An unfamiliar proportional quantifier

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1 Introduction

This paper investigates an element in St’át’imcets (Lillooet Salish) which appears to straddle the divide between weak and strong quantifiers. This element, nukw, is described by van Eijk (1997:131; 263) as being an indefinite quantifier meaning ‘some’ or ‘other’. Some examples are given in (1-2).²

(1) lh-núkw-as wa7 t’it n-q’áy-lec [i núkw-a HYP-nukw-3CONJ IMPF also LOC-run.away-AUT [DET.PL nukw-DET sk’wémk’úk’wmi7t] children] ‘Sometimes some children would run away’. (Matthewson 2005:208)

(2) wa7 sqwal’-en-túmulh-as tákem i qwámqwmet-a wa7 száyten-s IMPF tell-DIR-1PL.OBJ-3ERG all DET.PL fun-DET IMPF business-3POSS [ DET.PL nukw-DET person] ‘She would tell us all the fun things the other people were doing.’ (Matthewson 2005:79)

DPs containing nukw display a range of initially puzzling syntactic and semantic behaviours. They are felicitous in existential sentences, which suggests that they are weakly quantificational and should pattern with English DPs containing weak some (s’m). However, nukw-phrases are unambiguously proportional rather than cardinal, in the sense that a nukw-phrase always carries the meaning ‘some, but not all’. In this respect, nukw-phrases parallel English partitive some (of), which many researchers take to be excluded from existential sentences. With respect to familiarity, nukw-phrases also display dual behaviour: they may be used in out-of-the-blue, discourse-novel contexts, but also in anaphoric, definite contexts.

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2 Abbreviations: ACT = active intransitivizer, APPL = applicative, AUT = autonomous intransitivizer, CAUS = causative, CONJ = conjunctive, DEIC = deictic, DET = determiner, DIR = directive transitivizer, ERG = ergative, FOC = focus, HYP = hypothetical complementizer, IMPF = imperfective, LOC = locative, OBJ = object, OOC = out of control, PASS = passive, PL = plural, POSS = possessive, NEG = negation, NOM = nominalizer, REPORT = reportative, STAT = stative, SUBJ = nominative subject.
The goals of the paper are twofold: firstly, to provide a unified analysis of the various interpretations of nukw, and secondly, to investigate the theoretical consequences of the analysis. I will argue that nukw encodes only the proportional (‘not all’) aspect of English partitive some or other, and that this aspect of meaning is a presupposition. The existential force of some or other is achieved in St’át’imcets by an obligatorily co-occurring determiner. Finally, the discourse-familiar aspect of English partitive some or other is missing entirely from the St’át’imcets constructions.

The data and analysis presented here suggest that at least for St’át’imcets, neither Zucchi’s (1995) nor Keenan’s (2003) analysis of the definiteness effect with existential sentences can be correct. However, McNally’s (1998) approach has the potential to work for St’át’imcets. The nukw data confirm that, contrary to what is sometimes assumed, the notions of proportionality and familiarity are not necessarily linked in the denotations of quantifiers (cf. also de Hoop 1995 on Dutch). Finally, the analysis of nukw provided here contributes to the growing body of evidence that there are no phenomena in St’át’imcets which require us to hardwire a familiarity requirement (cf. Matthewson 1998 for determiners, Davis et al. 2004 for clefts, and Matthewson in press for presupposition triggers).

The structure of the paper is as follows. In section 2 I discuss the syntactic behaviour of nukw and propose that nukw is a modifier to D. In section 3, I present the semantic data and generalizations. Section 4 provides the analysis, and section 5 addresses the theoretical consequences.

## 2 The syntax of nukw

In this section I show that nukw does not pattern syntactically with either weak or strong quantifiers. I argue that it is a modifier to D. I begin with some basic background on St’át’imcets determiners.

### 2.1 Background on determiners

All argument DPs in St’át’imcets are introduced by an overt determiner. Bare plurals or bare mass nouns are not grammatical, as shown in (3) and (4).

(3) a. léxlex [i smelhmůlhats-a] intelligent [DET.PL woman(PL)-DET] ‘The / some women are intelligent.’
   b.* léxlex [smelhmůlhats] intelligent [woman(PL)]

(4) a. wa7 ts’aqw-an’-ítas [i t’éc-a] [i míxalh-a] IMPF eat-DIR-3PL.ERG[DET.PL sweet-DET] [DET.PL bear-DET] ‘The / some bears eat honey.’
   b.* wa7 ts’aqw-an’-ítas [t’æc] [i míxalh-a] IMPF eat-DIR-3PL.ERG[sweet][DET.PL bear-DET]

Most St’át’imcets determiners contain both a proclitic and an enclitic portion. The proclitic potion immediately precedes, and the enclitic portion immediately follows, the first prosodic
2.2 Syntactic behaviour of nukw

The translations given for nukw might lead us to suspect that it is a quantifier. In many cases, the syntactic behaviour of nukw is consistent with such an assumption. For example, nukw in (5a) appears in a parallel position to the quantifiers in (5b) and (5c).

(5) a. léxlex [i nükw-a sk’wemk’úk’wmí7t] intelligent [DET.PL nukw-DET children] ‘Some of the children are intelligent.’

b. léxlex [i tákem-a sk’wemk’úk’wmí7t] intelligent [DET.PL all–DET children] ‘All children are intelligent.’

c. léxlex [i cw7ít-a sk’wemk’úk’wmí7t] intelligent [DET.PL many–DET children] ‘Many (of the) children are intelligent.’

However, further data reveal that nukw behaves neither like a weak, nor like a strong quantifier. Unlike strong quantifiers, nukw may not precede the determiner in argument position.

(6) a. wa7 tayt [tákem [i sk’wemk’úk’wmí7t-a]] IMPF hungry [all [DET.PL children-DET]] ‘All (of the) children are hungry.’

b.* wa7 tayt [cw7ít [i sk’wemk’úk’wmí7t-a]] IMPF hungry [many [DET.PL children-DET]] ‘Many (of the) children are hungry.’

c.* wa7 tayt [nukw [i sk’wemk’úk’wmí7t-a]] IMPF hungry [nukw [DET.PL children-DET]] ‘Some (of the) children are hungry.’

Unlike weak quantifiers, nukw may not function as a main predicate.

(7) a.* tákem [i sk’wemk’úk’wmí7t-a]$_{DP}$ all [DET.PL children-DET] ‘There are all the children.’ [Literally: The children are all.’]

b. cw7ít [i sk’wemk’úk’wmí7t-a]$_{DP}$ many [DET.PL children-DET] ‘There are many children.’ [Literally: ‘The children are many.’]

3 Things are slightly more complicated; Davis (2000) has shown (on the basis of coordination facts) that the pro- and enclitic portions of the determiner occupy different projections. The relevant point for current purposes is that the placement of the enclitic portion is prosodically determined and therefore does not provide a direct window into syntactic structure.
Unlike weak quantifiers, \( nukw \) may not function as an adjective modifying a nominal predicate.

