

Chapter One: Introduction

1 Introduction

This thesis addresses the question of what it is semantically that a determiner can do. By ‘determiner’, I do not refer to all generalized quantifier-creating elements, as Barwise and Cooper (1981) do. Instead, I refer to a subset of noun phrase initial elements – a subset more similar to those that have been called ‘articles’.¹ (See also Giusti 1991 who argues that the term ‘determiner’ obscures the structural and categorial differences between the many types of ‘determiners’). In order to distinguish between the more traditional use of the term ‘determiner’ (which includes demonstratives, numerals and quantifiers) and the meaning intended here, I use the term D-determiner.

The main claim of this thesis is that all D-determiners share a common core semantics: domain restriction (cf. Westerståhl 1984 and von Stechow 1994). This domain restriction, implemented by a contextual variable C , restricts the domain of quantification. There is a long-standing debate about the position of domain restriction. Stanley and Szabó (2000) and Stanley (2002) argue that domain restriction is associated with the noun, while von Stechow (1994) and Martí (2003) argue that domain restriction is associated with the D-determiner or quantifier. Giannikidou (2004) argues that domain restriction is associated with the nominal in English and the D-determiner in St’át’imcets Salish. I argue instead that, universally, only D-determiners are associated with domain restriction.

In this thesis, I focus on the D-determiner system of Skwxwú7mesh Salish (also known as Squamish). Skwxwú7mesh D-determiners provide evidence for the claim that D-determiners are associated with domain restriction. All of the D-determiners in Skwxwú7mesh are sensitive to the context they are used in. All D-determiners in Skwxwú7mesh can be used to refer to a previously mentioned referent. This is because they are all associated with domain restriction.

One of the D-determiners differs from the rest of the system in that it must take narrow scope (*kwi*), similarly to bare nouns in languages like English (Carlson 1980), Mandarin

¹ However, I do not analyze the English indefinite article *a* as belonging to this set. See Chapter 6 for discussion.

(Rullmann and You 2003), Brazilian Portuguese (Müller 2005) and Blackfoot (Glougie 2000). I claim that *kwi* DPs compose via Restrict, as can bare nouns (cf. Chung and Ladusaw 2004). However, *kwi* DPs and bare nouns differ in one crucial aspect: *kwi* DPs can be used to refer to previously mentioned referents, and can also be used partitively. Bare nouns (in languages with overt D-determiners) cannot do this. I claim that bare nouns lack D-determiners and are unable to refer to a previously mentioned discourse referent. *Kwi* DPs can refer to a previously mentioned referent (or be used partitively) precisely because they have a D-determiner (*kwi*).

The behaviour of the D-determiner *kwi* also provides us with evidence that there is no strict correlation between the presence of more structure and the ability to take wide scope. Instead, I argue that a lack of features is correlated with the obligation to take narrow scope.

Skwú7mesh D-determiners behave significantly differently from those of better studied languages, and also differ in their semantics from those of St'át'imcets (cf. Matthewson 1998, 1999), a related Salish language. I will assume that the English D-determiner *the* asserts the uniqueness of its referent. Skwú7mesh D-determiners do not assert the uniqueness of their referents. Instead, sentences containing (most) DPs are associated with an implicature of uniqueness of the referent of the DP. The DPs are normally interpreted as referring to the unique entity which matches the NP description; however, this uniqueness can be cancelled.

On the basis of the differences between English and Skwú7mesh, I argue that D-determiners can vary with respect to (i) whether they are used in only familiar contexts or both familiar *and* novel contexts, (ii) whether they assert uniqueness, and (iii) whether they carry deictic information. (This is not meant to be an exhaustive list: other information may also be encoded.) For example, Skwú7mesh D-determiners (i) can occur in both familiar and novel contexts (as can all Salish D-determiners; see Matthewson 1998) (ii) do not assert uniqueness, and (iii) can carry deictic information.² The English D-determiner *the*, on the other hand, can only occur in familiar contexts, asserts uniqueness and is not deictic.

The properties listed above are not all independent of one another. I argue that the familiarity effects seen with English *the* are derived from the domain restriction and the assertion of uniqueness. Skwú7mesh lacks familiarity effects, which I derive from the lack of assertion

² *Kwi* differs from the rest in not carrying any deictic information (as I show in Chapter 5); however, it behaves like the other determiners with respect to familiarity and assertion of uniqueness.

of uniqueness. Deictic information is independent of the other two: theoretically, a language could have D-determiners which asserted uniqueness *and* encoded deictic information.³

Salish D-determiners provide us with evidence that the effects of definiteness in English must be teased apart. Both English and Salish D-determiners share domain restriction. However, the lack of assertion of uniqueness in Salish allows the D-determiners to be used in novel contexts, unlike English *the*. I extend the property of domain restriction to all D-determiners, no matter what other properties they may have.

