Bare nouns in Innu-aimun: what can semantics tell us about syntax?\textsuperscript{1}

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The structure of bare nouns has long been controversial. Many researchers argue that bare nouns involve a covert determiner (e.g., Longobardi 1994, Progovac 1998); many others argue that bare nouns are truly bare (e.g., Chierchia 1998, Rullmann and You 2003, Bošković (2008), Bošković and Gajewski to appear). Others argue that bare nouns can vacillate between NP and DP structures (Franks and Pereltsvaig 2004, Ajíbóyè, 2006). In this paper, I use semantic diagnostics to shed light on the structure of bare nouns in Innu-aimun (Algonquian). In previous work, I argue that, crosslinguistically, determiners are associated with a particular semantics: domain restriction (Gillon 2006, 2009b). Using this as a starting point, I investigate the behaviour of bare nouns in Innu-aimun and show that they must involve two different structures: DP and NP. I also argue that the covert determiner must be associated with a non-definite semantics.

1 Introduction

This paper addresses two related questions. First, this paper addresses the question of whether semantics can provide us with insight into the structure of bare nouns.\textsuperscript{2} I explore the idea that the semantics can help us uncover the structure of bare nouns. Bare nouns have no overt functional superstructure. The question is whether bare nouns in languages that lack articles have covert determiners; that is, whether they are covert DPs or simply NPs.\textsuperscript{3} I argue that there is a covert determiner in Innu-aimun, but that it is not always present, based on the semantic variability of bare nouns.

Second, this paper addresses the question of what semantics the covert determiner is associated with. Determiners are crosslinguistically associated with different semantics: (in)definiteness (English), (non-)specificity (Samoan; Mosel and Hovdaugen 1992), and (non-)deixis (Salish; Matthewson 1998, Gillon 2006, 2009a). A covert determiner might be expected to have the most basic semantics (whatever that might be); in this paper I explore the semantics of the covert determiner in Innu-aimun. This determiner is unlike the (putative) covert determiner in languages like Mandarin Chinese, which appears to be definite (Rullmann and You 2003, 2006). That is, the covert determiner in Innu-aimun is not associated with definiteness.

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\textsuperscript{2} Bošković and Gajewski (to appear) also attempt to use semantics to uncover the syntax of bare nouns. They use the available interpretations of most-like quantifiers in articleless and articleful languages as a diagnostic for the presence of D. Most is lacking in Innu-aimun, however, and so this cannot be used as a test. The second semantic generalization, that articleless languages disallow neg-raising, is beyond the scope of this paper.

\textsuperscript{3} They may in fact be slightly larger than NP. Bare nouns, even if they lack the DP layer, may have other functional superstructure, such as NumP or nP. In fact, in other work (Gillon 2010), I argue that bare plurals are minimally NumP or nP (depending on the interpretation of the plural). I am simplifying here, but the arguments for NP work for NumP or nP.
1.1 The problem

In languages that lack (overt) articles, bare nouns are somewhat anomalous, in that one (overt) form is associated with multiple interpretations: indefinite and definite.\(^4\) Innu-aimun\(^5\) is such a language. In (1)a, \textit{atik} ‘caribou’ receives an indefinite interpretation. In (1)b, \textit{pineshish} ‘bird’ receives a definite interpretation.

(1) a. \textit{Atik}\(^b\) pimút-eu. \quad b. Upa-u \textit{pineshish}.

\textit{caribou} \textit{walk}AI-3 \quad \textit{take.off}AI-3 \textit{bird}

‘A caribou was walking.’ \quad ‘The bird is flying.’

These facts also obtain in texts. In the text \textit{Uâpush mâk umâtshâshkuk}, \textit{ûkûa} ‘owl’ is translated as a definite ((2)a) and \textit{mishtikua} ‘tree’ is translated as an indefinite ((2)b).

(2) a. Ek\(^a\) tshâtâpamiku-t mâni ûhû-a…

\textit{then watch.TA-3>3’conj usually owl-obv}

‘The owl kept staring at him…’

b. Mu-eu anite \textit{mishtiku-a} auen n-uâpam-âu…

\textit{eatTA-3>3’there tree-obv someone I-seeTA-I>3}

‘I saw someone eating a tree there…’

This is unlike English, where bare nouns must be used to introduce new referents. (3)b cannot be used following (3)a (immediately following or later on in the same discourse. Instead (3)c must be used.

(3) a. There were toys all over the floor. \quad (novel)

b. I picked up toys. \quad (novel; *familiar)\(^7\)

c. I picked up the toys. \quad (familiar)

Instead, the behavior of bare nouns in Innu-aimun is reminiscent of the behaviour of Salish DPs (cf. Matthewson 1998; Gillon 2006, 2009b). DPs in Skwxwú7mesh (Salish) receive both indefinite and definite interpretations.

(4) a. Na kw’áy’ \textit{ta} swí7ka.

\textit{rl get.hungry det man}

‘The/a man is hungry.’

b. Chen kw’ách-nexw \textit{ta} swí7ka.

\textit{1sg.s look-tr det man}

‘I saw a/the man.’ \quad (Gillon 2006)

\(^4\) Generic sentences in English can also be translated into Innu-aimun using bare nouns. I leave the generic interpretations for future research.

\(^5\) Innu-aimun is also known as Montagnais, and is part of the dialect continuum of Cree (MacKenzie 1980).

\(^6\) I use the following abbreviations: 1 = first person, 3 = third person, 3’ = third person obviative, AI = animate intransitive, conj = conjunctive morphology, det = determiner, dim = diminutive, dist = distal, II = inanimate intransitive, neg = negative, nom = nominalizer, obv = obviative, pst = past tense, rl = realis, s = subject, sbj = subjunctive, sg = singular, TA = transitive animate, TI = transitive inanimate, tr = transitivizer,

\(^7\) In progressive contexts, bare nouns behave better (Meagan Louie, pe).

(i) There were toys all over the floor. ?So I started picking up toys.

This has a flavor of genericity, rather than referring to a subset of the toys introduced in the first sentence. I ignore these examples here.
However, bare nouns in Innu-aimun do not display the same semantic behaviour as Skwxwú7mesh DPs. For example, Skwxwú7mesh DPs that share the same NP description must refer to the same referent within a stretch of discourse. In (5)a, ta mixalh must refer to the same bear in both sentences. In (5)b, ta swí7ka must refer to the same man (resulting in a contradiction) (Gillon 2006, 2009b).

(5) a. Chen nam ch’áatl’am kwi chél’áklh.
   1sg.s go hunt/track det yesterday
   S-en men kw’ách-nexw ta mixalh.
   nom-1sg.sbj just look-tr det bear
   ‘I went hunting. I saw a bear.’

b. #Na huyá7 ta swí7ka i hāw k’as i huyá7 ta swí7ka.
   rl leave det man conj neg irr-3sib prox leave det man
   ‘The man left and the man didn’t leave.’
   Consultant’s comment: “It’s a contradiction.” (Gillon 2006)

This is not true of bare nouns in Innu-aimun. Bare nouns often will refer to the same entity as any other nominal with the same NP description within a stretch of discourse, but they are not compelled to. This can be seen in (6)a, where mishtukua can refer to a tree earlier in the story and then to a group of trees later in the same story. In (6)b, in each clause nápeu refers to a different man. This sentence is not contradictory.

(6) a. Mu-eu anite mishtiku-a auen n-uápam-áu…
   eatTA-3>3’ there tree-obv someone 1-seeTA-1>3
   ‘I saw someone [porcupine] eating a tree there…’
   …Nánatúukamenua mishtiku-a.
   redup.break.in.twoTA.3>3’ tree-obv
   ‘…They (the beavers) were chewing down trees.’ (text: Uâpush mák umâtshâshkuk"

b. Tshinuáshkushi-u nápeu mák apù tshinuáshkushi-t nápeu.
   tallAI-3 man and neg tallAI-3con man
   ‘There’s a man who’s tall and a man who isn’t.’ (2 different men)

We are now left with a puzzle: in some ways (i.e., their (in)definiteness), bare nouns in Innu-aimun behave like Skwxwú7mesh DPs; in other ways (i.e., anaphorically), bare nouns behave completely unlike Skwxwú7mesh DPs. How can we resolve this?

1.2 The analysis

I argue that the structure of bare nouns is the locus of the difference between Skwxwú7mesh and Innu-aimun. There are at least three possible analyses of bare nouns. Longobardi (1994), for example, argues that all arguments must be associated with a determiner, and therefore must be a DP (7)a (see also Progovac 1998). Many others argue that bare nouns are in fact bare, and are not associated with covert determiners. Within this group, Chierchia (1998), for example, argues that bare nouns are kind-referring elements of type e (7)b. Rullmann and You (2003), Dayal (1999, 2004), Müller and Oliveira (2004), among others, argue instead that indefinite bare nouns are predicates of type <e,t> (7)c. 8

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8 Rullmann and You do not address the structure of definite bare nouns.
Another possibility is that bare nouns are sometimes DPs, and other times NPs (Franks and Pereltsvaig 2004; Ajibóyè 2006). In this paper I argue for the last option: bare nouns in Innu-aimun vacillate between NPs and DPs.