(8) a. \( [ \text{tákem} \text{sk’wemk’úk’wmi7t-} \text{a}] \text{PRED} [i \text{wa7} \text{tayt}] \text{DP} \)
\( [\text{all children}] \text{DET.PL IMPF hungry} \)
‘The ones who are hungry are all the children.’

b. \( [\text{cw7it sk’wemk’úk’wmi7t-} \text{a}] \text{PRED} [i \text{wa7} \text{tayt}] \text{DP} \)
\( [\text{many children}] \text{DET.PL IMPF hungry} \)
‘The ones who are hungry are many children.’

c. \( *[[\text{nukw sk’wemk’úk’wmi7t-} \text{a}] \text{PRED} [i \text{wa7} \text{tayt}] \text{DP} \]
\( [\text{nukw children}] \text{DET.PL IMPF hungry} \)
‘The ones who are hungry are some children.’

Unlike both weak and strong quantifiers, \( nukw \) may not appear in a fronted position.

(9) a. \( [\text{tákem i sk’wemk’úk’wmi7t-a}] \text{DET.PL children-DET] q’uq’wts t_i} \)
‘All the children are fat.’

b. \( [\text{cw7it i sk’wemk’úk’wmi7t-a}] \text{DET.PL children-DET] q’uq’wts t_i} \)
‘Many children are fat.’

c. \( *[[\text{nukw i sk’wemk’úk’wmi7t-a}] \text{DET.PL children-DET] q’uq’wts t_i} \)
‘Many children are fat.’

In summary, \( nukw \) has an entirely unique syntax within St’át’imcęts. It cannot syntactically be classified with either the strong or the weak quantifiers. Nor can it be classified as an adjective, since adjectives function as main predicates.\(^4\) There are no other DP-internal elements which resemble \( nukw \) in their syntactic behaviour. We therefore need a custom-made analysis for \( nukw \).

### 2.3 Syntactic analysis

The data in (8) above showed that we cannot treat \( nukw \) as combining as a sister with the noun; it is dependent on the presence of a determiner. Nor can we treat \( nukw \) as combining with the whole DP, as strong quantifiers do; this was shown in (6) and (9). I conclude that \( nukw \) composes first with D and then with N. It is thus syntactically a modifier to D. We will

\(^4\) Adjectives and weak quantifiers pattern alike in all respects except that adjectives are ungrammatical in the constructions in (9).
also see semantic arguments for this claim below. The structure proposed is given in (10).

(10) DP
     / \
    Det \ NP
     / \
nukw Det

3 The semantics of nukw

In this section I provide data and generalizations concerning the semantics of phrases containing nukw. I begin with some basic background on the semantics of the determiners and on existential sentences in St’át’imcets.

3.1 Semantic background

Apart from the polarity determiner ku, which cannot be used anaphorically, all St’át’imcets determiners are underspecified for familiarity and can be used in both familiar and novel discourse contexts. This is illustrated in (11); see Matthewson (1998, 1999) for more data and discussion.

(11) a. húy’-lhkan ptákwlh, ptákwlh-min lts7a [ti smém’ḻhats-a] … going.to-1SG.SUBJ tell.story tell.story-APPL here [DET girl-DET] ‘I am going to tell a legend, a legend about a girl…’ (novel)
    b. … wa7 ku7 ílal láti7 [ti smém’ḻhats-a] … IMPF REPORT cry DEIC [DET girl-DET] ‘… The girl was crying there.’ (familiar) (van Eijk and Williams 1981:19)

The determiners introduce the equivalent of widest-scope existential quantification. The wide-scope existential properties of the determiners are illustrated in (12) with respect to negation, and in (13) with respect to a quantified phrase; (13) is a case of scope-taking across an island boundary.

(12) cw7aoz kw-s áz’en-as [ti sts’úqwaz’-a] kw-s Sophie NEG DET-NOM buy-DIR-3ERG [DET fish-DET] DET-NOM Sophie Sophie didn’t buy a fish.’ (= ‘There is a fish which Sophie didn’t buy.’)

= ∃x [fish (x) & ¬ [buy (x) (Sophie)]
≠ ¬ [∃x [fish (x) & buy (x) (Sophie)]] (Matthewson 1999)

(13) [tákem i wa7 tsunám’-cal] cuz’ wa7 qwenúxw-alths’a7 [all DET.PL IMPF teach-ACT] going.to IMPF sick-inside

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5 The surface linear order of elements is achieved by the cliticization of the two parts of the determiner to nukw.
Every teacher will be sad if a child quits.

i. **Accepted** in widest-scope context: There is one child, who every teacher doesn’t want to leave.

ii. **Rejected** in intermediate-scope context: For each teacher, there’s one child who they don’t want to leave.

iii. **Rejected** in narrowest-scope context: Every teacher will be sad if any child leaves. (Matthewson 1999)

The exact mechanism for achieving the widest-scope existential effect is not critical here. In Matthewson (2001) I utilized free choice function variables which receive their value from the assignment function; I shall assume that analysis here.

Existential sentences show a strong/weak quantifier contrast in St’át’imcets, as shown in (14).

(14)  a. wa7 [ti míxalh-a] [láku7 sqwém-a]
    be [DET bear-DET] [DEIC mountain-DET]
    ‘There is a bear on that mountain.’

    b. wa7 [i míxalh-a] [láku7 sqwém-a]
    be [DET.PL bear-DET] [DEIC mountain-DET]
    ‘There are bears on that mountain.’

    c. wa7 [i cw7ít-a míxalh] [láku7 sqwém-a]
    be [DET.PL many-DET bear] [DEIC mountain-DET]
    ‘There are many bears on that mountain.’

    d.* wa7 [tákem i míxalh-a] [láku7 sqwém-a]
    be [all DET.PL bear-DET] [DEIC mountain-DET]
    * ‘There are all (the) bears on that mountain.’

3.2 The semantics of nukw-phrases

In this section I outline the range of contexts in which nukw is licit. I argue that nukw is an unambiguously proportional element, but that it is not specified for familiarity.

The first set of contexts in which nukw is licit is all contexts in which English uses *other*. These are all familiar contexts, in the sense that some previous discourse referent(s) must have been introduced (or accommodated). The examples of ‘other’ uses of nukw in (13-16) are all from spontaneously offered oral narratives.

(13) …múta7 kw s-ka-kwan-ens-túm-a lhel-ki musmus-lhkálh-a múta7…
    and DET NOM-OOC-take-DIR-1PL.ERG-OOC from-DET.PL.cow-1PL.POSS-DET and
    [i níkw-a spzu7-lhkálh] wá7 l-ti tmičw-lhkálh-a
    [DET.PL nukw-DET animal-1PL.POSS] be in-DET land-1PL.POSS-DET
    ‘[Whatever they couldn’t grow on our land] or get from our cows and the other
    animals on our land.’ (Matthewson 2005:105)
(14) nilh s-k’wík’wena7-s t’u7 i wa7 ka-kan-s-twítas-a ts’i7 múta7 FOC NOM-few-3POSS just DET.PL IMPF OOC-can-CAUS-3PL.ERG-OOC meat and sts’úqwaz’ múta7 [i níkw-a s-q’wel s-7ílhen] fish and [DET.PL níkw-DET STAT-cook NOM-eat] ‘So they could only can a few cans of fish and meat and other cooked food.’ (Matthewson 2005:146)

(15) plan wa7 qelhmín [ti pápel7-a smúlhats] already IMPF old [DET one(human)-DET woman] ‘One woman was already old.’

cw7aoz kw s-ts’il.h-as kw s-qelhmín-s [ta níkw-a smúlhats] NEG DET NOM-like-3CONJ DET NOM-old-3POSS [DET níkw-DET woman] ‘The other woman didn’t seem very old.’ (Matthewson 2005:59)

(16) taw-min’-ítas ta sáq’ulh-a nilh s-ts’aqw-an’-ítas [ti níkw-a sell-APPL-3PL.ERG DET half-DET FOC NOM-eat-DIR-3PL.ERG [DET níkw-DET såq’ulh] half] ‘They sold half of it, and they ate the other half.’ (Matthewson 2005:65)

However, níkw is also possible in cases where the presuppositions of other are not met. In (17), for example, the meaning of ta níkwa macaroni in the last line is not ‘the/some other macaroni’; in context it is clear that the DP refers to some of the macaroni that is already being discussed. (In contrast, the níkw in the third line does mean ‘other’.)

