p.dat Turk think-aor-3p
 'They thought that they were Turks' [lit. 'They thought themselves Turks']
 - d. Maro-(*n) Jan-as!M -dt dear-1s.poss'Maro, my dear!'

e. tətum kəlux-(*ə)!

pumpkin head-dt

'Pumpkin head!'

In this the SWA examples resemble the Italian bare noun expressions discussed by Longobardi (73). He cites these as examples of bare nouns in non-argument position.

(73) a. Simona è ingeniere⁵⁴
Simona is engineer
'Simona is an engineer'

Italian

- b. Simona è sorella di Carla.
 Simona is sister of Carla 'Simona is Carla's sister'
- c. Ti credevo sorella di Simona you I.believed sister of Simona 'I believed you were Simona's sister'

Given the feature-based framework I am assuming, we expect to find bare NPs adjacent and to the left of the verb, as they have no features to trigger movement. The fact that they are interpreted as predicates is consistent with their being NPs unspecified for Number and Person, that is, expressions which denote properties rather than individuals. Not surprisingly, adjectives, which also denote properties, can appear in the same position (75).

(74) a. Maro-n [NP pəzifg] gard^Ze-c-i <*[NP pəzifg]> SWA

⁵⁴These examples are adapted from Longobardi's (1994:612).

M -dt doctor think-aor-1s
'I thought Maro was a doctor'

- b. Hasmig-ə [NP mart.a.sban] tad-v-ec-av <*[NP mart.a.sban]>
 H -dt man.cx.kill judge-pass-aor-3s

 'Hasmig was judged a murderer'
- (75) a. Maro-n [AP kezi bes dzuyl] gardze-c-i <*[AP kezi bes dzuyl]>

 Maro-dt 2.dat as lazy think-aor-1s

 'I thought Maro was as lazy as you'
 - b. Ani-n [AP nihar] g-erevi-Ø <*[AP nihar]>
 A -dt thin imp-seem-3s

 'Ani seems thin'

From the predicate nominal constructions we find confirmation that bare NPs are not marked for number or person. The sentences in examples (76) and (77) show the standard form of predicate nominal construction in SWA. Comparing (76a) and (b) we see that the plural marker is optional when the subject is plural, although the non-plural form is preferred. I take the fact that a bare NP can be used in this construction when the subject is plural as more evidence that the bare NP is unmarked for number, i.e., it has no feature specification that would clash with the subject's number features. Likewise if the subject is a first- or second-person pronoun, there is no first- or second-person agreement marking on the NP.

- (76) a Maro-n pəʒi∫g e-Ø

 Maro-dt doctor be-3s

 'Maro is a doctor'
 - b. Maro-n yev Ani-n pəʒifg/(-ner) e-n

 Maro-dt and Ani-dt doctor/(-pl) be-3pl

 'Maro and Ani are doctors'

- c. (yes) pagifg-(man) / *-as e-m

 1s.nom doctor-indef / -1s.poss be-1s

 'I am a doctor'
- d. (tuk) pəʒi∫g /*-nit e-k

 2p.nom doctor / 2p.poss be-3p

 'You are doctors'

Note that it is also possible to use the indefinite article in predicate nominal constructions, (77a). However, it is not possible to use the indefinite article when the subject is plural, (77b). This I take to indicate that NPs bearing the article are specified [-pl, +sg].

- (77) a. Maro-n pəʒi∫g-mən e-Ø

 M-the doctor-a be-3s

 'Maro is a doctor'
 - b. *Maro-n yev Ani-n pəʒisg-mən e-n

 Maro-dt and Ani-dt doctor-indef be-3pl

 ('Maro and Ani are doctors')

As far as I can tell (76a) and (77a) do not mean exactly the same thing. The difference appears to be that by using NP+mə, (a), the speaker is emphasizing that being a doctor is the defining characteristic of Maro. The difference seems to be similar to the contrast we find in English with certain adjectives that can be used as substantives. So the difference between saying Mary is a Catholic and Mary is Catholic is that the latter is used simply to state one of Mary's characteristics: she's tall, athletic, and catholic. If the speaker chooses the former, the intention is to define Mary by her religous affiliation. The fact that an NP without overt number marking is preferred in the predicate nominal construction and that this form of the NP

correlates with a strictly predicative interpretation (that is the *Mary is Catholic* rather than the *Mary is a Catholic* reading) supports my claim that $[\#\emptyset]$ NPs are predicative.

If the definite article is added to the NP p = 3i / g, then the sentence is equative or identificational, as shown in (78).

- (78) a. Maro-n pəʒi∫g-n e-Ø

 Maro-dt doctor-dt be-3s

 'Maro is the doctor'
 - b. Maro-n yev Ani-n pəʒisg-ner-n e-n

 Maro-dt and Ani-dt doctor-pl-dt be-3pl

 'The doctors are Maro and Ani'

We find a similar pattern with adjectives. When an adjective is bare, it is predicative, it denotes a property. If it is marked with the plural suffix -ner or the definite article⁵⁵ it refers to an entity which has the property.

- (79) a. Maro-n gəd^zd^zi e-Ø M -dt stingy be-3s 'Maro is stingy'
 - b. kyuz-i-n gəd^zd^zi-n Maro-n e-Ø

*garmir-mə red-a

Even though it is possible to say

garmir-a red-dt 'the red one'

⁵⁵Adjectives bearing the indefinite article do not seem to be acceptable, however. That is, you cannot say 'a red one' by saying

village-gen-dt stingy-dt M -dt be-3s 'Maro is the village miser'

- c. Maro-n gəd²d²i-n e-Ø⁵⁶ M -dt stingy-dt be-3s 'The miser is Maro'
- (80) a. Ani-n yev Ara-n harusd e-n
 A -dt and Ara-dt rich be-3p
 'Ani and Ara are rich'
 - b. Ani-n yev Ara-n harusd-ner-ən e-n
 A -dt and Ara-dt rich-pl-dt be-3p
 'The rich ones are Ani and Ara'
 - b. harusd-ner-ə Ani-n yev Ara-n e-n rich-pl-dt A -dt and Ara-dt be-3p 'Ani and Ara are the rich ones'

2.4.8 Bare NPs in SWA do not incorporate

I have proposed an analysis of bare NPs in which they do not incorporate into the verb, rather the NP is generated as the first sister of V and cannot move from this position because it lacks morphological features that require checking and therefore trigger movement. In this section I contrast this with an alternative analysis in which bare NPs incorporate into the verb. I argue that the bare NP argument in

⁵⁶This sentence is not simply equative, rather it needs a discourse setting in which the miser has been spoken about and is identified by saying maro-n gəd²d²i-n e'.

SWA does not incorporate into the tensed verb morphologically, syntactically or semantically. First let us be clear on what is meant by 'incorporate'.⁵⁷

2.4.8.1 Mithun (1984)

Mithun (1984) identifies four categories of noun incorporation. Type I noun incorporation is termed lexical compounding and includes two subclasses: composition by juxtaposition, in which the component V and N are adjacent and form "an especially tight bond," while retaining their status as distinct words. In the second subclass, morphological compounding, the two components form a single word. In both subclasses, as well as in the other types of noun incorporation, the incorporated noun "loses its status as an argument of the sentence" and the "phrase denotes a unitary activity, in which the components lose their individual salience" (Mithun 1984:849). The second type of noun incorporation process is found in languages where the result of noun incorporation is a verb which has an empty argument position. That is, when an object incorporates it vacates the object position, leaving it open for another noun phrase (e.g., an instrument, location or possessor) to take the position vacated. Type III incorporation is not formally distinct from the first two types, rather Mithun refers to this type as a different use of noun incorporation, "to background known or incidental information within portions of the discourse" (Mithun 1984:859). Finally, the fourth type of noun incorporation Mithun calls classificatory. Nouns incorporated in this process are

⁵⁷Borer 1994 discusses semantic incorporation of nonspecific NPs that remain in VP, where semantic incorporation is understood as complex predicate formation. T. Mohanan analyses nominative objects in Hindi as incorporating into the verb, forming a morphological unit, yet having syntactic independence (Mohanan 1995:91); the incorporated noun phrase is an NP sister of V' dominated by V. Ghomeshi and Massam 1994 argue for an analysis of bare noun objects in Persian in which the N' and the V' are sisters under a V' node, as opposed to NP being sister to V' as in the case of regular direct objects. Delfitto and Schroten (1991) propose that bare plurals incorporate into V' in languages such as Spanish and Italian, where bare plurals are acceptable in object but not in subject position.

relatively general; the N+V combination can then take a more specific NP as argument which is identified with the incorporated NP. This more specific NP can be referred to later in the discourse by means of the incorporated noun. These four types of noun incorporation are arranged in a hierarchy such that if a language has type IV, it will have types I-III as well; if a language has type III, then it has I and II, and so on.

2.4.8.2 SWA does not have morphological incorporation

It is clear from examples such as those in (85)-(86) that the bare NP object in SWA does not incorporate morphologically.⁵⁸

- (85) a. maro-n <u>tuz</u> g-ude-Ø gor
 M -dt fig imp-eat-3s prog
 'Maro is eating fig(s)'
 - b. *maro-n gə-tuz-ude-Ø gor
 M -dt imp-fig-eat-3s prog
 ('Maro is fig-eating')
- (86) a. bəzdig-ner-ə <u>tuz</u> **č**-e-n sire-r small-pl-dt fig neg-be-3p like-neg.prtc 'The children do not like figs'
 - b. *bəzdig-ner-ə &-tuz-e-n sire-r small-pl-dt neg-fig-be-3p like-neg.prtc ('The children do not fig-like')
 - c. *bəzdig-ner-ə **č**-e-n <u>tuz</u> sire-r small-pl-dt neg-be-3p fig like-neg.prtc

⁵⁸Thanks to Ken Hale for bringing up these examples.

We can, therefore, rule out morphological incorporation, as there is no way to insert a bare noun into an inflected verb, or between the auxiliary and an uninflected stem, (86c).

What about incorporation by juxtaposition? The question is what does it mean for the interpretation of a NP+V combination to be 'unitary' and for each component of the compound to lose its individual salience? Is it necessary, for example, that the result of incorporation be something which is a typical activity⁵⁹, such as letter-writing as opposed to letter-stealing? This is the conclusion that Mohanan (1995) reaches. She cites the examples in (87) to illustrate the contrast between what she refers to as the 'incorporated meaning' of a NP+V sequence, B, as opposed to the interpretation of a non-incorporated complement, A.

(87) [Mohanan 1995:93, (30)]

	typical action	non-typical action		
a.	gʰaas kaaṭnaa / becnaa grass cutting selling	de k^hnaa seeing		
	A. 'cutting/selling grass'B. 'grass-cutting/-selling'	'seeing grass' #'grass-seeing		
b.	kitaab lik ^h naa / padnaa/becnaa book writing / reading/selling	denaa / uṭʰaanaa giving / lifting		
	A. 'writing / reading/selling books' B. 'book-writing/-reading/-selling'	'giving / lifting books' #'book-giving / -lifting'		

⁵⁹By typical I mean 'nameworthy' in the sense of Hale and Keyser (1991:13).

The difference betwen the A and B interpretations can be indicated in Hindi syntax by means of case endings. If the object is marked accusative, then only the A reading is available, (88). But both A and B type meanings are available when the object is nominative, (89) (subject to certain constraints: the object must be inanimate and left-adjacent to the verb, for example; other constraints are mentioned below). By contrast, in SWA the same bare NP+V is not interpreted as a predicate (in Mohanan's terms, it lacks an 'incorporated' reading), but rather only as a mass indefinite, that is, it is nonspecific and non-enumerable, but it is a referential NP rather than a modifier of the verb. For this reason, all of the tests that lead Mohanan to conclude that NOM objects are incorporated when they have the B interpretation fail to show that bare NPs inncorporate in SWA, as we see in the following sections.

(88) a. anil-ne kitaab**ő-ko** becaa [Mohanan 1995:83(16b)]

Anil-E(M) book-A.PL(F) sell-PERF. M.SG⁶⁰

A: 'Anil sold (the) books'

B: *

(89) a. anil-ne kitaab**ẽ becîi** [Mohanan 1995:83(16a)]

Anil-E(M) book-N.PL(F) sell-PERF.F.PL

A: 'Anil sold (the) books' B: 'Anil did book-selling'

⁶⁰No gloss is given for the form becaa.

2.4.8.3 Incorporation and truth conditions

To clarify the difference between the two readings, Mohanan cites the example in (92) in which we see that the truth conditions of the two interpretations are different. The B interpretation of (92a) and (92b) can both be true at the same time. The same cannot be said for the A interpretation of (92a) and (92b). They contradict one another, and so cannot be true at the same time.

(92) [Mohanan 1995:91, (26)]

- a. mohan c'uṭṭiyỡ-me vækyum kliinar bectaa t'aa Mohan-N holidays-in vacuum cleaner-N sell-HAB be-PA
 - A. Mohan was selling vacuum cleaners during the holidays
 - B. Mohan was doing vacuum-cleaner-selling during the holidays.
- b. usne do mahine-me ek b^hii vækyum kliinar nahiii he-ERG two month-in one even vacuum cleaner-N not becii sell

He didn't even sell one vacuum cleaner in two months.

In SWA we do not find this contrast between the predicative and non-incorporated ('complement', hereafter) interpretations, when the object of the verb is a bare NP.⁶¹ Consider the example in (93), where we might expect to find both interpretations, as carpet-selling is a typical activity. We find that the B interpretation of (93a) is not available; only the complement reading is possible. We see this by observing that (93a)'s being true is not compatible with (93b)'s being true. If the predicative/incorporated reading were possible, (a) and (b) would not be

⁶¹ There do exist incorporation constructions such as $kork d^2ax-ox/carpet$ sell-sr/'a carpet seller'.

contradictory, as in the third example in (94). The interpretation of (93a) seems to be no different from (94a), an instance where we would not expect to find the incorporated (B) interpretation as donkey-brushing is not a typical activity.

- (93) a. yerp ani-n beirut gə-pənage-r kork gə-d²axe-r when A-dt Beirut imp-live-pst.3s carpet imp-sell-pst.3s
 - A. 'When Ani lived in Beirut she sold carpets'
 - B. NOT AVAILABLE: 'When Ani lived in Beirut she did carpet-selling'
 - b. payc ayn yerek dar-va əntack.i.n nuynisg meg had but that three year-gen during not.even one cl

kork **čə**-d^zaxe-c-Ø carpet neg-sell-aor-3s

'But she didn't sell a single carpet in those three years'

- (94) a. polor anc.yal Sapat maro-n es gə-xozanage-r all past week M -dt donkey imp-brush-pst.3s
 - A. 'Ail last week Maro brushed donkeys'
 - B. NOT AVAILABLE: 'All last week Maro was donkey-brushing'
 - b. haziv meg had ef &-xozanage-c-Ø barely one donkey neg-brush-aor-3s 'She barely brushed one donkey'

Before concluding that the incorporated reading is never available, I should mention that I have found an example of a bare NP+V occurrence that does seem to indicate

that an 'incorporated' reading is possible. Consider the questions and answers in (95).

(95) a. ov go∫ig gə-noroke-Ø

who shoe imp-repair-3s

'Who repairs shoes/does shoe repair?'

Answer: go∫gagar-ə cobbler-dt 'the cobbler'

b. gosig ov gə-noroke-Ø shoe who imp-repair-3s 'Who repairs shoes/*does shoe repair?'

Answer: Maro #go∫gagar-ə 'the cobbler'

Apparently the appropriate answer to (a) is the name of the *type* of person who does shoe repair. That is, the question might be paraphrased 'who is a shoe-repairer', rather than as a request for the name of an *individual* who repairs shoes. The latter would be an appropriate answer to the question in (b).⁶²

Setting this example aside, however, in the next section we consider the SWA data in light of syntactic tests that Mohanan uses to show that nonspecific objects can incorporate. These show that SWA bare NPs pattern with the non-incorporated

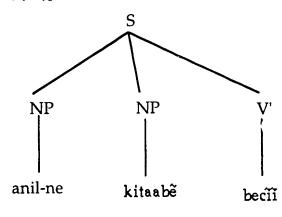
⁶²The fact that the bare NP in (b) is not adjacent to the verb is striking. The sentence is apparently acceptable, although not the ground state. A more acceptable way to ask the question would be to add the definite article to the object, *gofig*.

objects in Hindi, thus confirming the conclusion we reached based on the evidence from truth conditions of sentences with bare NP objects.

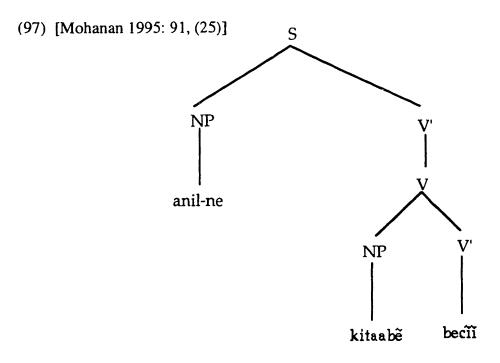
2.4.8.4 Structural difference between incorporated objects and non-incorporated objects

Mohanan concludes that the structure underlying the complement interpretation is the one in (96) and that (97) underlies the incorporated meaning.

(96) [Mohanan 1995:90, (24)]



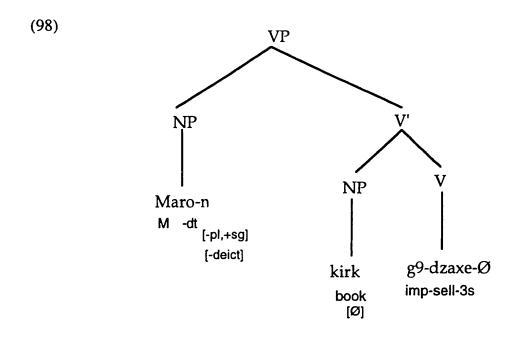
'Anil sold books'



'Anil did book-selling'

I propose that the structure in (98) underlies a transitive clause whose object is a bare NP. The NP object does not incorporate lexically, and, as we see in the following sections, it is compatible with syntactic constructions which are not compatible with incorporation (e.g., conjunction), thus making it reasonable to conclude that the NP object does not incorporate syntactically.

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'Maro sold books'

2.4.8.5 Bare Ns can be modified

Modification of bare Ns in SWA is acceptable when the modifier is adjectival, (99). However, only the complement reading is available. In this the bare NP objects in SWA contrast with NOM objects in Hindi,⁶³ where modification is permitted with the complement interpretation, but not with the incorporated meaning. To explain this Mohanan argues that [modifier + N] is a phrasal entity, and, as incorporation is a lexical phenomenon, it cannot involve phrasal categories.

(99)a. Ani-n ar**ʒ**ekavor kork gə-d^zaxe-Ø A -dt valuable carpet imp-sell-3s Ani sells valuable carpets

_

⁶³Mohanan 1990:139, 1995:85.

- b. Maro-n yergar veb gə-kəre-Ø
 M -dt long novel imp-write-3s
 Maro writes long novels
- c. Siran-ə avant-agan yerk g-erke-Ø gor S -dt tradition-al song imp-sing-3s prog Siran is singing traditional songs
- d. ∫ad hay ga-Ø hon many Armenian exist-3s there 'Are there many Armenians there?'
- e. gar.ow pəʒi∫g &-eg-av
 capable doctor neg-come.aor-3s
 'No decent doctors came'

Modification of bare NP arguments in SWA is also possible using one type of relative clause. Relative clauses in SWA can be either head-initial, (100a) or head-final, (100b). Using the first type to modify the noun results in a grammatical sentence, however the second type, (100b), is not acceptable. In both cases the bare noun is left-adjacent to the verb, so the difference in grammaticality cannot be due to a violation of the adjacency constraint.

- () a. Ani-n parsgasdan-e-n per-v-ad^z kork gə-d^zaxe-Ø

 A -dt Iran-abl-dt bring-pass-prt₁ carpet imp-sell-3s

 ('Ani sells carpets that are brought from Iran')
 - b. *Ani-n kork gə-d²axe-Ø vor parsgasdan-e-n gu-ka-n

 A -dt carpet imp-sell-Ø which Iran-abl-dt imp-come-3p

 ('Ani sells carpets that come from Iran')

2.4.8.6 Bare NPs and conjunction

Bare NP objects in SWA can be conjoined. In each of the following examples, the interpretation does not depend on whether the conjoined items form a class of things typically sold, written, or thrown together, as in the case of (101a-c), (where we might expect to find an incorporated meaning) or whether they do not form such a class, as in (101d).

- (101)a. Maro-n oratert yev zurnal gə d²axe-Ø
 M -dt newspaper and magazine imp-sell-3s

 Maro sells newspapers and magazines
 - b. Siran-ə hotvad² yev veb gə-kre-ø
 S -dt article and novel imp-write-3s
 Siran writes articles and novels
 - c. bəzdig-ner-ə kavazan yev kar nede-ci-n small-pl-ə stick and stone throw-aor--3p 'The children threw sticks and stones'
 - d. hərabarag-i-n vəra zinvor usanor yev kyur.aci des-ank square-gen-dt on soldier student and villager see-aor.1p 'We saw soldiers, students and villagers in the square'

According to Mohanan, in Hindi the incorporated meaning is not available when the bare NP objects are conjoined.

(102) [Mohanan 1990:141,(12a)]

a. anil har^hii aur g^hode bectaa hai
Ani-N elephants-N and horses-N sell-HAB be-PRES
Anil sells elephants and horses

*Anil does elephant- and horse-selling

In SWA the bare NP arguments of passive and unaccusative verbs can also be conjoined. Again, the incorporated interpretation might be expected when the conjunction refers to items that form a class of goods sold together, for example, and the verb is in the imperfect, as in (103a). The fact that the tense in (103c) is aorist and the items conjoined are not habitually spilled out of windows make the complement interpretation more likely in (103c). In fact only the complement reading is possible in both cases.

- (103)a. xanut-i-n meč kirk dedrag yev oratert gə-d^zax-v-i-Ø shop-gen-dt in book notebook and newspaper imp-sell-pass-3s 'Books, notebooks and newspapers are sold in the shop'
 - b. tarag-i-n meč kərič yev madid ga-Ø drawer-gen-dt in pen and pencil exist-3s 'There are pens and pencils in the drawer'
 - c. baduhan-e-n turs havgit yev lolig tap-ve-c-av window-abl-dt out egg and tomato ≈spill/throw-pass-aor-3s 'Eggs and tomatoes were thrown out of the window'

In Hindi the incorporated reading is not possible at all in passive constructions:

(104) a. anil-se kitaabê becii jaaêgîi [Mohanan 1990:140, (10)]

Anil-I book-n-pl sell-perf go-fu-pl

'The books will be sold by Anil'

^{*&#}x27;Book-selling will be done by Anil'

Two verbs can also be conjoined, sharing a bare NP object, (105). Even when the verbs involved refer to actions that are typically done together (e.g., train and sell horses), an incorporated meaning is not possible. I consider this to be further evidence that the bare NP does not incorporate. If it did incorporate, then to account for the fact that a single copy of a bare NP can be the object of two conjoined verbs, we would have to posit either an empty copy that incorporates as well, or posit a structure in which there was incorporation of one verb into the other (in addition to the conjunction) before incorporation of the NP.

- (105)a. Maro-n ci_i gə-marze-Ø yev __i gə-d^zaxe-Ø
 M -dt horse imp-train-3s and imp-sell-3s

 Maro trains and sells horses
 - b. Maro-n ci gə-marze-Ø yev Siran-ə __ gə-d²axe-Ø M -dt horse imp-train-3s and S -dt __ imp-sell-3s 'Maro trains horses and Siran sells [horses]'
- (106)a. Ani-n čutag_i gə-ʃine-Ø payc __i č-i-Ø nəvake-r

 A -dt violin imp-make-3s but neg-be-3s play-neg.ppt

 'Ani makes violins but does not play __'
 - b. Ani-n čutag_i gə-ʃine-Ø yev siran-ə __i gə-nəvake-Ø A -dt violin imp-make-3s and S -dt imp-play-3s 'Ani makes violins and Siran plays [violins]'

Mohanan uses the fact that verbs cannot be conjoined and share a bare NP object, with the incorporated interpretation, to show that is incorporation that gives rise to this interpretation, (107).

(107) [Mohanan 1995:89, (23b)]

- a. anil ghoqe khariidtaa hai aur raam __i bectaa hai
 Anil-N horses-N buy-HAB be-PR and Ram-N sell-HAB be-PR
 A. Anil buys and Ram sells horses
 - B. *Anil does horse-buying and Ram does __-selling
- c. anil ghode _i aur raam haathi bectaa hai
 Anil-N horses-N and Ram-n elephants-n sell-HAB be-PR
 - A. Anil buys horses and Ram elephants
 - B. *Anil does horse-__ and Ram elephant-selling

2.4.8.7 Phonological evidence that bare NP subjects remain in VP

Finally, there is phonological evidence that indicates that bare NP subjects remain in the VP. Sentential stress in a sentence with a bare NP argument must fall on the argument and not on the verb.⁶⁴ This contrasts with the stress pattern in a sentence where the subject has a determiner or is overtly marked plural. In these sentences the stress can fall on the verb.

(108) a. d^zar-e-n [_{VP} derev ingav] tree-abl-dt leaf fall From the tree there fell leaves

b. d^zar-e-n derev-ner-ə [_{VP} inga-n] tree-abl-dt leaf-PL-dt fall.aor-3p

The leaves fell from the trecs

⁶⁴Ghomeshi and Massam (1994:183) report a similar alternation in stress in Persian: stress falls on the last syllable of the verb stem if the object has a suffix, but on the object if the object is a bare NP. Similarly, Knecht (1986) states that in Turkish stress can distinguish between specific and non-specific objects, even in the absence of articles: if the object is non-specific, stress falls on the object; if the object is specific, then stress falls on the verb.

Nespor, Guasti and Christophe (1995) argue that stress falls at the left edge of the phonological phrase in a left-recursive language (like Armenian or Turkish) and on the right edge of a right-recursive language (like Italian or English).

(109)

a. Italian

[ho studiato <u>bene</u>] [i corvi <u>bianchi</u>] '(I) have studied well the white crows'

b. Turkish

[güzel köpek-ler] [et yedi] 'Beautiful dogs eat mea:'

c. SWA

[dzuyl ef-er-ə] [hod g-ude-n] lazy donkey-pl-dt grass imp-eat-3p 'Lazy donkeys eat grass'

(110) Italian Turkish Armenian
secondo me benim ičin indzi hamar
according me me for 1s.DAT for

The fact that stress must fall on the subject *derev* in (108a) according to their generalization suggests that it is at the left edge of the VP, that is, inside the VP as I have argued. Of course the phonological facts also support an analysis in which the noun actually incorporates into the verb, so that these facts do not choose between an incorporation and a complement analysis.