I further argue that when Innu-aimun bare nouns have an NP structure, they are predicates, rather than individuals (contra Chierchia 1998).

One way to test for the presence of D is to test for the semantics associated with that position. In previous work, I argue that D can be associated with various semantics, such as uniqueness or deixis. I further argue that all determiners are associated with domain restriction (Gillon 2006, 2009b; see also Giannakidou and Extebarria 2010). If this is correct, we can test for the presence of D by testing for the presence of domain restriction.

Bare nouns in language with overt determiners always take narrow scope (Carlson 1980 [English]; Rullmann and You (2003) [Mandarin]; Müller 2005 [Brazilian Portuguese]; Glougie 2000 [Blackfoot]). I claim that the ability to take wide scope arises from some kind of functional superstructure (Gillon 2006; 2009b). Therefore, if bare nouns are associated with (covert) determiners, we expect that they will be able escape scope (if they are definite) or take wide scope (if they are indefinite or non-definite).

There are other properties, aside from wide-scope-taking abilities, that we would expect from bare nouns if they have a covert determiner. If the (putative) covert determiner is definite, then we expect that bare nouns will (i) be anaphoric and (ii) assert or presuppose the uniqueness of their referent. In languages with definite determiners, definite DPs are usually found in familiar contexts (see §3 for more discussion), and when used in familiar contexts, they must be anaphoric. Therefore, if bare nouns are DPs, they must always be anaphoric in familiar contexts. (That is, they cannot introduce new referents with the same NP predicate as a previous referent.) In languages with definite determiners, definite DPs can only refer to unique referents within some context. Therefore, if bare nouns are (definite) DPs, we expect them to refer to unique referents in some context. Finally, any nominals that are of type e obey the law of contradiction. Therefore, if a bare noun is a DP (or an NP of type e), then they will obey the law of contradiction.

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9 I use scare quotes here, because, as we will see, bare nouns in Innu-aimun are never truly definite.

10 Giannakidou and Extebarria (2010) implement this idea in a different way: D can occupy different positions (the head of DP or adjoined to Q). I argue instead that D is always the head of DP.

11 I use the term non-definite to describe DPs that are neither definite nor indefinite in Salish. See Gillon (2006) for more discussion.

12 The situation is actually more complicated than this. As I spell out below, some languages lack definite DPs (e.g., Salish languages), and do not require their referents to be unique within a context. However, they do carry an implicature of uniqueness (Gillon 2006, 2009b). Therefore, we expect DPs to minimally be associated with an implicature of uniqueness. I simplify here for expediency, but see below for more details.
1.3 The semantics of the covert determiner?

Since overt determiners can be associated with different semantics (e.g., definiteness, specificity, deixis), any analysis that posits a covert determiner must address the semantics of that covert determiner. Covert determiner semantics appears to vary crosslinguistically (as might be expected, given the difference in overt determiners crosslinguistically): the Mandarin Chinese covert determiner appears to be definite, whereas the Innu-aimun covert determiner is not definite.

1.4 The outline

This paper has the following structure. In §2, I provide some background on the syntax of Innu-aimun. In §3, I discuss the semantics of determiners as well as the diagnostics for the presence of D. In §4, I discuss the behaviour of bare nouns in Innu-aimun. In §5, I provide the analysis of the syntax of bare nouns in Innu-aimun. In §6, I discuss the semantics of the covert determiner and compare it to the covert determiner in Mandarin Chinese. In §7, I discuss the implications of my analysis, and in §8 I conclude the paper.

2 Background on Innu-aimun

Innu-aimun is a dialect of Montagnais spoken in Labrador and Quebec, Canada. The speakers I worked with lived in St Johns, NL or in Sheshatshiu, NL. Innu-aimun–Montagnais–Naskapi is spoken by approximately 11,000 people, and by fewer than 1,600 in Labrador (Statistics Canada 2006); children are still acquiring the language.

2.1 Polysynthesis and word order

Innu-aimun is a polysynthetic language. Both subject and object are marked on the verb. In (9), the first person singular subject is marked on the verb via the prefix $ni$- and the suffix -$u$. The prefix $ni$- indicates that the subject is first person, and the suffix -$u$ indicates that the object is third person (proximate or obviative).

(9) Mashk$^{a}$ni-pâssu-âu anûtshîsh.
    bear 1-shootTA-1>3 today
    ‘I shot a bear today.’

Word order is fairly free.

(10) a. Atîk$^{a}$ pimût-eu. (SV) b. Pimût-eu atîk$^{a}$. (VS)
    caribou walkAI-3
    ‘A caribou was walking.’
    walkAI-3 caribou

(11) a. Namesh-a mu-euat mashku-at. (OVS)
    fish-obv eatTA-3pl>3’ bear-an.pl
    ‘Bears were eating fish.’

Bošković (2008) claims that polysynthetic languages lack articles; however, this is an overly broad generalization. Salish languages, which are also polysynthetic, often have many determiners, as does Blackfoot, another Algonquian language. In fact, many of his generalizations are not applicable to Innu-aimun, such as left-branch extraction and multiple wh-movement, and others also appear to be overly broad, such as scrambling.

The suffix -$a$- is the direct theme sign, signaling that highest person on the person hierarchy is the subject, and the lowest person is the object (Goddard 1966). The person hierarchy is as follows: $2 > 1 > 3 > 3’$. In this case, $1 > 3$, so the subject is first person.

The lack of a plural marker entails that both the subject and object are singular.

It is likely that there are restrictions on word order, arising from focus or discourse considerations. For example, (10)b focuses on the walking, rather than on the caribou. A study of word order is beyond the scope of this paper.
b. Namesh-a mashku-at mu-euat.
   fish-obl bear-an.pl eat-TA-3pl>3
   ‘Bears were eating fish.’

c. Mu-euat mashku-at namesh-a.
   eat-TA-3pl>3 bear-an.pl fish-obl
   ‘Bears were eating fish.’

d. Mu-euat namesh-a mashku-at.
   eat-TA-3pl>3 fish-obl bear-an.pl
   ‘Bears were eating fish.’

e. Mashku-at mu-euat namesh-a.
   bear-an.pl eat-TA-3pl>3 fish-obl
   ‘Bears were eating fish.’

f. Mashku-at namesh-a mu-euat.
   bear-an.pl fish-obl eat-TA-3pl>3
   ‘Bears were eating fish.’

2.2 Animacy

All nouns in Innu-aimun (and in Algonquian in general) are classified as either inanimate or animate. The plural animate suffix is -at and the plural inanimate suffix is -a.

There are four verb types in Algonquian and Innu-aimun (Table 1).

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<tr>
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<tr>
<td>intransitive</td>
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<td>transitive</td>
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Table 1. The four types of verbs in Algonquian

All verbs agree with one of their arguments with respect to animacy. Intransitive verbs agree with the animacy of their subject. Transitive verbs agree with the animacy of their objects – at least when the object is animate. An example of each type of verb is given in (13).

   deliciousII-3 soup       deliciousAI-3 fish
   ‘The soup is delicious.’   ‘The fish is delicious.’

c. Suzie mitsh-epan nashûp-ino.
   Suzie eatTI-3>3 pst soup-sg.inan.obv
   ‘Suzie ate the soup.’
d. Mashku-at namesh-a mu-euat.
   *bear-an.pl fish-3’ eatTA-3pl>3*
   ‘Bears were eating fish.’

Things get more complicated when the object is inanimate. In this case, the verb may agree with the object (resulting in a morphologically TI verb, as in (13)d), or with the subject (resulting in a morphologically AI verb; also called a pseudo-transitive, as in (14)).

(14) Niueueshîtân utâpâna.
   ni-ueuesh-ît-â-n utâpân-a
   *1-repair-caus-AI-1 car-pl.inan*
   ‘I am repairing the cars.’
   (Brittain 1993: 24)

2.3 Obviation

Innu-aimun, like other Algonquian languages makes a distinction between the “important” third person (proximate) vs. all other third persons (obviative) (Bloomfield 1957, Wolfart 1973). There are two obviative markers: animate (singular and plural) -a and inanimate -inu (Brittain 1993).