(17) t’ak aylh q’wel [ta macaroni-ha] go then cook [DET macaroni-DET] ‘Then the macaroni was getting cooked.’

nih s-a-s p’líxwexw FOC NOM-IMPF-3POSS boil.over ‘Then it overflowed.’

kwán-lhkan [ta níkw-a tsqústen] take(DIR)-1SG.SUBJ [DET níkw-DET saucepan] ‘I took another saucepan.’


Similarly in (18), the níkw-phrase is clearly partitive in that it refers to some of the previously-mentioned food; it does not refer to some other food.

(18) mítsa7q-kalh aylh, nilh s-wa7-s nilham’-ci-túmul-em sit-1PL.SUBJ then FOC NOM-IMPF-3POSS put.in-APPL-1PL.OBJ-PASS [i s-7ílhen-a] [DET.PL NOM-eat-DET] ‘We sat down, then they served us the food.’
The third set of uses of *nukw* involve novel discourse contexts; these are illustrated in (19-20).

(19) wa7 tsut [i *nukw*-a úcwalmicw] k-wa-s tu7 nilh i IMPF say [DET.PL *nukw*-DET person] DET-IMPF-3POSS then FOC DET.PL cácl’ep-mec-a k’al’em-mín-itas kw s-wa7 i wa7 Fountain-people-DET wait-APPL-3PL.ERG DET NOM-be DET.PL IMPF sáysez’-wit lh-us pipántsek play-3PL HYP-(IMPF)3CONJ summer

‘Some people say that it was the Fountain people who they waited for, to play [sports] during summer.’

[okay as beginning of story]

(20) i-cín’-as, wa7 ku7 láti7 [ti *nukw*-a mixalh] when.PAST-long.time-3CONJ be REPORT DEIC [DET *nukw*-DET bear]

‘Once upon a time, there was a bear.’

We have seen so far that *nukw*-phrases are used in (a) familiar, ‘other’ contexts, (b) familiar partitive contexts, and (c) novel, plain existential contexts. What unifies all the data in (13-20) is that *nukw* always conveys the notion of ‘some but not all’ of some larger set.

Further support for the ‘some but not all’ semantics of *nukw* comes from the fact that nouns with unique denotations are impossible with *nukw*, as shown in (21), which is emphatically rejected.

(21) * ka-lhéxw-a aylh [ta *nukw*-a snéqwem]
OOC-appear-OOC then [DET *nukw*-DET sun]

‘A sun rose.’

The final piece in the puzzle presented by *nukw* is that unlike English strong *some*, *nukw* is straightforwardly possible in existential sentences. This is shown in (22), as well as in (20) above.

(22) a. wa7 [i *nukw*-a sqweyíts] l-ta lep’cáltən-a be [DET.PL *nukw*-DET rabbit] in-DET garden-DET

‘There are some rabbits in the garden.’

b. á7hen! wa7 [ta *nukw*-a splaont] l-ta lep’cáltən-Ihkálh-a! look be [DET *nukw*-DET skunk] in-DET garden-1PL.POSS-DET

‘Look, there’s a skunk in our garden!’

Before proceeding to the analysis, a note is in order regarding my use of the term ‘proportional’. Several people have suggested that *nukw* is not truly proportional, in the sense that the English quantifier *most* is, for example. In a sentence of the form *most* A B, the cardinality of the set A \( \cap B \) must be greater than the cardinality of the set A – B (equivalently: greater than half the cardinality of A). That is, there is some lexically specified proportional relation between the size of two sets. This is not true of *nukw*-phrases, which...
merely require that a phrase of the form \textit{nukw Det NP} not pick out the entire set denoted by the NP.

This objection to the use of the term ‘proportional’ is partially justified. A determiner which formed a generalized quantifier while inducing a ‘not all’ semantics would, I believe, clearly count as proportional. Observe that a ‘not all’ requirement can be represented in a way which is almost identical to Partee’s (1988) denotation for the proportional readings of weak quantifiers. Partee’s interpretation for a sentence of the form \textit{few A B} under its proportional reading is given in (23).

\begin{equation}
\frac{|A \cap B|}{|A|} \leq k \quad \text{k a fraction or %}
\end{equation}

We can adapt (23) to represent the ‘not all’ requirement of a hypothetical \textit{nukw}-like determiner, as shown in (24).

\begin{equation}
\frac{|A \cap B|}{|A|} < 1
\end{equation}

Such a determiner would be in one sense more similar to \textit{most} than weak quantifiers like \textit{many} and \textit{few} are; both (24) and \textit{most} lexically specify the proportion, while with the proportional readings of \textit{many} and \textit{few}, the value for the variable \(k\) is context-dependent.

The proposal that the determiner represented in (24) is proportional is also supported by Partee’s claim that one of the tests for proportional (as opposed to cardinal) \textit{few} is that it cannot be true of all elements of a set. One of Partee’s examples is given in (25). (25) contains cardinal \textit{few}, and it ‘could be true in a situation where all the faculty children were at the picnic, but there were few faculty children back then.’

\begin{equation}
\text{There were few faculty children at the 1980 picnic.}
\end{equation}

Proportional \textit{few}, as found in the subject of an individual-level predicate in (26b), crucially does not allow all members of the set to satisfy the predicate.

\begin{equation}
\begin{align*}
\text{a. } & \text{Few egg-laying mammals turned up in our survey, perhaps because there are few.} \\
\text{b. } & \# \text{ Few egg-laying mammals suckle their young, perhaps because there are few.}
\end{align*}
\end{equation}

Finally, Partee notes that the proportional reading of weak quantifiers is unavailable in unambiguously adjectival positions. If \textit{nukw} were proportional, this would correlate with – perhaps even explain – the fact that \textit{nukw} never appears in adjective position (see (8) above).

Having said all this, we will see below that we cannot actually analyze \textit{nukw} as a generalized-quantifier-forming determiner with the semantics in (24). This is because St’át’ímctwets DPs do not denote generalized quantifiers, but individuals (cf. Matthewson 1999). This will in turn lead to the result that \textit{nukw} is proportional, in the sense discussed here, only by implicature rather than truth-conditionally.

Summarizing what we have established so far about the semantics of \textit{nukw}, we have seen that (i) \textit{nukw} is not itself quantificational (the determiner is responsible for the existential force); (ii) \textit{nukw} unambiguously indicates ‘not all’ in all of its uses; (iii) \textit{nukw} is unspecified with respect to familiarity. Before moving to the analysis, I provide one final refinement of the generalizations, relating to discourse sensitivity. Observe that in (27), the phrase \textit{i nükwa sk’wemk’ük’wmi7t} must denote a proper sub-part not merely of the NP
denotation, but of the five most salient children.