2.4.9 Conclusion

Having considered both word order and interpretation of bare NPs, we find that although there is a strict constraint on the position of bare NPs, namely that they must be left-adjacent to the verb, there is no morphological or interpretive evidence to show that incorporation has taken place. The fact that bare NPs can be modified and conjoined further confirms this conclusion.

2.5 The indefinite article -mo

The suffix $-m\vartheta$ is the indefinite article in SWA.¹ In this section I present data that show that a noun bearing this article can be interpreted as either a specific or nonspecific indefinite. I propose to characterize the suffix $-m\vartheta$ as being $[-pl, +sg]^2$ and optionally marked for person, [-deictic]. I say optionally because nouns with this suffix are sometimes interpreted as specific and sometimes as nonspecific. A noun phrase that includes the indefinite article is therefore either a NumP or a DP, given the analysis of DP-internal structure and features proposed here, in which a noun phrase that has the ϕ -feature number only is a NumP; and a noun phrase that is specified for person as well is a DP.

If the article precedes a vowel-initial clitic such as forms of the verb θ and the conjunction θ also, the indefinite article surfaces as θ . Before vowel-initial full lexical items it appears as θ and in Armenian orthography it is cliticized onto the following word, as in (ii).

¹The indefinite article, like the definite article -ə(n), is unstressed. Stress usually falls on the last syllable in Armenian; all of the other nominal suffixes (case, plural) as well as inflectional suffixes on the verb bear stress. These issues are discussed by Vaux (1994, 1997), where he categorizes the articles as enclitics, distinct from stress-bearing suffixes.

i. Երկայն կին <u>մրն</u> է yergayn gin -<u>mən</u> e tall woman-a is 'She's a tall woman'

ii. Սեւ գլխարկ <u>u</u>'ունի sev kəlxarg <u>-m</u>' uni-Ø black hat -a have-3s 'She has a black hat'

²It has been claimed (Adjarian 1957) that -mo derives historically from the word for the number one, min, which was used either before or after the noun it modified in Classical Armenian. Interestingly, if it followed the NP, it had to agree in person, case and number with it, while if it preceded it, it was undeclined (this is true in general of adjectives in Classical Armenian). By the 5th century, agreement was no longer present on the article.

Adjarian (1957) observes that -mi reduced to -me when it was used as an article, but retained the vowel and stress when used to mean the number one.

In addition to its role on noun phrases, we examine the location and interpretation of adverbs that bear the indefinite article. It seems to be the case for some adverbs there is a correlation between the presence of the indefinite article on an adverb and its position relative to the verb. An adverb can be non-adjacent to the verb only if it bears the article, and when it bears the article it can be interpreted as an event adverbial (in the sense of Travis 1988). These facts are interesting because they suggest that, independent of category, the feature that enables an element to be external to VP is spelled out as -mə.

2.5.1 The indefinite article is ambiguous as to specificity

Is $N+m\theta$ specific or non-specific? To answer this question we must look at noun phrases bearing the indefinite article in several different contexts; this we do in the next sections, concluding that a nominal expression $N+m\theta$ is usually nonspecific but sometimes is interpreted in ways that are characteristic of specific noun phrases.

One way to show that a nominal expression such as *a church* is ambiguous as to specificity is to observe that both of the sentences (111b,c) are acceptable responses to the statement in (111a).

- (111) a. Mary is looking for a church.
 - b. When she finds one, she will go in and pray. [nonspecific]
 - c. When she find: it, she will make a sketch of it. [specific]

In SWA we find that by this measure the article -mə is ambiguous. Consider the following examples.

- (112)a. maro-n yegereci-mə gə-pəndre-Ø gor M -dt church-a imp-search-3s prog 'Maro is looking for a church'
 - b. yerp-(vor) had-mə kədne-Ø bidi mədne-Ø yev arote-Ø when-that CL-a find-3s fut enter-3s and pray-3s 'When she finds one, she will go in and pray'
 - c. yerp-(vor) Ø/adiga kədne-Ø yegereci-i nəgar bidi kədze-Ø when-that /it find-3s church-gen picture fut ske ch-3s 'When she finds it, she will make a sketch of it'
- (113) a. sosig-ə pəzifg-mə desna-l g-uze-Ø S -dt doctor-a see-inf imp-want-3s 'Sosig wants to see a doctor'
 - b. meg-e-mə xərad g-uze-Ø ir d^zung-i-n masin one-abl-a advice imp-want-3s 3'.gen knee-gen-dt about 'She wants advice from one about her knee'
 - c. arten yergu **Z**am **ə**sbas-ad^z e-Ø iren hed xose-l-u hamar already 2 hour wait-ppt₁ be-3s 3'.dat with speak-inf-g/d for 'She's already been waiting for two hours to speak to him/her'

By contrast a bare noun phrase in SWA is unambiguously nonspecific. Bare NPs are discussed in detail in section 2.4, but here I give examples to illustrate the difference in interpretation between a noun phrase that bears the indefinite article and one that bears no article. It is not possible to refer back to the indefinite using a pronoun or the expression *had-mə*, that corresponds to *one* in English.

- (114) a. gentan.a.pan.agan bardez-i-n meč <u>pik</u> desa-nk zoo.o.log.ical garden-gen-dt in elephant see.aor-1p 'We saw an elephant/elephants at the zoo'
 - b.##yerp adiga desa-nk siser dəvi-nk when it see.aor-1p chickpea give.aor-1p 'When we saw it we gave [it] chickpeas'
 - c. ##had-mə cag une-r vor ʃad anuʃ e-r cl-indef young.animal have-pst.3s rel.prn very sweet be-pst.3s

'One had a young one that was very cute'

- (115) a. maro-n pə**2**i[g gə-pəndre-Ø gor Maro-dt doctor imp-look.for-3s prog 'Maro is looking for a doctor/doctors'
 - b. ##meg-e-n: xərad g-uze-Ø ir d^zung-i-n masin one-abl-a advice imp-want-3s 3'.gen knee-gen-dt about 'She wants advice from one about her knee'
 - c. ##arten yergu 2am əsbas-ad² e-Ø iren hed xosel-u hamar already 2 hour wait-ppt₁ be-3s 3'.dat with speak-inf-dat for 'She's already been waiting for two hours to speak to him/her'

2.5.1.1 Scope and *N*+*m***ə**

As far as I have been able to determine, a noun bearing the indefinite article -ma can take narrow scope only. According to Enç (1991) an indefinite NP is considered to be specific if it can take wide scope and nonspecific indefinites take narrow scope only. With respect to quantifiers, modals and verbs of propositional attitude, it seems that N+ma can take narrow scope only, so according to this test, N+ma is nonspecific. In each of the following cases the wide scope reading is obtained only when the noun bears the definite article -a(n).

- (116) a. amen meg usucič a∫agerd-(i)-mə hantimane-c-ø every one teacher student-dat-a scold-aor-3s 'Every teacher scolded a student'³
 - i. NOT AVAILABLE Wide scope, specific reading:

³Since the indefinite article in SWA cannot bear stress, there is no way to encourage the wide scope meaning by stressing the article, as for example in English, where Every teacher scolded a student allows wide scope reading of the indefinite a student, but when the article is unstressed, a narrow scope interpretation is preferred.

There is a student, such that every teacher scolded that student.

- ii. Narrow scope, nonspecific reading: For each teacher, there is a student, such that every teacher scolded that student.
- (117) a. amen meg gin senyag-mə məd-av every one woman room-a enter.aor-3s 'Every woman entered a room'
 - i. NOT AVAILABLE: Wide scope, specific reading:'There was a room, such that every woman entered it'
 - ii. Narrow scope, nonspecific reading:'For each woman, there was a room such that she entered it'
- (118) a. maro-n mart-mə bedk e-Ø kədne-Ø
 M -at man-a must be-3s find-3s
 'Maro must find a man [a husband]'
 - i. NOT AVAILABLE: *Wide scope, specific reading:* There is a particular man that Maro must find.
 - in. Narrow scope reading: Maro must find some man or other.
- (119) a. ani-n yerkië-mə varce-l g-uze-Ø

 A -dt singer-a hire-ini imp-want-3s
 'Ani wants to hire a singer'
 - i. NOT AVAILABLF: Wide scope reading: there is a particular singer that Ani wants to hire.

ii. Narrow scope reading: Ani wants to hire someone or other who sings.

In the examples above, I have cited sentences in which the indefinite is not the head of a relative clause, as the presence of a relative encourages a specific reading, a fact noted by Enç in her discussion of relational specifics. We discuss relative clauses headed by indefinite noun phrases below.

In a negative context it is difficult to get a wide scope interpretation for a noun phrase unless it is modified. Consider the examples in (120) where the indefinite is modified. In English such modification is compatible with the presence of the indefinite article and with wide scope reading. However, to get such an interpretation in SWA the definite article is required.

(120) a. Maro-n təran-mə vəra-i nə∫an-ə/*-mə čə-des-av
M -dt door.gen-a on-gen sign-dt /-a neg-see.aor-3s
yev mart-oc ardaknoc-ə məd-av
and man-gen.pl bathroom-dt enter.aor-3s

Maro didn't see a sign on the door and so walked into the men's bathroom'

- i. NOT AVAILABLE: Wide scope: There was a sign on the door that Maro did not see ...
- ii. Narrow scope: It is not the case that Maro saw a sign on the door ...

2.5.1.2 Predicate nominals

In predicate nominal expressions the indefinite article is sometimes optional. When the noun being modified refers to a person, as in (122), then with or without -mə the noun phrase is acceptable. In the examples where the modified noun refers to an inanimate object, (123), there is a difference in opinion as to whether the sentences are acceptable without the indefinite article. For speakers who accept both variants, there is a difference between the bare N and the N+mə predicates. Apparent!y, using -mə gives the sense of familiarity with the object being described. So, for example, in (120) if the indefinite article is present it is likely that the speaker is in some way familiar with the school, e.g., is a teacher or a neighbor. But someone describing the building with no prior knowledge of the school, would be more inclined to use the bare N version of (121). This difference in interpresention is not too surprising given that familiarity with something would indicate that it is part of the speakers context, and thus can be referred to using a specific noun phrase (N+mə) rather than the obligatorily nonspecific bare N.

- (121) a. bəzdig təbroc-(mən) e-Ø small school-a be-3s 'It is a small school'
- (122) animate subjects: indefinite article is optional
 - a. maro-n pə**2**i∫g-(mən) e-Ø M -dt doctor-a be-3s 'Maro is a doctor'
 - b. zarmig-əs yerk-ič-(mən) e-Ø cousin-1s sing-er-a be-3s 'My cousin is a singer'
 - c. darantavor arvesd.a.ked-(mən) e-Ø talented artist-a be-3s

'Is s/he a talented artist?'

- d. ani-n lav xakcok(mə) g-erevi-Ø
 A -dt good player-a imp-seem-3s
 'Ani seems a good player'
- (123) inanimates: the article is preferred; bare N is acceptable
 - a. as hedakərkəragan hotvad²-(mən) č-e-Ø this interesting article-a neg-be-3s 'It's not an interesting article'
 - b. ayt d²ag-ə kerezman-(mən) e-Ø that₂ hole-dt grave-a be-3s 'That hole is a grave'
 - c. iraganutyan me**č** ays hayeli-n baduhan-(mən) e-Ø reality.gen in this mirror-dt window-a be-3s 'That mirror is really a window'
 - d. ays kord^zik-ə duduk-(mən) e-Ø this intrument-dt duduk-a be-3s 'This instrument is a duduk⁵'
 - e. ayt Senk-er-ə yegereci-(ner) e-n that2 building-pl-dt church-pl be-3p 'Are those buildings churches?'

Note that the bare predicate nominal does not need to agree with the noun it modifies in number, (122), (123). This is expected given that a bare N is not specified for number. The indefinite article, on the other hand, does have number specification [-pl, +sg] so we correctly expect it to be incompatible with a plural subject.

(124) a. təraci-ner-əs pə**2**i/g-(ner)/*-mə e-n neighbor-pl-1poss doctor-pl / -a be-3p 'My neighbors are doctors'

⁵The duduk is a double reeded wind instrument about the size of a soprano recorder.

b. maro-i-n paregam-ner-ə yerkič-(ner)/*-mə e-n M -gen-dt friend-pl-dt singer-pl/-a be-3p 'Maro's friends are singers'

2.5.1.3 Partitives

When a noun refers to one of a set of individuals previously introduced, that is, when a noun phrases is a partitive specific, N+ma can be used, however the preferred reading seems to be non-partitive. This is shown in the examples in (125)-(127), where the (a) sentences give a context and the (b) sentences contain an indefinite noun phrase that is compatible with the context given. The preferred or 'first impression' reading of (125b) is that the girl referred to cannot be (except purely coincidentally) one of the pupils that Maro brought to the museum. Similarly in the (b) sentences of (126-7) the tendency is for the indefinite to refer to something newly introduced into the discourse.

- (125) a. maro-n ir asagerd-ner-ə tankaran per-av M -dt 3'.gen student-pl-dt museum bring-3s 'Maro brought her students to the museum'
 - b. aktig-mə gors-v-ec-av girl-a lose-pass-aor-3s 'A girl got lost' [preferred reading: the girl is not one of the students]
- (126) a. aycel-or odar-ner-ə aifel asdarag-ə kac-in visit-SR foreign-pl-dt Eiffel tower-dt go.aor-3p
 'The visiting foreigners went to the Eiffel Tower'
 - b. maro-n əs-av vor mart-mə kale-l-ov M -dt say-aor.3s rel.prn man-a walk-inf-instr aſdarag-ə yela-v tower-dt ascend-aor.3s

'Maro said that a man went to the top of the tower on foot'
[preferred: The man in question is not one of the visiting foreigners in (a)]

- (127) a. Maro-n ir kər-ad²-ner-e-n mi-kani⁶ orinag-ner **x**ərge-c-Ø M -dt 3'gen write-ppt₁-pl-abl-dt a-few example-pl send-aor-3s 'Maro sent a few examples of what she has written'
 - b. panasderdzutyun-mə əntun-v-adz e-r
 poem -a accept-pass-ppt1 be-pst.3s
 dəb-v-el-u hamar
 publish-pass-inf-dat for

'A poem was accepted for publication'
[preferred reading: the poem accepted was not one of those sent]

However, in an explicit partitive construction, the indefinite article can be used to refer to an individual of a set just mentioned.

- (129) a. mer azkagan-ner-e-n mor-a-kuyr-mə ter bolis
 our relative-pl-abl-dt mother.gen-cs-sister-a still Istanbul
 gə-pənagi-Ø
 imp-live
 'Of our relatives, an aunt still lives in Istanbul'
 - b. cerp.a.gal-v-ad^z anc-er-e-n usanow-mə pand wərg-v-ec-av arrest-pass-ppt₁ person-pl-abl-dt student-a jail send-pass-aor-3s 'Of the people arrested, a student was sent to jail'

2.5.1.4 The indefinite article in relational specific noun phrases

⁶Some speakers of SWA consider *mi kani* to be Eastern Armenian and use only the expression *kanime* to mean ambiguously 'few' and 'a few'. For the speakers that do use *mi kani*, it means 'a few', while *kani-me* means 'few'.

Partitive specifics are one type of specific noun phrase discussed by Enč (1991). The second type of specific noun phrase is what she calls 'relational specific'. These are often exemplified by relative clauses. In the sentences in (129) indefinite noun phrases head relative clauses and in each case they are interpreted as specific. In (130), however, the interpretation of the indefinite can be either specific or non-specific.

(129) Specific reading only:

- a. ani-n vəJare-c-Ø yerkič-*(mə) vor duduk al gə-nəvake-Ø A -dt pay-aor-3s singer-a rel.prn duduk also imp-play-3s 'Ani paid a singer who also plays the duduk'
- b. kord².avor-mə vor kəsan dari aʃxad-ad² e-Ø kord²-e-Ø worker-a rel.prn 20 year work-ppt1 be-3s work-abl-Ø hane-ci-n displace-aor-3p 'They fired a worker who had worked for twenty years'
- c. maro-n lezv.a.ked-*(mə) vor parsgasdan-e-n M -dt linguist-a rel.prn Iran-abl-dt yeg-av həravire-c-Ø come.aor-3s invite-aor-3s 'Maro invited a linguist who has come from Iran'
- d. ani-n pararan-*(mə) uni-Ø vor yerevan-e-n
 A -dt dictionary-a have-3s rel.prn Yerevan-abl-dt

 varg-v-ad² e-Ø iren

 send-pass-ppt1 be-3s 3'.dat

 'Ani has a dictionary that was sent from Yerevan'

(130) Non specific interpretation is possible:

- a. ani-n yerkič-*(mə) vor duduk al gə-nəvake-Ø
 A -dt singer-a rel.prn duduk also imp-play-3s
 varce-l g-uze-Ø
 hire-inf imp-want-3s
 'Ani wants to hire a singer who also plays the duduk'
- b. maro-n čutag-*(mə) vor nə∫anavor čutag.a.har-i-mə violinist-dat-a M -dt violin-a rel.pm famous kədne-l gə-husa-Ø gə-badgane-r imp-hope-3s imp-belong-pst.3s find-inf 'Maro hopes to find a violin that used to belong to a famous violinist'

In (129) the specific reading of $N+m\theta$ is preferred when the verb is in the past tense, and the nonspecific is more 'accessible' when the matrix verb expresses future or conditional action, (130). It is likely, then, that the specificity is determined by the tense and aspectual class of the verb rather than a feature of the article.

-mo is used when N is modified by 'a certain' or a 'particular'

When an indefinite noun phrase is modified by adjectives like 'certain' or 'particular' it has a specific reading. In SWA such noun phrases must have the indefinite article, (131).

- (131) a. voros/masnavor vajaragan-mə ays kork-ə dzaxe-c-Ø mezi certain/particular merchant-a this carpet-dt sell-aor-3s 1p.dat 'A certain/particular merchant sold this carpet to us'
 - b. maro-n voros/masnavor pararan-mə kədav ayn xanut-ə M dt certain/particular dictionary-a found.3s that store-dt 'Maro found a certain dictionary at that store'
 - c. voros/masnavor təraci-mə misd mer sun-i-n masin certain/particular neighbor-a always 1p.gen dog-gen-dt about gə-kankadi-Ø

imp-complain-3s
'A certain neighbor always complains about our dog'

Generic interpretation of N+indefinite article

As in English, a noun bearing the indefinite article can be interpreted as generic. The examples in () show that this interpretation is possible in SWA when the noun bears the indefinite article.

- (132) a. yete asagerd-i-mə sad hantimane-s pro gə-caxoxi-Ø if student-dat-indef much scold-2s imp-fail-3s 'If you scold a student a lot s/he will fail'
 - b. yete usatrutyamp karakaked-i-mə ləse-s
 if carefully politician-dat-indef listen-2s
 gə-husaxap-vi-s
 imp-disappoint-pass-2s
 'If you listen carefully to a politician, you will be disappointed'
 - c. hyur-mə mifd iravunk uni-Ø məna-l-u vor-ĕap guest-a always right have-3s remain-inf-d/d rel.prn-much vor g-uze-Ø rel.prn imp-want-3s 'A guest always has the right to stay as long as s/he wants'

As noun phrases with generic interpretation are appropriate ony if there is a presupposition that their referents exist, I would group the indefinite noun phrases with generic interpretation with specific indefinites.

2.5.1.5 The indefinite article on adverbs

In the examples in (133)-(134) we see that the indefinite article can appear on a non-nominal element, and yet it functions as we would expect if we assume the suffix -mə spells out the morphological features that license expressions in VP-external positions. That is, bare adverbs, like bare Ns must be adjacent to the verb; adverbs that are not adjacent to the verb must bear the indefinite article (if the adverb belongs to the class given below, (133)). In presenting these data, I do not claim that the adverb is base generated inside the VP, and then raises to check its features, as I am assuming that the adverbs are adjoined to the XPs that they have scope over. The data are more of an interesting sideline than evidence for or against a feature-driven theory of syntactic movement.

(133)

The following adverbs can take the indefinite article.

fad 'very, much'
fud 'soon, quickly'
arak 'fast, quickly'
gamac 'slowly'
tetev 'softly'
lav 'well'

ayt/s/n-bes 'like this/that2/that3'

Feydit (1969) writes that the indefinite article serves to "reinforce" the meaning of the adverb, citing the examples in (134a,b).

(134) [Feydit 1969:313]

a. Jud-mə tarc-irfast-a return-imper.2s'Return very quickly!'

- b. ayn-bes-mə kəlx-u-n zarg-av vor kedin-ə ing-av that3-like-a head-dat-dt hit.aor-3s rel.prn floor-dt fall.aor-3s 'S/he hit her/him so [hard] on the head that s/he fell to the floor'
- c. lav-mə d^zed^ze-c-i iren well-a beat-aor-1s 3'dat 'I gave him/her a good beating'
- d. tetev-mə pəspəsa-csoftly-a whisper-aor.3s'S/he whispered softly'

In addition to whatever difference in interpretation there may be, I have found that there is a correlation between the position of the adverb relative to the verb and the presence of the indefinite article. If the adverb is adjacent to the verb, then the indefinite article is optional, but if the adverb is non-adjacent, then the indefinite article is perhaps not absolutely required, but is preferred, (135). For the adverb arak, 'quickly', this difference in word order also corresponds to a difference in interpretation. When an adverb bears the indefinite suffix and is not adjacent to V, it can be interpreted as modifying the time at which an action occurred; Travis (1988) refers to this as the 'event' reading of the adverb. This interpretation is associated with a structure in which the adverb is adjoined to the Infl projection (or in the sentence structure assumed here, the T projection).

⁷When not adjacent to V, adverbs can be reduplicated for example, but cannot be bare:

i. gamac-gamac derev-ner-ə inga-n slowly-slowly leaf-pl-dt fall-3p 'The leaves fell slowly'

ii. arak-arak bəzdig-ner-ə gə-vaze-i-n gor quickly-quickly small-pl-dt imp-run-pst-3p prog 'The children were running'

- (135) Event reading: adverb adjoined to TP article is obligatory
 - a. baytum-e-n hedo [TP arak-*(mə) [TP [VP vec nav əngəzme-c-av]] explosion-abl after fast-a six ship sink-aor-3s 'After the explosion, six ships quickly sank'

When the adverb is bare and so obligatorily adjacent to V, it can only be interpreted as modifying the manner in which the action occurred, in other words it has a 'process meaning' (Travis 1988); this interpretation is associated with a structure in which the adverb is adjoined to VP.

- (136) Process reading; adverb adjoined to VP article is optional
 - a. baytum-e-n hedo hink nav-er [vparak-(ma) [vpangame-c-an]] five ship-pl quickly sink-aor-3p
 'After the explosion, five ships sank quickly'

2.5.1.6 Plural noun with the indefinite article

Another unusual place to find the indefinite article is on plural nouns. Although usually affixed to a singular noun, the indefinite article can appear on a plural noun when a particular interpretation is intended. In this case, the noun is interpreted to mean that the objects referred to were plural but indistinct. Feydit (1969:313) describes the interpretation as corresponding to 'quelque chose comme' [= 'something like'].

(137) a. heru-n dun-er-mə desa-nk
far-dt house-pl-a see.aor-1p
'We saw a bunch of houses in the distance'

b. pan-er-mə əs-av payc mədig č-əri-Ø thing-pl-a say.aor-3s but attention neg-do.aor.3s 'S/he said things but I didn't pay attention'

2.5.2 Conclusion

In conclusion, we have seen that the indefinite article in SWA, like its English counterpart, is ambiguous between a specific and a nonspecific interpretation, depending on the context, and sometimes within the same context. The pronominal reference facts show that the article is ambiguous: Scope facts show that it is nonspecific, in that it always takes narrow scope; data on the indefinite article in negative contexts show that it is nonspecific; either a specific or a nonspecific reading is possible when the indefinite is the head of a relative clause; and finally, with respect to partitives, there seems to be a split between examples of discourse partitives, for which the preferred reading is nonspecific, and explicit partitives that have specific interpretation. However, since it is always singular (with the exception of cases like (137)), I conclude that noun phrases that bear this article are specified for Number ([-pl, +sg]) and optionally for Person ([-deict]).

2.6 The Definite Article

In this section we examine the distribution of the suffix in SWA traditionally called the definite article and the interpretation of noun phrases that bear this suffix. The analysis I develop here treats the definite article in SWA as a marker of the semantic notion of specificity, of which definiteness is a subcase. In particular I argue that the definite article does two things. First, within DP it is an agreement marker signalling person agreement with the argument in the specifier of DP. The derivation that results in the specifier-head relation required for agreement involves N raising to adjoin to D and the argument in specNP raising to specDP.2 Evidence for this proposal comes from agreement with genitive noun phrases, from what I will argue is agreement in noun phrases containing demonstratives and from agreement in floating quantifier constructions. Further evidence comes from the fact that the definite article appears on inherently definite Ns such as proper names and the third-person pronoun *ink*. I assume that the ϕ -feature Person can have either the value [+deictic] or [-deictic];³ [+deictic] being the value associated with first- or second-person, [-deictic] being the value associated with third-person agreement. In saying that the specific interpretation and syntactic movement are associated with a feature on D, I am in agreement with Longobardi (1994), in which the feature [±R] (suggesting 'referential') is associated with D.

¹It will become clear that the term *definite article* is not exactly accurate. However, it is the traditional term, and among its other uses, the suffix does mark noun phrases that are definite. I will therefore use this term throughout the following discussion.

²According to Longobardi (1994:661) N to D raising, or N raising to a higher functional head that can be identified with D has been argued to apply in Semitic (Ritter 1988, 1991, Ouhalla 1988, Fassi Fehri 1989, Siloni 1989, 1990) and Scandinavian (Delsing 1988, Taraldsen 1990, Holmberg 1992).

³The distinction that I am making between [+deictic] and [-deictic] is sometimes referred to using the terms [+participant] and [-participant], respectively. There is a great deal of cross-linguistic evidence to justify treating first- and second-person pronouns/agreement as distinct from third-person agreement (Moravscik 1978).

Second, at the clause level, the definite article is a marker of specificity,⁴ in other words it appears on a noun phrase whose referent forms a subset of items that have already been introduced into the discourse (I adopt Enç's definition of specificity; see section 2.2). Definiteness is a special case of specificity, since if the referent of a definite noun phrase is identical to a previously introduced referent, as it must be if the noun phrase is definite, then it is necessarily a subset of that referent.

The proposal that the definite article is in fact a marker of specificity has much in common with Szabolsci's recent account of the definite article in Hungarian, and in section 2.6.3.3 we will discuss the SWA data in comparision with the Hungarian data she investigates.

2.6.0.1 Basic facts about the article

The definite article has the form -a when attached to a noun ending in a consonant and the form -n when attached to a vowel-final noun, (138).