(15) a. Mashku-at namesh-a mu-euat.
   *bear-an.pl fish-obv eatTA-3pl>3*
   ‘Bears were eating fish (sg or pl).’

b. Suzie mitsh-epan nashûp-inu.
   *Suzie eatTI-3>3’p soup-inan.obv*
   ‘Suzie ate the soup.’

Inanimate obviatives have an extra plural marking that is lacking in the animate. Somewhat confusingly, the inanimate plural -a has the same shape as the animate obviative suffix.

(16) Mâni mishkam*au assîkunua.
Mâni mishk-am*au assîku-inu-
*Mary findTI-3>3’pot-inan.obv-pl*
‘Mary finds some pots.’
   (Brittain 1993: 32)

2.4 The syntax of DPs

The order of many elements within a nominal can vary quite a bit. For example, demonstratives may precede or follow the NP.

(17) a. Ek*ne Uâpush mitshuâp-inu…*
   *then comeAI-3conj dem.sg.dist hare house-obv*
   ‘Then the Rabbit enters the house…’
   (text: Uâpush)

b. «*Mitish-a nenua tâpishikuau-eu.»
   *bead-obv dem.obv.dist threadTA-3>3’*
   ‘“She is stringing beads.”’
   (text: Mishta-pâushtik*)

Furthermore, demonstratives need not be adjacent to their NP; discontinuous DPs are very common, both in texts and in elicitation.

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17 I have modified Brittain’s glosses and orthography in (14) and all subsequent examples to be consistent with the glosses and orthography used throughout this paper.
18 This form is singular, and not vague, unlike the animate obviative, which can be used for singular or plural objects.
really dem.pl.inan.dist be.whiteII-3’ hand-obv
‘It was a very white hand.’ (text: Atîku-mitshuap)

b. Auen-nua nenua petâshtamâ-inua, mush-a!
someone-obv dem.obv.dist sit.facingAI-3’>3 moose-obv
‘He (Hare) saw a moose facing him.’ (text: Uâpush mák umâtshâshkuk⁹)

c. Papeik⁸ ume namîtshen mâna.
papeik⁸ ume ni-mîtsh-en mâna
each dem.prox 1-eat.TI-1>3 berries
‘I ate each berry.’
‘I ate berries, one at a time.’

d. Mitshet mitshite-u-at atimu-at.
many barkAI-3-pl dog-pl
‘Many dogs are barking.’

2.5 Novel vs. familiar reference in texts

There are many strategies for introducing new referents and for referring back to previously introduced referents in Innu-aimun. I describe these strategies here.

Within a text, bare nouns can be used for novel and familiar referents. Often (but not always), a new character is introduced by a bare noun. For example, in the text Uâpush mák umâtshâshkuk⁸, the main character uâpush ‘hare’ is introduced without any functional material (19)a. Later in the story, the same character is referred to via a null pronoun/agreement on the verb (19)b, a demonstrative+NP (19)c, a pronoun uîn ‘s/he’ (19)d, and a bare NP (19)e.

(19) a. Pe-pâmipâtâ-t ek³ Uâpush.
redup-runVAI-3conj then hare
‘The hare was off on his run.’

seeTA-3’>4conj someone-obv be.perchedAI-3’>3’ porcupine-obv
‘He (Hare) saw someone, the porcupine, perched (in a tree).’

c. Piâtâkuepanit ek³ ne Uâpush.
singe.quillsAI-3conj then dem.sg dist hare
‘Then the hare burned the quills off the porcupine.’

d. (Uîn an mu-eu, peikuku-e-sh-u.)²⁰
3 dem.sg.neut eatTA-3’>3’ do.somthing.aloneTA-3’>3’-dim-3
‘(He (Hare) was the one that had eaten it, all by himself.’

e. Shiâkâshkuaik shâkâshku-am-t Uâpush.
come.out.of.the.woodsTI-3’>3’-3’>3’ conj hare
‘Hare came out from the woods.’

²⁰ The demonstrative here does not form a DP with the pronoun uîn ‘s/he’. This is a cleft structure, akin to ‘he is the one…’, reflected in the translation.
As Hare is an important character in the story, the ability to be introduced via a bare noun even in familiar contexts may just be indicative of his status. That is, Uâpush might be a proper name, reflected by the capitalization. (This doesn’t explain why the demonstrative is sometimes used, however.)

Less important figures in the story such as kâkua ‘porcupine’ are also introduced with a bare noun (20a). The porcupine is not a major character in this story. Later in the story, the porcupine is referred to via a bare noun (20b), a null pronoun/agreement on the verb (20c), a demonstrative+NP (20d), incorporated noun (20e), and a quantifier (20f).

(20) a. Uâpush akushînua kûkua. seeTA-CIN.3>3’ someone-obv be.perchedAI-obv-3-obv porcupine-obv
‘He (Hare) saw someone, the porcupine, perched (in a tree).’

b. Akushî-nua uâpam-eu, uâuineshina kâku-a. be.perchedAI-3’ someone-obv seeTA-3>3 be.roundAI-3’ porcupine-obv
‘He (Hare) saw someone who was perched, a round porcupine.’

c. «Tshika nakatitin takushinitî.»
   tshi-ka nakat-itin takushin-tî
   2-fut leave.behindTA-1>2 arriveAI-CS.3
   ‘I (Hare) will leave you behind when he (porcupine) arrives (i.e. because he's afraid).’

d. «Tshîtshue uîtshi-ne…»
   tshîtshue uîtshi-ti ne
   really taste.goodAI-3 dem.sg.dist
   ‘It (porcupine) really tastes good…”’

e. ekâ nepâi-ät nenua kâku-a ne Umâtshashkuk…
   then killTA-3>3’.conj dem.obv.dist porcupine-obv dem.sg.dist frog
   ‘and then Frog killed the porcupine…’

f. Kâtshî piminuepâni-t ekue mu-âkue-t.
   after cookAI-3 conj at.that.moment eatAI-porcupine-CIN.3
   ‘After he (Hare) had finished cooking, he ate the porcupine.’

g. …kassïnû nekânî tshitamu-eu-at, …
   all dem.obv.inaccess eat.completelyTA-3>3’-3p
   ‘and they finished all of it (porcupine)…”

So far, it would appear that, when referents are introduced in a text, a bare noun is used to do so. However, larger elements (such as demonstrative+NP combinations) may also be used in novel instances. Often, this nominal is translated as definite into English (21)a-c, but that is not always the case (21)d.

(21) a. Ekâ pe-pâmû-te ne nâpeu.
   then redup-walk.aroundAI-3 conj dem.sg.neut man
   ‘Then the man had a dream.’ (first line in text; Ka uî uîtshimikut kâkua)

b. Puâmû ne nâpeu
   dream.AI dem.sg.dist man
   ‘The man had a dream.’ (first line in text; Mishikamâunnû)

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21 As kâkua is not capitalized, it is less likely that it is being used as a proper name; further, the porcupine eventually gets eaten, unlike the main characters Uâpush ‘Hare’ and Umâtshashkuk ‘Frog’.
Often, stories can begin without any overt nominal whatsoever.\(^{22}\)

(22) Mamâush-û-at it-åkan-û-at.
gather.berries.redupAI-3>3pl say-Indef-3>3pl  
‘They were picking berries, so the story goes.’ (Ka uitashkumat)

They can also begin without an overt nominal for the main character.

(23) Nekâtshi-eu u-tishkue-m-a, nîshi-nua u-tishkue-m-a.
make.sufferTA-3>3′-wife-posp-obl two-obl 3-wife-posp-obl  
‘He abused both of his wives.’ (Aiâsheu)

It is clear that storytelling in Innu-aimun behaves significantly differently from that in English.\(^{23}\)

In English, the indefinite article (for singulars) or bare plurals (for plurals) are used to introduce new referents; definites and pronouns are used for familiar referents. There does not appear to be any such restrictions on the use of bare nouns or demonstratives or even agreement on the verb.

2.6 Ne as a definite determiner?

Cyr (1993) argues that one of the demonstratives (ne, the distal singular demonstrative) is now the definite determiner in Montagnais. However, this cannot be right, at least for Innu-aimun. Although this demonstrative is likely becoming the definite determiner, it has not yet fully taken over the role of determiner, syntactically or semantically.

There are two ways ne behaves syntactically like a demonstrative but not like a determiner. First, it can occur on its own. Demonstratives can do this, but determiners cannot.

(24) a. I saw that.
   b. *I saw the.
   c. Apû tshî pîtûshet ne ek\(^u\).
      not able enter-3conj dem.sg.dist then  
      ‘She could not enter then.’ (text: Aiâsheu)

Second, ne can be part of a discontinuous DP.

---

\(^{22}\) This is another way that Innu-aimun behaves like Salish. Discourse (including texts) can begin without an overt nominal in St’át’imcets (Matthewson 2008) (i), as well as in Lushootseed (Hess 2006) (ii). In (ii), the referent ‘their neighbours’ has not been introduced.