(27) Context: There are 20 children in the daycare. You are in a room with five of those children, and you notice that those five are all hungry.

I therefore conclude that a nukw-phrase must denote a proper subset of the set of contextually salient individuals satisfying the NP denotation.

4 Analysis of nukw

We have seen that nukw requires its DP to correspond to a proper subset of the set of contextually salient individuals satisfying the NP.

The question now is how nukw-phrases are semantically composed. Recall that nukw always co-occurs with a determiner. We know from previous work on St’át’imcets that these determiners function like domain restrictors, in the sense that as choice functions, the determiners narrow the set denoted by NP by picking a (singular or plural) individual from that set (see Matthewson 1999; cf. also Giannakidou 2004). We might therefore suppose that first, the determiner restricts the domain so that the DP denotes the contextually salient (singular or plural) individual, and second, nukw further reduces the denotation to a proper subpart of the contextually salient individual. Of course, this order of composition would not accord with the syntax I proposed above, according to which nukw combines first with the determiner, rather than with a Det-NP phrase. We will now see that it also would give the wrong semantics.

In (28), nukw appears with a singular N. It is clear that the determiner has not first composed with the NP, as suggested in the previous paragraph: ti núkwa míxalh does not mean ‘some but not all of a bear’ or ‘some but not all of the contextually salient bear’.

(28) i-cín’-as, wa7 ku7 láti7 [ti nukw-a míxalh]
when.PAST-long.time-3CONJ be REPORT DEIC [DET nukw-DET bear]
‘Once upon a time, there was a bear.’

Singular examples therefore show that it is not that the determiner has not first composed with the NP, as suggested in the previous paragraph: ti núkwa míxalh does not mean ‘some but not all of a bear’ or ‘some but not all of the contextually salient bear’.

[all [DET bear-DET]] black
‘All of the bear is black.’

6 Thanks to Henry Davis for suggesting this comparison.
b. ? [tqílíh t’u7 tákem [tí míxalh-a]DP]QP q’wexq’wíx [almost just all [DET bear-DET]] black

‘Almost all of the bear is black.’

Having confirmed that nukw must compose with the determiner, there are now two options for how to implement the ‘not all’ requirement: as part of the truth conditions, or as a presupposition. The former option would involve adopting a generalized-quantifier-style analysis and giving nukw a denotation of type <<et,e>,<<et>,<et,t>>. This is illustrated in (30) (where C is the set of contextually salient singular or plural individuals).

(30) \[[ nukw ]\] = \( f \in D_{\langle et,e,\rangle} \cdot g \in D_{\langle et,\rangle} \cdot \lambda h \in D_{\langle et,\rangle} \cdot \exists x [ C(x) = g(x) = h(x) = 1 \& \neg \forall y [ C(y) = g(y) = 1 \implies h(y) = 1 ]] \).

This would straightforwardly yield a proportional reading, since it enforces a proportion between the cardinality of \( C \cap NP \) and the cardinality of \( C \cap NP \cap VP \). The problem with this approach is that it renders the determiner vacuous, and thereby loses the widest-scope/referential properties of St’át’imcets DPs (cf. section 3.1). As outlined in detail in Matthewson (1999), St’át’imcets DPs cannot be treated as generalized quantifiers, since we could not account for their scope properties under such an approach. The same widest-scope peculiarities hold of nukw-DPs, as will be shown in section 4.1.3 below. I therefore reject the approach in (30), and turn to the other option for implementing the ‘not all’ requirement: as a presupposition.

The presuppositional approach is given in (31). For any set A, +A is understood to be the individual that is the sum of all the members of A. The underlined portion is the presupposition. nukw is of type <<et,e>,<et,e>>.7

(31) \[[ nukw ]\] = \( f \in D_{\langle et,e,\rangle} \cdot \lambda g \in D_{\langle et,\rangle} \cdot f(g) < +( C \cap \{ x : g(x) = 1 \}) \cdot f(g) \)

This analysis says that nukw takes a determinant as its first argument, and an NP as its second. The presupposition checks what the result of applying the determiner in context to the NP is, and compares this to the sum of \( C \cap NP \). The presupposition then requires that the former be a proper part of the latter. For example, suppose the NP is sk’úk’wmi7t ‘child’. The presupposition requires that the child picked out by f is a proper part of the group of salient children. If the NP is sk’wemk’úk’mi7t ‘children’, the presupposition requires that the plurality of children picked out by f is a proper part of the sum of all the salient (singular or plural) children.

If defined, the denotation of the entire nukw-phrase is identical to the denotation of the plain DP without nukw. Therefore, nukw does not affect truth conditions, but merely functions to enforce proportionality.

In the remainder of this section I show that the predictions of the analysis in (31) are upheld.

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7 Thanks to an anonymous reviewer for pointing out a problem with a previous version of this denotation. I am also very grateful to Hotze Rullmann for discussion of how to formulate the presupposition of nukw.
4.1 Predictions of the analysis

4.1.1. Implicature status of ‘not all’ requirement

The analysis in (31) models the proportionality requirement as a presupposition. However (unlike with the assertion analysis given in (30) above), (31) actually predicts that the proportionality of nukw-phrases may be canceled in context. To see why this is so, take the simple example in (32).

(32) qwatsáts [i nákwa sqayqéqy’ecw] leave [DET.PL nukw-DET boys]
    ‘Some of the boys left.’

(32) asserts that a plural individual consisting of contextually salient boys left; that plural individual is presupposed to be a proper subset of the entire set of contextually salient boys. Suppose there are four contextually salient boys: Benjamin, Merlin, Adam and Rafael. Suppose that the DP i nukwa sqayqéqy’ecw picks out Benjamin and Merlin, so the presupposition is satisfied. Now suppose that all four of the boys left. (31) is still true, since the individual consisting of Benjamin and Merlin left. However, we can predict that (31) in this context implicates that Adam and Rafael did not leave. The reason for the implicature is that if all four of the boys did leave, the simpler and shorter sentence in (33), which lacks nukw, would be true.

(33) qwatsáts [i sqayqéqy’ecw-a] leave [DET.PL boys-DET]
    ‘The boys left.’

The fact that the speaker of (32) went to the trouble of using nukw, which presupposes non-maximality, strongly suggests that (33) is not true.

The prediction that the ‘not all’ effect is a cancelable implicature is upheld, as shown in (34).8

(34) cúy’-lhkan nas-ts [i nákwa sk’wemk’úk’wmi7t] going.to-1SG.SUBJ go-CAUS [DET.PL nukw-DET children]
    ats’x-en-tsi-has see-DIR-2SG.OBJ-3ERG
    ‘I am going to bring some of the children to see you.’

nás-ts-kan zam’ [tákem i sk’wemk’úk’wmi7t-a] go-CAUS-1SG.SUBJ after.all [all DET.PL children-DET]
    ats’x-en-tsi-has see-DIR-2SG.OBJ-3ERG
    ‘In fact, I’ll bring all of the children to see you.’

4.1.2 Unique cases correctly predicted to be bad

Recall that sentences containing nukw inside a singular DP which is known to have a unique

8 A sequence similar to (34) was rejected by one consultant. This accords with a general reluctance to allow overt cancellations of implicatures in St’át’imcets.
referent are emphatically rejected:

(21) * ka-lhéxw-a aylh [ta núkw-a snéqwem]
    OOC-appear-OOC then [DET nukw-DET sun]
    ‘A sun rose.’