(1) All D-determiners have domain restriction in their denotation.

In this thesis I propose a semantic definition of a D-determiner, which I crucially link to the syntax. In the traditional semantics literature, ‘determiner’ refers to anything that creates a generalized quantifier from a predicate (see, e.g. Barwise and Cooper 1981). That analysis makes no reference to the syntax of determiners. For example, *more than one* is treated as a determiner. This is unexpected if all determiners occupy the same head (since *more*, *than*, and *one* are all themselves heads). I will argue in this thesis that there *is* a link between the syntax and the semantics of D-determiners: if an element has a particular semantics, it occupies D, and if an element occupies D, it will have that particular semantics. For example, *all* cannot be a D-determiner because it does not occupy D. We can see this in (2) below. Assuming that *the* occupies D, *all* may not also occupy D.

(2) All **the** men walked.

I argue that the position D is strictly tied to one particular meaning.

(3) Domain restriction is only introduced by D-determiners.

I thus argue that D-determiners have a semantic ‘core’. Some researchers have claimed that the syntactic position D is associated with certain distinctions (definiteness, specificity, etc.), but do not share a particular core semantics (see Matthewson 1998, for example). Unlike English D-determiners, Salish D-determiners (including Salish) do not encode definiteness (Matthewson 1998, Gillon 2003; see also Chapter 4). This led Matthewson to conclude that the position D does not have the same semantics across all languages. Here I argue against this and

³ Demonstratives are potential examples of this. However, I do not treat demonstratives as D-determiners. See Chapter 6 for discussion.

instead argue that all D-determiners share something in common. That is, even though D-determiners may not have the exact same semantics (as they can vary with respect to assertion of uniqueness, for example), they share a core semantics.

I also argue against Matthewson's (1998) claim that Salish D-determiners do not access the common ground of the discourse. Salish D-determiners, according to Matthewson, have a particular setting of a Common Ground Parameter, as in (4).

- (4) Common Ground Parameter
Determiners may access the common ground of the discourse

Yes: {English,...}

No: {Salish,...}

(Matthewson 1998)

Matthewson appealed to this in order to capture the fact that Salish D-determiners do not encode definiteness.

However, I argue that all D-determiners in Skwxwú7mesh are sensitive to the context they are used in and that they *are* able to access the common ground, via domain restriction. I derive the lack of definiteness effects from the lack of assertion of uniqueness instead.

2 The background

In this section, I outline the issues that arise in both Skwxwú7mesh and English. Skwxwú7mesh lacks a definite/indefinite distinction, or a non-assertion of existence/assertion of existence distinction (cf. Matthewson 1998). English has a definite/indefinite distinction. The problem is how to relate these two systems. Do they share anything in common?

2.1 The problem in Skwxwú7mesh

Skwxwú7mesh DPs do not encode a definite/indefinite contrast. In (5)a, the DP can be used in a novel context, where the referent has not been previously mentioned. This same effect is found in (5)b, where the DP is used in an existential context. (5)c can be used following either of (5)a or b. Here the hearer is familiar with the referent, as it has already been introduced. The use of

the DPs in novel or familiar contexts is not affected by the choice of D-determiner. There are eight D-determiners in *Skw̓x̓wú7mesh* (four gender-neutral and four female);⁴ here I show the gender-neutral D-determiners in both novel and familiar contexts. (All data is from my own fieldwork, unless otherwise noted.)

- (5) a. Chen kw'ách-nexw **ti/ta/kwa/kwi** swí7ka.
Isg.s look-tr(lc) det man
 'I saw a man.' (novel context)
- b. Tsí7 **ti/ta/kwa/kwi** swí7ka ná7 ta lám'.
exist det man loc det house
 'There's a man in my house.' (novel context)
- c. Na kw'áy' **ti/ta/kwa/kwi** swí7ka.
rl hungry det man
 'The man is hungry.' (familiar context)

Given that there are so many D-determiners in *Skw̓x̓wú7mesh*, the question arises as to what distinctions are encoded by these D-determiners.

A possible analysis has already been provided by Matthewson (1998), the first in-depth study of Salish D-determiners. Her main claim is that Salish D-determiners (with the exception of Straits Salish) encode an 'assertion of existence' distinction. However, *Skw̓x̓wú7mesh* D-determiners, as we shall see, do not encode this distinction.