(i) súcwt-en-as ta=kûkwpi7=a pro.Erg. tâlhetic aylih s=Mary recognize-DIR-3ERG DET=chief=EXIS pro.ErgG. stand.up-AUT then NOM=Mary  
‘She; recognized the chief. #Then Mary stood up.’

(St’át’imcets: Davis 2006; cited in Matthewson 2008: 528)

(ii) huy cut(t)əbox*. (p. 3:21)  
‘Then [their neighbors] said,’ (p. 235:9.21)  
[literally: ‘Then they said.’] (Lushootseed: Hess 2006; cited in Matthewson to appear)

\(^{23}\) I assume conversations also behave this way, but I do not have firsthand evidence that this is true.
Demonstratives and quantifiers may freely do this in languages like Innu-aimun and Greek, but determiners in Greek, at least, cannot (Ntelitheos 2004). There are two ways that ne behaves semantically unlike a definite determiner. First, ne is not required for a definite interpretation. While it common for nominals to occur with a demonstrative in anaphoric uses, it is by no means necessary.

Second, ne does not always receive a definite interpretation. In (27), ne ūhû introduces an owl to the story.

Despite the fact that ne does not (yet) appear to function as a definite determiner, I predict that over time, ne will become the definite determiner in Innu-aimun.

3 The semantics of D

The semantics of determiners can vary quite widely across languages. In this section, I describe some variation (familiarity and uniqueness) and also one universal: domain restriction. In order to show this, I discuss two languages, with very different determiner semantics: English and Skwxwú7mesh. English DPs always refer to unique referents within a context, whereas Skwxwú7mesh DPs do not need to. However, DPs in both languages share domain restriction. This has implications for how DPs can be used and how they behave.

3.1 English vs. Skwxwú7mesh

In this section, I briefly describe the difference between the Skwxwú7mesh and English determiner systems. (For more information, see Gillon (2006, 2009a).)

Determiners are not homogeneous in their semantics. The English definite determiner the is usually used in familiar contexts; in novel contexts the indefinite article a or bare nouns are used instead.

As first noted by Matthewson (1998), Salish DPs do not distinguish between novel and familiar contexts. In particular, Skwxwú7mesh determiners can be used in familiar and novel contexts.

24 I do not treat a as a determiner (that is, it does not occupy D). See Gillon (2006) for discussion.
The English definite determiner must be used for unique/maximal referents (within a context). In (30)a, the king must refer to the only king in the context. However, in (30)b, a king can be used in a context with multiple kings.

(30) a. The king visited me.
   b. A king visited me.

The force of uniqueness can be seen in examples like (31)a, where the fact that there could be other alternatives is negated by the speaker using the instead of a (cf. Horn 1985). A strongly implicates the existence of alternatives in (31)b.

(31) a. That wasn’t a reason I left Pittsburgh, it was the reason.
   b. He was a friend; I had others. (Abbott 1999)

This effect is not found in Skwxwú7mesh. Skwxwú7mesh DPs do not assert or presuppose the uniqueness of the referent in the context.

(32) a. Mi7-shit-[t]s checxw ta lapát.
   come-appl-1sg.o 2sg.s det cup
   ‘Bring me one of the cups.’
   (translated as ‘bring me the cup’)
   Consultant’s comment: “You’re not asking for a specific one.”
   b. Chen háy’-s ta shłúm’.
      Tsí7-xw ta shłúm’ ná7 ta nkwi7stn.
      1sg.s finish-caus det soup exist-still det soup loc det pot
      ‘I ate some soup. There’s still some soup in the pot.’
      (translated as ‘I ate the soup and there’s still some soup in the pot.’) (Gillon 2006)

It looks like English and Skwxwú7mesh determiners share nothing in common.

However, in Gillon (2006, 2009b) I argue that determiners in English and Skwxwú7mesh share domain restriction. In the next section I describe domain restriction.

3.2 Domain restriction

The interpretation of DPs is sensitive to the context in which they are uttered (Westerståhl 1984; von Fintel 1994, 1998, 1999; Martí 2003; Giannakidou 2004; Etxeberria 2005, among others). This is because DPs (usually) cannot refer to all individuals in the world that match the NP description. For example, in (30a), the rabbits does not (normally) refer to all rabbits in the world. Instead, it refers to the set of contextually salient rabbits. Similarly, in (30b), the rabbit cannot refer to the only rabbit in the

---

25 The period between the s and the h indicates that they are pronounced as /s/ and /h/ respectively, rather than as ‘sh’ or /ʃ/.
26 Westerståhl (1984) claims that the is itself domain restriction, and nothing more. I do not adopt this view, as uniqueness (in English) also plays a role (see Gillon 2006, 2009b).
world; it can only refer to a rabbit that is unique in the context.\textsuperscript{27}

(33) a. The rabbits were nibbling carrots.

   b. The rabbit was nibbling a carrot.

   Quantifiers have been argued to introduce unpronounced domain restriction variables ranging over properties of individuals (Westerståhl 1984; von Fintel 1994, 1998, 1999; Martí 2003).\textsuperscript{28} Furthermore, von Fintel claims that strong quantifiers restrict the domain of the NP that is quantified over. In this way, strong quantifiers are context-dependent.

(34) The dinner guests had rhubarb pie for dessert.\textbf{Everyone} developed a rash.  \textit{(von Fintel 1998:2)}

In (34), \textit{everyone} does not quantify over all the individuals in the world; in fact, it \textit{cannot} quantify over all the individuals in the world. Instead, it is restricted to the dinner guests who had rhubarb pie for dessert.

   Formally, the domain of the quantifier is restricted to those dinner guests by an unpronounced element (C) that is introduced by the quantifier. In (35), the domain of the quantifier \textit{every} is restricted to the freshmen in the context.

(35) \textbf{Every} freshman is from out of state.

\textit{every [C & freshman] [out of state]}

\textit{every \(\lambda x\) [C(x) & freshman (x)] [\(\lambda x\) [out of state(x)]]} \textit{(von Fintel 1999:3)}

This unpronounced element C is of type \(<e,t>\) and is interpreted via intersective predicate modification with the NP predicate (which is also of type \(<e,t>\)). C is the characteristic function of the set of individuals that are under discussion: in this context, this set might include all the participants in the relevant undergraduate semantics class.

In Gillon (2006, 2009b), I argue that only \textbf{D} is associated with domain restriction.\textsuperscript{29} Below I show how domain restriction allows us to force co-reference between two DPs.

3.3 Domain restriction and anaphoricity

   Recall that, in Skwxwú7mesh, DPs which share the same NP description must refer to the same entity (5), repeated below.


   b.\#Na huyá7 ta swi7ka i háw k’ás i huyá7 ta swi7ka.\textit{ rl leave det man conj neg irr-3sbj prox leave det man}\textit{‘The man left and the man didn’t leave.’}

\textit{Consultant’s comment: “It’s a contradiction.”} (Gillon 2006)

\textsuperscript{27}Attempts to make uniqueness more “realistic” (Kadmon 1992) involve contextual dependence.

\textsuperscript{28}In Gillon (2006, 2009b), I claim that determiners are (at least in some languages) the pronunciation of this domain restriction. I also do not assume that quantifiers themselves introduce domain restriction.

\textsuperscript{29}This is in contrast to Stanley and Szabó (2000) and Stanley (2002) who argue that the noun is associated with domain restriction. See Gillon (2006, 2009b) for arguments against that analysis. It is also in contrast to Cappelen and LePore (2005) who argue that domain restriction is not part of the semantics of the noun, quantifier or determiner.
Domain restriction allows us to account for this fact. In the second sentence of (3a), the bear has already been introduced and is in the context (C). The DP ta ṁixalh ‘the bear’ must refer to that bear.

(36) a. Sen men kw’áchnexw ta ṁixalh.  
    C_{\text{ta ṁixalh}} = D_e
b. [ta ṁixalh] = \{bear_i\}

c. Sen men kw’elasht ta ṁixalh.  
    C_{\text{ta ṁixalh}} = \{bear_i\}
d. [ta ṁixalh] = \{bear_i\}

Similarly in (3)b, the man has already been introduced, and so ta swi7ka must refer to that man.\footnote{In both cases, the first instance of the DP introduces the referent. For more information on how this works, see Gillon (2006, 2009b).}

English definite DPs behave the same way in familiar contexts. In (37)a, a bear introduces a new referent into the context. In (37)b, the bear must refer to the only bear in the context (bear_i).