The analysis predicts this effect. (21) presupposes that the DP ta snéqwema in context denotes a sun which corresponds to a proper subset of the set of contextually salient suns. This presupposition conflicts with the state of our solar system; hence, the sentence results in laughter on the part of the consultant.

4.1.3 Presupposition projection

I have claimed that the ‘not all’ aspect of the semantics of nukw is a presupposition. This predicts that the ‘not all’ aspect of meaning should project through negation and other operators, like presuppositions do. This prediction is upheld, as illustrated in (35).

(35) Context: Talking about meals at residential school.
    aoy t’u7 i núkw-a pro k-wa-s áma s7ílhen
    NEG just DET.PL nukw-DET pro DET-IMPF-3POSS good NOM-eat
    ‘Some of it wasn’t good food.’
    = ‘For some but not all of it, it wasn’t good food.’

(35) presupposes that the denotation of i núkwa pro corresponds to a proper subset of all the contextually salient food. It then denies that this proper subset was good food. As outlined above, this will not force the rest of the food to be good; however, it will certainly implicate that the rest of the food was good. Importantly, however, the ‘not all’ requirement cannot take scope under the negation. Thus, (35) cannot mean something like ‘It is not the case that some but not all of it was good food.’ If (35) could mean that, we would expect that (35) could be followed in discourse by (36). However, it cannot.

(36) (35) cannot be followed by:
    # tákem i s-7ílhen-a wa7 áma
    all DET.PL NOM-eat-DET IMPF good
    ‘All of the food was good.’

In a sense, it is not at all surprising that the meaning of nukw takes wide scope with respect to negation in (35). As shown by Matthewson (1999), DPs containing the determiner i…a necessarily take widest scope in St’át’imcets with respect to any operator. The data in (35-36) do, however, serve once again to rule out the generalized quantifier, truth-conditional analysis of the ‘not all’ requirement which was rejected above.

4.1.4 Out of the blue uses of nukw

Recall that nukw is good discourse-initially. An example was given in (19), repeated here.

(19) wa7 tsut [i núkw-a úcwalmicw] k-wa-s tu7 nilh i
    IMPF say [DET.PL nukw-DET person] DET-IMPF-3POSS then FOC DET.PL
Fountain-people-DET wait-RED-3PL.ERG DET NOM-be DET.PL IMPF sáysez’-wit lh-us pipántsek play-3PL HYP-(IMPF)3CONJ summer ‘Some people say that it was the Fountain people who they waited for, to play [sports] during summer.’ [okay as beginning of story]

Discourse-initial uses of nukw are common with plural DPs, and are less common with singular DPs (Henry Davis, Jan van Eijk, p.c.). Consultants often prefer to translate out-of-the-blue singular nukw-phrases into English using other, which implies that a prior context has been accommodated. Examples of this are given in (37-38).

(37) aoz t’u7 kw-en-s zúqwnucw [ku nukw ts’i7] lhkúnsa ku sq’it NEG just DET-1SG.POSS-NOM kill.animal [DET nukw deer] now DET day ‘I didn’t kill another deer this day.’ (volunteered gloss)

Consultant’s comment: “You already killed one and you didn’t this day.”

(38) Context: Out of the blue.

wá7 [ta nukw-a sqweyits] l-ta lep’cáltén-a be [DET nukw-DET rabbit] in-DET garden-DET

Speaker 1: ‘The other rabbit is in the garden.’ (volunteered gloss)
Speaker 2: ‘That would be like saying you already saw some by the house and then there’s one by the garden.’

On the other hand, discourse-initial nukw with singular DPs is often ignored in translation, and is often accepted in elicitation contexts, without any indication of accommodation being required. For example, a third speaker accepted (38) and commented that it is acceptable “because you’re talking about just one.” Similarly, if a singular DP is substituted for the plural i núkwa úcwalmicw ‘some people’ in (19), the result is an acceptable sentence, as shown in (39). The consultant’s comment for (39) was “Yes, that was Leonard Sampson that told me that.”

(39) wa7 tsut [ta nukw-a úcwalmicw] k-wa-s tu7 nilh i IMPF say [DET nukw-DET person] DET-IMPF-3POSS then FOC DET.PL cácl’ep-mec-a k’al’em-mín-itas kw s-wa7 i wa7 Fountain-people-DET wait-APPL-3PL.ERG DET NOM-be DET.PL IMPF sáysez’-wit lh-us pipántsek play-3PL HYP-(IMPF)3CONJ summer ‘Someone said that it was the Fountain people who they waited for, to play [sports] during summer.’ [okay as beginning of story]

Another example of discourse-initial singular nukw is given in (40); cf. also (22b) above.

(40) íkena7! wá7 [ta nukw-a xzum sk’ák’y’et] l-ta sácwemten-a! eek be [DET nukw-DET big spider] in-DET bathtub-DET ‘Eek! There’s a big spider in the bathtub!’
Consultant’s comment: “That sounds ok if you saw one.” Do you have to have seen one before? “No, because sometimes you see them so it’s not presuming.”

How does the analysis presented here account for discourse-initial uses of nukw? Recall that although nukw is presuppositional, it crucially differs from English other in not requiring there to be any previously-known alternate individual(s) in C \(\cap\) NP. To account for discourse-initial uses, we need only assume that in out-of-the-blue contexts, C can be vacuously large (i.e., contain all individuals in the domain). In that case, the presupposition of nukw reduces to requiring that the denotation of the DP correspond to a proper subset of the denotation of the NP. Note that in its ability to be vacuously large, C differs from the reference of definite descriptions in English. This accounts for the difference between nukw and English some of the with respect to discourse familiarity, as shown in (41). Some of the NP requires prior mention of a contextually salient set of NPs.

(41) Context: Out of the blue; no prior knowledge of a set of rabbits.

# Some of the rabbits are eating your lettuce.

The situation, then, is that if there is a contextually salient set of individuals, C does some work, and C \(\cap\) NP will already be reduced to a proper subset of the denotation of the NP predicate. Nukw will then require the denotation of the DP to be a proper subset of C \(\cap\) NP. If there is no contextually salient set of individuals, the nukw-phrase is only required to denote a proper subset of the entire denotation of the NP predicate.

This account also seems to explain the difference in status between singular and plural nukw-DPs. Note that a plain plural DP in St’át’imcets can easily denote the entire set of NPs, as shown in (42). In fact, the most common way to express generic statements is to use a plain plural DP.

(42) sáq’w [i haláw’-a]  
fly [DET.PL eagle-DET]  
‘Eagles fly.’

Since in the absence of nukw, a discourse-initial plural DP could denote the entire set of NPs, nukw does some work when it appears with a plural DP and a vacuously large C. With singulars, however, the situation is different: by virtue of the singular determiner, the DP already denotes a proper subset of the entire set of NPs (with the exception of singleton predicates such as snéqwem ‘sun’, discussed above). This means that singular nukw in an out of the blue context is essentially vacuous, and therefore is predicted to be dispreferred.