(138) a. surǐ-ə 'the coffee' d. gadu-n 'the cat'

b. xanut-ə 'the shop' e. ci-n 'the horse'

c. <code>ʒamacuyc-ə</code> 'the watch' f. <code>d²ara-n</code> 'the servant'

⁴The definite article is also responsible for subtle semantic effects that do not appear to be directly related to specificity. These are discussed by der Houssikian (1995). I do not attempt to account for these here.

⁵In chapter three I argue that subjects in spec-TP should be considered internal, where 'internal' means inside the predicate, rather than inside the VP.

If the noun bearing the article is followed by a vowel-initial clitics, such as al 'also', u 'and' and present or imperfect forms of the verb 'to be', then it takes the form -n following consonant-final forms.

(139)a. maro-n kavat-n-al godre-c-Ø

M -dt cup-dt-also break-aor-3s

'Maro also broke the cup'

b. bardez-i-n meč gadu-n-u Jun-ə gə-gərve-i-n gor garden-gen-dt in cat-dt -and dog-dt imp-fight-pst-3p prog 'The dog and cat were fighting in the garden'

The definite article and possessive agreement markers differ from case and plural suffixes in SWA in that they do not bear stress. Stress normally falls on the final syllable in SWA. The examples in (140)-(141) show the contrast between the article and possessive suffixes and the case and plural suffixes.

(140) The definite article cannot bear stress:

a.	atór	'chair'	(141)a. atór			
b.	atór-ə	'the chair'	b.	atór-əs	'my chair'	
c.	ator-nér	'chairs'	c.	ator-nér-əs	'my chairs'	
d.	ator-nér-ə	'the chairs'	d.	ator-ner-ú-s	'of/to my	
chairs'						
e.	ator-ner-ú	'to/of the chairs'	d.	atór-ət	'your chair'	
f.	ator-ner-é	'from chairs'	e.	ator-nér-ət	'your chairs'	
g.	ator-ner-é-n	'from the chairs'				

Because the definite article does not bear stress and appears outside case and plural marking, it has been suggested (Marantz, p.c.) that it should be analyzed as a clitic.⁶ Throughout the following discussion I assume following Chomsky (1993) that verbs and their arguments enter the syntax fully inflected and, for nouns, this includes the case, number and definiteness marking.

Adjectives precede the nouns they modify and do not agree with them in number or definiteness.

Adjectives can take the definite article, but only when they are interpreted as substantives, as in (143).

[Halpern 1995:150,17]

(i) a. kniga-ta 'the book' Bulgarian

b. xubava-ta kniga 'the nice book'c. moja-ta xubava kniga 'my nice book'

Compare with SWA:

(ii) a. kirk-• 'the book' SWA

b. garmir kirk-ec. (im) garmir kirk-es'the red book''my red book'

⁶Halpern (1995) discusses the status of suffixal or enclitic definite articles. Several Balkan languages have suffixal or enclitic articles. In Bulgarian, Romanian, Macedonian and Albanian, the definite article appears on the first word of a noun phrase. Halpern argues that the definite article in Bulgarian is not a true second position clitic, but rather an inflection on the head of the first constituent of the NP. The Balkan articles, exemplified here by the Bulgarian, differ from articles in Armenian in that the definite article and indefinite article appear at the end of the entire noun phrase in Armenian.

'The red one is cheap, the black one is expensive'

- b. akkad-ner-u-n təram gu-da-nk
 poor-pl-dat-dt money imp-give-1p
 'We give money to the poor'
- c. d^zuyl-ə yerpek č-i-Ø hačori-r lazy-dt never neg-be-3s succeed-neg.prtcp 'The lazy one never succeeds'

The definite article must appear on all nouns in a conjunction, (144).

- (144) a. čutagahar-ə yev yerkič-ə violinist-dt and singer-dt 'the violinist and the singer'
 - b. *čutagahar yev yerkič-ə ('the violinist and singer')
- (145) a. maro-i-n sirahar-ə yev (ir) dan.der-ə

 M -gen-dt lover-dt and 3' house.lord-dt

 'Maro's lover and her [Maro's] landlord'
 - b. *maro-i-n sirahar yev dander-ə ('Maro's lover and landlord')

(146) kal ʃapat maro-*(n) yev aram-*(ə) bidi amusnana-n
to.come week m -dt and A -dt fut get.married-3p
'Next week Maro and Aram will get married'

2.6.0.2 Definite article marks specific indefinite as well as definite noun phrases

The examples in (147)-(148) are given to show the run of the mill contexts in which the definite and indefinite articles appear, which give rise to the descriptive generalization that -a/n markes definite nouns and -ma markes indefinite nouns. The goal of this section is to show that there is more to the definite article than such examples reveal.

The nouns in (147) are all singular in form: (147a) shows that a bare N is interpreted as indefinite and nonspecific and neither singular not plural, a mass indefinite. (147b) shows that $N+m\theta$ is interpreted as a specific or nonspecific indefinite. (147c) shows that a noun bearing the definite article is interpreted as definite.

- (147) a. bardez-i-n meč es desa-nk

 garden-gen-dt in donkey see.aor-1p

 'We saw donkey(s) in the garden' [nonspecific indefinite, neither sg. nor pl.]
 - b. bardez-i-n meč es-mə des-ank

 garden-gen-dt in donkey-a see.aor-1p

 'We saw a donkey in the garden' [specific or non-specific]

c. bardez-i-n me**č** <u>e[-e</u> desa-nk garden-gen-dt in donkey-dt see.aor-1p

'We saw <u>the donkey</u> in the garden' [definite]

The nouns in (148) are all plural in form. Without an article, an unmodified plural noun has a marked interpretation, (148a), so I have added a modifying relative clause to make the example sound more natural (see section 2.7 for discussion). Although it is a somewhat marked construction, a plural noun can bear the indefinite article, (148b); the resulting interpretation is something like 'a bunch of nondistinct Xs'. If the definite article is attached to a plural, (148c), it is interpreted as definite, that is, the normal use of this sentence would be in a context where both the speaker and the hearer were familiar with the letters mentioned.

- (148) a. <u>namag-ner</u> kəre-c-i payc bedk **č-e-**Ø vor sərge-m
 letter-pl write-aor-1s but needs neg-be-3s rel.prn neg-send-1s

 'I wrote <u>letters</u> that I should not send' [specific]
 - b. heru-n <u>dun-er-mə</u> desa-Ø

 far-dt house-pl-indef see.aor-1s

 'In the distance I saw [a bunch of] houses' [group, nonspecific]
 - c. angown-in dag-ə namag-ner-ə kəda-n
 bed-gen-dt under-dt letter-pl-dt find.aor-3p
 'They found the letters under the bed' [definite]

Now we turn to examples that show that the definite article cannot be described accurately as a definite marker. First we consider possessive noun phrases, (149)-151). The contrasts between the noun phrases in the (a) and (b) examples show that in addition to definite noun phrases, *in*definite specific noun phrases bear the definite article suffix. The fact that the possessor is indefinite in the (a) examples does not change the fact that the definite article is obligatory on the entire noun phrase.

The definite article is obligatory in genitive constructions

- (149) a. yegereci-i-mə danik-*(ə) / *-(mə) church-gen-a roof-dt / -a 'a church's roof'
 - b. yegereci-i-n danik-*(ə) church-gen-dt roof-dt 'the church's roof'

⁷In SWA most postpositional phrases are also genitive constructions. In these constructions the presence of the definite article on the noun phrase changes the interpretation of the PP in different ways, in (i) from indicating direction to referring to location; in (ii) from place adverbial to argument:

⁽i) a. maro-n turs-** vaze-c-Ø

M -dt ouside-dt run-aor-3s

'Maro ran outside [from inside to outside]'

b. maro-n turs-*(*) g-*sbase-Ø gor
M -dt outside-dt imp-wait-3s prog
'Maro is waiting outside'

⁽ii) a. dup-er-ə gamurč-i-n dag-(ə) bahe-c-ink box-pl bridge-gen-dt under-dt hide-aor-1p 'We hid the boxes under the bridge'

b. gamurë-i-n dag-*(ə) lav bahvəde-l-u dez-mən e-Ø bridge-gen-dt under-dt good hide.unacc-inf-dat place-a be-3s 'Under the bridge is a good place to hide'

- (150) a. otanav-er-u baduhan-ner-*(ə)
 airplane-pl-gen_{PL} window-pl-*(ə)
 'airplanes' windows'
 - b. otanav-er-u-<u>n</u> baduhan-ner-<u>*(a)</u>
 airplane-pl-gen_{PL}-dt window-pl-dt
 'the airplanes' windows'
- (151) a. yeraxa-i-mə kar-ad² d²arig-*(ə) / *-(mə) child-gen-a pick-ppt1 flower-dt / -a 'a flower picked by a child'
 - b. yeraxa-i-n kaw-adz dzawig-*(ə) / *-(mə) child-gen-dt pick-ppt1 flower-dt / -a 'the flower picked by the child'

In the examples in (6) as well we see that in partitive constructions the definite article must appear on quantificational proforms and on the classifier. In each case the noun phrase is specific and not definite.

- (152) a. oto-ner-e-n yerek had-*(ə) koʁ-c-ve-c-an car-pl-abl-dt three cl-dt steal-caus-pass-aor-3p 'Three of the cars were stolen'
 - b. yeraxa-ner-e-n kani had-*(ə) gə-kənana-n gor child-pl-abl-dt few cl-dt imp-sleep-3p prog 'A few of the children are sleeping'
 - c. nergayacucič-ner-e-n ʃad-er-*(ə) č-ega-n representative-pl-abl-dt many-pl-dt neg-come.aor-3p Many of the representatives did not come'
 - d. kini-i-t med^z mas-*(a) xame-c-ink
 wine-gen-2poss large part-dt drink-aor-1p

'We drank most of your wine'

Finally, we see that speakers strongly prefer the definite article on plural subjects, even where the subject has an indefinite interpretation and the whole sentence has an existential interpretation. This is particularly so when the verb is transitive or unergative. Without the article, the sentence is not fully acceptable. With the article it is ambiguous, as indicated in the glosses.

- (153)a. pəʒiʃg-ner-*(ə) gə-kankade-i-n vor pavarar elektraganutyun doctor-pl-dt imp-complain-pst-3p comp enough electricity čə-ga-r hivantanoc-ner-u-n hamar neg-exist-pst.3s hospital-pl-gen-dt for '(The) doctors were complaining that there was not enough electricity for the hospitals'
 - b. usanor-ner-*(ə) garavarutyan tem gə-poroke-i-n gor student-pl-dt government.gen against imp-complain-pst-3p prog '(The) students were protesting against the government'
 - c. zadig-i aden gin-er-*(a) vorpanoc abrank sørge-c-in
 Easter-gen time woman-pl orphanage goods send-aor-3p
 'At Easter (the) women sent stuff to the orphanage'

But, with verbs that are arguably unaccusative or passive, bare plural subjects are acceptable. Word order also seems to play a role; when the bare plural subject is not sentence-initial the sentence is acceptable. The sentence is much less acceptable when the bare plural subject comes first in the sentence.

(154) a. 301/0v-i-n lezvaked-ner masnagce-c-an meeting-dat-dt linguist-pl participate-aor-3p 'Linguists participated in the meeting'

- b. ??lezvaked-ner 30x0v-i-n masnagce-c-an
- (155)a. vank-e-n vanagan-ner yega-n kyuʁ-i-n yegeʁeci-n monastery-abl-dt monk-pl come.aor-3p village-gen-dt church-dt noroke-l-u hamar repair-inf-dat for 'Monks came from the monastery to repair the village church'
 - b. *vanagan-ner vank-e-n yega-n kyur-i-n yegereci-n noroke-l-u hamar
- (156)a. tarum-i-n are ig-ner mare-c-an funeral-g/d-dt girl-pl faint-aor-ep 'At the funeral girls fainted'
 - b. *arcig-ner tarum-i-n mare-c-an

These facts resemble the bare plural facts discussed in Longobardi (1994). In his discussion of bare plurals Longobardi cites Italian data that show that the definite article is required on (non-pronominal) subjects with definite or generic interpretation but not on internal arguments with specific existential interpretation. He accounts for this by saying that bare plurals have an empty D node, which must be governed by the verb (otherwise the structure violates the ECP). But while Longobardi compares subjects with objects, the SWA data suggest that internal subjects, which I assume are in specTP, pattern with internal objects in permitting bare plurals.

So we see that there are several cases where the noun phrase bears the definite article, but in fact is not interpreted as a definite, rather it has a specific indefinite

interpretation. From this we can conclude that an expression that bears the definite article does not obligatorily have a definite interpretation, but is always specific.

2.6.0.3 Definite article in relative clauses

We have just seen that noun phrases that bear the definite article are not always interpreted as definite. Consistent with this we find that in relative clauses the definite article is not sufficient to render the clause definite, and the presence of a demonstrative is required,⁸ further evidence that the definite article is in fact a marker of specificity.

SWA uses two strategies to form relative clauses: the one given here is head-initial and uses a relative pronoun, the other uses the possessive construction and is discussed in section 2.6.2 where we look at agreement in genitive constructions.

- (157) a. ??(ayn) tankaran-ə vor aycele-c-ink saryan-i-n kord^z-er-u-n that₃ museum-dt rel.prn visit-aoir-1p S-gen-dt work-pl-gen-dt havakad^zo-n uni-Ø collection-dt have-3s

 'The museum that we visited has a collection of Saryan's works'
 - b. kord^zavor-ner-ə ?*(ayt) dup-er-ə vor navag-i-n meč worker-pl-dt that2 box-pl-dt rel.prn boat-gen-dt in bah-v-adz e-i-n kamyon-i-n vəra tər-in store-pass-ppt1 be-pst-3p truck-gen-dt on put.aor-3p 'The workers put the boxes that were stored on the boat onto the truck'
 - c. maro-n g-əse-Ø vor ?*(ayn) asagerd-ner-ə vor M -dt imp-say-3s rel.prn that3 student-pl-dt rel.pm usa-c-an tas-e-n hedo bedk e-Ø ges 3am məna-n

⁸These facts were brought to my attention by Anaïd Donabédian.

be.late-aor-3p class-abl-dt after needs be-3s half hour stay-3p 'Maro says that the students that were late must stay half an hour after class'

What is interesting is that the demonstrative ayn in this context is not deictic in the sense that the expressions, as indicated in the glosses, do not have the interpretation in which the hearer expects the speaker to point out the relevant objects. The function of the demonstrative is to make the expression definite, which suggests that -a/n alone is not able to make a noun phrase definite.

2.6.1 Definite article as an agreement marker in DP

2.6.1.1 Inherently definite expressions that require the definite article

Now let us look at examples of nominal expressions that bear the definite article and where the whole nominal expression is indeed definite, but where it does not seem right to say that it is the article that is responsible for the definiteness. These cases include proper names and deictic expressions, and the third person pronoun *ink*.

2.6.1.1.1 Proper names

Armenian, like Modern Greek and some dialects of Italian, Hungarian and German⁹, requires proper names to bear the definite article in any argument position. One SWA grammar claims that in fact it is not correct to use the definite article on a name in subject position (Feydit 1969), another reports that the definite article is optional in subject position (Bardakjian and Thomson). However, all but one of the native speakers who have given me judgements use the definite article on proper names in

⁹See examples in Szabolsci 1994.

all argument positions and do not accept expressions where the definite article is absent, (158).¹⁰

(158) Definite article required on proper names

- a. maro-*(n) yerpek č-i-Ø kankadi-r SUBJ m -dt never neg-be-3s complain-neg.prtcp 'Maro never complains'
- c. <u>ani-*(n)</u> yev <u>aram-*(ə)</u> kal ʃapat bidi amusnana-n A -dt and A -dt coming week fut marry-3p 'Ani and Aram are getting married next week'
- b. polor afagerd-ner-ə maro-*(n) des-an DO
 all student-pl-dt M -d see-3p
 'All the students saw Maro'
- c. maro-i-*(n) nəver-mə xərge-c-i IO
 M -dat-dt gift-a send-aor-1s
 'I sent Maro a gift'
- d. saryan-i-*(n) nəgar-ner-u-n med² mas-ə GEN
 S -gen-dt painting-pl-gen_{PL}-dt large part-dt
 ayt tankaran-i-n með gə-kədnə-v-i-Ø
 that² museum-gen-dt in imp-find-pass-3s
 'Most of Saryan's paintings are found in that museum'
- e. sosig-e-*(n) namag-mə əsda-c-a-Ø ABL
 S -abl-dt letter-a receive-aor-3s
 'I got a letter from Sosig'

¹⁰I have not been able to find any acceptable cases of the definite article appearing on nouns bearing the instrumental suffix, -ov.

2.6.1.1.2 Deictic expressions

Noun phrases that are introduced by a demonstrative pronoun¹¹ also obligatorily take the definite article at their right edge. The only exception to this seems to be nouns with instrumental case, (159f).

- (159) a. <u>ays dup-*(ə)</u> xəncor-ov gə-lecne-m gor this box-dt apple-instr imp-fill-1s prog 'I am filling this box with apples'
 - b. ayt vank-*(ə) yot-erort tar-u-n ∫in-v-ad² e-r
 that₂ monastery-dt seven-ordinal century-gen-dt build-pass-ppt be.pst.3s
 'That monastery was built in the eighth century'
 - c. <u>ayn usan.or-ner-u-*(n)</u> anun-er-ə **č-e-m** kide-r that₃ student-pl-gen_{PL}-dt name-pl-dt neg-be is know-neg.prtcp 'I don't know those students' names'
 - d. Maro-n ayn karakaked-i-*(n) namag-mə gə-kəre-Ø gor M dt that3 politician-gen-dt letter-a imp-write-3s prog 'Maro is writing a letter to that politician'

Nominative deictic expressions:

	sg. pronoun/modier	pronoun	plural pronoun
1 (this)	a(y)s	asi(ga)	asonk
2 (that)	a(y)t	adi(ga)	adonk
3 (that)	a(y)n	ani(ga)	anonk

¹¹There are several forms of the deictic pronouns. The forms in the first column can be used to introduce a noun or as pronouns. The others are 'stand alone' pronouns only. The forms given here are nominative only.

- e. ays dup-er-e-*(n) xəncor ar-ink this box-pl-abl-dt apple take.aor-1p 'We took apples from this box'
- f. Ani-n ays murj-ov-(ə) pazag-ə godre-c-Ø

 A -dt this hammer-instr-dt glass-dt break-aor-dt

 'Ani broke the glass with this hammer'

2.6.1.1.3 The pronoun¹² ink

The third example of a nominal expression which is inherently definite and must bear the definite article is the pronoun ink.¹³ This pronoun is third-person, singular, and is used to refer to a person who has been introduced into the discourse when the antecedent is 'close', (160)-(161).¹⁴

When it is in subject or direct object (i.e., when it is accusative-marked, *z-ink*) position, *ink* requires the definite article. The other third-person pronoun, *an*, never

Ink is also used to form the reflexive pronouns; for example:

ink-z-ink-əs ink-z-ink-ət ink-z-ink-ə self-acc-self-1.poss self-acc-self-2.poss self-acc-self-dt 'myself [nom]' 'her/himself [nom]'

Interestingly, it is the morpheme that corresponds to auto- in compound words, such as the following:

ink.n-a-farz ink.n-a-gens-a-kər-utyun ink.n-a-ser self-cx-move self-cx-life-cx-write-nominal self-cx-love 'autobiography' 'selfish'

¹²I have encountered teachers who take the view that *ink* is somehow not good Armenian, that is, not prescriptively correct. They claimed that only the third person singular pronoun *an* should be used. However, as all native speakers regularly use this pronoun, I consider it to be part of the spoken language.

¹³I have come across many examples of *ink* and the accusative form *z-ink* without the article, but these have always been in written rather than spoken Armenian.

 $^{^{14}}$ The examples given are suggestive; I have not yet determined the constraints on ink's use.

takes the definite article. Interestingly, neither the plural form of *ink*, *irenk*, nor any of the forms that take a case suffix (GEN *ir*, DAT: *iren*, ABL *ir-me*, INSTR *ir-mov*) take the definite article suffix.

- (161)a. Ani-n <u>ir-(*ə)</u> bayusag-ə gorsən-cu-c-ad^z e-Ø
 A -dt 3'.gen bag-dt lose-caus-aor-ppt1 be-3s
 'Ani has lost her [Ani's/*someone else's] bag'
 - b. Ani-n <u>anor-*a</u> bayusag-a gorsancu-c-ad^z e-Ø
 A -dt 3.gen-dt bag-dt lose-aor-ppt1 be-3s
 'Ani has lost her [*Ani's/someone else's] bag'
- (160)a. Maro-n ani-i-n əs-av vor <u>ink-*(ə)</u> bidi **č**ə-həravir-vi-Ø
 M -dt A -dat-dt say-aor.3s that 3'-dt fut neg-invite-pass-3s
 'Maro said to Ani that she [Maro or Ani] will not be invited'
 - b. Maro-n ani-i-n əsav vor <u>an</u> bidi **č**ə-həravir-vi-Ø
 M -dt A -dt say-aor.3s 3'-dt fut neg-invite-pass-3s
 'Maro said to Ani that she [*Maro or *Ani] will not be invited'

While I have not looked into the distribution and interpretation of *ink* in any detail, I think that the obligatory presence of the definite marker might be explained as follows: *ink* and *zink* are the nominative and accusative forms of a 'defective' pronoun, one that is a NumP rather than a DP. In order to become a DP, the definite article must be affixed.¹⁵

¹⁵Abney (1987) classifies pronouns and articles as DPs that contain only the category D. However, Ritter's (1995) analysis of pronouns in Hebrew shows that there are two types of pronouns, those that are D and those that are Num. Evidence for this comes from observing that third-person pronouns in Hebrew can cooccur with the definite article in demonstrative expressions. She argues that these pronouns are of the category Num and therefore can combine with the definite article that is of the category D.

2.6.2 Agreement inside DP

In the preceding sections we examined the distribution of the definite article. It is required in possessive constructions, noun phrases containing demonstratives, on proper names, on heads of relative clauses and on the pronoun *ink*. In this section I propose an explanation for this distribution based on the characterization of the definite article as an agreement morpheme.

Without going into a detailed semantic analysis of names or demonstrative expressions, it seems intuitively clear that these two types of nominals are definite on their own, that is they do not require a definite article to make them definite. This is confirmed by the fact that the interpretation of a proper name like Maro is not made more definite with the addition of the definite article. That is Maro-n is not comparable to the Mary in English (as in, e.g., the Mary that lives next door is annoyed with the Mary that lives downstairs). I take this to mean that the string Maro-n is semantically on a par with Mary, in other words, Maro is not a common noun that is made into a uniquely referring proper noun by means of the addition of the definite article. Similarly, ayt gin-ə/that woman-dt/'that woman' is not made more definite by the addition of the definite article, it is simply ill-formed without the article. Likewise, the interpretation of the pronoun ink, discussed just above, is not affected by the addition of the definite article; the presence of the article is a morphological requirement of the lexical item. 16

It seems, then, that the definite article is a redundant addition to the noun phrase consisting of a proper name or a deictic expression. Natural languages display just

¹⁶ Just as some nouns in English are intrinsically plural and require the plural marker -s, e.g., scissors, trousers, glasses.

such redundancy in agreement or concord relations, and at least two authors have analysed as elements of agreement and concord relations the definite article and possessive agreement elements of languages completely unrelated to SWA. Green (1991) analyses the possessive suffixes in the Misulmalpan language Miskitu as agreement elements¹⁷, and Szabolsci (1994) proposes that the presence of the definite article in Hungarian is the result of a concord process. We discuss their analyses below. Assuming the complex DP structure described in section 2.3, I propose to analyze the definite article marker as an agreement marker that appears when an NP is in a spec-head relation with a specific noun phrase in specifier position of DP. The argument in specDP can be overt or phonologically null.

2.6.2.1 Basic facts of nominal agreement

The basic forms of possessive¹⁸ construction in Standard Western Armenian are given in (163). Note that the third person singular agreement marker has the same form as the definite article. I take this to indicate that the 3sg form is the 'default form' (as is often assumed regarding the 3sg form in verbal agreement); in terms of features I will assume this is accounted for by saying that the specification for the

¹⁷Similar proposals have been made for Turkish (Kornfilt 1984), Dagur (Hale and Ning 1996) and Hebrew (Ritter 1988, 1991, Siloni 1989, 1990).

¹⁸It should be noted that the morpheme termed the "possessive" suffix in this discussion can indicate something other than possession. In other words, there are cases such as those in (ii) in which the N+possessive suffix does not occur with a genitive possessor, and is interpreted more as a deictic/spatial index. Roughly speaking, Armenian distinguishes between 'this'/1st person ay-s, 'that'/2nd-person ay-t, and 'that'/3rd person ay-n.

⁽i) asxarh-s
world-poss.1sg
'this world' [could also mean literally 'my world']

⁽ii) in tu-u-s bedk [in tu on its own means 'why'] what-dat-poss.1sg needs 'what's it to me?'

Person feature of *dun-ə* is [-deictic], while the specification for the possessive forms *dun-əs/-ət* is [+deictic].

(1)	63)
-----	-----

	GEN	house-POSS[AGR]			
1sg	(im)	dun-əs	'my house'		
2sg	(ku)	dun-ət	'your house'		
3sg	anor	dun-ə	'her/his house'	dun-ə	'the house'
3'sg	ir	dun-ə	'her/his house'		
1pl	(mer)	dun-er-ni.s ¹⁹	'our house(s)'		
2pl	(cer)	dun-er-ni.t	'your (pl) house(s)'		
3pl	anono	dun-er-ni.n	'their house(s)'		
3'pl	irenc	dun-er-ni.n	'their house(s)'	dun-er-ə	'the houses'

2.6.2.1.1 Pro-drop and nominal agreement

As indicated in the paradigm, there is pro-drop in SWA in genitive constructions when the possessor is the first or second person. As in pro-drop²⁰ in sentential

¹⁹According to Feydit the plural possessives are formed using the suffixes (article possessif in his terminology) -nis, nit, and -nin, without adding the plural marker -(n)er, except when the noun is monosyllabic (Feydit 1969:149, 151). When the plural and the possessive marker are present, the noun phrase is ambiguous; the possessed noun can be interpreted as either plural or singular, as in (i).

⁽i) dun-er-nis house-pl-1pl.poss 'our house(s)'

²⁰I use the term pro-drop to refer to those languages like Italian in which subject-verb agreement suffices to identify the subject and the subject is not present unless emphasized in some way. I do not include Chinese-type pro-drop phenomena for the purposes of this discussion.

contexts, the presence of the possessive suffix is obligatory and the presence of the genitive pronoun means that the speaker wants to emphasize the possessor in some way, (164).