(37) a. I was hunting. I saw a bear. I was scared, so I shot the bear.
    C_{\text{the bear}} = \{bear_i\}

In Gillon (2006), I argue that a is not a determiner, as it occupies a different position (see Epstein 1999). This also explains why in both languages DPs obey the law of contradiction. The second DP is obligated to refer to the same referent as the first DP.

(38) a. The man left and the man didn’t leave.  
    C_{\text{the man}} = \{man_i\}
b. Na huya7 ta swi7ka i haw k’as huya7 ta swi7ka.  
    C_{\text{ta swi7ka}} = \{man_i\}

English and Skwxwú7mesh determiners share domain restriction, and only domain restriction. My hypothesis is that domain restriction is the only feature shared crosslinguistically in the D position. If this is correct, we can probe for the D position by looking for similar effects in bare nouns in Innu-aimun.

3.4 Semantic diagnostics for D

With our hypothesis in mind, we can now turn to the semantic diagnostics to test for the presence of D.

First, the ability to take wide or narrow scope is evidence for the presence or absence of structure. For example, less structure is usually associated with the ability to take narrow scope.

What I expect to find [crosslinguistically] is that reduced indefinites are more likely than corresponding nominals with determiners to ... take narrow scope...

(Borthen (2003)

If this generalization holds true, we expect that if bare nouns take narrow scope, they should be reduced (perhaps merely NPs). We also expect that bare nouns will only be able to take wide scope or escape scope if they have some functional superstructure.

Second, if there is a D, we expect uniqueness to potentially be relevant. While English and Skwxwú7mesh determiners behave differently with respect to uniqueness, other languages may or may not have uniqueness as part of their determiners’ denotations. If bare nouns must refer to unique referents within a context, we could use this as evidence for the presence of the D position. (The opposite is not true, however. If there is no uniqueness effect, that is not evidence for a lack of D position.)
If D is associated with domain restriction, and bare nouns are DPs, we expect them to behave in certain ways. First, we predict that bare nouns in familiar contexts will be able to be used anaphorically. That is, if we use two bare nouns with the same NP predicate in a stretch of discourse, they should be able to refer to the same entity. Further, if they are DPs, not only will they be able to be used anaphorically, but they will have to be used anaphorically. That is, any subsequent use of the same bare noun should refer to the same entity. In English, we cannot use bare nouns in this way, but any definite DP will have to refer to the same referent.

(39) The cat and the dog were fighting. The dog was winning.

Finally, if bare nouns are DPs, they will obey the law of contradiction. This follows from the fact that a second use of a DP must refer to the same entity as the previous use of the same DP. It is also a consequence of the fact that DPs are of type e.31 Again, we cannot use English bare nouns, but definite DPs cannot be used in contradictory sentences.

(40) The cat was large and the cat wasn’t large.

We have six semantic diagnostics to test for the presence or absence of D.

<table>
<thead>
<tr>
<th></th>
<th>NP</th>
<th>DP</th>
</tr>
</thead>
<tbody>
<tr>
<td>wide scope/escape scope</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>narrow scope</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>assertion/presupposition of uniqueness</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>can be used anaphorically</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>must be used anaphorically (in stretches of discourse)</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>obeys law of contradiction</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

Table 2. Semantic diagnostics to test for the presence or absence of D

In the next section, I apply the diagnostics to bare nouns in Innu-aimun. As we shall see, the behaviour of bare nouns does not pattern exclusively as an NP, nor as a DP.

4 Behaviour of bare nouns in Innu-aimun

Bare nouns in Innu-aimun do not behave exactly as one would expect if they had a determiner, nor exactly as one would expect if they lacked a determiner.

4.1 Scope

Beginning with scope, bare nouns overwhelmingly receive a narrow scope interpretation (41)a-d.

(41) a. Kassinû ishkeu shuenime-pan auâss-a.
    every woman kiss-3pst child-obv
    ‘Every woman kissed a child.’ (narrow; *wide)

b. apû tâ-t atik
    neg beAl-3conj caribou
    ‘There were no caribou.’ (narrow, from text 7)

31 There are potentially counterexamples to this. See Chung and Ladusaw (2004) and Gillon (2006) for determiners that do not change the type of the NP to e. These determiners have a very different semantics from the kind of determiner we are looking for in Innu-aimun, however: they never receive definite interpretations and they never allow the nominal to take wide scope. I ignore this kind of determiner as a potential candidate.
There are, however, a few cases where the bare noun can take wide scope (or potentially escape scope; see §6 for more discussion). In (42)a, *mashk* ‘bear’ takes wide scope/escapes scope. In this case, the bear has already been introduced into the discourse. In (42)b, *nâpeu* ‘man’ introduces a new referent, but it is in contrast to another man already in the discourse.

(42) a. …*apù tût pâssu-k mashk*.  
   *neg pst shoot.TA-1conj bear*  
   ‘…I didn’t shoot a bear.’ (wide/escapes)  
   context: a particular bear has already been introduced into the discourse

   b. …*apù tshinûâshkushi-t nâpeu*.  
   *neg tallAI-3conj man*  
   ‘…there’s a man who isn’t tall.’ (wide)  
   context: one man is tall and another isn’t tall

What is going on here? Why do bare nouns prefer to take narrow scope, but in some limited cases (familiar referents, contrastive contexts) take wide/escape scope? This seems to be contradictory behaviour (and problematic for most analyses). However, if both structures are available – NP, which is obliged to take narrow scope, and DP, which can (or must) take wide scope – then these facts make sense.

We are still left with the question of why a DP cannot be projected in all cases. Why isn’t it possible for *auâssa* ‘child’ to project a DP in (41)a? Why do speakers prefer to use demonstratives to force the wide scope of the DP, as in (43)?

(43) *Kassinû ishkueu shuenim-epan nenua auâss-a.*  
   *every woman kissTA-3>3’pst dem.obv.dist child-obv*  
   ‘Every woman kissed that child.’ (wide)

Clearly, speakers can project a DP for bare nouns when the context forces them to, as in (42). However, bare nouns usually receive a narrow scope interpretation. I argue that this is a pragmatic effect.

If speakers choose to use a demonstrative, then the hearers know that the nominal is a DP and that it must take wide scope. If the speakers do not choose to use a demonstrative, then hearers assume that the structure is smaller than that (i.e., an NP). NPs must take narrow scope. If the hearer has reason to suspect that the nominal involves a larger structure (i.e., DP), then they will interpret the bare noun as taking wide scope.

As we will see below, different contexts are associated with different structures. Here, it appears that operators that can take scope over the bare noun are associated with the bare noun having an NP structure. However, it is possible to overrule this tendency by setting up the correct context, as in (42).

4.2 Uniqueness

Recall that definite DPs are associated with uniqueness. If bare nouns in Innu-aimun always had the same structure, then we would expect them to always be associated with uniqueness in the same way or to never be associated with uniqueness.

In novel cases, bare nouns are do not presuppose or assert the uniqueness of their referent. For example, in (44)a, *mina* ‘berries’ does not refer to the entire set of berries in the context. Some of the
berries remain uneaten. Compare this to the English in (44)b, where ‘the berries’ must refer to the entire set of berries.

(44) a. Mîna\textsuperscript{32} ni-mîtsh-en. Passe apû minuá-kâu mîna.
   berries 1-eatTI-1\textgreater 3 some neg goodII-3pl berries
   Apû tût mîtsh-amân nenû ekâ kâ minuá-t
   neg pst eatTI-1conj dem.obv.dist neg pst goodII-3conj
   ‘I ate berries. Some of the berries were not good [=mouldy]. I didn’t eat the not good ones.’

   b. I ate the berries. Some of them were mouldy, #so I didn’t eat the mouldy ones.

   In familiar contexts, uniqueness cannot be asserted or presupposed either. In (45), all three uses of \textit{mîna} can refer to a different set of berries.

(45) Ni-mâut-en \textit{mîna} mâk Pun iât mâut-epan \textit{mîna}.
   1-gatherTI-1\textgreater 3 berries and Paul even gatherTI-3pst berries
   ‘I gathered berries, and Paul gathered berries too.’
   Mânî kâtâ-pan \textit{mîna}.
   Mary hideTI-3pst berries
   ‘Mary hid the berries.’
   (can be any berries; could be different berries that Marie picked or berries Paul and/or I picked)

In (46)a, \textit{mishtiku} ‘a tree’ introduces a new referent. Later in the story, \textit{mishtiku} ‘trees’ introduces another new referent; this cannot be a unique referent as another tree had already been introduced. In (46)b, \textit{atîku} ‘a caribou’ introduces a new referent in both clauses.\textsuperscript{33} Again, neither can be unique in the context.