5 Consequences

We have seen that the element nukw only ever appears inside a DP, whose determiner contributes existential quantification to the sentence. We have also seen that DPs containing nukw are unambiguously proportional, in the sense of meaning ‘some, but not all’. Finally, we have seen that nukw-DPs are underspecified with respect to familiarity; they are felicitous in any kind of context, from discourse-initial to familiar. I have argued that nukw is presuppositional: it presupposes that the DP denotes a proper subset of the intersection of C with the NP denotation. This in turn means that nukw presupposes that the denotation of the NP restriction is non-empty. However, nukw does not presuppose discourse-familiarity. That
is, there need not be any familiar or salient individuals satisfying the NP restriction. This distinction will be crucial below.

In this section we will examine the theoretical consequences of an existential, proportional, non-familiar element such as nukw. The first set of consequences has to do with the correct analysis of the definiteness effect in existential sentences (section 5.1). The second set of consequences has to do with the general absence of items which hardwire familiarity in St’át’imcets (section 5.2).

5.1 Existential sentences

Nukw provides a good testing-ground for theories about existential sentences, because it splits two properties which are often linked in the denotations of quantifiers: proportionality and presuppositionality (in the sense of familiarity). That is, quantifiers are often assumed to be proportional just in case they quantify over a presupposed (= familiar) set of individuals. We see this in the difference between English unstressed some (s’m) on the one hand, and stressed SOME or partitive some of the on the other. Unstressed s’m is neither proportional nor presuppositional, and it is straightforwardly good in existential sentences, as shown in (43a). Some of the and SOME are not only proportional (in the sense that they mean ‘some but not all’), but also presuppositional, in that neither is felicitous unless the relevant NP denotation is already in the domain of discourse. Both are degraded in existential sentences, as shown in (43b). For the link between proportionality and presuppositionality, see Herberger (1993), Musan (1995), Diesing (1992), among others.

(43) a. There are s’m rabbits in the garden.
   b. * There are some of the rabbits / SOME rabbits in the garden.

The putative link between proportionality and presuppositionality has already been disproved for Dutch by de Hoop (1992, 1995). De Hoop argues that the quantifier sommige ‘some’ always gets a partitive reading, not a cardinal reading (see also de Jong 1983); it means ‘some, but not all’. She further shows that sommige is disallowed in existential sentences:

(44) a. * Er zijn [sommige eenhoorns] [in dit bos]  
    there are [some unicorns] [in this forest]  
    ‘There are some unicorns in this forest.’  
    (Dutch; de Hoop 1992:208)

   b. * Er zijn [sommige eenhoorns] wit  
    there are [some unicorns] white  
    * ’There are some unicorns white.’  
    (Dutch; de Hoop 1995:427)

However, the proportionality of sommige is not what excludes it from existential sentences, since other explicit and implicit partitives are allowed in Dutch there-sentences, as shown in (45).³

³ Hotze Rullmann (p.c.) informs me that the judgements on Dutch partitives in existential sentences are somewhat controversial (as is also the case for English; see discussion shortly below). He confirms, however, that existential sentences with sommige are worse than those with other partitives.
(45) a. Er zijn [twee van de drie eenhoorns] wit
there are [two of the three unicorns] white
* 'There are two of the three unicorns white.' (Dutch; de Hoop 1995:427)

b. Er zijn [enkele eenhoorns] wit, de rest is zwart
there are [some unicorns] white the rest is black
* 'There are some unicorns white, the rest are black.' (Dutch; de Hoop 1995:427)

De Hoop’s solution is to say that *sommige* is presuppositional, in the sense that it ranges over a group which must be familiar in the discourse, and that this is what is incompatible with the existential context (see also Comorovski 1988). Other partitives, as in (45), are proportional but not presuppositional.

In a sense, *nukw* makes the flip side of de Hoop’s point. While *sommige* is proportional and familiar and is disallowed in existential sentences, *nukw* is proportional and non-familiar, and is good in existential sentences. This might lead us to conclude that the defining criterion for phrases which are excluded from existential sentences involves familiarity.

However, things are not as simple as just outlined. In the remainder of this section I will show that the presuppositionality-based analysis of Zucchi (1995) makes incorrect predictions for *nukw*. I will also argue that Keenan’s (2003) analysis makes incorrect predictions for *nukw*. Finally, I will show that McNally’s (1998) analysis has the best chance of accounting for *nukw*.

Before proceeding, I will clarify the grammaticality status of *nukw*-phrases in existential sentences. An anonymous reviewer claims that the link between proportional readings and infelicity in existential sentences is already disproven in English. For example, McNally (1997:10) claims that partitives are generally licit in existential sentences, and gives the following data.

(46) a. This time, there were none of the objections they had encountered on other occasions.

b. There were many of the same people at both events. (McNally 1997:10)

Hoeksema (1996:12-14) similarly claims that partitives are good in presentational existential sentences, as in (47a), and bad only in purely existential sentences, as in (47b).

(47) a. There were several of us in the room.

b. # There is one of the two boys. (Hoeksema 1996:13)

Just as in Dutch (cf. footnote 9), the acceptability status of English partitives in existential sentences is somewhat controversial. I will set aside the debate about English here, since it is not my goal to give an analysis of English partitives. I will simply note that *nukw* in St’át’imcets appears to be entirely unexceptional in existential sentences. Thus, I am proposing that *nukw*-phrases in existential sentences have a grammaticality status corresponding to uncontroversially ‘weak’ phrases in English.10

10 I also obviously discount the possibility that *nukw*-phrases in existential sentences have a similar status to the well-discussed cases of definite noun phrases appearing in existential sentences in English (see e.g., Ward and Birner 1995, Abbott 1992, Prince 1992, among many others).
5.1.1 Zucchi (1995)

A brief and simplified summary of Zucchi’s (1995) analysis is as follows. Zucchi argues that DPs which are unacceptable in there-sentences are those which contain presuppositional determiners. Zucchi’s notion of ‘presuppositional’ is that the relevant determiners presuppose that the denotation of their NP is not empty. He also assumes that in an existential sentence, the coda (e.g. ‘in the garden’) provides the contextual domain for the interpretation of the postverbal NP. In (45), for example, the presupposition of the determiner every is that the set of students in the garden is non-empty.

(48) * There is every student in the garden.

Finally, there is a felicity condition on there-sentences: the common ground must include neither the proposition that the NP+coda is empty, nor that it is non-empty. (48) does presuppose that the set of students in the garden is non-empty, so the sentence is bad.

Let us turn now to nukw. As noted above, nukw presupposes that the denotation of [Det NP] is a proper subset of the contextually salient set of individuals fitting the NP description. This entails that the set of individuals fitting the NP description is non-empty. We might conclude from this that nukw comes out as presuppositional under Zucchi’s analysis, and therefore would be incorrectly predicted by Zucchi to be ruled out from existential sentences.

Before we conclude this, however, we should pay attention to the contribution of the coda. When we do, we discover that there is a more basic problem with applying Zucchi’s analysis to St’át’imcets. Recall that Zucchi’s coda condition says that in an existential sentence, the NP+coda provides the domain of interpretation for the determiner. In (22b), for example, repeated here, applying the semantics that we know nukw to have in all its other uses would mean that nukw presupposes that the denotation of its plain DP is a proper subset of the contextually salient skunks in our garden.

(22) b. á7hen! wa7 [ta nukw-a splaont] l-ta lep’calten-lhkálh-a!
   ‘Look, there’s a skunk in our garden!’

However, (22b) does not presuppose that there is more than one skunk in our garden; on the contrary, it is entirely felicitous if there is only one skunk in our garden. This casts doubt on the idea that the coda restricts the domain of evaluation of the determiner in St’át’imcets existential sentences.