- (164)a. im hotvad^z-əs əntun-v-ad^z č-e-r

 1s.GEN article-1s.poss accept-pass-ppart₁ neg-be-pst.3s

 'My article was not accepted'
 - b. ku dan.dir.uhi-t xent e im-(in)-əs ʃad 2s.GEN hous.lord.fem-2s.poss crazy be.3s 1s.GEN-x-1s.poss very azniv e-Ø nice be.3s 'Your landlady is crazy, mine is very nice'

2.6.2.1.2 Nominal agreement in PPs

In postpositional constructions the noun phrase that would be considered the complement of the preposition in a language like English appears either in genitive case as the subject of the possessive expression, or in the dative case. When the subject is in the genitive case, there is agreement on the postposition, just as in the possessive constructions above. When the subject is marked dative, however, possessive agreement is not allowed, (165).

b. anor mod-a anonc mod / *-a
3s.GEN near-dt 3p.DAT near / -dt

'near her/him'

2.6.2.1.3 Nominal agreement in participial relative clauses

As in Turkish,²¹ Dagur,²² and Hungarian,²³ relative clauses in SWA are expressed using nominal agreement constructions:²⁴

- (166) a. (im) kər-ad² kirk-əs

 1GEN write-ppt₁ book-1.s.poss

 'the book that I wrote'
 - b. (ku) kər-ad² kirk-ət
 2GEN write-ppt₁ book-2.s.poss
 'the book that you wrote'
 - c. anor/ir/maro-i-n kər-ad² kirk-ə
 3gen/3'gen/Maro-gen-dt write-ppt₁ book-3.s.poss/dt
 'the book that she/she_i/Maro wrote'

2.6.3 Derivations of DP-internal agreement

Now let us look at the derivations that underlie the constructions involving the agreement marker given above. The derivations are based on the following assumptions: (a) the article is an agreement marker; (b) it is the spellout of the feature Person that triggers movement to D; (c) the person feature is responsible for

²¹Kornfilt (1984), Poole (1993), Hankamer, et. al. (19xx).

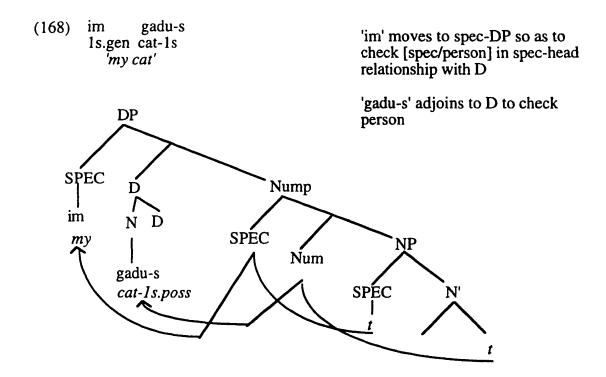
²²Hale and Ning (1996).

²³Szabolsci (1987, 1994).

²⁴Bert Vaux informs me that all of the Southwest Turkic languages use this type of relative clause.

the specific interpretation. We first consider the SWA examples in (168) and (169) and then turn to examples from Miskitu and to Green's (1991) analysis of them.

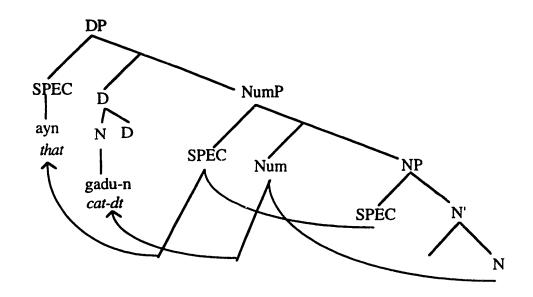
Consider the derivation in (168). The noun raises to Num and then to D to check its φ-features, Number and Person, respectively. I assume that N raises to D to check its person features, and that genitive case on the possessor is checked when it raises to specDP (this Case checking parallels nominative or accusative case checking in TP/AgrSP or AgrOP, respectively, where Case is checked only when V raises to the functional projection to whose specifier the argument has raised).



The derivation in (169) schematizes the DP-internal agreement relation with a demonstrative. I assume that the features checked in the derivation in (169) are

Person and Number. This derivation differs from the derivation of the possessive DP above in that the argument in specifier position is not genitive, but nominative.²⁵

(169) ay.n gadu-n that cat-dt 'that cat'



'ayn' moves to spec-DP to check [+deictic] in spec-head relationship with D

'gadu-n' adjoins to D to check its [+deictic] feature, spelled out as '-n'

While it may seem unusual to characterize the relationship between a demonstrative and the noun that follows it as a specifer-head relationship rather than a D-NP relationship, there are two reasons why this might be a reasonable characterization. First, as far as as a semantic analysis is concerned, demonstrative and possessive constructions are similar in that 'Mary's book' is the book that is associated with

²⁵In this respect it resembles Miskitu, Turkish and Hungarian, in which the possessor is nominative (or optional dative in the case of Hungarian, see Szabolsci (1987, 1994).

Mary, whether because she is the owner, author or recipient of the book as a gift. Similarly, 'this book' is the book associated with this place. In fact in SWA, although the possessive suffixes are primarily used to agree with genitive arguments, they can also be used to indicate location, as in (170), although this is not common usage.

- (170) a. asxarh-əs təzvarutyun-ner-ov lecun e-Ø
 world-1poss difficulty-pl-instr full be-3s
 'This world is full of difficulties' [can also mean 'my world ...']
 - b. mart-ig-((n)er)-əs mah.ganacu e-nk man-pl²⁶-pl-1s.poss mortal be-1p '[We] humans are mortal'

An interesting fact regarding the demonstratives and possessive pronouns is illustrated in (171). Apparently, even though it is possible to point to something that near the hearer (so the second-person demonstrative *ayt* would be appropriate) and yet it belongs to the speaker, it sounds odd to have the morphological mismatch.

- (171) a. im a(y)s dun-əs also: a(y)s im dun-əs

 1gen this house-1s.poss

 'this house of mine'
 - b. a(y)s dun-əsthis house-1s.poss'this house of mine'
 - c. ?im a(y)t dun-əs

 1gen that2 house-1s.poss
- (172) a. ku a(y)t Jun-ət also: a(y)t ku Jun-ət

²⁶The -ig plural is not a productive suffix and so is sometimes doubled by the regular plural suffix -(n)er.

2gen that₂ dog-2s.poss 'that dog of yours'

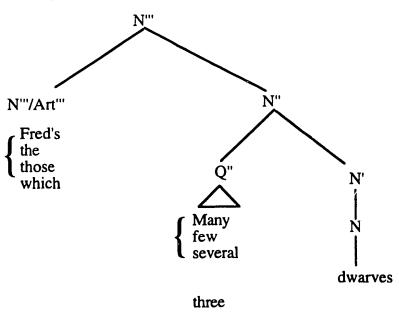
- b. a(y)t ∫un-ətthat₂ dog-2s.poss'that dog of yours'
- c. ?ku a(y)s Jun-ət

 2gen this dog-2s.poss

 'this dog of yours'

Syntactically, demonstratives and possessives have been considered similar in English, for example. Jackendoff (1977) divides the prenominal specifiers of N into two groups, grouping demonstratives and possessives in the same category, generated in the specifier of NP, (173).

(173) Jackendoff (1977:105)



2.6.3.1 Nominal agreement in Miskitu

Green (1991) also considers Miskitu demonstratives and possessors to be on a par. Like possessors, demonstratives in Miskitu appear before the noun and trigger 3rd-person agreement on the noun (construct state morphology). Let us look at the Miskitu data in detail, as it shares many similarities with the SWA data.

(174) Miskitu possessive agreement

âras 'horse'32

	pronoun	horse-Construct		
1s	(yang)	âras-ka	'my horse'	
2s	(man)	âras-ki	'your horse'	
3s	(witin)	âras-kam	'her/his horse'	
1p	(yang nani)	âras-ka	'our horse'	
2p	(man nani)	âras-ki	'your [pl] horse'	
3р	(witin nani)	âras-kam	'their horse'	

(175) SWA possessive agreement

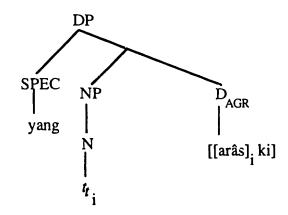
pronoun	house-poss.agr	
1s (im)	dun-əs	'my horse'
2s (ku)	dun-ət	'your horse'
3s anor/ir	dun-ə	'her/his horse'

 $^{^{32}}$ In the Miskitu examples, \hat{a} represents a long a. Green's (1991) glosses use the following notation: 1C = 1st person, construct state; 1PS = 1st person singular, nominative agreement.

1p mer	dun-ə	/	(mer)	dun-er-nis	'our house(s)'
2p cer	dun-ə	/	(cer)	dun-er-nit	'your house(s)'
3p anonc/irenc	dun-ə	/	(anonc/ire	enc) dun-er-nin	'their house(s)'

Green proposes that the forms in (174) are derived as shown in (176). The bound morpheme that forms the construct state merges with the NP that raises to DAGR. This morpheme "marks the special spec-head relationship which realizes abstract Case on the 'subject'" (Green 1991:9). The definite article *ba*, on the other hand, is not a bound morpheme and thus is not assumed to participate in the agreement relationship with the possessor, or with the demonstrative.





(177) Miskitu: agreement with demonstrative

- a. naha âras-ka this horse-3:C
- b. baha âras-ka that horse-3:C

'this horse'

'that horse'

- c. *naha âras this horse
- d. *baha âras that horse

e. âras ba horse DEF 'the horse'

- f. baha âras-ka ba that horse-3:C DEF 'that horse'
- () SWA agreement with the demonstrative
 - a. ays dun-ə
 this house-dt/3s.poss
 'this house'
- b. ayt dun-ə that house-dt/3s.poss 'that house'

2.6.3.2 Agreement with wh expressions in specDP

We can now apply the nominal agreement analysis to another instance in which the definite article is obligatory. In wh expressions that correspond to English which NP, as opposed to what or who (179), the definite article is required. In the analysis proposed here this is explained by assuming that vor 'which' is specific, i.e., [±deictic], while ov 'who' and inč 'what' are not specified for person. They are nonspecific, or in Pesetsky's terms, non-D-linked noun phrases.³³

³³The term *D-linked* means discourse-linked. D-linked wh terms are appropriate in situations where the discourse supplies the set from which the question asks which one, and are not appropriate in an out of the blue context. The non-D-linked expressions what and who, on the other hand, are appropriate in an out of the blue context. Essentially this means that d-linked expressions are specific in the sense assumed here, and non-d-linked expressions are nonspecific. Pesetsky distinguishes these two types of wh expression in his account of LF movement of wh phrases.

- (179) a. vor hotvad^z-*(ə) garta-c-ir which article-dt read-aor-2s 'Which article did you read?'
 - b. vor karakaked-ner-*(a) xose-c-an which politician-pl-dt speak-aor-3p 'Which politicians spoke?'
 - c. maro-n vor təraci-ner-ə həravire-c-Ø

 M dt which neighbor-pl-dt invite-aor-3s

 'Which neighbors did Maro invite?'

As expected, if the nonspecific wh word in&' what' is used, the definite article cannot appear on the noun phrase that follows. The sentences in (180) are not fully grammatical, but the alternative that has the definite article is completely ungrammatical, (180b). As indicated, the interpretation of in&x 'what x' is not as in English, a version of 'which x', but 'what kind of x'. This interpretation is expected given the characterization of bare NPs as denoting types rather than individuals.

- (180) a. seran-i-n vəra inč kavat-(*ə) tər-ir table-gen-dt on what cup-dt put.aor-2s 'What kind of cups did you put on the table?'
 - b. inč kirk-(*ə) gə-d²axe-n what book-dt imp-sell-3p 'What kind of books do they sell?'

2.6.3.2.1 Agreement with quantifiers

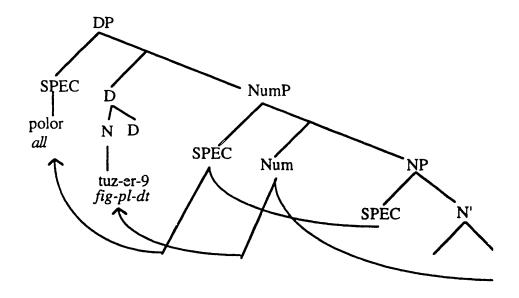
In quantifier phrases that contain the strong quantifier *polor* 'all' we find that the definite article is obligatory on the quantified noun phrase, (181). If we assume that

the quantifier raises to specDP to check its Person feature, then we can use the analysis of nominal agreement in DP to cover this case as well, (182).

- (181) a. polor yerkič-ner-*(ə) sayat nova-i-n yerk-er-ə gə-sire-n all singer-pl-dt S N -gen-dt song-pl-dt imp-like-3p 'All singers like Sayat Nova's songs'
 - b. bəzdig-ner-ə polor tuz-er-*(ə) ger-ad² e-n small-pl-dt all fig-pl-dt eat.aor-ppt1 be-3p 'The children have eaten all of the figs'
 - c. Maro-n polor a∫agerd-ner-u-*(n) hantimane-c-Ø

 M -dt all student-pl-gen-dt scold-aor-3s

 'Maro scolded all of the students'
 - polor tuz-er-9 all fig-pl-dt 'all the figs'



What is interesting and problematic for this analysis is that the other strong³⁴ quantifiers, amen 'each, every' and yurakanĕyur 'each,' do not require the definite article on the quantified noun phrase. In fact, the presence of the definite article depends on whether the quantifier phrase is in subject or object position; it is disallowed when the quantified noun phrase is in subject position and is obigatory when the quantified noun phrase is in object position. For this reason the data from quantifier phrases needs further study.

2.6.3.2.2 Agreement with pro subject in specDP: proper names

The N to D raising analysis can be applied to the case of the definite article on proper names if we introduce an empty element in the specifier of DP, a *pro* subject. We can justify positing such an empty subject by analogy with verbal pro-drop familiar from Italian. As mentioned above, the interpretation of *Maro-n/Maro-the* is not equivalent to English 'the Mary', which is used to achieve an emphatic or contrastive effect. Similarly, in pro-drop languages, when the subject is null and only the inflectional ending is present, no emphatic or contrastive interpretation is available. If the subject is overt, however, the subject is understood in some marked way. Consider the examples in (187) and (188).

(187) a. <u>pro</u> Maro<u>-n</u> čutag gə-nəvake-Ø SWA

M -dt violin imp-play-3s

'Maro plays the violin'

b. ayn Maro-n čutag gə-nəvake-Ø

³⁴I use the terms weak and strong in the sense of Milsark (1974, 1977): a quantifier is strong if it cannot appear in subject position of an existential sentence; it is weak if it can appear in the subject position of an existential sentence.

That Maro [e.g., that lives next door to as opposed to the one that lives downstairs] plays the violin'

- (188) a. <u>pro</u> cant<u>-o</u> nella doccia *Italian* sing-1s in.the.fem shower
 - b. <u>io</u> cant<u>-o</u> nella doccia
 I sing-1s in.the.fem shower
 'I [as opposed to my husband] sing in the shower'

I will therefore tentatively posit an empty *pro* specDP subject for all noun phrases bearing the definite article that do not have a possessor or demonstrative.

2.6.3.2.3 Agreement with indefinite possessors

According to the analysis proposed here, the definite article signals that the noun that bears it is in an agreement relation with a specific noun phrase in specDP. One question that arises is what happens when the argument in specDP is indefinite. The prediction would be that the possessor would necessarily be specific, since according to our assumptions, an argument is not licensed in specDP unless it has Person features. As mentioned above (section 2.6.0.3) regardless of whether the genitive argument bears the definite or indefinite article, the possessed noun phrase must bear the definite article or possessive agreement suffix. This is shown in the examples in (189) below.

(189) a. hoviv-i kəlxarg-Ø/-mə/*-ə gə-pəndre-m gor shepherd-gen hat-Ø/-indef/-dt imp-look.for-1s prog 'I'm looking for shepherd hat(s)/a shepherd hat/*the shepherd hat'

b. hoviv-i-mə kəlx.arg-*(ə) / -*mə gə-pəndre-m gor shepherd-gen-indef hat-dt/-indef imp-look.for-1s prog 'I'm looking for a [specific] shepherd's hat'

At first glance this may look like a problem for the analysis, but in fact I think that, without going into a detailed discussion of the semantics of possessive noun phrases with indefinite possessors³⁵ we can appeal to Enç's notion of relational specificity (according to which a referent that is in an appropriate relation with another is deemed to be specific) and argue that the possessed item is the kind of relationship with its possessor that puts it in the class of relational specifics.

In English the expression 'a shepherd's hat' is ambiguous. It can mean a certain type of hat usually worn by shepherds, or it can mean a hat belonging to some shepherd. In SWA the former is expressed using a possessor that is genitive but lacks an article, (189a). If the indefinite article is present, (189b) the expression is ambiguous, but the preferred reading is one where the hat belongs to some particular shepherd. It is therefore not surprising that the definite article is obligatory when the possessor is a certain shepherd, as it is the agreement marker associated with the specific reading. But the fact that the nonspecific reading is also available is a problem, one for which I do not have a solution.

³⁵For such details see Woisetschläger 1983.

2.6.3.3 The definite article as evidence of concord (Szabolsci 1994)

An alternative to the agreement analysis proposed would be to follow Szabolsci (1994) and consider the presence of the definite article to be evidence of a concord relation. Szabolsci proposes that "the \pm definiteness of the noun phrase is really determined within (N+I)P [see example (196)] and the form of the article D is the result of a concord-like process, in interaction with D deletion"³⁶. Her argument regarding the definiteness of the complement of D and the appearance of the definite article a(z) is based on data from Hungarian that is some respects quite similar to the SWA data discussed in section 2.6.0.2. That is, there are cases in Hungarian where the presence of the article does not contribute anything to the interpretation, as in (190) and (191). On the other hand, there are examples such as (192) and (193) where the presence of the article does make a difference. (Compare these examples to the SWA sentences given in (151), repeated below, in which the N+det is ambiguous as to whether it is specific or definite.)

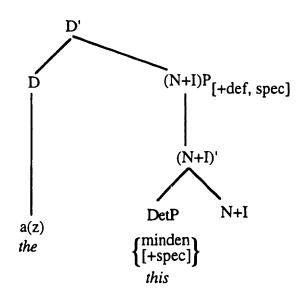
- (151) a. yeraxa-i-mə kar-ad² d²arig-<u>*(ə)</u> / <u>*-(mə)</u> child-gen-a pick-ppt1 flower-dt / -a 'a flower picked by a child'
 - b. yeraxa-i-n kaw-ad² d²awig-*(ə) / *-(mə) child-gen-dt pick-ppt1 flower-dt / -a 'the flower picked by the child'
- (190) a [vel-ed való] minden/ezen/melyik találkozás the with-2sg being ever/this/which meeting 'every/this/which meeting with you'

³⁶Szabolsci (1994:219).

- (191) [vel-ed való] minden/ezen/melyik találkozás with-2sg being ever/this/which meeting 'every/this/which meeting with you'
- (192) a találkozás the meeting 'the meeting'
- (193) találkozás meeting 'a meeting'

In Szabolsci's analysis DPs have the structure given in (196), where Det is the category that includes quantifiers such as *minden* 'every', *valamennyi* 'each', *ezen* 'this', and D includes only the article. She assumes that DetP can consist of the features [\pm definite] and [\pm specific]. Depending on the feature composition of DetP, D will have content or not: [\pm specific, \pm definite] selects a(z) 'the'; [\pm specific] selects \emptyset (Szabolsci 1994:220).

(196) [=Szabolsci's (101b)]



The SWA examples in (151) likewise demonstrate that in certain environments, where the noun phrase is possessive for example, the presence of the article does not rule out a specific indefinite interpretation. In other situations, the presence of the definite article clearly makes a difference in interpretation.

Szabolsci argues that the article is in fact always present when the (N+I)P is specific, and that its absence is due to a filter that rules out contiguous strings of the form D Det. If nothing intervenes between D and Det, then the article must be deleted.³⁷ This deletion takes place at Phonetic Form, and so does not affect interpretation.

Although there are similarities between the SWA and Hungarian data, I do not think that Szabolsci's analysis of the definite article a(z) can successfully account for the definite article in SWA. This is because the distribution and interpretation of the definite article in SWA seems to depend on the presence of the article and the position of the noun phrase in the clause and not, as far as I can tell, on any PF level considerations.

2.6.4 Conclusion

In this section we have seen that the same type of feature-driven movement analysis used to account for derivations of sentences can be applied to arguments in the nominal domain. By characterizing the article and possessive agreement suffix as the spellout of the ϕ -feature Person ([-deict] and [+deict], respectively) we account for the similarity in pro drop in verbal and nominal constructions, and for the

³⁷Szabolsci (1994:210).

obligatory presence of the definite article on inherently definite noun phrases such as proper names and the pronoun *ink*.

2.7 Plurals

Informally speaking, in SWA the plural suffix is added to the noun when there is some sort of focus on the individual referents of the noun phrase, and not simply when a nominal expression refers to more than one thing. In this section I want to explore the relation between this informal descriptive generalization and the notion of specificity.

Clearly if the individual referents of a plural noun phrase are in some way focused, one would expect that the noun phrase would have a specific interpretation, since it is difficult to imagine a scenario in which you do not presuppose the existence of an individual (by using a nonspecific noun phrase) and yet somehow focus attention on it as an individual (by using the plural suffix). However this expectation is not fulfilled. Bare plurals are particularly tricky. The judgements that are clear and consistent show that bare plurals are excluded from subject position of sentences with generic interpretation. Judgements that are less consistent suggest that bare plurals are excluded from subject position of transitive and unergative verbs, even with a specific indefinite reading, and that bare plurals are acceptable in object position and subject position of non-transitive verbs (unaccusative and passive verbs). In addition it seems to be unacceptable to refer to a bare plural's referents using a plural pronoun. The explanation I propose for this set of facts is to say that bare plurals are NumPs that have the specification [+pl], but have no person specification.

This explanation relies on the argument in chapter three that person features are checked in AgrP, and that this external position is the location of generic subjects and for subjects of transitive verbs. Being unspecified for Person means that bare plural subjects cannot raise to to SpecAgrP position, but raise to specTP only in order to check Number. Lacking person specification also accounts for the incompatibility of bare plurals with plural pronouns, which I assume are DPs fully specified for person and number.

2.7.1 The plural suffix

The plural marker in Standard Western Armenian takes the forms shown in (200). The form -(n)er is the most productive in the modern language.¹ In this section we examine the distribution and interpretation of nouns that are overtly marked plural. What we find is that plural marking depends both on the specificity of the noun phrase and on its location in syntactic structure. Definite noun phrases must bear the plural marker if they are to be interpreted as referring to more than one entity. Indefinite noun phrases (preceded by a numeral or weak quantifier) are usually not marked plural when they refer to more than one entity; these are the covert plurals discussed in chapter three. Bare plurals are restricted in where they can appear in the clause and are much less frequent than plurals that also bear the definite article or covert plurals.² Bare plurals can serve as subjects in sentences with an indefinite/existential interpretation, but not in subject position of sentences with generic interpretation. Bare plurals in object position are acceptable with either

¹See Vaux (1997) for detailed discussion of the plural marker and syllable structure in the modern dialects of Armenian.

²Donabédian (1993:182) writes that in the corpus of written SWA that she analyzed, in the majority of occurrences (4/5) one finds a numeral greater than one with either the plural plus article (-er-e) or neither (-O-O).

generic or indefinite interpretation provided the discourse context supports their use.

(200) The plural suffix in SWA:

-er monosyllabic nouns³, e.g., mom-er 'candles,' kork-er, 'carpets'; asdx-er 'stars';

-ner polysyllabic, nouns, e.g., kəri&ner 'pens'; auxig-ner 'girls'; navahankisd-ner 'harbors'

few nouns in the modern language, e.g., dəxa-k 'boys, sons', dzənox-k 'parents'; -k is an older form of the plural now incorporated into the stem of paired body part names e.g., a&-k 'eye', vod-k 'leg, foot', yerigamun-k 'kidney'

-ig mart-ig 'humans, men'

2.7.2 Nouns that refer to a plurality are not always marked plural

The first observation about the plural suffix made in any grammar or textbook of Western Armenian is that in many instances nouns which would be marked plural in English or French for example are not marked plural in SWA. A generalization commonly made is that the plural marker is used when the speaker wants to focus attention on the referents as individuals rather than instances of a type or to the collection of individuals as an entity. Examples such as those given in (201) are used to support this claim. I mark the plural option with # rather than with an asterisk to indicate that the plural would not necessarily be ungrammatical in these examples,

³Compounds whose second element is a monosyllabic noun also take the -er form of the plural suffix, e.g. (see Vaux 1997 for discussion of the behavior of compounds):

tas.a.kirk-er/*-ner lesson.x.book-pl 'textbooks'

but would sound odd unless supported by contextual factors. The plural would have a marked interpretation, not the meaning given in the translation.

- (201) a. gentan.a.pan.agan bardez-i-n meč piv/#-er desa-k zoo.o.log.ical garden-gen-dt in elephant/-pl see.aor-2p 'Did you see elephants at the zoo?'
 - b. sad hay/#-er ga-Ø ho.n much Armenian[person] exist-3s there 'Are there many Armenians there?'
 - c. ani-n kuyr/#-er č-uni-Ø
 A-dt sister neg-have-3s
 'Ani does not have any sisters'
 - d. 30x0v-mə ga-r payc mart/#-ig č-ega-v/-an meeting-a exist-pst.3s but man/-pl neg-come.aor-3s/-3p 'There was a meeting, but no one came'
 - e. zarmig-əs yeresun pararan/#-ner kən-ad² e-Ø cousin-1poss 30 dictinary/-pl buy-ppt₁ be-3s 'My cousin has bought thirty dictionaries'
 - f. mer dun-ə kiser-ə utə hyur/#-er ge-c-av/-an 1pl.gen house-dt night-dt eight guest/-pl stay-aor-3s/-3p 'Eight guests stayed overnight at our house'

In each of the above examples, the ground state is for the noun not to bear the plural marker. In (201a) the speaker is interested in knowing whether the hearer saw a certain type of animal at the zoo, rather than whether she saw particular individual elephants. Likewise in (201b), what is important is whether the Armenian community is large in a certain place; particular Armenian individuals are not being inquired after. In (201c), what is asserted is that in fact no sister of Ani exists, so there is no referent, let alone a plurality of referents; similarly with (201d). In (201e), again, the quantity and type of thing bought is the point of the utterance, rather than

the individual dictionaries. And in (201f) as well, the number of people and the fact that they are guests is salient, not their identities.