(46) a. Mu-eu anite \textit{mishtiku-a} auen n-uâpam-âu…
   eatTI-3\textgreater 3 there tree-obv someone 1-seeTA-1\textgreater 3
   ‘I saw someone [porcupine] eating a tree there…’
   …Nânâtuâkamenua \textit{mishtiku-a}.\textsuperscript{34}
   redup.break.in.two.3\textgreater 3 tree-obv
   ‘…They (the beavers) were chewing down trees.’

   b. Tshân pâssu-epan \textit{atîku-a} utâkuushît mâk pâssu-epan anûtshish
   John shootTA-3pst caribou-obv yesterday and shootTA-3pst today
   \textit{atîku-a}.
   caribou-obv
   ‘John shot a caribou, yesterday and he shot a caribou\textsubscript{ij} today.’ (2 different caribou)

   In all of these cases, the bare nouns are introducing new referents. I claim that these are all instances of NPs, and so uniqueness will never be relevant. The only time uniqueness could potentially be

\textsuperscript{32} \textit{Mîna} ‘berries’ is a frozen plural form.

\textsuperscript{33} One possible objection to the lack of uniqueness in (46)b is there could be “situational uniqueness”; the first \textit{atîku} ‘caribou’ could refer to the unique caribou in the situation yesterday and the second to the unique caribou in the situation today. However, if we look at English, that is not the easiest interpretation to get.

   (i) I shot the caribou yesterday and I shot the caribou today.

   The most normal interpretation is that I am a cruel hunter that shoots the same animal twice in as many days. The “situational” interpretation is available only if I set up the context such that there is a special caribou each day, and I manage to shoot whichever caribou it is two days in a row.

   \textsuperscript{34} Note that the first \textit{mishtiku} could be referring to a unique tree in the context, as no other tree had been introduced. The second \textit{mishtiku} cannot be unique, as they are not chewing down the first tree that had already been introduced. The lack of uniqueness is also reflected in the translation ‘trees’, rather than ‘the trees’.
relevant would be when the bare nouns project a DP. Although it not found in the cases above, there are some cases where the force of uniqueness can be seen. In (47)a, the bare noun mashku⁶ must be interpreted as one of the set of bears introduced by nîsh⁶ mashkuat 'two bears'. In this case, the sentence is pragmatically odd because mashku⁶ ‘bear’ is not the unique referent in the context.\(^{35}\)

\[
\text{(47) Nîsh⁶ mashku-at pimûte-pan-it anite minâshkuât }
\]
\[
two \text{ bear-pl walkAI-3pl.pst there forest.loc }
\]
\[
# ekue mashku⁶ nâtshikâpa-u tshetshî mitshishu-t. and.then bear go.to.standAI-3 irrealis eatAI-3conj
\]
\[
‘Two bears were walking in the forest, #and then a bear stopped to eat.’
\]

However, DPs do not always have to refer to the unique referent in the context.

\[
\text{(48) Patetât tâu-at mashku-at mâk kutuâsht atiku-at uâpam-akâu }
\]
\[
five existAI-1-pl bear-pl and six caribou-pl seeTA-1>3plconj
\]
\[
‘There were 5 bears and 6 caribou that I saw.’
\]
\[
Ni-pâssu-eu-at mashkuat I-shootTA-1>3-pl bears
\]
\[
‘I shot the bears.’ (implicates: all 5 bears)
\]
\[
Peik⁶ na mashku⁶ tshitshipât-u one dem bear leave.by.runningAI-3
\]
\[
‘One of them escaped/ran away.’ (so I only shot 4 – cancels implicature)
\]

The only way to interpret this data is to say that bare nouns can be NPs which introduce new referents and which do not have to be unique within a context, or they can be DPs which are anaphoric. A sentence containing a full DP bare noun will carry an implicature of uniqueness, but this implicature can be cancelled.

4.3 Anaphoricity

If bare nouns were always to occur with a covert determiner, we would expect all uses of bare nouns in a stretch of discourse to refer to the same entity. However, as we have already seen in §5.2, this is not always the case. Even in familiar contexts, bare nouns can introduce new referents. However, there are many cases where the bare noun can refer to a previously introduced referent. For example, in (49)a uâpush ‘Hare’ has already been introduced, and yet a bare noun is acceptable, and continues to refer to the same entity. In (49)b, innuat ‘people’ introduces a new referent. Later in the story, innua refers back to that same referent.\(^{36}\) In (49)c, mashkua ‘bear’ introduces a new referent. Later in the story, mashk⁶ refers to the same bear.\(^{37}\)

\[
\text{(49) a. Shiâkâshkuikai }
\]
\[
\text{Uâpush. (familiar)}
\]
\[
\text{shâkâshku-amt uâpush come.out.of.the.woodsTI-3>3’.conj hare}
\]
\[
‘Hare came out from the woods.’ (text: Uâpush mâk umâtshâshkuk")
\]

---

\(^{35}\) In order to get the intended meaning (one of the bears), the numeral peik⁶ must be used instead.

\[(i) \text{ Nîsh⁶ mashku-at pimûte-pan-it anite minâshkuât kuet peik⁶ shikâpa-u }
\]
\[
two \text{ bear-pl walk-3pst-pl there forest and.then one go.to.standAI-3}
\]
\[
tshetshî mitshishu-t. irrealis eatAI-3sg.conj
\]
\[
‘Two bears were walking in the forest and then one stopped to eat.’
\]

\(^{36}\) In this example, the Innu are presumably familiar to the hearers (as they are themselves Innu), and so innuat receives a definite translation. Note that Innu-aïmun does not require a demonstrative to flag the definiteness that is reflected in the English.

\(^{37}\) The first introduction to the bear is in reference to a dream. The bear is also referred to outside of the dreamworld previous to the second use of the bare noun; however, the structure involved is demonstrative+NP.
b. «Innu-at nipâi-e-tshen-at.» (novel)
   person-an.pl killTA-3>3'-3-pl
   “The Innu have killed him.”
   Ek” uîn ishkeu mâuat itemim-eu tsheshî nipâi-â-nî-tî innu-a.
   woman not thinkTA-3>3’ so that killTA-3>3’-obv-CS.3 person-obv
   ‘But, the woman did not think that the Innu had killed him.’ (familiar; text: Missus Hubbard)

c. Mashku-a ka-utinkâshâpanua, ni-tishinu-âû. (novel)
   bear-obv preverb-taken.3’>3 1-perceiveTA-1>3pst
   ‘He was taken by a bear I dreamed.’
   Uîpat mâ kâshî panâkuneâkanit anite it-âkan-û
   soon intns after remove.snow.from.den there say-Indef-3
   mashk”, ekue unûpani-u-t it-âkan-û… (familiar)
   bear and.then make.go.outsideTA-3-3 say-indef-3
   ‘Soon after the snow was removed, it is said, the bear ran out it is told…’
   (text: Ka uitashkumat)

This ability to introduce new referents in some cases and to refer to the same entity in other contexts is most easily explained if we posit two structures: DP for those bare nouns that are anaphoric, and NP for those that introduce new referents.

4.4 The law of contradiction


(50) a. #The man is tall and the man isn’t tall.

b. #An tl’âktay’kwem ta swí7ka i haw k’as tl’âktay’kwem ta swí7ka.
   very tall det man conj neg irr-3sbj tall det man
   ‘The man is tall and the man is not tall.’

However, bare nouns in Innu-aimun do not obey the law of contradiction. This is true regardless of whether they are proximate or obviative.

(51) a. Tshinuâshkushî-u nâpeu mâk apû tshinuâshkushî-t nâpeu.
   tallAI-3 man and neg tallAI-3 conj man
   ‘There’s a man who’s tall and a man who isn’t.’ (2 different men)

b. Mânî ushtesh-a tshinuâshkushin-ua mâk Mânî ushtesh-a
   Mary brother-obv tall-3 obv and Mary brother-obv
   apû tshinuâshkush-nîtî.
   neg tallAI-3 ’conj
   ‘Mary’s brother, is tall and Mary’s brother is not tall.’ (2 different brothers)

This only makes sense if bare nouns can be of a different type than e. This rules out any analysis where bare nouns are always DPs.38

Note that a Chierchia-type analysis where bare nouns are underlying NPs of type e will also make incorrect predictions. Although Chierchia (1998) proposes free type-shifting (from e to <e,t>) in a

38 I cannot argue, however, that both are NPs, as the second nominal is taking wide scope. I argued that this structure had to be DP. Only the first instance must be an NP. The second, a DP, is behaving non-anaphorically.
language that lacks overt determiners, the type-shifting that he proposes will result in the wrong kind of indefinite: a wide-scope taking indefinite.

The argumental types \( e \) and GQ are linked via LIFT (which turns an individual into a GQ by taking all of the sets to which it belongs) and its inverse LOWER. The type of GQ and pred are linked via an operation of existential closure, which turns a property into an existential generalized quantifier. This is traditionally taken to be the meaning of the indefinite article ‘a’.