The situation is therefore as follows. Nukw is presuppositional in Zucchi’s sense, except that it does not induce the relevant presupposition on the NP+coda sequence in an existential sentence. This seems to suggest that Zucchi’s proposal about the contribution of the coda is not correct, at least for St’át’imcets. Note that Zucchi proposed the coda condition in an effort to reconcile the presupposition of the determiner (which we usually assume is only over its NP) with the felicity condition for existential sentences (which disallows a presupposition over the intersection between the NP and the coda). Because Zucchi wants to derive the felicity condition from the semantics of the determiners, he proposes that the determiner in an existential sentence operates on the NP+coda sequence. If my proposals about the semantics of nukw are correct, this explanation cannot work for St’át’imcets. Nor would Zucchi’s generalization about the semantics of the determiners themselves (ignoring the attempt to derive the felicity condition) account for St’át’imcets, since nukw is presuppositional in his sense, yet is good in existential sentences.
5.1.2 Keenan (2003)

Keenan claims (2003:200) that the DPs which are acceptable in existential sentences are the set of (boolean compounds of) DPs built from lexical determiners which are conservative on the second argument (cons2). Lexical cons2 determiners are defined in (49). \( P_E \) is the set of subsets of \( E \) (properties of individuals); \( GQ_{E,X} \) is the set of functions from \( P_E \) into \( X \). (In the simplest case, \( X = \{true, false\} \) and the result is an ordinary generalized quantifier.)

\[ (49) \quad \text{A map } D \text{ from } P_E \text{ into } GQ_{E,X} \text{ is conservative on the second argument (cons}_2\text{) iff } A \cap B = A' \cap B \Rightarrow DAB = DA'B, \text{ for all } A, A', B \subseteq E. \quad \text{(Keenan 2003:200)} \]

A determiner which is cons2 relies on (a) the value of the second argument, and (b) the value of the second argument intersected with the first argument. We can change the value of the first argument without changing truth, as long as the intersection of the two arguments remains constant. For example, exactly two is cons2. If the women who are dancing are the same individuals as the chiefs who are dancing, then the two sentences in (50) necessarily have the same truth value. It doesn’t matter if the set of women is not equivalent to the set of chiefs and does not even have the same cardinality as the set of chiefs.

\[ (50) \quad \begin{align*}
\text{a.} & \quad \text{Exactly two women are dancing.} \\
\text{b.} & \quad \text{Exactly two chiefs are dancing.}
\end{align*} \]

On the other hand, all is not cons2, as shown by the fact that (51a) and (51b) can have different truth values in a situation where the dancing women are exactly the dancing chiefs.

\[ (51) \quad \begin{align*}
\text{a.} & \quad \text{All (the) women are dancing.} \\
\text{b.} & \quad \text{All (the) chiefs are dancing.}
\end{align*} \]

Is \textit{nukw} cons2? Imagine the following situation: there are four women at the party, Alfreda, Bernice, Clara, and Darla. Alfreda and Bernice are chiefs, but Clara and Darla are not. There are no other chiefs at the party. Alfreda and Bernice are dancing. The situation is schematized in (52).\textsuperscript{11}

\[ (52) \quad \begin{align*}
A &= \{a,b,c,d\} \quad \text{[women]} \\
A' &= \{a,b\} \quad \text{[chiefs]} \\
B &= \{a,b\} \quad \text{[dancers]}
\end{align*} \]

If \textit{nukw} were cons2, then (53a) and (53b) should necessarily have the same truth value. However, in the situation described, (53a) is felicitous and true but (53b) is rejected by consultants.

\[ (53) \quad \begin{align*}
\text{a.} & \quad \text{wa7 q’wezílc [i námaju nukw-det] smelhmúlhats } \\
& \quad \text{IMPF dance [DET.PL nukw-DET women]} \\
& \quad \text{‘Some women are dancing.’} \\
\text{b.} & \quad \# \text{ wa7 q’wezílc [i námaju kúkwpi7] } \\
& \quad \text{IMPF dance [DET.PL nukw-DET chief]} \\
& \quad \text{‘Some chiefs are dancing.’}
\end{align*} \]

\textsuperscript{11} Thanks to Hotze Rullmann for help in constructing the relevant scenario.
There is no available denotation for the DP *i nūkwa kūkwpi7* in (53b) which allows the sentence to be true in this context. Since there are only two salient chiefs, and since the DP is marked as plural, the DP in context can only denote the sum of Alfreda and Bernice. Once it does this, the presupposition of *nukw* cannot be satisfied, since the sum of Alfreda and Bernice is not a proper part of the sum of contextually salient chiefs.

One might object that we should set aside cases where the presuppositions of *nukw* are not satisfied when evaluating whether *nukw* is cons2. (This would be a similar idea to von Fintel’s (1999) ‘Strawson entailment’.) In that case, we get a slightly different result. Suppose that the situation is exactly as before, except that Clara is also a chief, and she is also dancing:

\[\text{A} = \{a,b,c,d\} \quad \text{[women]} \]
\[\text{A'} = \{a,b,c\} \quad \text{[chiefs]} \]
\[\text{B} = \{a,b,c\} \quad \text{[dancers]} \]

This time, (53a) is felicitous and true, while (53b) is also technically true, as long as we assume that the plain DP inside (53b) can denote, for example, the sum of Alfreda and Bernice. However, (53b) is still rejected by consultants in this context, due to the strong implicature that there should be some contextually salient chief who is not dancing.

It is at this stage not completely clear to me whether *nukw* counts as cons2. If we adopt the step of considering only sentences whose presuppositions are satisfied before judging *nukw*, then we would presumably have to allow the same escape route for other presuppositional determiners, including English *some of the*. This would then predict that *some of the* is cons2 and should be felicitous in existential sentences. As observed above, the literature is divided on the facts with respect to English partitives, although the majority opinion seems to be that they are degraded.

5.1.3 McNally (1998)

McNally (1998) argues that there is no single generalization which accounts for existential sentences. Instead, there are two separate constraints operative, one with a stronger effect than the other. First, strong quantifiers are (usually) ruled out because the existential predicate requires the postverbal NP to either denote a property (or a ‘non-particular’), or a quantifier over properties / non-particulars. This requirement is illustrated in (55). (55a) and (55b) contain the same determiner, but differ in their status because (55a) but not (55b) quantifies over particulars.

\[(55) \quad \begin{align*}
\text{a.} & \quad * \text{There were most books in his library.} \\
\text{b.} & \quad \text{There were most sorts of books in his library.} \quad (\text{McNally 1998:358})
\end{align*}
\]

Second, definite descriptions are ruled out (less strictly) because of a pragmatic novelty requirement. McNally basically follows Prince (1981, 1988), among others, in claiming that the existential predicate pragmatically requires the postverbal NP to introduce a novel discourse referent. A crucial component of McNally’s approach is that definite descriptions in English allow property denotations (following Partee 1987). Definites are not ruled out by the non-particular restriction which rules out strong quantifiers, but only pragmatically by the novelty restriction.