If a semantically plural noun is modified, one way of indicating that there is focus on the individuals denoted, then the plural morpheme appears, although if the modification is not 'heavy' a bare noun is still used. Consider the sentences in (202) where adjectives or relative clauses have been added to the nouns in (201). The unmarked form is still acceptable, but the plural form is as well.

- (202) a. gentan.a.pan.agan bardez-i-n meč həntg.a.sdan-e-n
 zoo.o.log.ical garden-gen-dt in Indian.cx.place-abl-dt
 per-v-adz piw-er/-Ø desa-k
 bring-pass-ppt1 elephant/-pl see.aor-2p
 'At the zoo did you see elephants that were brought from India?'
 - b. \(\) \(\) \(\) \(\) ad \quad \text{parsg.a.sdan-e-n} \quad \text{nor} \quad \text{veg-ad}^z \quad \text{hay-er/-\Omega-n} \quad \text{ga-n} \quad \text{ho.n} \\
 \text{much Iran-cx-abl-dt} \quad \text{new come-ppt}_1 \quad \text{Armenian-pl exist-3p} \quad \text{there} \\
 \text{'Are there many Armenians there who have recently arrived from Iran?'} \end{arrived}
 - c. ani-n harusd kerecig yev darant.avor kuyr-er/-Ø č-uni-Ø

 A-dt rich beautiful and talented sister-pl neg-have-3s

 'Ani does not have rich, beautiful and talented sisters'
 - d. zarmig-əs yeresun hay.eren-ankl.eren pararan-ner kən-ad² e-Ø cousin-1poss 30 Armenian-English dictionary-pl buy-ppt₁ be-3s

... had pararan-Ø
CL dictionary

'My cousin has bought thirty Armenian-English dictionaries'

e. mer dun-s kiser-s uts teram č-une.c.or hyur-er-Ø

1p.gen house-dt night-dt eight money neg-have.aor.sr guest-pl

ge-c-an/-av

stay-aor-3p/-3s

'Eight guests who had no money stayed overnight at our house'

When the speaker focuses attention on the number of entities referred to by using an exclamatory expression or intonation, then the plural marker is also preferred. Donabédian (1993) offers the examples in (203) as evidence for this. In (203a) the speaker is simply asking the number of students, but in (203b) the speaker is exclaiming over the number of hours spent in reflection. In (203c) the repetition of *kani* 'how many' shows that the speaker is not just asking how many times, but is bemoaning the fact that there have been so many times, thus justifying the presence of the plural marker.

(203) [Donabédian 1993:183]

- a. kani asagerd-Ø uni-nk hima how.many pupil have-1p now 'How many students do we have now?'
- b. ov kide-Ø ink kani **3**am-er ind^zi bes who know-3s 3'.nom how.many hour-pl 1s.dat as

 $n \rightarrow s d - a d^z$ xorh- $a d^z$ e- \emptyset sit-ppt₁ think-ppt₁ be-3s

'Who knows how long he has been seated here like me, thinking!'

c. kani kani ankam-ner
how.many how.many time-pl
'Oh, how many times!'

Donabédian gives another example of a situation where the focus is on the referents of the plural, but the focus is from the point of view of the subject of the sentence rather than the speaker. In (204a), the five continents are not new or interesting to the speaker or hearer, but the sentence, by means of the overt plural, conveys that their existence is new and interesting to the subject Vahram. The statement of fact in

(204b) does not use the plural because the intent is to convey the number of continents, but nothing special about them.

- (204) a. vahram sorv-ad^z e-r vor a∫xarh-ə hink kəlxavor
 V learn-ppt₁ be-pst.3s rel.prn world-dt five principal
 mas-er uni-Ø
 part-pl have-3s
 'Vahram has learned that the earth has five princial parts (continents)'
 [Donabédian 1993, (16)]
 - b. asxarh-ə hink kəlxavor mas uni-Ø world-dt five principal part have-3s 'The earth has five principal parts (continents)'

Ajectives such as *mansavor* 'particular,' *vorof* 'specific' require the noun that they modify to be overtly plural, (205).

(205) masnavor/voros dup-*(er) barbe-c-in particular/specific box-pl empty-aor-3p 'They emptied particular / specific boxes'

Interestingly, the adjectives *zad* 'separate' and *darper* 'different' have different interpretations depending on whether they modify a plural or a bare noun:

- (206) a. hyur-er-ə zad senyag-ner g-uze-n guest-pl-dt separate room-pl imp-want-3p 'The guests want separate rooms [from each other]'
 - b. hyur-er-a zad senyag g-uze-n guest-pl-dt separate room imp-want-3p
 'The guests want separate rooms [from the others]'
- (207) a. yergvoryag-ner-ə darper harcum-ner harcu-c-in twin-pl-dt different question-pl ask-aor-3p 'The twins asked different questions [from each other]'

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b. yergvoryag-ner-ə darper harcum harcu-c-in twin-pl-dt different question ask-aor-3p 'The twins asked different questions [from the others]'

The difference in interpretation in (206) and (207) shows that the covert plurals have a group interpretation while overt plurals allow distributed interpretation. We come back to this point in section 3.2.1.2.

2.7.3 Specific (plural) noun phrases require overt plural marking

So far we have seen examples of plural nouns that do not bear any article suffix and are not preceded by a possessor or deictic pronoun. If the noun phrase does contain either the definite article, possessor or deictic pronoun then, with one exception⁴, the plural marker is obligatory. Consider the sentences in (208). When the noun bears the definite article, the plural marker is obligatory in order to obtain a plural interpretation. Without the plural marker, the interpretation of N-Ø-ə can only be 'the N-sg'.

(208) a. gentan.a.pan.agan bardez-i-n meč <u>pik-er-ə</u> desa-k

⁴A noun modified by a numeral greater than one can have the definite article suffix and yet still not have the plural suffix in examples such as (i,ii) (from Donabédian (1993:185, 187):

i. yergu <u>kilo-Ø-n</u> dasə frank-Ø two kilo-Ø-dt ten franc 'ten francs for two kilos'

ii. mayrakarak-ə toner-e-n pa 3nor haryur-utsun kilometro-Ø-n yerek capitol-dt Tonnerre-abl-dt separated 180 kilometer-Ø-dt three 3ame-n gə-gədre-Ø hour-abl-dt imp-cut-3s 'The train does the 180 kilometers separating Tonnerre from the capitol in three hours'

zoo.o.log.ical g :den-gen-dt in elephant-pl-dt see.aor-2p 'Did you see the elephants at the zoo?'

- b. ayn <u>hay-er-ə</u> vor L.A. gə-pənagi-n ſad e-n that₃ Armenian-pl-dt rel.prn L.A. imp-live-3p many be-3p 'The Armenians that live in Los Angeles are many'
- c. ani-i-n <u>kuyr-er-ə</u> hajax g-aycele-n A-gen-dt sister-pl-dt often imp-visit-3p 'Ani's sisters visit often'
- d. 30x0v-mə ga-r yev <u>polor nergayacucič-ner-ə</u> yega-n meeting-a exist-pst.3s and all representatives-pl-dt come.aor-3p 'There was a meeting and all the representatives came'
- e. zarmig-əs ays yeresun <u>pararan-ner-ə</u> təbroc-i-n hamar cousin-1s this 30 dictionary-pl-dt school-dat-dt for kən-ad^z e-Ø buy-ppt be-3s 'My cousin has bought these thirty dictionaries for the school'
- f. mer utə hyur-er-ə kifer-ə mer kov-ə gec-an
 1p.gen eight guest-pl-dt night-dt 1p.gen side-dt stand.aor-3p
 'Our eight guests stayed overnight'

2.7.4 Plurals and pronominal reference

We saw in section 2.4 that bare NPs can be used to refer to more than one thing, but that a plural pronoun is not compatible with this usage, as shown in (209). It was argued that bare NPs, or mass indefinites are not specified for number or person, and thus do not match the ϕ -features of third-person singular or plural pronouns, which are assumed to be [#+pl, -sg] [Pers-deictic] and [#+pl, -sg] [Pers-deictic], respectively.

- (209) a. sad hay ga-Ø hon much Armenian[person] exist-3s there 'There are many Armenians there'
 - b. *payc irenk/anonk hay-a-xos č-e-n

but 3'pl.nom/3pl.nom Armenian-cx-speak neg-be-3p ('But they are not Armenian speakers')

- c. *(anonk) irenk-irenc amerigaci gə-nəgade-n
 3.pl.nom 3'pl.nom-3'pl.dat American imp-consider-3p
 ('They consider themselves American')
- d. <u>ayn hay-er-ə irenk-irenc</u> amerigaci gə-nəgade-n that₃ Armenian-pl-dt 3'pl.nom-3'pl.dat American imp-consider-3p 'Those Armenians consider themselves American'

We see in (210) that a bare plural cannot be referred to using a plural pronoun. In (210) the students introduced in (210a) are not the same as the students referred to by *irenk* in (210b). Apparently (210b) sounds as though a different set of people is being referred to. To refer back to the students, the DP *usanox-ner-a* must be used. This fact supports my claim that bare plurals have both only number specification and no person specification (i.e., they are [#+pl, -sg] and [#-gersØ]). If we assume that pronouns can only be coreferent with noun phrases that they match exactly in #-feature specification, then, since third-person plural pronouns have both person and number specification (they are [#+pl, -sg] and [#-gersØ].

- (210) a. 30kov-i-n <u>usanok-ner</u> masnagce-c-an meeting-dat-dt student-pl participate-aor-3p 'Students participated in the meeting'
 - b. <u>irenk</u> fad harcum-(ner) harcu-c-in 3'p a lot question-pl ask-aor-3p 'They asked a lot of questions'
- () a. yergrasarz-i-n aden-ə təbroc-ner kant-əv-e-c-an

earthquake-gen-dt time-dt school-pl destroy-pass-x-aor-3p 'In the earthquake schools were destroyed'

b. *adonk bidi yed ʃin-v-in pro/they2 fut back build-pass-3p ('They will be rebuilt')

2.7.5 Bare plurals

If a semantically plural noun phrase is specific, in the sense of referring to entities already introduced into the discourse, then it is marked plural, but not obligatorily so. Consider the examples in (211)-(213) where the (a) sentence gives a context and the noun in the (b) sentence is understood to refer to something in the context given.

(211) a. yereg ardu gah garasi kəne-c-ink yesterday morning.dat furniture buy-aor-1p 'Yesterday morning we bought furniture'

> kəda-nk sosig-ə ator-(ner) yev agan seran-mə ∫uga-n cheap table-a find.aor-1p S-dt market-dt chair-pl and d^zaxe-c-Ø mezi sell-aor-3s 1pl.dat 'We found chairs at the market and Sosig sold us a cheap table'

- (212) a. maro-i-n xanut-i-n meĕ ∫ad kirk ga-Ø
 M -gen-dt store-gen-dt in a lot book exist-3s
 'There are a lot of books in Maro's store'
 - b. ancyal Japat pararan-(ner) d^zaxe-c-Ø
 past week dictionary-pl sell-aor-3s
 odar usanox-ner-u-n
 foreign student-pl-dt
 'Last week she sold dictionaries to the foreign students'
- (213) a. ayn tankaran-ə med^z havakad^zo-mə uni-Ø

that₃ museum-dt large collection-a have-3s 'That museum has a large collection'

b. ays amar-(ə) odar-ner yega-n nəgar-(ner) this summer-dt foreigner-pl come.aor-3p picture-pl desne-l-u hamar see-inf-G/D for 'This summer foreigners came to see paintings'

2.7.5.1 Bare plural subjects cannot be generic

Unlike in English, bare plural subjects in SWA are generally not permitted in generic sentences but are permitted in existential sentences. Consider the three sentences in (214). In (214c), where the interpretation is generic, the definite article is obligatory. In (214a) the bare plural is acceptable to some speakers, with a specific indefinite interpretation. However some speakers insist on the article and for them the interpretation can only be ambiguous between a meaning 'all students,' as opposed to other kinds of people,⁵ and 'the students' (e.g., that we have been speaking about). To express the meaning of the English sentence *Students have gathered in the square* on its existential interpretation, an overt quantifier is required, as in (214b).

- (214) a. usanor-ner-(ə) hərabarag-ə havak-v-ad² e-n student-pl-the square-the gather-pass-ppt₁ be-3p 'Students have gathered in the square'
 - b. gark-mə usanox-ner hərabarag-ə kərav-ad² e-n class-a student-pl square-the occupy-ppt₁ be-3p 'Some students have occupied the square

⁵For example, if one wants to say that students went on strike on Tuesday and train drivers on Wednesday, then the subject does not refer to students that have been mentioned in the discourse, rather to the type of person.

c. usanor-ner-*(ə) kord² gə-hedacəke-n student-pl-dt work imp-procrastinate-3p 'Students procrastinate [in their work]' or 'The students ...'

When the verb is unaccusative, however, as in (217) a bare plural subject is acceptable, but again, the generic interpretation requires the definite article:

- (217) a. yereg kiser sarsur-ner ga-i-n xohanoc-i-n meë yesterday night cockroach-pl exist-pst-3p kitchen-gen-dt under 'Last night there were cockroaches in the kitchen'
 - b. ənthanrabes xohanoc-i-n meč-ə sarsur-ner-* (ə) gə-kədnə-v-in usually kitchen-gen-dt in-dt cockroach-pl-dt imp-find-pass-3p 'Cockroaches are usually found in the kitchen'

This pattern is observed in other languages as well, such as Italian (Longobardi 1994) and Modern Greek. The generic interpretation requires the definite article but bare plurals can appear as subjects of a sentence with existential interpretation:

(218) *Greek*

- a. (i) fitités éxun katalávi tin platía the.pl student.pl have.pl occupy.ppt the.f.acc square/plaza 'Students have occupied the square'
- b. *(i) fitités anaválon tin δuliá tus the.pl student.pl procrastinate.3p the.f.acc work.acc their 'Students procrastinate in their work'

(219) Italian

a. (gli) studenti hanno occupato l'edificio the.pl student.pl have.3p occupy.ppt the'building

'Students have occupied the building'

b. *(gli) studenti sono pigri the.pl student.pl be.3p lazy.pl 'Students are lazy'

The exceptions that I have found in SWA to this rule (that a generic subject must bear the definite article) have inanimate subjects and the verbs fall into the non-accusative class (passives and unaccusatives):

- (220) a. asnan derev-(ner) gə-tapi-Ø/(n) autumn.gen leaf-pl imp-pour-3s/3p 'In autumn leaves fall'
 - b. nav-(er) g-əngərmi-/(-n) hon ship-pl imp-sink-3s/-3p there 'Ships sink there'
 - c. xosdum-*(ner) gə-morcə-vi-n promise-pl imp-forget-pass-3p 'Promises are forgotten'

2.7.5.2 Bare plural subjects of accusative vs unaccusative verbs

As we saw in (217), it seems that bare plural subjects are more likely to be acceptable if the verb is unaccusative or passive and not transitive or unergative. That is, when the subject is underlyingly an internal argument, as in passive or unaccusative constructions, it can be a bare plural, but when the subject is underlyingly external⁶, a plural subject is acceptable only if it bears the definite article. These SWA facts resemble data from Italian discussed in Longobardi (1994). According to Longobardi, bare nouns in Romance (mass nouns and bare plurals) are usually

⁶I assume that unergatives are underlying transitive and have a lexically external subject, as has been argued by Hale and Keyser (1993).

excluded from preverbal subject position, but are acceptable in object position or in postverbal subject position of unergative verbs.⁷

Consider the examples in (221)-(223). In the (a) sentences the verb is unaccusative or passive, and the bare plural subject is acceptable; in the (b) sentences the verb is transitive or unergative, and the bare plural subject is unacceptable.

- (221) a. kani vor pavarar təram &ə-ga-r pəzifg-ner how rel.prn enought money neg-exist-pst.3s doctor-pl kordz-e han-ve-c-an work-abl displace-pass-aor-3p 'Because there was not enough money, doctors were fired'
 - b. pazisg-ner-*(a) ga-kankade-i-n vor pavarar

 doctor-pl-dt imp-complain-pst-3p rel.prn enough
 yelektraganutyun ca-gar hivantanoc-ner-u hamar
 electricity neg-exist-pst.3s hospital-pl-g/d for
 '(The) doctors complained because there was not enough electricity for the
 hospitals'
- (222) a. 30x0v-i-n <u>usanox-ner</u> masnagce-c-an meeting-g/d-dt student-pl participate-aor-3p 'Students participated in the meeting'
 - b. garavarutyan tem <u>usanow-ner-*(ə)</u> gə-powoke-i-n gor government.gen against student-pl-dt imp-protest-pst-3p prog 'Students/the students were protesting against the government'
- (223) a. madid-ner kəriğ-ner yev kirk-er xərgə-v-ad² e-n
 pencil-pl pen-pl and book-pl send-pass-ppt₁ be-3p
 xarabax-i yeraxa-ner-u-n
 Karabagh-gen child-pl-dat-dt

⁷Bare plurals, according to Longobardi (1994), are DPs with a null determiner that is licensed when the DP is governed by the verb.

'Pencils, pens and books have been sent to the children in Karabagh'

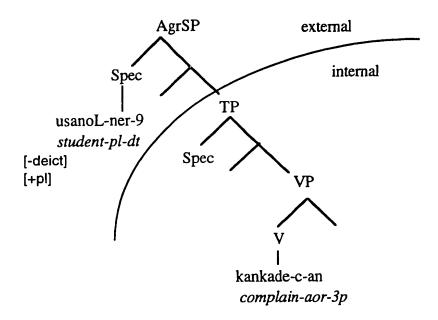
asagerd-ner-u-n b. <u>kər-or-ner-*(ə)</u> okne-c-in baderazm-i aden write-sr-pl-dt pupil-pl-dat-dt help-aor-3p time war-gen irenc tə zvarutyun-ner-u-n masin kəre-n 3'p.gen difficulty-pl-g/d-dt about write-3p 'Writers helped the children write about the hardships of the war'

The obligatoriness of the definite article in transitive and unergative constructions can be accounted for if we make the following assumptions: (i) the definite article is in fact a marker of specificity, where this means that noun phrases that bear the article have the specification [PERS±deict; (ii) person features are checked in specAgrSP. Taken together these assumptions create the derivations shown in (224) and (225). These assumptions square with Diesing's Mapping Hypothesis, which correlates the interpretation and location of subjects, saying essentially that VPexternal subjects must have specific (or generic) interpretation,8 and with Hale and Keyser's (1993) analysis of transitive and unergative verbs. In their view, the subject of a transitive verb is generated outside of the verb's lexical projection, its "appearance is forced by properties of the matrix — for example, the transitive features of a causative verb or by the Case and agreement features of I."9 If we take this to mean that it is the agreement features of AgrS (or the combined features of T and Agr, after T raises to Agr in the process of the verb's raising to Agr) that license the subject, then the subject must bear morphological features that justify its being in specAgrSP; it must be specified for Person. Thus the appearance of the definite article is expected, since, in the analysis proposed in section 2.6, it is in fact a person marker.

⁸See discussion of Diesing's analysis in section 3.2.2.

⁹Hale and Keyser 1993:101.

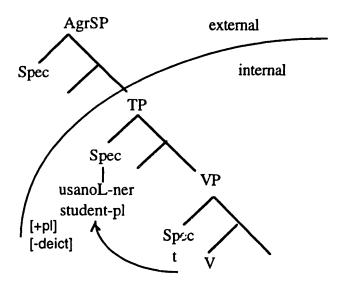
(224) usanok-ner-*(9) garavarutyan masin kankade-c-an student-pl-dt government.gen about complain-aor-3p 'Students complained about the government'



If the verb has an internal subject, then it can be licensed in specTP, where it checks its number feature.

(225) ZoLov-i-n usanoL-ner yeg-an meeting-dat-dt student-pl-dt come.aor-3p 'Students came to the meeting'

[Unaccusative]



2.7.6 Conclusion

There is clearly much more to be said about the role of the plural marker. I have not, for example, discussed the interpretation of bare plurals in dative, genitive or other case-marked positions. The problem of the 'types of' interpretation of bare (count) plurals also needs to be addressed. However, at this point I conclude with a first approximation of an account. I propose that an NP with the plural marker has the ϕ -feature specification [#+pl], [Pers Ø]. Having the feature specification [#+pl] enables a plural argument to move out of VP by raising to spec-TP to check number (there is no adjacency requirement for overt plurals as there is for bare NPs) and to refer to a plurality of individuals (recall that number specification is what allows a nominal

expression to refer to an individual rather than to a property). The fact that bare plurals are excluded from external subject positions but permitted in internal subject position and object position is consistent with the claim that they are not specified for Person.

Chapter Three

3 The Non-agreement Construction

3.1 Introduction

In this chapter I discuss data from Standard Western Armenian (SWA) that bear on the questions of subject-verb agreement and specificity. Several authors have discussed the notion of specificity in relation to Case and agreement. Enč (1991) analyses the relationship between Turkish accusative case marking and specificity. Borer (1994) discusses the relationship between specificity, aspect and Case. Runner (1994) gives cross-linguistic evidence for a connection between AGR and specificity. Bobaljik (1995) discusses the relationship between specificity and the location of arguments in an articulated VP structure. The Armenian data examined here bear on the relationship between specificity and subject-verb agreement, in particular number agreement.

I argued in chapter one that bare NP arguments do not raise out of VP, as they lack the ϕ -features Number and Person. In this chapter I argue that NumP subjects raise to specTP, as they are specified for Number, which, it will be argued, is checked in TP. DP subjects, which are specified for both Number and Person,

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¹ Mahajan 1990 asserts that there is a connection between object agreement and specificity in Hindi. However, Mohanan (1995) shows that nonspecific (nominative) objects do trigger agreement in Hindi.

raise to specTP and then to specAgrSP to check these features, as is standardly assumed in the MP (Chomsky 1993). The idea that both specTP and spec AgrSP are subject positions, but for different types of subjects, has been put forward for Icelandic by Jonas (1994, 1995), Bobaljik and Jonas (1995), and Vangsnes (1995) and for Celtic by Bobaljik and Carnie (1994). Jonas and Vangsnes in particular have argued that Number is checked on subjects in specTP.

The structure of the chapter is as follows. In section 3.1.1, I present the general facts concerning the construction which I call the *non-agreement* construction, in which the verb does not show plural agreement with a nonspecific plural or *covertly plural* subject. I then sketch an analysis of this based on a derivation which contains no AGR projections; the only functional projection present is TP, to which both the subject and verb move.

In section 3.2 and 3.3 we discuss the interpretation of the covertly plural subjects and the nonagreement clauses they appear in. I argue on the basis of pronominal reference facts and the inability of non-agreeing subjects to be null subjects, that they must be distinguished from overt plurals in terms of their feature specification. The distinction is that overt plurals are DPs bearing both person and number features and covert plurals are NumPs that have number features only.

In section 3.4 we look at the consequences of positing specTP as the subject position for NumP subjects. First we consider where non-agreeing subjects can appear relative to adverbs, finding that subjects to the left of TP-adjoined adverbs tend to trigger agreement while those to the right are acceptable without agreement. This, in addition to the fact that non-agreeing subjects can occur to the left of VP-

adjoined adverbs, leads us to conclude that these subjects are in a position between AgrP and VP, namely spec-TP.

We then observe, in section 3.4.2, that transitive verbs must show plural agreement, particularly when the object is specific. I argue that this is predicted by the analysis proposed, as a derivation that has only one functional projection, namely TP, does not provide a specifier position (standardly assumed to be specAgrOP) in which the object can move to check Case features. The fact that transitives with nonspecific NP objects are more acceptable than transitives with specific DP objects lends further support to our analysis. This is because NP objects, which lack ϕ -features, do not move to specAgrOP. If the subject in the derivation is a NumP, which also does not need to move to the specifier position of an Agr projection, then a non-agreement derivation will converge. The fact that transitives with NP objects are not completely grammatical, however, shows that the analysis is insufficient.

In section 3.4.3 we turn to unergative verbs and address the problem raised by transitives with nonspecific objects. Unergatives are generally not permitted in the nonagreement construction. This I argue can be accounted for by adopting an analysis of unergatives in which they are underlyingly transitive, as argued for by Hale and Keyser 1993. In their analysis, the subject of an unergative or transitive verb is external, in that it is licensed outside the verb's lexical projection. I interpret this to mean that these subjects are in fact licensed outside TP, on the assumption that it is predication that licenses the external subject and that the TP rather than VP represents the predicate. This means that external subjects, i.e. subject of unergatives and transitives, must be in specAgrSP, and thus we explain the fact that overt agreement is obligatory.

In section 3.4.4.1 I outline Bobaljik's recent proposal relating the presence of overt tense and agreement morphology and the availability of specTP as a subject position. On the basis of principles of Distributed Morphology (Halle & Marantz 1993) he argues that in a language where tense and person-number agreement are both marked, specTP is a permissible subject position. We see that SWA's verb paradigm puts it in the class of languages predicted to have specTP as an independent Case-checking position, thus confirming the analysis of nonagreement proposed, which relies crucially on specTP being a subject position.

Finally, in section 3.4.4.2 we discuss the analysis proposed here, which relies on the presence of the functional head AGR, in the context of the multiple specifier proposal of Chomsky 1995, in which AGR plays no role. I argue that, while the agreement facts can be accommodated in such a framework, the correlation between subject-verb agreement and transitivity cannot be explained.

3.1.1 Basic facts

The sentences in (1) illustrate the pattern that I call 'nonagreement.'² The indefinite subject is modified by a numeral or weak quantifier, which makes it semantically plural, but it does not bear the plural marker. In addition the verb appears in the form identical to third-person singular.

(1)a. passive

ayt	baderazm-i-n	me č	hink	zinvor	əsbann-ve-c-av
that	battle-GEN-dt	in	5	soldier(sg)	kill-pass-aor-3sg

²Non-agreement is not the result of sloppy or casual speech. In their textbook on SWA, Bardakjian and Thomson describe this type of sentence as being standard Western Armenian.

'In that battle there were five soldiers killed'3

b. intransitive (unaccusative)4

```
kəsan usanor kənuten-e-mə caxore-c-av
twenty student(sg) exam-ABL-a fail-aor-3sg
≈'There failed an exam twenty students'
```

c. weakly quantified subject

∫ad derev ing-av many leaf fall.aor-3sg ≈'There fell many leaves'

Now consider the sentences in (2). We observed in section 2.6 that a noun phrase can bear the definite article (a marker of specificity) only if it is also specified for [-pl, +sg] or [+pl, -sg]. Here we see that NumPs specified for [-pl, -sg] only cannot be specific. So while it is acceptable to say 'five soldier (sg)' when the soldiers have not been introduced into the discourse, the NP 'the five soldier (sg)' is illegitimate. In other words, there are no definite covert plurals. Once the subject is overtly plural, the verb must also be marked plural, as indicated in (2).