(Chierchia 1998: 359)

As we saw above, indefinitely interpreted bare nouns in Innu-aimu prefer to take narrow scope with respect to some operator. If the indefinitely interpreted bare nouns were type-shifted via LIFT, then they would be generalized quantifiers, freely capable of taking wide scope. While nominals headed by ‘a’ can take narrow scope, there is no restriction compelling them to prefer narrow scope, even pragmatically. If bare nouns vacillate between NP and DP, we can understand why they might prefer narrow scope – they are preferentially interpreted/generated as NPs. While bare nouns can be DPs, speakers will use overt DPs (that is, demonstrative+NP combinations) if they want the nominal to take wide scope. Under a Chierchia-style analysis, we have lost this story. The fact that the bare nouns almost always take narrow scope is left unexplained.

Chierchia’s analysis also makes incorrect predictions about the interpretation of NPs in general in Innu-aimun. Chierchia argues that there are three types of languages.

<table>
<thead>
<tr>
<th>example languages</th>
<th>[+arg, -pred]</th>
<th>[-arg, +pred]</th>
<th>[+arg, +pred]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Japanese, Chinese</td>
<td>e</td>
<td>&lt;e,t&gt;</td>
<td>e (mass), &lt;e,t&gt; (count)</td>
</tr>
<tr>
<td>type of NP</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>bare nouns can occur as arguments?</td>
<td>yes</td>
<td>no</td>
<td>only mass</td>
</tr>
<tr>
<td>generalized classifier system?</td>
<td>yes</td>
<td>no</td>
<td>no</td>
</tr>
<tr>
<td>plural marking?</td>
<td>no</td>
<td>yes</td>
<td>yes</td>
</tr>
</tbody>
</table>

Table. 3: Chierchia’s typology of bare nouns

Innu-aimun does not neatly fit into this system. Innu-aimun allows bare nouns to occur freely as arguments, but it lacks a generalized classifier system (52) and has obligatory plural marking (53).

(52) a. Peik\(^8\) ná(peu) tshîtû-te-u.  
\(\text{one man leaveAI-3} \)  
‘One man left.’

b. Peik\(^8\) ni-min-en nipî.  
\(\text{one } l\text{-drinkAI-1>3 water} \)  
‘I drank one glass of water.’\(^{39}\)

c. Nápeu tshîtû-te-u.  
\(\text{man leaveAI-3} \)  
‘A/The man left.’

d. *Nápeu tshîtû-te-u-at.  
\(\text{man leaveAI-3-pl} \)  
‘Some/The men left.’

(53) a. Nápeu tshîtû-te-u.  
\(\text{man leaveAI-3} \)  
‘A/The man left.’

b. *Nápeu tshîtû-te-u-at.  
\(\text{man leaveAI-3-pl} \)  

We are now left with our original hypothesis: bare nouns can be NPs or DPs. This analysis predicts that if the hearer were to interpret both of the bare nouns as DPs, then these sentences would be illicit. It is possible to set up the context such that the consultant finds these sentences as contradictory.

\(^{39}\) Another problem for Chierchia’s system is that Innu-aimun has a mass/count distinction (Gillon 2010), although this is not obvious from the example in the text.
When the consultant is primed to think of the two bare nouns as the same person, then they are judged as infelicitous. In (54)a, for example, there was only one woman in the context. In (54)b, on the other hand, there was no man in the context.

(54) a. #Anûtsîsh tshîtûte-pan ishkueu mâk apû tshîtûte-pan anûtsîsh ishkueu.
   today leaveAI-3pst woman and neg pst leaveAI-3conj today woman
   #‘The woman, left today and the woman, didn’t leave today.’
   Context: only one woman

   b. Nâpeu tshîtûte-u mâk apû tshîtûte-pan nâpeu.
      man leaveAI-3 and neg leaveAI-3conj man
      ‘This man is leaving but the other guy’s not leaving.’
      Context: out of the blue

Note that Dem+NP combinations must always be interpreted as referring to the same individual.

(55) #Ne nâpeu tshîtuteu mâk apû tshîtute-pan nâpeu.
    dem man leave-3 and neg leave-3conj dem man
    ‘That man is going and he’s not going.’

The only way to reconcile these facts is to say that bare nouns can have either an NP or DP structure.

4.5 Summary

Innu-aimun bare nouns share some properties in common with bare nouns and some properties in common with DPs.

<table>
<thead>
<tr>
<th>Property</th>
<th>NP</th>
<th>DP</th>
<th>Innu-aimun bare nouns</th>
</tr>
</thead>
<tbody>
<tr>
<td>wide scope/escape scope</td>
<td>✗</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>narrow scope</td>
<td>✓</td>
<td>✗</td>
<td>✓</td>
</tr>
<tr>
<td>assertion/presupposition of uniqueness</td>
<td>✗</td>
<td>✓</td>
<td>✗</td>
</tr>
<tr>
<td>can be used anaphorically</td>
<td>✗</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>must be used anaphorically (in stretches of discourse)</td>
<td>✗</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>obeys law of contradiction</td>
<td>✗</td>
<td>✓</td>
<td>✓/✓</td>
</tr>
</tbody>
</table>

Table 4. Semantic diagnostics to test for the presence or absence of D

Innu-aimun bare nouns behave like DPs with respect to scope when they are definite, and like NPs with respect to scope when they are indefinite. They behave like NPs in that they do not need to refer to a unique referent in the context, they do not need to be used anaphorically in a stretch of discourse, and they do not always obey the law of contradiction. However, they behave like DPs in that they can be used anaphorically, and in the right context, do obey the law of contradiction.

5 The analysis

The semantic facts are confusing unless we posit two different structures for bare nouns: NP and DP.
Bare nouns can project a DP layer or not, and this has an impact on the interpretation. If a bare noun projects a DP layer, it escapes scope, can be used anaphorically, and obeys the law of contradiction. If a bare noun does not project a DP layer, it will take narrow scope, will introduce a new referent (even in a stretch of discourse or in familiar contexts), and does not obey the law of contradiction.

Now that we have an analysis for the DP, let’s look at how NPs and DPs behave in Innu-aimun. First, let’s take an example of a bare noun that is likely an NP, followed by the same bare noun that now is a DP.

In (57)a, the bare NP innuat introduces a new referent (a sum of Innu people). In (57)b, the DP innuat is forced to refer to that same sum of Innu people.

In (58)a, mashku ‘bear’ introduces a new referent (a bear). Later in the text, mashku refers back to the same bear (58)b.

In the following example, it is possible that both instances of the bare noun uâpush are DPs, assuming that proper names are always DPs. If we take the translation into English seriously, that would seem to be the most likely analysis. Hare is an important character in stories, and so would be part of the hearer’s knowledge.

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40 The reason I say that the first instance is “likely” an NP has to do with the translation into English. If we take the translation seriously, then this bare noun would project a DP. However, since it is the first use of the bare noun, I assume that it is an NP.

41 The word innu means ‘person'; however, it is usually used to refer only to the Innu.

42 Here innuat ‘Innu (pl)’ is translated into English as a definite. I assume this is because of some property of English, rather than of the Innu-aimun.

43 See Gillon (2006) for discussion. This assumption is not necessary; however whatever analysis of proper names is adopted, these examples do not involve NPs in the regular sense (that is, they probably don’t introduce new referents, and are of type \( e \)).
In those cases where the bare noun introduces a new referent, domain restriction plays no part. In (60)a, mistikua introduces a tree into the discourse. In (60)b, mistikua again introduces a new referent into the discourse; in this case a sum of trees.

(60) a. Mueu anite **mishtikua** auen nuápamâu…
   ‘I saw someone [porcupine] eating a tree there…’

b. Nânâtuâkamenumua **mishtikua**.
   ‘They (the beavers) were chewing down trees.’
   (text: Uâpush mâk umâtshâshkuk”)

Only if there is a D present will domain restriction play a role, and only then will the bare noun be anaphoric.

The ability for a bare noun to be associated with a DP layer or not explains why bare nouns can behave quite differently in different situations (i.e., obey or not obey the law of contradiction).

6 The semantics of the covert D

Recall that determiners can have different semantics. English determiners can only be used for unique referents (within a context). Skwú7mesh determiners, on the other hand, can be used for non-unique referents. What about the covert determiner in Innu-aimun? Is it definite like the, or is it not, like the determiners in Skwú7mesh?

First, let’s examine the semantics of a different language that lacks overt articles. The covert D in Mandarin Chinese appears to be definite.\(^44\) Definitely interpreted bare nouns escape scope.