McNally’s theory seems to have the best chance so far of accounting for St’át’ímcets existential sentences, since the way McNally divides up the facts correlates with the grammaticality status of St’át’ímcets existential sentences. First, let’s assume strong quantifiers are ruled out in St’át’ímcets for the same reason they are in English. Adopting
McNally’s analysis would of course predict that if a strong quantifier quantifies over non-particulars as in (55b), the sentence is acceptable. Unfortunately, this prediction cannot be tested, since St’át’imcetst entirely lacks nouns such as sort, kind or variety.

The second component of McNally’s analysis is correctly predicted not to apply in St’át’imcets. That is, plain DPs and nukw-DPs are all licit in existential sentences because they differ from English definites in lacking a familiarity requirement, and therefore the pragmatic novelty constraint does not rule them out. We therefore see that the independent absence of familiar determiners in St’át’imcets immediately derives the split between strong quantifiers, which are bad, and ordinary DPs, which are all good. This lends support to McNally’s division of the set of nominals which are unacceptable in English existential sentences into two separate categories.

There is one aspect of McNally’s approach which may not be applicable to St’át’imcets. Recall that her analysis would require us to assume that all St’át’imcets DPs can be type-shifted to denote properties, just like English definites can. However, type-shifting of DPs has no independent motivation in St’át’imcets (unlike in English). For example, there is no independent evidence for Partee’s (1987) BE type-shift in St’át’imcets. On the contrary, there is a strict complementary distribution between the elements which can appear in argument positions (full DPs, containing a determiner) and the elements which can appear in predicate positions (NPs, containing no determiner; see Matthewson 1998, 1999 for data). Adopting this aspect of McNally’s proposal, therefore, would leave us needing to explain why the DPs are unable to undergo the property type-shift when they appear in syntactic predicate position.12

5.1.4 Summary

The discussion of existential sentences presented here is very preliminary and brief. Nevertheless, it seems that out of the three different approaches discussed here, McNally’s is the one which has the best chance of accounting for existential sentences in St’át’imcets (although the type-shifting issue remains to be clarified). Under a McNally-style approach, all non-strongly-quantified DPs – including nukw-DPs – are licit in St’át’imcets existential sentences, because they lack a familiarity requirement. Note that McNally’s account does not predict that English partitives pattern exactly like nukw. McNally states (1998:10) that ‘I take partitives to be acceptable [in existential sentences] and assume they differ from non-partitives only in the felicity conditions on the familiarity or anaphoricity of the referents associated with the complement to of.’ Of course, the complement to of is a definite DP, and thus induces its own familiarity effects. McNally therefore predicts that while English partitives are not ruled out by the pragmatic novelty restriction of existential sentences, they can still be infelicitous if the familiarity requirement of the embedded the is not satisfied. As has been reiterated throughout this paper, nukw-phrases lack any such independent familiarity requirement.13

This leads us into the final section, which discusses the lack of familiarity effects in the St’át’imcetst language as a whole.

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12 It is worth noting that Giannakidou (2004) has proposed that such type-shifts do exist in St’át’imcets. Giannakidou’s proposal stems from an effort to find an analysis of St’át’imcets quantified DPs which parallels the standard analysis of English. See Matthewson (to appear) for a reply to Giannakidou’s paper.

13 In a sense, we are back at the spirit of de Hoop’s claim that the reason why sommige is disallowed in existential sentences relates to its familiarity requirement.
5.2. The absence of any familiarity effects in St’át’ímcets

The analysis presented in this paper assigns a presupposition to *nukw*, but it is not a presupposition of familiarity. Indeed, the facts clearly speak against a familiar analysis for *nukw*; as we have seen, *nukw* is licit in out of the blue or novel discourse contexts, as well as in partitives and anaphoric contexts. In this final section I place the non-familiarity of *nukw* in a wider context, by observing that St’át’ímcets completely lacks any elements which would enforce partitivity (like English *some of the*) or anaphoricity (like English *other*). In fact, it is my contention that the entire language lacks any hardwired familiarity effects.

There is a growing body of evidence that there are no elements in St’át’ímcets which induce presuppositions about the discourse. There are no definite / familiar determiners (Matthewson 1998); all determiners in St’át’ímcets are felicitous in novel contexts (see for example (11) above). Furthermore, St’át’ímcets clefts (unlike English clefts) do not presuppose familiarity, as shown by Davis et al. (2004). Thus, (56) and (57) are both felicitous discourse-initially; note that their English translations using clefts sound odd.\(^{14}\)

\[(56)\]  
\[
\begin{align*}
\text{ni} & \text{ s-pála7-s-}a, \\
\text{FOC} & \text{ DET one-3SG.POSS-DET} \\
\text{ti} & \text{ plísmen-a} \\
\text{DET} & \text{ DET policeman-DET} \\
\text{t’iq} & \text{ arrive} \\
\text{áts’x-en-ts-as} & \text{ see-DIR-1SG.OBJ-3ERG} \\
\end{align*}
\]

\[\text{‘Once it was a policeman who came to see me.’} \quad \text{(Davis et al. 2004:113)}\]

\[(57)\]  
\[
\begin{align*}
\text{nilh} & \text{ s-Richard ti sek’w-en-táli-ha ta lháxts-a} \\
\text{FOC} & \text{ NOM-Richard DET break-DIR-TOP-DET DET plate-DET} \\
\text{‘It was Richard who broke a plate.’} \quad \text{(Davis et al. 2004:114)}
\end{align*}
\]

Most strikingly, even presupposition triggers such as ‘again’, ‘stop’, ‘also’ or ‘more’ do not place the same restrictions on the common ground in St’át’ímcets as they do in English (Matthewson in press). In particular, these typical presupposition triggers never give rise to von Fintel’s ‘Hey, wait a minute!’ response, which is the most fieldwork-friendly way I know of to detect the presence of presuppositions. As illustrated in (58), St’át’ímcets consultants do not challenge presupposition failures in context.

\[(58)\]  
\[
\begin{align*}
\text{Context: Addressee has no knowledge of anyone planning a trip to Paris.} \\
A: & \text{ nas t’it áku7 Paris-a kw s-Haleni lh-klísmes-as} \\
& \text{go also DEIC Paris-DET DET NOM-Henry HYP-Christmas-3CONJ} \\
& \text{‘Henry is also going to Paris at Christmas.’} \\
\text{B:} & \text{ o áma} \\
& \text{ oh good} \quad \text{(Matthewson in press:6)}
\end{align*}
\]

These results can be compared with parallel discourses in English, which very frequently do give rise to ‘Hey, wait a minute!’-style responses.

\(^{14}\) (57) also illustrates the lack of an exhaustivity requirement in St’át’ímcets clefts.
I analyze this failure of the ‘Hey, wait a minute!’ test as evidence that although the relevant items are presuppositional, they do not force the content of the presupposition to be familiar to all discourse participants at the time of utterance. This is therefore another instance of St’át’imcets lacking any familiarity effects in the sense of requirements being placed on the common ground.

The consequences of my suggestion that an entire language lacks familiarity presuppositions are quite far-reaching. If my claims about St’át’imcets are correct, we may be forced to postulate a pragmatic parameter, according to which presuppositions have a different effect on the common ground in St’át’imcets than they do in English. I must leave further discussion of this idea for future research. I will simply close by observing that the initially puzzling array of behaviours displayed by nukw turn out to be perhaps not very surprising at all, if it is right that the language lacks any familiarity effects. Nukw looks very much like an element corresponding to English strong some or other would be expected to look, in a language which cannot enforce familiarity.

References


Garland.