- (2)a. ayt baderazm-i-n meč hink zinvor-*(ner)-ə əsbann-ve-c-an that battle-GEN-dt in 5 soldier-*(pl)-dt kill-pass-aor-3p 'In that battle the five soldiers were killed'
 - b. kəsan usanox-*(ner)-ə kənuten-e-mə caxoxe-c-an twenty student-*(pl)-dt exam-ABL-a fail-aor-3p

³I will indicate that a translation into English is not exactly grammatical English by marking it with'≈'.

⁴Because one fails from an exam in Armenian I have tentatively labelled caxoxil 'to fail' unaccusative. At this point it is difficult to say which intransitives should be considered unaccusative and which unergative in Standard Western Armenian (there is, for example, only one auxiliary, so there is no have/be distinction in the standard dialect. There is a distinction in the Hamsen and Van dialects which may be a clue: there are two classes of compound verbs, one formed with ellus, 'be', the otherwith enus, 'have' (Vaux, p.c.). However, there is a difference in behavior between intransitive verbs in the way they form participial relative clauses that may be a language-specific test for making this distinction.

'The twenty students failed the exam'

c. polor $\int i \int -*(er) - \Rightarrow ing-an$ all bottle-pl-dt fall.aor-3p 'All the bottles fell'

In (3) we see that it is also grammatical for the noun which is modified by a numeral to bear the plural suffix -ner without the definite article.⁵ As in (2), an overtly plural subject requires a plural verb. As indicated in the gloss, when plural marking is present on the subject and the verb, the interpretation is one where the subjects's identity is determined, that is, the speaker is concerned with the fact that these particular soldiers were killed, not with the number of deaths. The subjects in (3a-c) are not definite NPs, since the information about their identity is not necessarily shared by the listener. I will therefore consider them specific indefinite noun phrases.⁶

- (3)a ayt baderazm-i-n meč hink zinvor-ner əsbann-v-ec-an / *-av that battle-GEN-dt in 5 soldier-pl kill-pass-aor-3pl / *-sg 'In that battle five soldiers were killed'
 - b. pem-i-n vəra-(n) dasə gin-er g-erke-in /*-r stage-GEN-dt on-(dt) 10 woman-pl imp-sing.pst-3pl / * -sg 'Ten women were singing on the stage'
 - c. kəsan usanoz-ner kənuten-e-mə caxoze-c-an / *-v twenty student-pl exam-ABL-a fail-aor-3pl / *-sg 'Twenty students failed an exam'

The examples in (4) show that non-agreement is not possible with transitive verbs. For some speakers these require a plural verb, even though the subject is

⁵ In this way Armenian differs from languages like English which almost always mark plural nouns modified by numbers, Chinese which never marks plural, Hungarian (Ritter 1991), in which the plural suffix is not allowed on a noun modified by a numeral and Georgian (Nash-Haran 1992), in which the noun following a numeral is singular in form, as is the verb.

⁶Recall that in section 2.7 I concluded that bare plurals did not have specific interpretation. It seems that when a numeral or quantifier precedes a plural, however, it can be interpreted as specific.

morphologically singular. For others, the mismatch between subject and verb is not acceptable and they insist on adding the plural suffix to the subject, indicated in square brackets.

- (4)a. hink gin-[er] surj gə-xəme-n/*-Ø gor five woman coffee imp-drink-3pl/*-3sg prog 'Five women are drinking coffee'
- b. kəsan məgn-ig-[ner] gadu-mə əsbanne-c-in / * -Ø twenty mice-dimin cat-a kill-aor-3pl / * -3sg 'Twenty mice killed a cat'
- c. hisun zinvorg-[ner] ayn kyur-ə kantec-in / * -Ø
 50 soldier that village-dt destroyed-pl / * -sg
 'Fifty soldiers destroyed that village'

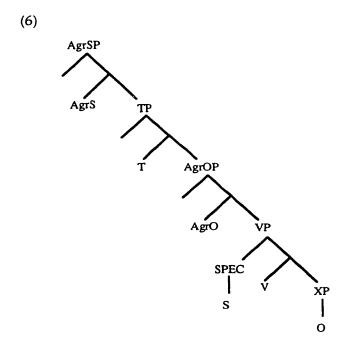
Thus the basic pattern that emerges from the facts given so far is the following:

(5)

- (i) a plural indefinite subject, when it is morphologically singular, does not trigger plural marking on non-transitive verbs,
- (ii) a plural indefinite subject that is marked plural must trigger plural verbal agreement,
- (iii) transitive verbs always show plural agreement with plural subjects, overtly marked or not, regardless of whether they are indefinite.

3.1.2 Sketch of analysis

I adopt the general framework of Pollock (1989), and Chomsky's (1993) Minimalist Program (MP), in which sentences have the basic structure given in (6) (in section 3.4.4.2 I discuss the more recent multiple specifier analysis (Chomsky 1995).



In the MP it is generally assumed that whether or not the verb has any overt agreement marking, abstract agreement features called \$\phi\$-features are present and are associated with the verb and its arguments, and that the basic structure of a sentence includes AGR projections where these features are checked. A central idea in the MP is that \$\phi\$- and Case features determine the final position of arguments and verbs in that the features must be checked by being in an appropriate relation with a functional head. For verbs this means being adjoined to a functional head, for nominal arguments this means being in the specifier position of a functional head. This framework is used to analyze languages such as Italian or Georgian, which have "rich" morphology, as well as languages such as Chinese or English which are said to have "poor" agreement systems. Armenian is interesting in this context in that it is indisputably a language with rich verbal morphology, 9 yet in certain environments overt agreement is absent. 9

⁷For an overview of the MP see Marantz's synopsis in Webelhuth (1995).

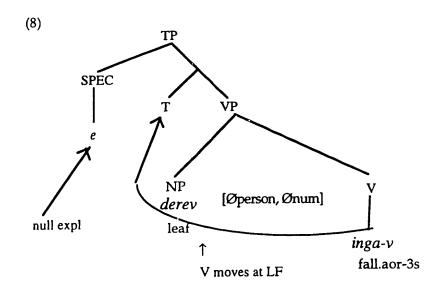
⁸In SWA, a typical verbal paradigm would mark tense/aspect, mood, person, and number. For example, the verb *sirel*, 'to like/love' is conjugated as follows:

In the MP's account of subject-verb agreement, ϕ -features (assumed to include person and number) are associated with three entities: the subject, the verb, and the functional head AGR. It is normally assumed that the subject checks its personnumber features when it is in a specifier-head relation with AgrS and its Case features when it is in a specifier -head relation with T. I assume here that φ-features can be distinct and that arguments can lack agreement features altogether, or lack [person] while being specified for [number]. This entails (on the assumption that number and person are checked in distinct functional projections) that there can be sentences which lack AgrP (TP is required by the EPP). I proposed in chapter one that this the proper way to view absence of overt agreement marking in constructions involving bare NPs, that is I argued that there simply are no abstract agreement features associated with the lexical items and therefore there is no need for functional projections in which to check them. To account for the covertly plural noun phrases we discuss here I propose that they have only one feature, [number]; consequently, the derivation of a sentence with a covertly plural subject requires only one functional projection (which I show is TP). The structure underlying

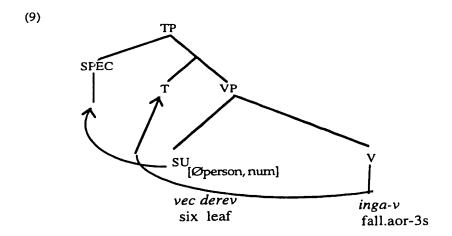
	pronoun	imperfect	present	aorist
1	ye.s	g ə -sir.e-i	gə-sir.e-m	sir.e-c-i
2	tu.n	g ə -sir.e-ir	gə-sir.e-s	sir.e-c-i-r
3	a.n	gə-sir.e-r	gə-sir.e-Ø	sir.e-c-Ø
$3_{\mathbf{i}}$	ink-ə	11		п
1p	men.k	g ə -sir.e-i-n.k	gə-sir.e-n.k	sir.e-c-i-n.k
2p	tu.k	gə-sir.e-i-k	gə-sir.e-k	sir.e-c-i-k
3p	an.on.k	gə-sir.e-i-n	gə-sir.e-n	sir.e-c-i-n
3 _i p	ir.en.k	n n	"	н

⁹ The Celtic languages are well known for the contrast between the analytic (poor) and the synthetic (rich) verb forms (Mcloskey and Hale 1984). In Rouveret's (1991) analysis of person and number morphology in Welsh he shows that person and number behave differently, due to their distinct derivational origins. He aruges that the synthetic (rich) form is the result of number incorporating into AGR.

derivations involving both bare NP and covert plural arguments contains only the T(ense) projection, as in (8) and (9).



'.... leaves fell....'



'There fell six leaves'

3.2 Interpretation of non-agreement constructions

In this section we examine the interpretation of non-agreement sentences. We observe that non-agreement sentences share interpretive and syntactic characteristics with existential sentences in other languages, these similarities being:

- (i) the subject of a non-agreeing sentence is nonspecific, that is, it refers to entities which have not been introduced into the discourse;
- (ii) transitive verbs do not occur in the non-agreement construction;1
- (iv) the focus of the non-agreeing sentence is not on the subject but on the whole event;
- (v) only the group interpretation of the plural subject of a non-agreeing sentence is possible.

I argue that by analyzing nonagreeing subjects as being in specTP, their interpretation can be accounted for by the Mapping Hypothesis of Diesing (1992), which requires non-specific indefinite noun phrases to remain in an 'internal' subject position so that they are mapped appropriately to the nuclear scope of the semantic representation. Specific noun phrases are in an 'external' position and are mapped into the restrictive clause. I depart however from Diesing, for whom the internal subject position is spec-VP, in proposing that spec-TP also counts as an internal subject position for the purposes of the Mapping Hypothesis.

¹There are of course exceptions to this generalization; some languages do allow transitive existential/expletive sentences Icelandic and Dutch for example (see Bures 1993, Jonas 1994,95, Bobaljik 1995, Jonas and Bobaljik 1996, for discussion of Icelandic and Reuland's 1988 discussion of Dutch).

3.2.1 Covertly plural subjects are nonspecific

The interpretation of covert plurals can illustrated by examples such as (11). (11) shows that when the subject is covertly plural, the sentence can have the meaning that forty non-specific boats go through the canal regularly, where the individual boats are not indicated. There may be twenty individual boats, for example, each of which go through twice. It can also have the meaning where the speaker is asserting the fact that forty boats *can* go through the canal, that is, the capacity of the canal is forty boats; it is a forty-boat canal. It is not possible to interpret *karasun navag* to mean forty particular boats; this interpretation is available only when the noun bears the plural marker.

- (11) amen or ays kanal-i-n meč.e.n karasun navag g-ancni-Ø every day this canal-gen-dt in.abl.dt forty boat imp-pass-3s
 - i. 'Forty boats can pass through this canal every day'
 - ii. 'Every day there go through this canal forty boats'
 - iii. *'A certain forty boats go through this canal every day'

Example (12) shows that when the noun bears the plural marker, the subject receives specific interpretation,² that is, *karasun navagner* is 'forty particular boats', or the speaker is stressing that <u>forty</u> boats pass through the canal, where there is something notable about it being forty.

- (12) amen or ays kanal-i-n mečen karasun navag-ner g-ancni-n every day this canal-gen-dt in.abl.dt forty boat-pl imp-pass-pl
 - i. 'Forty particular boats go through the canal every day'

²Recall that adjectives like *vorof* 'certain' and *masnavor* 'particular' require the noun that they modify to be overtly plural (see discussion of plurals in section 2.7).

ii. 'Forty boats go through the canal every day'

I should mention, however, that it may not be strictly accurate to say that covert plurals are nonspecific, as there are examples like (13), in which the subject vec gin refers to a subset of the participants referred to. However, it refers to the number and type of person, rather than to the individual women. I will therefore continue to call covert plurals nonspecific.

- (13) a. masnagcox-ner-e-n vec gin hivanta-c-av participant-pl-abl-dt six woman became sick-aor-3s 'Of the participants, six women became sick'
 - b. maro-i-n təraci-ner-e-n das-ə mart yega-v
 M -gen-dt neighbor-pl-abl-dt ten-dt man come.aor-3s
 'Of Maro's neighbors ten men came'
 - c. gentan.a.pan.agan bardez-i-n gentani-ner-e-n yerek pik
 zoo.o.log.ical garden-gen-dt animal-pl-abl-dt 3 elephant
 pax-av
 escape.aor-3s
 'Of the animals in the zoo, three elephants escaped'

Let us look further at the difference in interpretation between non-agreeing sentences like (14a), which lack number agreement and sentences that show agreement such as (14b), repeated below. One native speaker describes the difference in the following way: "when you say (14a) you are stating a fact; when you say (14b) you are telling what happened." One way to interpret this distinction would be to say that the predication in the plural-Subj/plural-V case is the usual sort, that is, you are predicating 'sat on the stage' of the subjects referred to by the noun phrase 'ten women.' On the other hand, in uttering a singular-Subj/singular-V sentence such as (14a) you are asserting that an event occurred which had the

characteristics that it was a sitting on the stage by ten women. In other words, you are predicating 'being a sitting on the stage by ten women' of an event.

- (14)a. pem-i-n vəra-n dasə gin gə-nəsdi-r

 stage-GEN-dt on-dt 10 woman imp-sit-pst.3s

 ≈'There were sitting on the stage ten women'
 - b. pem-i-n vəra-n dasə **gin -ner** gə-nəsde-i-**n** stage-GEN-dt on-dt 10 woman-pl imp-sit-pst-3p 'Ten women were singing on the stage'

Put another way, the (14b) is *about* the ten women, while (14a) is about the situation. To illustrate "aboutness," consider which questions have as their felicitous answers agreeing or non-agreeing sentences. The element that is questioned corresponds to the focused element in the response; a proposition is *about* its focus.

Suppose the context of the utterances in (15) and (16) is a discussion after a battle. In (15), the focus is on the situation; the question asks about the current state of affairs. The events of the battle and its participants serve to describe the current (speaker time) state. The individual referents of the subject NumPs are not presupposed to exist except in a general way, as being soldiers (recall that the definition of specificity that I am using considers a nominal expression specific if its referents are presupposed).

- (15) a. inč vijag-i meč e-nk what situation-gen in be-1p 'What is our current situation?'
 - b. kəsan zinvor əsbann-v.e-c-a.v dasə kyuk.aci viravor-v.e-c-a.v 20 soldier kill-pass-aor-3s 10 villager wound-pass-aor-3s 'There have been twenty soldiers killed and ten villagers wounded'

On the other hand, if the question posed presupposes the existence of particular soldiers, either by containing a specific (d-linked³) wh-expression or by mentioning them explicitly, then the felicitous response must contain a specific noun phrase subject and verb, (16), which in SWA means that they will bear number marking.

- (16)yer-av a. inč zinvor-ner-u-n what be.aor-3s soldier-pl-dat-dt 'What happened to the soldiers?'
 - b. vor mart-ig-ə əsbann-ve-c-an vor.on-k viravor-ve-c-an which person-pl-dt kill-pass-aor-3p which-pl wound⁴-pass-aor-3p 'Which people were killed, which wounded?'
 - c. kəsan zinvor⁵-ner əsbann-v-e.c-a.n dasə kyur.aci-ner viravor-v-ecan 20 soldier-pl kill-pass-aor-3p 10 wound-pass-aor.3p villager 'Twenty soldiers were killed and ten villagers were wounded'

Milsark (1977:22) observes the same effect in English. The topic of (17a) or (b) is not unicorns, but the horizon. According to him, "The sentence [(17a)] is about the horizon, not about certain unicorns, and it says only that an act of appearing transpired there and that that act involved an indefinite number of unicorns."

zin-vor-ner weapon-having-pl 'soldiers'

³Pesetsky's (1987) term to distinguish between wh-words such as who or what that do not presuppose a set of referents relative to which the question asks 'which one(s)', and those that do, such as which. The former are non-d(discourse)-linked, the latter are d-linked. See discussion of agreement in whquestions in section 2.6.3.2.

4.5 Bert Vaux points out that the morphological analyses of these forms are:

vir -a -vor -v.e-c-a.n wound-cx -having -pass-aor-3p '[they] were wounded'

Therefore, an appropriate answer for (18) is a sentence such as (19), whose topic is a specific set or subset of the unicorns in question. But neither (17a) nor (17b) will answer (18) felicitously.

- (17)a. Sm unicorns appeared on the horizon [sm = unstressed some]
 - b. There appeared on the horizon (sm) unicorns.
- (18) What did the unicorns do?
- (19) The/some of the/all the/most unicorns appeared on the horizon.

3.2.1.1 Agreement in wh questions

If the subject of a clause is a wh word, we find find the same pattern of specificity triggering agreement that we find in declaratives. If the subject is nonspecific ov 'who,' then the verb cannot be marked plural, even when there are pragmatic factors that make it very likely that the referent of the subject is more than one individual. So, for example in the (a) examples where one expects that many people would come to the wedding or live in the village, the verb in the question must be non-plural. On the other hand, if the subject of the question includes the specific wh expression $vor\ DP_{PL}$ 'which' or $vor\ onk$ 'which ones', then the noun phrase that follows the wh word must bear the definite article⁶ and the verb must bear plural marking (if the subject is plural), (20)-(22)b:

(20) a. maro-i-n harsnik-i-n ov gu-ka-Ø/*-n

M -gen-dt wedding-gen-dt who imp-come-3s/-3p

'Who is/*are coming to Maro's wedding?'

⁶The appearance of the definite article on the noun phrase is the result of specificity agreement inside the DP, as we saw in section 2.6.1.

b. maro-i-n harsnik-i-n vor azkagan-ner-*(ə) / voro-nk

M -gen-dt wedding-gen-dt which relative-pl/which-pl⁷

gu-ka-*Ø/ -n imp-come-3s/-3p

'Which relatives/which ones are coming to Maro's wedding?'

- (21) a. ayt kyuʁ-i-n með ov gə-pənagi-Ø/*-n that village-gen-dt in who imp-live-3s/-3p 'Who lives/live in that village?'
 - b. ayt kyuk-i-n meč {vor gin-er-*(ə)}/{voro-nk} gə-pənagi-*-Ø/-n that village-gen-dt in which women-pl-dt/which-pl imp-live-3s/-3p 'Which women/which ones live in that village?'
- (22) a. ays haryur dup-er-u-n meč inč tər-v-ad² e-Ø/*-n this 100 box-pl-gen-dt in what put-pass-prt₁ be-3sg/-3pl 'What has/*have been put inside these hundred boxes?'
 - b. ays haryur dup-er-u-n meč vor kəlxarg-ner-*(ə) tər-v-adz

 this 100 box-pl-gen-dt in which hat-pl-dt put-pass-prt₁
 e-*Ø/-n
 be-3sg/-3pl
 'Which hats have been put inside these hundred boxes?'

Similar facts in English are discussed by Pesetsky (1987), who uses the term *d-linked* (to suggest 'linked to the discourse') to refer to *wh* expressions such as *which*, as distinct from *non-d-linked wh* expressions like *who* and *what*. For our purposes, d-linked is essentially the same as 'specific.' The SWA agreement facts are entirely expected given that the *wh* expressions involving *vor* 'which' are only appropriate

⁷Voronk usually refers to people rather than things.

⁸Enç in fact says as much (1987:21).

when there is a presupposed set from which the referents associated with the answer are drawn. In the case of (20b) it is assumed that there are relatives, the question is which of them are coming. Since the relatives who are coming to the wedding are a subset of the presupposed set of relatives, the noun phrase that refers to them is specific. Since specific arguments move to specAgrP and therefore trigger agreement, we expect *vor DPs* to trigger plural agreement. Since there is no corresponding presupposed set of individuals from which *ov* 'who' or *ine* 'what' pick, these *wh* expressions are not specific and therefore do not trigger agreement on the verb.

Interesting morphological confirmation of this explanation comes from judgements about the interpretation of the expression $in\mathcal{E}$ - ϑ 'what-dt' in (23). Although it is not standardly used, to the extent that it is acceptable it means 'what of among a set of items'. This is exactly what we would expect given that the definite article $-\vartheta(n)$ makes noun phrases specific by adding the feature [PERSON-deictic].

- (23) a. ?karayr-i-n meč inč-ə kəda-n cave-gen-dt in what-dt find.aor-3p

 'What [of a certain set of things] did you find in the cave?'
 - b. ?seran-i-n vəra inč-ə tər-ir table-gen-dt on what-dt put.aor-2s 'What [of a certain set of things] did you put on the table'

3.2.1.2 Group vs. distributed interpretation of non-agreeing subjects

In general plural subjects allow either a group reading or a distributed reading in sentences like (24), to borrow an example from Pesetsky (1982). What this means is

that (24) can be true if six mathematicians working together proved the theorem, in which case there was one event of proving the theorem and six participants. (24) is also true if each of six (or three groups of two each, etc.) mathematicians proved the theorem separately. In this case there are six events of proving the theorem involving one or more participants each.

(24) Six mathematicians proved the theorem.

The difference between the group and the distributed interpretation is that the event has wide scope over the subject in the first case and the subject has wide scope over the event in the second. The ambiguity in the English sentences is attributed by Pesetsky to the optionality of QR applying to the subject.

Consider the following examples in SWA where the distributed reading is forced in the (b) sentences.

- (25) a. kəsan yerk.i**č** ing.a-**v/-n**twenty sing.er(**sg**) fall.aor-3**sg/-3pl**'There fell twenty singers'
 - b. kəsan yerk.ič ing.a-*v/-n darper pem-er-e-n twenty sing.er(sg) fall-*:3sg/-3pl different stage-pl-ABL-dt Twenty singers fell off of different stages'
- (26) a. vec hyur yeg.a-v/-n parti-i-n
 six guest(sg) came-3sg/-3pl party-DAT-dt

 There came to the party six guests. / Six guests came to the party'
 - b. vec hyur yeg.a-*v/-n parti-i-n darper oto-ner-ov six guest(sg) came-*3sg/-3pl party-DAT-dt different car-pl-INSTR

'Six guests came to the party in different cars'

In discussing non-agreement phrases in Russian⁹, Pesetsky (1982) describes their behavior in clauses where the verb requires a subject which is a group. Verbs such as 'disperse', 'gather,' and 'meet' require their subject to be a group. He finds that the Russian verb *razlučit'sja* 'to part company' requires an agreement numeral phrase as subject.

- (27) a. [šest' matematikov] razlučilis' na mostu six mathematicians parted company(pl) on bridge
 - b. #[sest' matematikov] razlučilos' na mostu six mathematicians parted company(sg) on bridge

Under his analysis, non-agreement numeral phrases obligatorily undergo QR. This would result in the non-group reading, hence the unacceptable (27b).

In SWA the data are not consistent on this point; both plural and nonagreement are acceptable when the verb requires a plural subject:

- (28) kəsan məgn-ig havak-v-e.c-a.v/-a.n xohanoc-i-n meč
 20 mouse-dimin gather-pass-aor-3sg/-3pl kitchen-GEN-dt in
 'Twenty mice gathered in the kitchen'
- (29) yerp gadu-mə yerev-c-a.v karasun məgn-ig darad^z-v-e.c-*a.v/-a.n when cat-a appear-aor-3s 40 mouse-dimin disperse-pass-aor-*3sg/-3pl

⁹Pesetsky (1982) describes what he calls no-agreement numeral phrases. They are strikingly similar to the SWA non-agreeing subjects in that they must be indefinite cannot be modified and must be subjects of non-transitive verbs (if the verb is transitive then it must show plural agreement). In addition, he claims that Russian non-agreement numeral phrases "generally have an 'existential' flavor which is not obligatory for agreement numeral phrases" (Pesetsky 1982: 84).

'Forty mice dispersed when a cat appeared'

3.2.1.3 Adverbs that modify subjects vs. adverbs that modify events

Adverbs such as 'intentionally' or 'on purpose' that modify agents that are animate actors are not acceptable in non-agreement sentences, (30).

- (30)a. kəsan yerk.ič tid.mamp pem-i-n vəray-e-n inga-n/*-ø twenty sing.er notice.instr stage-GEN-dt on-ABL-dt fell-pl/*sg

 Twenty singers intentionally fell off the stage'
 - b. vec usan.ow uraxut.yamp cerp.a.gal-v-e.c-a.n/*-a.v
 6 student happiness.instr arrest-pass-aor-3p/-3s
 'Six students happily were arrested'

We also find that modifying the subject with an adjective tends to force agreement (31). We saw in section 2.7 that the more modified a noun is, the more likely it will be to bear the plural morpheme (when it is modified by a numeral greater than one). The tendency of the verb to show plural agreement may be due to the same effect.¹¹

- (31)a. kəsan kin.ov yerkič pem-i-n vray-e-n ing-a.n/%-a.v twenty wine.instr singer stage-gen-dt on-ABL-dt fell-pl/%-sg 'Twenty drunk singers fell off the stage'
 - b. dasə d^z uyl es d^z e d^z -v-ec-a.n/%-a.v

11Note that nonagreement is best when the subject is a numeral or quantifier plus words like mart 'man/person' or hoki 'soul' (used to refer to people, as in kani hoki ga?/how.many soul exist.3s/'how many [people] are there?') or pan 'thing'.

ten lazy donkey beat-pass-aor-**pl**/%-sg 'Ten lazy donkeys were beaten'

- c. hink an.bargesd pern.a.gir yerev-c-a.n/%-a.v five dishonest porter appear-aor-pl/%-sg 'Five dishonest porters appeared'
- d. karasun kerecig navag əngərməve-c-a.v/%-a.n forty beautiful boat sink[unacc]-aor-3s/%-3pl 'Forty beautiful boats sank'

While adverbs that modify the action with respect to the subject favor an agreeing verb, sentences in which the adverbs modify the event or the outcome of the action of the verb are grammatical when there is no agreement, (32).

- (32)a. kič aden-mə kəsan yerkič məna-c-Ø/-i.n little time-a 20 singer stay-aor-3s/-3pl 'Twenty singers stayed briefly'
- b. an.agəngal.oren haryur zinvor voxe mənac / -i.n unexpectedly 100 soldier healthy stayed.3sg / -3pl 'A hundred soldiers unexpectedly survived'
- c. yerek məgnig haziv gadu-e-mə pax-av/-an
 3 mouse barely cat-ABL-a escape.aor-3sg/-3pl
 'Three mice barely escaped from a cat'

The adverb facts are easily explained if we adopt Travis's (1988) account of adverb licensing, in which the placement and interpretation of a given adverb depends on which features of which head licenses that adverb. For example, she distinguishes between subject- and agent-oriented adverbs ((33) and (34)). In (33) we see that the

adverb modifies the subject, whether or not it is the agent. In (34) on the other hand we see that the adverb modifies the agent whether or not it is the subject.