(61) Ta xiang gen nianqing de xinlixuejia tantan.\(^45\)
    *she* wish *with* *young* mod psychiatrist talk

i. ‘She wishes to talk with young psychiatrists.’ (narrow scope)

ii. ‘She wishes to talk with the young psychiatrist(s)’ (definite reading)

(Rullmann & You 2006: 184)

Rullmann and You argue that when bare nouns receive narrow scope, they are bare nouns. While they do not address the syntax of the definite bare nouns, I claim that they are best analyzed as DPs. The covert determiner appears to have the semantics we associate with the in English.\(^46\)

Covert determiners can behave like definite overt determiners. The question now is, is this the only interpretation available for covert determiners? The evidence from Innu-aimun suggests otherwise: just like with overt determiners (compare English to Skwú7mesh), covert determiners may be associated with different semantics.

I argue that the covert determiner has a semantics more akin to the Skwú7mesh determiners, rather than the English the or the covert determiner in Mandarin.\(^47\) The evidence comes from three sources: (i) the interpretation of bare nouns when they take wide Scope/escape scope, (ii) uniqueness, and (iii) the semantics of demonstratives.

First, let’s examine the scope-taking behavior of bare nouns. As we saw in §4.1, bare nouns can take either scope (although, they prefer to take narrow scope, for pragmatic reasons). What concerns us is here is the interpretation of the wide scope bare nouns, as in (42), repeated below.

(42) a. …apû tût pâssu-k **mashk**.
    neg pst shootTA-1>3conj bear
    ‘…I didn’t shoot the bear.’

    *Context: a particular bear has already been introduced into the discourse*
b. …apû tshinuâshkushi-t nâpeu.
   neg tallAI-3conj man
   ‘…there’s a man who isn’t tall.’

   Context: one man is tall and another isn’t tall

I argued above that these examples involve a DP structure. If this is correct, then the D cannot be definite. In (42)a, the covert D could be definite. The bear had already been introduced into the discourse (and is presumably a unique bear in the context). However, in (42)b, this cannot be the case. Not only had the man not already been introduced into the context, but it isn’t even the only man in the discourse. I therefore argue that the covert determiner is not definite.

Second, bare nouns, even when given a definite interpretation and in familiar contexts, do not have to refer to a unique referent in the context. As we saw above, all three uses of mîna ‘berries’ can refer to a different set of berries.

(62) Ni-mâut-en mîna mâk Pun iât mâut-epan mîna.
1-gatherTI-1>3 berries and Paul even gatherTI-3pst berries
   ‘I gathered berries, and Paul gathered berries too.’
Mânî kâtâ-pan mîna.
   Mary hideTI-3>3 pst berries
   ‘Mary hid the berries.’
   (can be any berries; could be different berries that Marie picked or berries Paul and/or I picked)

The last example is the crucial test case here. If mîna refers to a new set of berries, I argue that the bare noun is an NP, and so tells us nothing about the semantics of the covert determiner. However, if mîna refers to a familiar set of berries, I argue that the bare noun is a DP. Here, it provides us with a clue as to the semantics of the covert determiner. Mîna can refer to Paul’s berries, or my berries, or all of the berries already in the discourse. If the covert determiner were definite, mîna would be forced to refer to all of the berries (mine and Paul’s), contrary to fact.

Finally, indirect evidence comes from the interpretation of the demonstratives. As we saw in §2.6, ne can be used in novel contexts. This is not restricted to ne; other demonstratives can also be used for novel referents. In (63)a, ne ûhû ‘an owl’ introduces a new referent to the discourse. In (63)b, nenua ‘that’ introduces a new referent (a moose). In (63)c, nenu introduces the embroidered item.

(63) a. Ekñiâtâu-ât ne ûhû.
then fly.toTA-3>3 conj dem.sg.dist owl
   ‘Then an owl flew to him (Hare).’
(Uâpush mâk umâtshâshkuk³)

b. Auen-nua nenua petâshtamâ-inua, mush-a!
someone-obv dem.obv.dist sit.facingAI-3>3 moose-obv
   ‘He (Hare) saw a moose facing him.’
(Uâpush mâk umâtshâshkuk³)

c. Apû tshissenimâ-k nenu tshekuânnu tshipâ
   neg know.about.something.TA-3conj dem.pl.inan.dist what would
   ashpikuât-am².
   embroiderTI-3>3’
   ‘He does not know what she might be embroidering.’
(Mishta-pâushtik³)

These facts are similar not only to the facts in Salish (Matthewson 1998, Gillon 2006) (64)a, but also to the indefinite use of ‘this’ in English (Prince 1981) (64)b.
(64) a. Na mi uys kwelhi hiyi slhanay’, chem-chem’a7s-t-as
   rl come inside dem.f big woman redup-carry.on.back-tr-3exp
   kwetsi hiyi sitn.
   dem big basket
   ‘A big woman came in, carrying a large basket on her back.’  (novel; Kuipers 1967: 219-220)

b. I saw this guy eat five hotdogs last night.  (novel)

Given that demonstratives are not definite, it would be strange to posit a definite covert determiner. As I have argued previously (Gillon 2006), demonstratives co-occur with (overt or covert) determiners. If the covert determiner were definite, we would expect that the demonstrative would be forced to be definite as well. Even if this analysis were incorrect (and demonstratives do not co-occur with covert determiners), then the demonstratives still would be expected to have a similar interpretation to the covert determiner.

7 Discussion

What does this mean for bare nouns? I am arguing that bare nouns have two totally different syntactic structures, with two totally different semantics. This seems like an unstable situation. How do hearers know which structure to project? I hypothesize that in novel out-of-the-blue cases, hearers assume an NP structure; in familiar cases, hearers project a DP, unless that would make the sentence infelicitous. This explains why bare nouns do not have to obey the law of contradiction: doing so would result in a contradictory sentence. Since the grammar allows bare nouns to not project a DP layer, bare nouns can be NPs in these cases.

Similar reasoning follows for the uniqueness cases. For both participants in (65)a, a different set of berries is picked. It is not possible for both to pick the same set of berries, and so the second NP mina introduces a new set of berries. In (65)b, however, either structure is possible. If an NP structure is chosen, then any berries could be the ones Mary hides. If a DP structure is projected instead, Mary hides at least some of the berries already in the discourse.

(65) a. Ni-mâut-en  mina mâk Pun iåt mât-epan  mina.
   l-gatherTI-1>3 berries and Paul even gatherTI-3>3’pst berries
   ‘I gathered berries, and Paul gathered berries too.’

b. Mânî kâtâ-pan  mina.
   Mary hideTI-3>3’pst berries
   ‘Mary hid the berries.’
   (can be any berries; could be different berries that Marie picked or berries Paul or I picked)

Given the fact that there are always two structures available, we might predict that the language would try to resolve the ambiguity. In many languages, determiners have developed from demonstratives (e.g., English the from Old English se). In languages where there is an opposition between overt DPs and bare nouns, bare nouns can only be used as indefinites. As we saw in §2.6, Cyr (1993) argues that this has already occurred in Montagnais. However, I showed that ne has not yet taken on this function, and I argue that bare nouns are still ambiguous between NPs and DPs.

Another issue that arises is the fact that definiteness (at least as I have defined it) is lacking in many North American languages. Salish lacks definiteness (Matthewson 1998, Gillon 2006, but see Giannakidou 2004 and Giannakidou and Exteberria 2010 for a different analysis), and so does Innu-aimun, according to the analysis given above. The fact that the covert determiner in Innu-aimun is not definite does not seem so odd once we acknowledge that definiteness is not found in all languages.

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48 A possible counterexample to this is proper names. I assume that they always project a DP level.
49 Navajo has been claimed to involve definiteness (Fernald et al 2000).
50 This is also true of Inuktitut (Wharram 2003; Gillon and Wharram 2008).
crosslinguistically, and once we notice that definiteness is often not found in the languages of the Americas. It is also important to note that tests that we might use for languages like Mandarin to test for the presence of D are not necessarily transferable to North American languages because of the lack of definiteness in many of the languages.

8 Conclusion

Semantically, bare nouns in Innu-aimun behave like NPs and DPs. If there is any connection between the syntax and the semantics, we are forced to conclude that bare nouns are NPs when they introduce new referents and DPs when they are used anaphorically. Although bare nouns in Innu-aimun seem to behave similarly to DPs in Skwxwú7mesh, when we dig deeper, we can see that they behave sufficiently differently to posit a different structure than a Skwxwú7mesh-type covert determiner. They must have be NPs in certain contexts and DPs in others.

However, despite the fact that Innu-aimun bare nouns behave somewhat differently from Skwxwú7mesh DPs, they behave like them when they project a DP. Thus, the covert D in Innu-aimun is most like a Skwxwú7mesh D, rather than the covert D in Mandarin Chinese, which is most like the English D.

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