The 'assertion of existence' distinction is one between those D-determiners which assert the existence of their referent and those that do not. Matthewson argues that *St'át'imcets* (along with most Salish languages) makes this distinction. In *St'át'imcets*, most of the D-determiners assert the existence of their referent. In both (6)a and b, the D-determiner *ti...a* asserts the existence of the book. Thus, the DP *ti púkwa* 'the/a book' cannot take narrow scope with respect to the non-factual operator *kelh* 'might' in (6)b.

- (6) a. tecwp-mín-lhkan **ti** púkwa-a lhkúnsa.
buy-appl-Isg.s det book-det today
 'I bought a/the book today.'
 □x, book (x), I bought x today

⁴ One of the female D-determiners is not often used, as I discuss in Chapter 5.

- b. *tecwp-mín-lhkan* *kelh* **ti** *púkw-a* *nacw.*
buy-appl-1sg.s *might det* *book-det* *tomorrow*
 ‘I might buy a/the book tomorrow.’
 □*x*, book (*x*), I might buy *x* tomorrow (St’át’imcets; Matthewson 1998)

In St’át’imcets, there is one D-determiner (*ku*) which does *not* assert the existence of its referent. According to Matthewson, this non-assertion of existence D-determiner cannot occur in a declarative sentence; *ku* requires the presence of a non-factual operator, as in (7)a.⁵

- (7) a. *tecwp-mín-lhkan* *kelh* **ku** *púkw* *nacw.*
buy-appl-1sg.s *might det* *book* *tomorrow*
 ‘I might buy a book tomorrow.’
- b. * *tecwp-mín-lhkan* **ku** *púkw* *lhkúnsa.*
buy-appl-1sg.s *det* *book* *today*
 (I bought a book today) (St’át’imcets; Matthewson 1998)

Matthewson claims that this restriction on non-assertion of existence D-determiners to these environments holds in other Salish languages. While she does not explicitly claim that Skwú7mesh D-determiners encode this distinction, she suggests that most Salish languages encode this distinction. However, it cannot be the correct analysis for Skwú7mesh. There is no ‘non-assertion of existence’ D-determiner in Skwú7mesh. All D-determiners are equally available in declarative sentences as well as in those with non-factual operators. However, different DPs can take different scope with respect to an operator. *Kwa* DPs must take wide scope, *ti* and *ta* DPs can take either wide or narrow, and *kwi* must take narrow scope.

- (8) a. *Chen silh7-án* **ti/ta/kwa/kwi** *sts’úkwi7.*
1sg.s buy-tr *det* *fish*
 ‘I bought a/the fish.’
- b. A: *Nú chexw silh7-án* **kwa** *sts’úkwi7?*
rl.Q 2sg.s buy-tr *det* *fish*
 ‘Did you buy a/the fish?’ (wide scope)
- B: # *Háw, háwk sts’úkwi7.*
neg be.not fish
 ‘No, there weren’t any fish.’

⁵ It is also licit in object position of morphologically intransitive verbs (Davis and Matthewson 2003). I do not discuss this issue here.

- B: Háw, an tl'í7.
neg very dear
 'No, it was too expensive.'
- c. A: Nú chexw silh7-án **ti/ta** sts'úkwi7?
rl.Q 2sg.s buy-tr det fish
 'Did you buy a/the fish?' (wide or narrow scope)
- B: Háw, háwk sts'úkwi7.
neg be.not fish
 'No, there weren't any fish.'
- B: Háw, an tl'í7.
neg very dear
 'No, it was too expensive.'
- c. A: Nú chexw silh7-án **kwi** sts'úkwi7?
rl.Q 2sg.s buy-tr det fish
 'Did you buy a fish?'⁶ (narrow scope)
- B: Háw, háwk sts'úkwi7.
neg be.not fish
 'No, there weren't any fish.'
- B: # Háw, an tl'í7.
neg very dear
 'No, it was too expensive.'

The D-determiner *kwi* is therefore the closest candidate to a 'non-assertion of existence' D-determiner; however, as shown in (8)a, it can occur in declarative sentences. It cannot be a non-assertion of existence D-determiner.⁷

The question then is: what distinctions are encoded by *Skwú7mesh* D-determiners? I will argue that deictic distinctions are the only relevant factor and that the D-determiner *kwi* has no deictic features at all. Matthewson (1998) has already shown that deictic distinctions are found in all Salish languages, but here, the deictic distinctions will receive primary focus. Further, I will derive the differences between the D-determiners in *Skwú7mesh* directly from the presence or absence of deictic properties.

⁶ The lack of a definite interpretation will be shown to derive from *kwi*'s obligatory narrow scope. See Chapter 5 for more discussion.