(33)¹² Subject-oriented adverbs

- a. The police <u>unwillingly/carelessly</u> will arrest Fred.
- b. Fred <u>unwillingly/carelessly</u> will be arrested by the police.

(34)¹³ Agent-oriented adverbs

- a. The police arrested Fred <u>unwillingly/carelessly</u>.
- b. Fred was arrested <u>unwillingly/carelessly</u> by the police.

Agent-oriented adverbs, according to Travis, are licensed by the Manner feature of V, while subject-oriented adverbs are licensed by the Agr feature of Infl. She specifies that they are licensed by the Agr feature of Infl, and not by Infl itself, because she proposes that another class of adverbs is licensed by the Event feature of Infl. This class includes the sentential adverbs that express epistemic modality, (35).

(35) Fred was <u>probably/evidently/definitely</u> arrested by the police.

Having looked at two aspects of the interpretation of non-agreeing clauses in Armenian, namely that they have an existential or event-focused meaning and that their subjects are non-specific, we now present a general account of indefinite

¹²These examples are based on Travis 1988:5, (11a,b), which are in turn based on Jackendoff 1972:82-83.

¹³These examples are based on Travis 1988:5, (11c,d), which are in turn based on Jackendoff 1972:82-83.

subjects and how the facts we have seen are explained given the feature-based analysis proposed.

3.2.2 Diesing (1992)

In the sections that follow, I sketch Diesing's (1992) Mapping Hypothesis and show that it accounts straightforwardly for the interpretation of SWA subjects. The Mapping Hypothesis (MH) says essentially that internal subjects are non-specific and that external subjects are specific. If we assume that TP is an "internal" domain, the MH predicts correctly that subjects in specTP will receive a non-specific interpretation. Overtly plural subjects, which move to spec-AgrSP, are external; they are interpreted as specific, again in accordance with the MH.

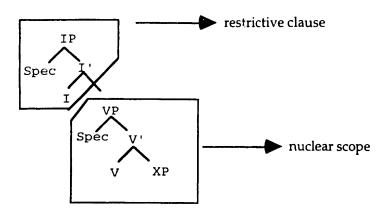
In order to account for the interpretation of indefinite noun phrases, Diesing (1992) proposes the Mapping Hypothesis, (50a,b), which "establishes a straightforward relationship between syntactic structure a d the form of the logical representations" (Diesing 1992:12). Non-specific NPs and non-quantificational NPs remain in an 'internal' subject position, the hypothesis being that NPs in this part of the syntactic representation are mapped to the nuclear scope of the semantic representation. These NPs introduce variables into the semantic representation and are subject to the general operation of existential closure. In this way they receive an existential interpretation. Specific noun phrases and quantificational NPs are in an 'external' position and are mapped into the restrictive clause.

(50)a. (= Diesing's (1), p 15)

Material from VP is mapped into the nuclear scope.

Material from IP is mapped into a restrictive clause

b.



(51)a. Every llama ate a banana.

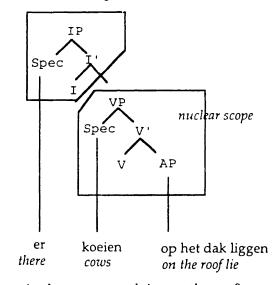
b. Every x [x is a llama] $\exists y, y$ is a banana & x ate y quantifier restrictive nuclear scope clause

For our purposes, what is interesting is how the Mapping Hypothesis accounts for differences in interpretation of indefinite subjects. Consider Diesing's examples of bare plural subjects in Dutch in (52) (the examples are from Reuland 1988).

- (52)a. *Fred denkt dat koeien op het dak liggen Fred thinks that cows on the roof lie
 - b. Fred denkt dat er koeien op het dak liggen Fred thinks that there cows on the roof lie 'Fred thinks that there are cows lying on the roof'
 - c. Fred denkt dat koeien lui zijn Fred thinks that cows lazy are 'Fred thinks that cows are lazy'

In the embedded clause in (52b), the external subject position is occupied by an expletive, and the subject *koeien* 'cows' is in a VP-internal position. The MH predicts that the sentence will have an existential interpretation, and such is the case. (52a) is ungrammatical because the subject is external and must, according to the MH, be interpreted generically, and yet the predicate 'lying on the roof' is not compatible with such an interpretation. The predicate *lui* 'lazy', on the other hand is compatible with a generically interpreted subject. (52c) is therefore grammatical. The examples (52)a,b are illustrated by (53) and (54), respectively.

(53) Existential Reading



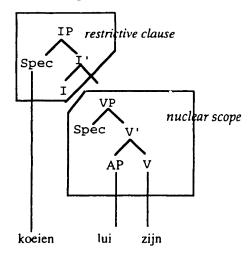
'... there are cows lying on the roof

 $\exists x \quad [x \text{ are cows } \& x \text{ are lying on the roof}]$

 \uparrow Existential Closure (applies to variables not bound by operators in the syntax)

The generic reading of (52c), is assigned the structure in (54):





3.2.2.1 SWA data

Turning to the Armenian data, the Mapping Hypothesis correctly predicts how agreeing and non-agreeing plural subjects will be interpreted, provided we make one additional assumption. For Diesing the internal subject position is spec-VP. I propose that spec-TP also counts as an internal subject position for the purposes of the Mapping Hypothesis. In fact, this is not so much a departure as an adaptation of Diesing's analysis to the articulated IP framework. Diesing bases her analysis on a non-articulated IP where the contrast is between spec-VP (internal) and spec-IP (external) subject positions. I assume here that spec-AgrP corresponds to her external subject position and that both spec-VP and spec-TP are internal subject positions. I say spec-AgrP and not spec-AgrSP for two reasons: one, in the

Minimalist framework there is no distinction between agreement nodes, and two, there is evidence that it is a general property of arguments related to an Agr node that they are specific.¹⁴

I take the fact that VP adverbs and PPs can intervene between the nonagreeing subject and verb, (24), to indicate that the subject has moved out of the VP.¹⁵ However, as I have argued, the subject does not move to spec-AgrP because there is no AgrP projected. The only position available to it then is either spec-TP or a position adjoined to VP. I assume that it is in spec-TP.

- (55)a. ay.t senk-e-n turs [TP kəsan gini [VP hantard [VP ti gə-sbase-r]]]

 that building-abl-dt outside 20 women calmly imp-wait-pst.3s

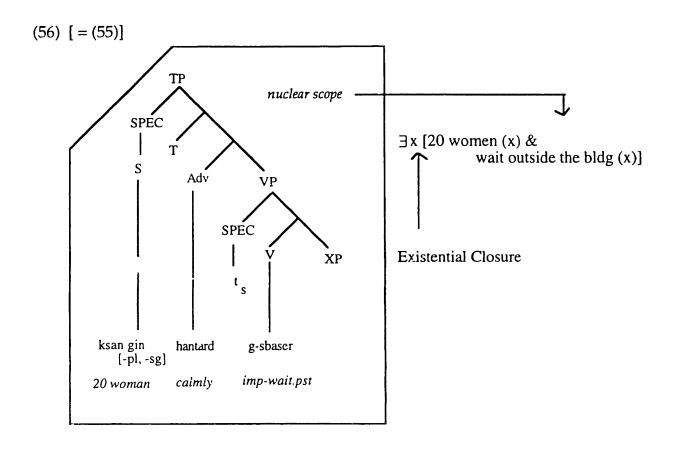
 There were twenty women calmly waiting outside that building'
 - b. ayt šenk-e-n turs mišd [TP kəsan gin; [VP ti gə-sbaser]]
 that2 building-abl-dt outside always 20 women imp-wait.pst
 'There were always twenty women waiting outside that building'
 - c. ardəvan ganux hangard^z [TP dasə zinvor_i [VP t_i yerev-c-av]] morning.gen early suddenly 10 soldier appear-aor-3s 'Early in the morning ten soldiers appeared'

Accusative case is linked with specificity in Turkish (Brown 1970, Enç 1991) and Hindi (Mohanan 1992, 1995), since it is checked in spec-AgrOP, this is another example of the link between specAgrP and specificity.

¹⁴See Runner (1994) for analysis of cross-linguistic evidence that specAgrP is a position reserved for specific arguments. French participial agreement is with specific objects only. Mchajan (1990) asserts that the verb in Hindi agrees with specific objects, although Mohanan 1995 claims that incorporated (nonspecific) objects trigger agreement on the verb. Deprez (1991) argues that Germanic Object Shift, which affects specific objects only, is movement to spec-AgrOP. If, as Mahajan (1991) claims, it is the relation with the pronominal component of inflection that renders an argument referential (a term he takes to be synonymous with *specific*), then it is reasonable to assume that an argument which is in a spec-head relation to T, that contains no person/pronominal features should not be specific.

¹⁵Following Pollock (1989), who uses adverb placement to determine arouments' place in the split-IP structure.

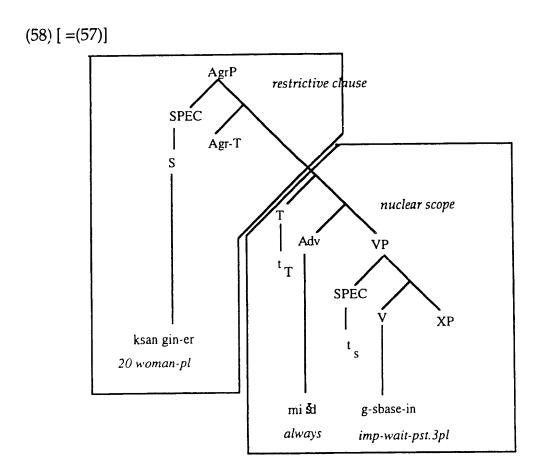
Non-agreeing subjects, then, behave as expected. The Minimalist Program predicts that, because they do not have the ϕ -feature Person, and they do not move to spec-AgrP (this is manifested by the lack of overt agreement); the Mapping Hypothesis predicts that, because they are in an internal subject position, they are interpreted existentially, (56).



Subjects that do bear ϕ -features also behave as expected; they move to spec-AgrSP, the verb shows agreement, and the subject receives a specific interpretation, (57).

(57)a. ay.t senk-e-n turs [AgrP kəsan gin-eri misd [TP [VP ti gə-sbase-i-n]]]
that2 building-abl-dt outside 20 woman-pl always imp-wait-pst-3p
'Outside that building twenty [particular] women were always waiting'

b. ardva ganux dasə [AgrP zinvor-neri hajax [TP [VP ti g-ereve-i-n]]]
morning.gen early ten soldier-pl often imp-appear-pst-3p
'Every morning [a certain] ten soldiers often appeared'



3.2.3 Conclusion

We have seen that by assigning covert plural subjects the feature specification [-pl,-sg] [persØ], and assuming that number features are checked when the subject raises to specTP, their interpretation can be accounted for by the Mapping Hypothesis of Diesing (1992), a general analysis for indefinites.

3.3 Nonagreeing subjects lack [person]

3.3.1 Covertly plural NPs and pronominal reference

Covertly plural NPs, like bare NPs, are not able to antecede the reciprocal pronoun *iraru* or the third-person pronouns *anonk* and *irenk*. Consider the sentences in (59)-(60). The (a) sentences demonstrate that the verbs *nəsdil* 'to sit' and *ingal* 'to fall' allow non-agreement. The (b) sentences show that the covertly plural subject cannot be coreferent with the reciprocal *iraru* or with the genitive version of the pronoun *irenk* in the same clause.

- (59) a. seran-i-n vəra-(n) yergu arcig nəsd-adz e-r table-gen-dt on-dt two girl sit-ppt₁ be-3s.pst
 - 'At the table there were seated two girls'
 - b. *tas.aran-i-n meč yergu azčig classroom-gen-dt in two girl

nəsd-ad^z er irar.u/ir.enc sexan-er-u-n¹ vəra sit-ppt₁ be.3s each other/3'pl.gen table-pl-gen-dt on

('In the classroom there were two girls seated at each other's/their [own] desks')

(60) a. danik-e-n yergu mart inga-v roof-abl-dt two person fall.aor-3s

'There fell from the roof two people'

¹The fact that covertly plural NPs have a group interpretation is also playing a role in these examples. You cannot say, for example:

^{*}vec yerkič darper mayk-er-ov g-erke-r six singer differer t microphone-pl-instr imp-sing-pst.3s 'There were six singers singing into different mikes'

b. *yergu mart inga-v iraru/irenc danik-ner-e-n two person fall.aor-3s each other's/3'p.gen roof-pl-abl-dt

('Two people fell from each other's/their [own] roofs')

As expected, the sentences in (61) and (62) are acceptable when the subject is overtly plural:

- (61) meč yergu arčig-ner tasaran-i-n classroom-gen-dt in two girl-pl nəsd-adz e-i-n iraru / irenc seran-er-u-n vəra be-pst-3p each other/3'pl.gen table-pl-gen-dt sit-ppt₁ on 'In the classroom two girls were seated at each other's/their [own] desks'
- (62) yergu mart-ig inga-n iraru/irenc danik-ner-e-n two person fall.aor-3p each other's/3'p.gen roof-pl-abl-dt 'Two people fell from each other's/their [own] roofs'

In (63) we see that the covertly plural subject cannot be coreferent with the third person pronoun *irenk* in a following clause.² This however is possible when the subject is overtly plural.

- (63) a. dasə asagerd yega-v ten student come.aor-3s
 - b. *ir.e.nk ir.e.nc³ d^zənoʁ.k-ner-ə per-ad^z e-i-n they 3'pl.gen parent.pl-pl-dt bring-ppt₁ be-pst-3p

'Ten students came. They had brought their parents'

c. *dasə asagerd yega-v pro irenc dznowk-ner-ə per-adz e-i-n
10 student came.aor-3sg 3'pl.gen parent-pl-dt bring-ppt be-3p-pst

(64)a. Cors hoki sas.aran məd-av

²The third-person pronoun *anonk* cannot refer back to the covertly plural subject's referent, but this could be because *anonk* seems to be unable to corefer with the closest preceding potential binder.

³Irenk irenc forms the 3rd-person plural reflexive pronoun.

four soul restaurant enter.aor-3s

*ir.e.nk / pro anoti e-i-n payc təram **č**-un-e-i-n they / pro hungry be-3p-pst but money neg-have-3p-pst

'Four people came into a restaurant. (They were hungry but they had no money)'

b. harteh-e-n hedo kəsan pəzisg yeg-a.v fire-abl-dt after tweny doctor come.aor-3s

*irenk/pro panag-i-n gozm-e-n per-v-ad² e-i-n they/ army-gen-dt side-abl-dt bring-pass-ppt₁ be-pst-3p

'After the fire twenty doctors came. (They were brought by the army)'

It seems that the most natural way to refer to the referents of the covert plural is to repeat the NP as indicated in the pairs of sentences in (65).⁴

(65) a. dasə asagerd yega-v ten student come.aor-3s

> ay.s asagerd-ner-ə d^zənox.k-ə per-ad^z e-i-n this student-pl-dt parent-dt bring-ppt₁ be-pst-3pl

'There arrived ten students. These students had brought their parents'

b. čors hoki₁ Jasaran məda-v ays mart-ig₁ four soul restaurant enter.aor-3s this person-pl

anoti e-i-n payc təram č-une-i-n hungry be-pst-3p but money neg-have-pst-3pl

Four people₁ entered a restaurant. These people₁ were hungry, but they didn't have any money'

The referents of the covert plural subject can be referred to using one of the expressions in (66). But as these are partitive expressions, they need not match the noun phrase that they refer back to in feature specification.

(66) a. amen meg-ə

⁴This is the same strategy used when a bare NP or bare plural introduces referents into the discourse (see sections 2.4.2, 2.7.4).

every one-dt 'every one'

- b. amen-ə / amen-n-al every-dt / every-dt-also 'all of them'
- c. yurakan**č**yur asagerd each student 'each student'

The pronominal reference facts indicate that the features of a covertly plural noun phrase do not match the features of either the singular or the plural third-person pronouns. If the number specification of a covert plural is [-pl, -sg], that would suffice to clash with pronouns specified for [-pl +sg] or [+pl, -sg]. So we actually cannot conclude that the covert plurals lack [person] on the basis of pronominal facts alone. To do this we look at the *pro* drop facts in the next section.

3.3.2 Pro drop is not permitted in non-agreeing sentences

We find that although Armenian is a pro-drop language in the usual sense⁵, nonspecific plurals cannot be phonologically null. Assuming that [person] is required to license a null subject, I take this fact to be evidence that nonagreeing verbs and subjects do not have person features. To show this we consider the case where there is overt singular marking on the verb, where the interpretation of the null subject is that of a definite singular noun phrase and not that of a covertly plural noun phrase. Similarly, when there is overt plural marking on the verb, the interpretation is that of a definite plural noun phrase and not of a covert plural. If

⁵By 'usual' I mean that all tensed verbs permit null subjects, as in Italian for example.

we assume that a null subject can only be licensed in specAgrP, and not in specTP, since [person] is checked in AgrP, then this is what we expect.⁶

In the examples in (67)a-c the null subject, *e*, cannot be interpreted in such a way that it refers to the same thing that a covertly plural NP refers to. Rather, speakers report that the null expressions in (67)a-c should be paraphrased only by expressions which contain the plural morpheme and the definite article.

(67)a. Jyur-e-n ing-ad^z $e = k \Rightarrow san t \Rightarrow r \in un-ner \Rightarrow un-ner \Rightarrow$ e-n branch-abl-dt fall-ppt₁ 20 be-3p bird-pl-dt 'They have fallen from the branch' kəsan (had) tərčun 20 (CL) bird b. bardez-i-n ef-er-ə meč yerev.c-a.n e = hinkgarden-gen-dt in appear.aor-3pl 5 donkey-pl-dt 'They appeared in the garden' $e \neq hink$ (had) e∫ 5 (CL) donkey c. angorn-i-n vra-(n) *e* gə-kənana-n Sun-er-a e = utabed-gen-dt imp-sleep-3pl dog-pl-dt on-dt 8 'They are sleeping on the bed' $e \neq uta$ ∫un 8 dog

Similarly when the agreement on the verb is singular, the *pro* subject can only be a singular, definite entity; it cannot be a nonspecific plural entity, despite the fact that singular morphology is compatible with non-specific plural subjects. This is clear from the examples in (68)-(69).

⁶For an analysis of the *pro* drop phenomenon within the MP framework as well as extensive references see, for example Speas (1995) Rohrbacher (1994).

- (68)a. pro pem-e-n ing-a.v

 ___ stage-abl-dt fall.aor-3s

 'It/she/he/the singer fell from the stage'

 *'There fell from the stage three singers'
 - b. pem-e-n yerek yerkič ing-a.v stage-abl-dt three singer fall.aor-3s ≈'There fell from the stage three singers'
- (69)a. pro turs ned-v-e.c-a.v

 out throw-pass-aor-3s

 'It/she/he/the garbage was thrown out'

 *'There were ten shoes thrown out'
 - b. dasə go∫ig turs ned-v-e.c-a.vten shoe out throw-pass-aor-3s≈'There were ten shoes thrown out'

3.4 Analysis

3.4.1 Word order in nonagreement clauses

The sentences in (70) show the preferred word order of the adverb, subject, and verb in a nonagreement sentence. As in sentences with bare NP arguments, native speakers prefer covert plural subjects to be adjacent and to the left of the verb.

- (70) a. hangard^z vec ∫i∫ ing-a.v suddenly six bottle fall.aor-3s ≈'Suddenly there fell six bottles'
 - b. havan.apar sad rump bayt.e.c-a.v probably many bomb explode.aor-3s

 *There probably exploded many bombs'
 - c. vəsdah.apar kəsan gin yeg-a.v **3**0x0v-i-n definitely twenty women come.aor-3s meeting-dat-dt ~'There definitely came to the meeting twenty women'

In (71) we see that these subjects can also appear to the left of VP adverbs, which I take to show that they move to a position above VP.

- (71) a. d²ar-e-n vec derev [VP gamac [VP t_{SUB} ing-a.v]]
 tree-abl-dt six leaf slowly fall.aor-3s
 'There slowly fell from the tree six leaves'
 - b. cor-i-n mee-3 yerek rump [VP axmug.ov [VP tSUB bayte-c-a.v]] valley-gen-dt in-dt three bomb noisily explode-aor-3s 'In the valley there exploded noisily three bombs'
 - c. taran-e-n sahe-c-av

shelf-abl-dt many dish smoothly slide-aor-3s 'Off the shelf there slid smoothly many plates'

d. arev-i-n dag-(ə) kani-mə kork arak.oren/arak-mə kunade-c-a.v sun-gen-dt under-(dt) few-a carpet quickly/quickly-a fade-aor-3s 'In the sun there faded quickly a few carpets'

While VP adverbs can intervene between the covert plural and the verb without affecting the grammaticality of the sentences, sentential adverbs such as *havanapar* 'probably' and *vəsdahapar* 'definitely' create less than acceptable sentences when they intervene between the subject and the non-agreeing verb, (72).

- (72)a. ??vec ∫i∫ hangard² [TP [VP t_{SUB} ing-a.v]]
 six bottle suddenly fall.aor-3s
 ≈'There fell suddenly six bottles'
 - b. ??ayt kamyon-i-n meč-ə sad rump havan.apar [TP [VP bayte.c-a.v]]
 that2 truck-gen-dt in-dt many bomb probably explode.aor-3s

 ~'In that truck there probably exploded many bombs'
 - c. ??kəsan gin vəsdah.apar [TP [VP tSUB] has-a.v 30x0v-i-n
 20 woman definitely arrived at the meeting'

 'Twenty women definitely arrived at the meeting'

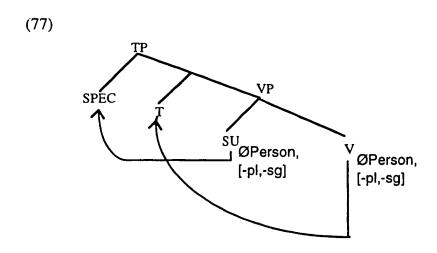
The sentences in (72) become more acceptable if the verb is plural, as in (73).

- (73) a. vec fif hangardz ing-a.n six bottle suddenly fall.aor-3p
 'Six bottles suddely fell'
 - b. ayt kamyon-i-n me**č-ə** ʃad rump havan.apar bayte.c-i.n that2 truck-gen-dt in-dt many bomb probably explode.aor-3p

'In that truck many bombs probably exploded'

c. kəsan gin vəsdah.apar has-a.n 30x0v-i-n
20 woman definitely arrive.aor-3p meeting-dat-dt
'Twenty women definitely arrived at the meeting'

The problem with these adverb facts is that there is a difference in interpretation associated with each location: when the adverb *havanapar* 'probably' precedes the verb it has scope over the verb and the sentence means that the bombs probably exploded in the truck, as opposed to doing something else (being transported or stored for example). If the adverb precedes the subject (either directly, or in sentence-initial position) then it has scope over the whole sentence and the sentence means that it is probably the case that the bombs exploded. This means that the adverbs in (73) are VP-adjoined and not TP-adjoined, which would not show that the subject has moved out of TP. So the above adverb placement facts are evidence that the covertly plural subect moves out of VP. We see in sections 3.3 and xx that binding and floating quantifier facts indicate that this argument does not move to AgrSP. I therefore conclude that covertly plural subjects move out of VP to an intermediate functional projection between VP and AgrSP and assume that this is TP, (77).



The structure in (77) has no AgrSP. This results from several assumptions: (i) an argument moves to a functional projection to check its features (a basic assumption in the MP); (ii) the lack¹ of overt agreement on the verb reflects the absence of the abstract morphological feature [person]; (iii) the projection of a functional projection is not allowed if no lexical element in the derivation ever makes use of it in the course of the derivation (ie, it is un-Economical to project vacuous functional projections)².

3.4.2 Transitive verbs cannot not agree

In addition to lacking AgrSP, the structure in (77) has no AgrOP. It is a basic assumption of the MP that the two AGR projections are, strictly speaking, not distinct, and therefore either both are projected or neither. This means that transitive verbs whose objects require Case (i.e., those whose objects are not bare NPs³) will not be able to have non-agreeing verbs, as the non-agreement derivation in (77) does not provide the necessary functional projection, AgrOP, for accusative case checking. The examples in (1)-(3) show that non-agreement is in fact unacceptable when the verb is transitive.

(78) a. kəsan zinvor kyuk-ə kant.e-c-i.n /-*Ø

20 soldier village-dt destroy-aor-3p / -3s

'Twenty soldiers destroyed the village'

¹By lack of overt agreement I mean its absence in a paradigm in which agreement would otherwise be marked.

²Chomsky (1995) suggests a version of this.

 $^{^{3}}$ When the object of a transitive is a bare NP, that is, an argument that is licensed inside VP (since it lacks ϕ -features), the non-agreeing construction seems to be acceptable. We discuss this in the next section.

- b. kəsan kyuk.a.ci ver.a.tarc-a.v/-*a.n
 20 villager return.aor-3s/-pl
 'There returned twenty villagers'
- (79) a. dasə arcig sis-er-ə nede-c-i.n/*-Ø
 ten girl bottle-pl-dt throw-aor-3p/-3s
 'Ten girls threw the bottles'
 - b. dasə arcig yeg-a.v ten girl come.aor-3s 'Ten girls arrived/came'
- (80) a. bardez-i-n meč-ə yerek e∫ d²aʁig-ət
 garden-gen-dt in-dt three donkey flower-2poss
 g-ude-i-n / *-r gor
 imp-eat-pst-3p/ -pst.3s prog
 'In the garden three donkeys were eating your flowers'
 - b. bardez-i-n meč-ə yerek ef ga-r garden-gen-dt in-dt three donkey exist-pst.3s

 'There were three donkeys in the garden'

Interestingly, it seems to be more acceptable to have a non-agreeing verb in a transitive clause where the object is a bare NP, i.e., a nonspecific noun phrase. The sentences in (81)-(82) are not perfect, but they are much better than their counterparts with specific objects.⁴

(81)a. ??yereg kiser hink gadu mug pərne-c-Ø

⁴Reuland observes a similar effect in transitive expletive sentences in Dutch; they are acceptable when the object is indefinite and not acceptable when the object is definite (Reuland 1988).

yesterday evening five cat mouse catch-aor-3s 'Yesterday evening five cats caught mice'

- b. yereg kiser hink gadu mug-er-ə pərn.e-c-i.n / *-Ø yesterday evening five cat mouse-pl-dt catch-aor-3p/-3s 'Yesterday evening five cats caught the mice'
- (82)a. ??vec gin JaJ g-epe-r gor six woman food imp-prepare-pst.3s prog 'Six women were preparing food'
 - b. *vec gin irenc Jas-s g-epe-i-n / *-r gor six woman their food-dt imp-prepare-pst-3p/-pst.3s prog 'Six women were preparing their food'

We would expect this given the analysis proposed, since a bare NP object has no ¢-features to trigger its movement to AgrOP, so no AgrOP is projected. The non-agreeing NumP subject can raise to specTP to check Number and Case and no AgrSP is needed. If the subject is a DP, AgrSP is projected so that it can check its person feature. Assuming that functional projections are added to the structure from the bottom up, as needed, AgrSP can be added to the structure without creating an AgrOP projection. In other words, if the subject DP raises to TP, then AgrSP is added, the projection of an Agr phrase lower than T will not be permitted (doing so would violate the principle of the Cycle; Merge can only add structure above existing structure). However, if AgrOP is projected, AgrSP is projected without violating these structure-building principles.