⁷ The non-deictic D-determiner *kwi* behaves the same in this respect as *he* in *M_ori* (cf. Chung and Ladusaw 2004). See Chapter 6 for more discussion.

2.2 The problem in English

English *does* have an indefinite/definite distinction. *A* is only felicitous in novel contexts, as in (9)a and b, whereas *the* is (usually) only felicitous in familiar contexts.⁸ Novel contexts are contexts where the hearer is not acquainted with the referent of the DP. Familiar contexts are contexts where both the speaker and the hearer are acquainted with the referent of the DP.

- (9) a. I saw **a** man. (novel context, *familiar context)
b. There's **a** man in my house. (novel context, *familiar context)
c. I saw **the** man. (familiar context, *novel context)

Definite D-determiners have been associated with many different properties: assertion of existence and uniqueness (Russell 1998[1905]), presupposition of existence and uniqueness (Strawson 1998[1950], Kadmon 1992), familiarity (Christophersen 1939, Heim 1988), inclusiveness (Hawkins 1978), etc. Indefinite articles have also been associated with many different properties: as existential quantifiers (Russell 1998 [1905]), as choice functions (e.g., Reinhart 1997), or even as presupposing uniqueness (Percus 1998).

Given that both indefinites and definites have been associated with a presupposition of uniqueness, what *is* the difference between *a* and *the*? I argue that *the* shares a core semantics with other D-determiners, and that *a* does not. In fact, I argue that *a* is not a D-determiner at all.

The goal of this thesis is a unified semantics for D-determiners. There is much variation between English and Skwxwú7mesh (and between any two unrelated systems). However, I show that there is commonality between these disparate systems: the presence of domain restriction in D.

2.3 Why are these two problems related?

Skwxwú7mesh and English seem to be very different from each other. The definite D-determiner in English bears little obvious relation to the many D-determiners in Skwxwú7mesh. The D-determiners in Skwxwú7mesh cannot be analyzed using the traditional notions of familiarity or uniqueness. However, they do appear to serve a similar function as other D-determiners. The

⁸ In some cases, *the* can be used in novel contexts (Heim 1988). See Chapter 3 for more discussion.

question then is, what, if anything, do D-determiners in Skwǂwú7mesh and English have in common? Domain restriction appears to play a role in both Skwǂwú7mesh and English. I pursue the idea that domain restriction is shared by D-determiners cross-linguistically.

The analysis I provide for Skwǂwú7mesh is (partially) applicable to English. The properties of the D-determiners in Skwǂwú7mesh provide us with evidence for universal claims about D-determiner denotations, but also for a specific analysis of the English definite D-determiner. I provide a unified analysis of the core properties shared by all D-determiners in both languages, as well as an analysis of the cross-linguistic differences in D-determiner semantics.

3 Preview of the analysis

I argue that there are two differences between Skwǂwú7mesh and English D-determiners. Unlike English *the*, Skwǂwú7mesh D-determiners have deictic features and are not used solely in definite contexts. The deictic features are given in the table below.

	Deictic			Non-deictic
	Neutral	Proximal	Distal, invisible	
gender-neutral	ta	ti	kwa	kwi
feminine	lha	tsi	kwelha	kwes

Table 1.1: The D-determiner system of Skwǂwú7mesh.

D-determiners in both English and Skwǂwú7mesh share domain restriction, however.

I assume that the definite/indefinite distinction in English arises from the assertion of uniqueness encoded by *the*, roughly following Heim and von Stechow (2001). I argue that the difference between the indefinite article *a* and the definite D-determiner *the* does not arise solely due to the assertion of uniqueness; the difference also arises from domain restriction, which is introduced by the D-determiner *the* (but not the indefinite article *a*).

D-determiners in Skwǂwú7mesh do not assert uniqueness. I argue that in Skwǂwú7mesh a subset of the D-determiners instead are associated with an *implicature* of uniqueness. Uniqueness is therefore still a factor in this language. However, one of the D-determiners is not associated with an implicature of uniqueness. Therefore, uniqueness is not a necessary part of the semantics of D-determiners. I predict that unless there is a contrast in the D-determiner system of

any given language (along deictic lines, for example), all D-determiners will be associated with uniqueness: either by assertion, or by implicature.

I derive the familiarity effects of English *the* from the assertion of uniqueness and the presence of domain restriction. *The* forces the referent to be the maximal member of the contextually restricted domain that matches the NP description. The only way to know if the domain contains this unique member is if the referent is familiar to the hearer (in the spirit of Kadmon 1992). I provide the denotation of *the* below.

$$(10) \quad \llbracket \text{the} \rrbracket = \lambda P \max(\lambda x [P(x) \wedge C(x)])$$

I argue that indefinite articles are not D-determiners, and do not introduce domain restriction over their NP. Therefore, even if they presuppose uniqueness (as argued by Percus 1998), the speaker does not assume that the hearer knows the referent. The presupposition of uniqueness in and of itself is not enough to force familiarity; it is only the interaction between the presupposition or assertion of uniqueness and domain restriction.

I argue that the lack of familiarity effects in *Skwxwú7mesh* arises from the lack of assertion of uniqueness. The domain restriction provided by the D-determiner can be accommodated (cf. Lewis 1979) because the speaker does not need to assert the uniqueness of the referent. The hearer therefore does not have to be familiar with the referent. I provide the denotation of the deictic D-determiners below. I provide a choice function analysis of the deictic D-determiners.

$$(11) \quad \llbracket \text{ta} \rrbracket = \lambda P f(\lambda x [P(x) \wedge C(x)])$$

The non-deictic D-determiner *kwi* also does not assert uniqueness, nor does it presuppose familiarity. Unlike deictic DPs, non-deictic DPs must take narrow scope. I claim that it does this because it composes with the predicate via Restrict (cf. Chung and Ladusaw 2004).

$$(12) \quad \llbracket \text{kwi} \rrbracket = \lambda P \lambda x [P(x) \wedge C(x)]$$

I argue that the core semantics of D-determiners is domain restriction; much of the rest of the semantics may vary. In (13) below, I give the denotations for English *the*, and *Skwxwú7mesh* deictic D-determiners and the non-deictic D-determiner. All contain domain restriction.

$$(13) \quad \text{a} \quad \llbracket \text{the} \rrbracket = \lambda P \max(\lambda x [P(x) \wedge C(x)])$$

- b. $[[ta]] = \lambda P f(\lambda x [P(x) \wedge C(x)])$
- c. $[[kwi]] = \lambda P \lambda x [P(x) \wedge C(x)]$

This is unlike bare nouns, which do not have domain restriction.

(14) D introduces domain restriction; NPs lack domain restriction

4 Outline of the thesis

This thesis has the following structure.

In Chapter 2, I provide some background information on Skwxwú7mesh, including the D-determiner system, and other morphological, syntactic or semantic information necessary for understanding the data presented in this thesis. I show that there are no argument nominals smaller than a DP in Skwxwú7mesh. I also provide preliminary analysis of the deictic D-determiners, as well as evidence for the deictic features in Skwxwú7mesh.

In Chapter 3, I provide the theoretical background for this thesis. This includes a discussion of presupposition and implicature, the debate on definiteness in English, and the background on domain restriction of DPs. I also provide an overview of my analysis for English in order to compare to the analysis of Skwxwú7mesh in Chapter 4.

In Chapter 4, I show that Skwxwú7mesh D-determiners can be used in both novel and familiar contexts. This has already been shown for St'át'imcets D-determiners as well (Matthewson 1998). I also show that Skwxwú7mesh D-determiners do not assert the uniqueness of their referent; instead, sentences containing a deictic DP carry an implicature of uniqueness of the referent of that DP. I relate the implicature to the domain restriction associated with the D-determiner: it is simpler to assume the speaker is talking about the unique referent in the context, unless he or she (or the context) gives you reason to believe otherwise.

In Chapter 5, I argue that there is a non-deictic D-determiner in Skwxwú7mesh. This non-deictic D-determiner can also be used in novel and familiar contexts. However, sentences containing a non-deictic DP do not carry an implicature of uniqueness of the referent of the DP. I argue that this is because the non-deictic D-determiner does not have deictic features. This lack of deictic features has other consequences for the grammar: a DP headed by this D-determiner

must take narrow scope with respect to any quantifier or operator because it composes via Restrict. DPs headed by this D-determiner behave somewhat like bare nouns in other languages. However, this D-determiner also introduces domain restriction, unlike bare nouns. This domain restriction allows the non-deictic D-determiner to be interpreted partitively.

In Chapter 6, I discuss some typological issues that arise from my analysis. I suggest that non-deictic D-determiners are present in many other Salish languages. I make predictions as to how those non-deictic D-determiners should behave. My analysis of Skwú7mesh also forces me to conclude that English D-determiners are also associated with domain restriction. I raise the question of whether quantifiers are also associated with domain restriction, and suggest that they are not. I argue instead that there is a set of elements which are domain restrictors over their NP, and that this set of elements are D-determiners. I argue that these elements occupy D. I also extend the analysis to other unrelated languages. I conclude that NPs cannot be associated with domain restriction and that only DPs are forced (where possible) to refer to previously mentioned referents.