3.4.3 Unergatives must agree

For the most part⁵ unergative verbs pattern with transitive verbs with respect to agreement in that covertly plural subjects trigger plural agreement on the verb, (1). In this section I discuss the data in detail and the potential challenge to the proposed analysis that the data present. I appeal to the analysis of unergatives in Hale and Keyser (1993), and conclude that the reason unergatives must show agreement is that the subject of an unergative verb is *external*, that is, it is external to the predicate, the syntactic boundary of which I take to be TP. An external subject according to this characterization is licensed syntactically only if it has the ϕ -features that allow it to move to spec-AgrSP. In the analysis presented here this amounts to saying that the subject must be specified for both number and person.

- (83)a. baduhan-i-n antin yerek ∫un hače-c-i.n / *hače-c window-gen-dt to.that.side three dog bark-aor-3p / bark-aor 'Outside the window three dogs barked'
 - b. ayt kord^z.aran-i-n meč hazar hoki g-a∫xadi-n/*-Ø that factory-gen-dt in 1000 soul imp-work-3p/-3s 'A thousand people work in that factory'
 - c. tebi gamurč-ə kəsan zinvor vaze-c-i.n/* vaze-c-Ø toward bridge-dt 20 soldier run-aor-3p/run-aor-3s 'Twenty soldiers ran toward the bridge'
 - d. Siran-i-n harsnik-i-n \(\) ad aze ig gə-bare-in / * -r gor S -gen-dt wedding-gen-dt many girl imp-dance-pst.3p / * -pst.3s prog 'At Siran's wedding many girls were dancing'

The fact that unergative verbs cannot occur in non-agreement constructions is a problem for the analysis proposed, since unergatives are transitive at the level of L(exical)-syntax (Hale and Keyser 1993), not at the level of S-syntax, where issues of

⁵Some speakers accept non-agreement in clauses where the unergative verb is one of involutary movement or bodily function, such as *pərənkdal* 'sneeze', *hazal* 'cough', *zəbdil* 'smile'.

Case and ϕ -features are operative.⁶ So, while I have proposed structural reasons to explain why derivations involving transitive verbs require the projection of AgrS/O, these reasons rely on the fact that the object in the transitive construction must move to spec-AgrO in the syntax, something which the object of an unergative verb is not required to do.

In other words, the problem is that the reason a transitive verb requires agreement is that (i) its object must move the specifier of a functional projection (to check Case and ϕ -features), and (ii) the only such position available, under our assumptions, is spec-AgrOP, and (iii) the presence of AgrO implies or "includes" the presence of AgrS. The fact that transitive verbs with bare NP objects tend to allow non-agreement is a good indication that it is Case/ ϕ -feature considerations that are at issue and not a property of the argument structure of the verb. In either case, whether it has a nonspecific object or a specific object, the verb is the same with respect to its argument structure. But here is the problem: we would expect unergatives to pattern with transitives whose object is nonspecific; in the case of an unergative verb, we expect this because its object incorporates in 1-syntax; in the case of a transitive verb with a nonspecific object, we expect it because its object does not have the ϕ -features that force movement to spec-AgrP.

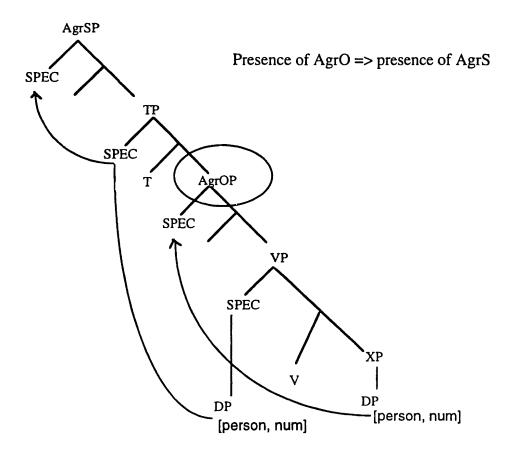
Compare the derivations in (84), (85) and (86); transitive verb with specific object, non-specific object and unergative verb, respectively. In (84) the object and subject move to specAgrP positions and agreement is overt. The presence of an object that is specified for Person means that AgrOP will be projected, and along

^{6&}quot;... Case and agreement, irrelevant in L[exical]R[elational]S[tructure], by hypothesis." (Hale and Keyser 1993:99).

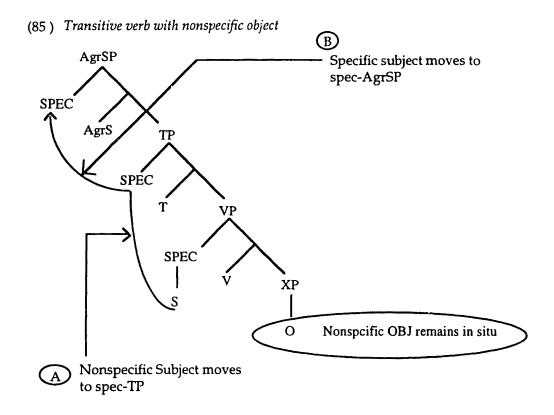
⁷I should stress that this is really a tendency: when the verb is transitive and the object is specific, the sentence is definitely ungrammatical; when the object is singular and nonspecific (a bare NP) it is more acceptable, but perhaps not completely grammatical.

with it, AgrSP to which the subject must move (to check AgrS's features) and to do this it itself must have φ-features motivating its movement, hence the subject must have person and number specification.

(84) Transitive verb with specific object

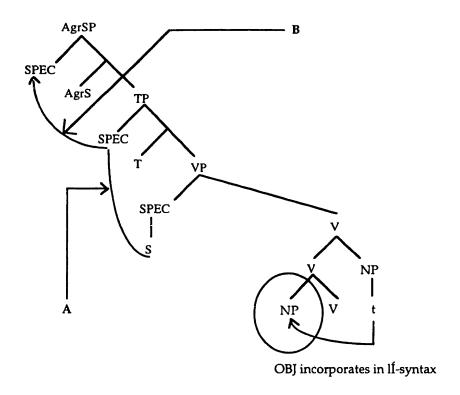


In (85) the object does not need to move to specAgrOP, as it has no ϕ -features to check. Thre are two possibilities for the subject: A indicates the path a NumP subject takes to check features in TP; B shows the DP subject raising to specTP and then to specAgrSP to check number and person, respectively. Here I assume that the projection of AgrSP does not require the projection of AgrO (since AgrS is inserted above T in the structure, no structure can be inserted at a lower node without violating some form of the Strict Cycle Condition).



In (86) we should be able to have the same A derivation as in (85). In both cases the object stays in VP, in (85) because it has no ϕ –features, in (86) because it incorporates into the verb in l-syntax (Hale & Keyser 1993; see below). But in fact the unergative examples are all ungrammatical with non-agreeing verbs, indicating that in fact the B derivation is obligatory.

(86) Unergative verb

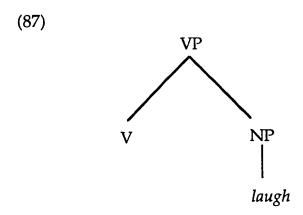


To solve this problem I appeal to the part of Hale and Keyser's analysis of unergatives that says that the subject of an unergative verb is *external* to the lexical projection of the verb and propose that the subject of an unergative is licensed in specAgrSP, in a position external not only to VP, but to the predicate. First, let us look at Hale and Keyser's argument that unergative subjects are external.

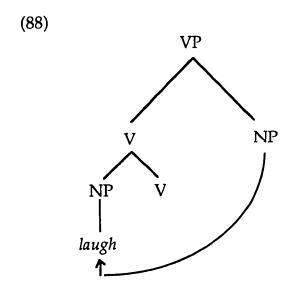
3.4.3.1 Hale and Keyser (1993)

Hale and Keyser propose that the lexical structure of an unergative verb is as shown in (87). Note that these structures are l-syntactic, that is, they are structures that obey constraints and undergo processes that are found in s-structure syntax (e.g.,

head movement, incorporation) but the operation of these processes is inside the Lexicon.



Incorporation can apply to this structure and give the result in (88):



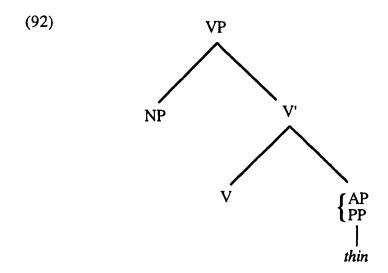
Or incorporation can fail to apply, and the surface form of the VP will be a "simple transitive," involving a light verb as in (89), or an unergative with a cognate object, (90).

(89)a. Mary had a good laugh.

- b. Vic had a dreamless sleep.
- (90)a. The landlord laughed a hearty laugh.
 - b. The detective ran her usual run.

The lexical relational structure (LRS) of unergatives contrasts with that of unaccusatives, (91), in which the lexical complement of the verb is an AP or a PP, rather than an NP, (92).

- (91) a. The door opened
 - b. The gravy thinned



The key difference between the two is that the unaccusative's lexical structure, (92), has a subject NP position and the unergative's does not. This, they argue, is the result of the properties of the lexical complement of V. An AP or PP being inherently predicational or relational, respectively, requires a subject at the lexical level. The lexical complement of the unergative verb, on the other hand, is NP, which is not inherently predicational and therefore does not license a subject

position inside the verb's lexical projection. For them the subject of an unergative (or transitive) verb thus is not present at the lexical level, rather it is licensed by "properties of the matrix — for example, the transitive features of a causative verb, or the Case and agreement features of I."8

To recast this claim in terms of the split-IP structure assumed here, we can say that the subject of an unergative verb is not generated in the verb's projection, i.e., inside VP, rather it is base generated in a functional projection external to VP, either spec-TP or spec-AgrSP. Which position would depend on the the ϕ -features of the subject: if it is specified for Number only, then spec-TP, if it has both Number and Person, then spec-AgrSP.

This, however, is not sufficient, since we know that unergatives in Armenian do not occur in non-agreement constructions, that is in constructions where the subject is in spec-TP. We need to find a way to force the subject to AgrSP. One way to do this would be to appeal to the principle that what licenses an external subject, in addition to ϕ -/Case features, is predication (Rothstein 1983), and in order to serve as a subject of a predicate an argument must be external to the predicate. If we define the boundary of the predicate to be TP (an assumption that is intuitively plausible, as tense per se has no affect on the argument structure or predicational structure of a VP), then the subject must be generated in or move to a functional projection outside TP. Assuming this projection to be AgrSP, we have an explanation for the obligatory presence of subject-verb agreement in unergative constructions.

⁸Hale and Keyser (1993:101).

3.4.4 Overt agreement and functional heads

So far I have argued that the lack of overt agreement in a clause can be explained by saying that the clause's underlying structure lacks the functional projection AgrP and contains only the functional projection TP. Adverb placement facts point to the conclusion that nonagreeing subjects are in specTP. Pronominal reference facts indicate that specTP subjects lack person features. In this section I discuss the Armenian data in the context of recent work on the phenomenon of object shift and multiple subject positions in Germanic (Bobaljik 1995, Bures 1993, Jonas, Jonas & Bobaljik, 1996). Bobaljik analyses the relationship between rich subject agreement (where 'rich' applies to a paradigm that displays both tense and person/number agreement) and the availability of spec-TP as a subject position, that is, an independent Case-checking position. He concludes that general morphological principles offer an explanation for the fact that spec-TP is a subject position in languages which have rich agreement. The fact that Armenian behaves as predicted by Bobaljik gives the analysis presented here additional, independent confirmation.

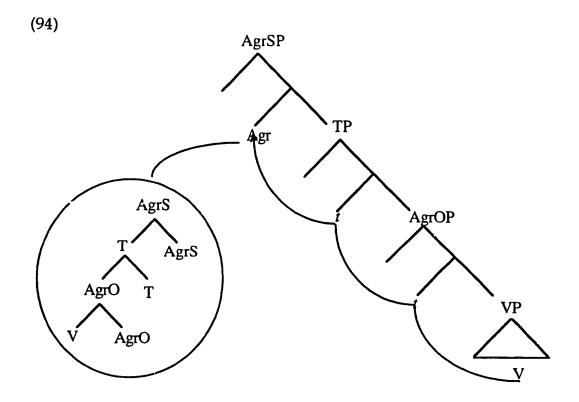
3.4.4.1 Bobaljik (1995)

Without going into great detail, I will sketch the analysis proposed in Bobaljik (1995) to account for the following descriptive generalization. A language whose inflectional endings show both person and tense agreement has two subject positions, spec-TP and spec-AgrSP. Languages which show one or the other, but not both, have only one subject position, which he designates as spec-IP. After looking at Bobaljik's analysis we discuss its relevance to the Armenian data.

Consider the verb paradigms in (93).

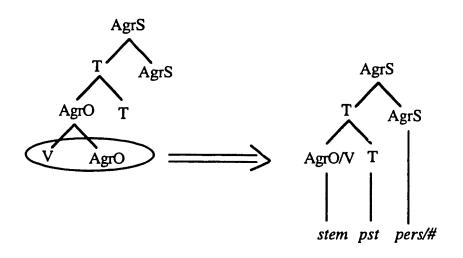
(93) Icelandic: kasta 'to throw'		English: 'to	toss' [Bobaljik 1995:25]
Present	Past	Present	Past
ls kasta	kasta- či	toss	toss-ed
2s kasta-r	kasta- ŏi-r	toss	toss-ed
3s kasta-r	kasta- 8i	toss- es	toss-ed
1p köst- um	köstu- ðu-m	toss	toss- ed
2p kast-ið	köstu- ðu-ð	toss	toss-ed
3p kasta	köstu- ðu	toss	toss-ed

The connection between surface morphology and syntactic structure is explained by Bobaljik as follows. The reason languages that have both tense and person/number agreement are those which allow the use of the specifier of TP as an independent Case-checking position is that in these languages T does not raise to AgrS before the verb adjoins to T. As a result verb movement in these languages gives rise to a compex head, circled in (94).



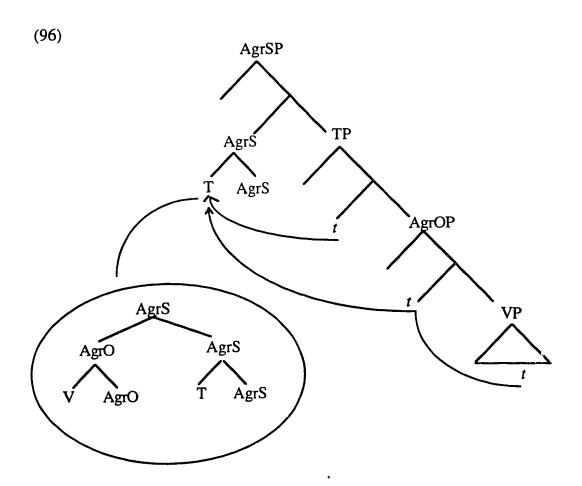
This complex head can undergo morphological fusion yielding the structure in (95). Lexical insertion applies to insert the verb stem and the morphemes encoding tense and person/number agreement:

(95)

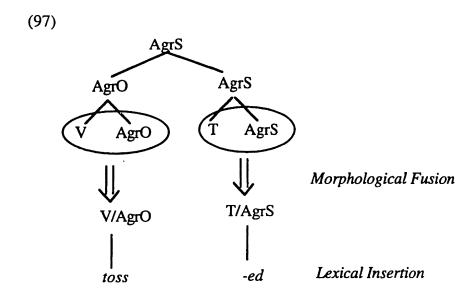


The key assumptions behind this analysis are that morphological fusion can only apply to nodes which are adjacent, and that lexical insertion can insert only one morpheme under a terminal node. So, if there is a fused node containing AgrS/T, Lexical Insertion can place tense or agreement under it, but not both.

Turning to English-type languages, Bobaljik argues that since tense and agreement are in complementary distribution, the head that dominates the inflectional morpheme is fused. Such a fused head is not compatible with the verb movement shown in (95) (since T and AgrS are not adjacent). It is compatible, however, with the complex head created by the two head movements, T to AgrS and V to AgrO to [AgrS T AgrS] in the derivation in (96).



Fusion and lexical insertion apply to give:



It is clear that the Armenian verb paradigm in (98) resembles Icelandic, (93), in that the aorist⁹ marker -*c*- and the endings indicating person are not in complementary distribution. This contrasts with the English paradigm in which tense and person markers cannot both be present on the stem.

⁹It could be that the -i- morpheme present in the past tense forms, both agrist and imperfect, is really the past tense morpheme.

(98)

	W. Armenian:	nedel 'to throw'	
	Present	Aorist	Imperfect
1s	gə-nede-m	nede- c-i	gə-nede-i
2s	gə-nede-s	nede-c-i-r	gə-nede- i-r
3s	gə-nede-Ø	nede-c-Ø	gə-nede- r
1p	gə-nede-nk	nede- c-i-nk	gə-nede- i-nk
2p	gə-nede-k	nede-c-i-k	gə-nede- i-k
3р	gə-nede- n	nede- c-i-n	gə-nede- i-n

According to Bobaljik's analysis, the morphology of Armenian is compatible with the head movement in which the verb moves successively from VP to AgrO, to T and finally to AgrSP, as shown in (94), in other words with a grammar that treats spec-TP as a final subject position.

The Armenian data can be seen to confirm Bobaljik's morphology-based approach in that the absence of person/number morphology in a given sentence signals the absence of the $AGR_{s/o}$ projection in the derivation of that sentence and not the fusion of the T and AGR heads generally in the language (as in English). In a sentence where the verb shows only tense and not agreement, we know from the SWA's verbal paradigm that it is not the case that the tense and agreement are vying for the same position in the structure (as in English), hence we can conclude that the functional head is absent in the derivation of the particular sentence.

3.4.4.2 Chomsky (1995)

In this section we discuss the analysis proposed for the bare NP and NumP arguments, in which AGR plays a key role, in light of the multiple specifier analysis of Chomsky 1995 in which the functional head AGR plays no role. The conclusion of the discussion is that, although the multiple specifier analysis can accommodate the Armenian data, it does not provide an explanation for the correlations between transitivity and subject-verb agreement and specificity and agreement that we find in Armenian and other languages.

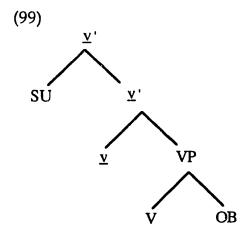
In his discussion of the status of AGR — a discussion which ends up eliminating AGR from the inventory of functional projections in the syntax — Chomsky asserts that there is evidence from interface relations, that is, semantic or phonological evidence, for each of the categories T(ense), D(eterminer), C(omplementizer), but that there is no such evidence for AGR. According to Chomsky, AGR consists of uninterpretable formal features only and is present for theory-internal reasons only, functioning only as a means to attract arguments to certain positions in the structure. He argues that its role in licensing of subject and object and triggering verb movement can be assumed by nominal features on the verb and on T, and concludes that once this modification is made, then there is no more justification for positing either subject or object AGR nodes.

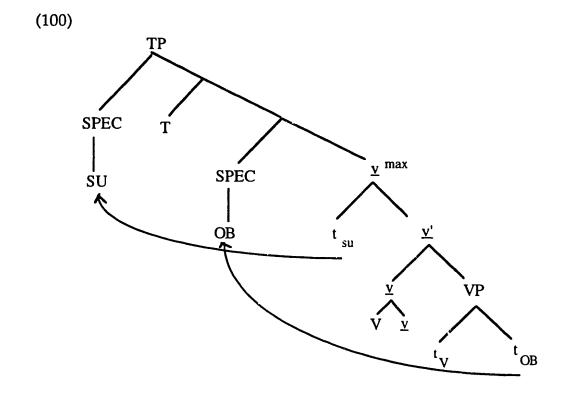
I have proposed an analysis of the Armenian agreement data that crucially relies on the assumption that the functional heads T and AGR are both present in the derivation of a sentence with an agreeing verb, and that T alone is present in the derivation of a non-agreement construction. The specifier positions of TP and AgrP provide the checking positions for two different types of argument, NumP and DP

respectively. Furthermore the assumption that AGR is "double-headed," that is, that AGR consists of both AgrS and AgrO, is critical in the analysis because it is only in constructions that have overt agreement that both subject and object are licensed. (Recall that the core characteristics of the non-agreement construction are that the subject must be indefinite and that the verb cannot have an object). I have argued that it makes sense to posit the existence of AgrS to account for the presence of subject-verb agreement as well as certain adverb placement facts. The additional assumption that AGR includes both AgrS and AgrO means that the fact that a derivation that has AgrSP (to accommodate a DP subject and subject agreement) means that the derivation also has AgrOP, and can therefore license an object.

Let us compare the two approaches in detail. The structure of a transitive verb phrase according to Chomsky 1995, before verb or argument movement, is shown in (99). The derivation of a transitive clause is schematized in (100). The transitive verb has two components, the lexical verb V and the light verb \underline{v} . During the course of the derivation V moves to adjoin to \underline{v} , creating the complex verb $[\underline{v} V \underline{v}]$. The movement of the object that was previously motivated by the presence of Case features on the object requiring checking in AgrOP and the presence of an N feature on AgrO is now motivated by the presence of a strong D-feature or [nominal] feature on \underline{v} . According to this analysis, "the choice of assigning strong D-features is optional, forced or unavailable according to whether object raising in the language is optional, obligatory or not present". The nominal feature on \underline{v} is checked by OB moving to an outer specifier position, as shown in (100).

¹⁰Chomsky 1995:352.





As far as the licensing of objects goes, the facts are captured equally well if we assume that AGR is present or not. However, when we consider the licensing of the subject, the two analyses have different coverage. In the multiple specifier analysis the subject originates in spec-vP and moves to spec-TP, where it checks the N features of T and checks its own Case feature. As we saw in section 3.1, a

nonspecific plural subject does not trigger plural agreement, while a specific plural subject does. In the analysis I advocate, this is accounted for by saying that subjects are in different locations in the structure; those that do not trigger agreement are in spec-TP and those that do trigger agreement are in spec-AgrS. In making this claim I rely on the assumption that, at least in Armenian, there is a connection between the expression of agreement, where this is linked to specificity, and the presence of a functional head labelled AGR. There is substantial cross-linguistic evidence for this assumption (Runner 1994).

In addition to assuming that overt agreement morphology signals the presence of AGR in the derivation, I also assume that in derivations that have no AGR, that is, in derivations in which the subject is in spec-TP, not only is there no AgrS for checking of subject-verb agreement, but there is also no AgrOP projection for the object to raise to. This follows from the standard assumption that there is no theoretical difference between AgrS and AgrO; the labels that identify them as subject or object AGR are simply mnemonic devices.

In the multiple specifier analysis, however, the licensing of the object and the agreement relation between the subject and the verb are completely independent. The subject moves to specTP in order to check its own Case features and the N features of T. If the object moves, it does so to check its own Case features and the N (or D) features of \underline{v} . Furthermore, there is no *structural* correlate of agreement morphology, therefore no possibility of a syntactic link between subject agreement on the verb and the possibility of licensing a specific object. The transitivity/agreement dependency would be reduced to a coincidence.

Chapter Four

4 Conclusion

As its name implies, the Minimalist Program provides minimal mechanisms for explaining syntactic behavior. Φ -features are associated with a lexical item upon its entry into the syntactic component. It is then up to the checking mechanism to operate and the derivation either converges or fails to do so when the feature checking procedure halts.

Given such a framework and the standard assumption that agreement features include at least Person and Number, we *a priori* expect to find XPs that have both, neither or one or the other of these features. The data presented here from Standard Western Armenian (SWA) nominal and verbal agreement confirm these expectations.

Before presenting the data in detail I outlined the articulated DP structure assumed, which provides a fuctional head between N and D where Number is checked. Number, I claimed, is the feature which is necessary for plural marking, but more importantly, it is the feature that enables the noun phrase to refer to a *unit*, that is an indistinct individual of a type, rather than to a predicate or to a mass

indefinite. The feature Person, checked when the nominal raises to D, was posited as the feature which enables a nominal expression that is specified for Number to refer to a particular or *specific* individual.

We examined bare NPs and found that they are restricted in where they may occur; they must be left-adjacent to the verb and take narrowest scope. On the assumption that arguments move away from their VP-internal position only if they have φ-features, we concluded that these noun phrases lack φ-features. This conclusion was found to be consistent with an analysis in which bare NPs do not incorporate into tensed verbs, but rather have a *mass indefinite* reading. Lacking φ-features, in particular lacking Number, was also seen as consistent with the bare NP's predicative interpretation in the predicate nominal construction.

Next we saw that the characteristics of noun phrases bearing the indefinite article and the plural marker warranted assigning them at least the feature Number and addressed the question as to whether they were specified for Person as well. I argued, drawing in advance on the conclusions in chapter three (that Person is checked in AgrP) that bare plurals are not marked for person and that nouns bearing the indefinite marker are optionally marked for Person. Bare plurals were seen to be clear examples of a NumP that is overtly plural (and intuitively third-person) but the fact that they are excluded from external subject position showed that they lacked the feature necessary to move to an external subject position, namely Person.

In the discussion of noun phrases that bear the definite article we saw that there is evidence from both DP-internal and verbal agreement to say that the feature Person is checked in DP and that DPs in turn check this feature in AgrP. The definite article was shown to be a marker of specificity rather than only of

definiteness, and to be the instantiation of default agreement in an agreement paradigm evidenced in demonstrative, possessive and postpositional expressions as well as in participial relative clauses.

After distinguishing three types of arguments on the basis of their feature specification, we turned to examine the behavior of one of them, the covert plural NumP, in the clause. We saw that by assuming that NumPs check their number feature in TP, we could explain why it is that they do not trigger overt subject-verb agreement, cannot be subjects of ergative or intransitive verbs, and why they are nonspecific in interpretation. The nonagreement construction was thus seen to be straightforwardly accounted for by the assumptions of the version of Minimalist Program that includes AGR and by Diesing's general account of the interpretation of indefinites.

This thesis represents the first attempt to approach the SWA language in the framework of modern generative grammar. Although I have examined only a tiny part of the syntax of this language, I am encouraged by the extent to which the conclusions reached here are consistent with conclusions reached in recent work on languages as far removed from SWA as Icelandic, Hebrew and Miskitu.

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