

Notes on determiner phrases in Moses-Columbia Salish¹

Nancy Mattina
University of Montana

Moses-Columbia Salish has a small set of determiners with which open predicates are bound into referring expressions that are determiner phrases in the syntax. The main properties of determiner phrases are much like those familiar from other Interior Salishan languages. Differences of detail suggest that a complex history underlies determination in the Interior Salishan group. For example, Moses-Columbia does not encode a referentiality distinction through its determiners, although such a distinction has been reported for other Interior Salishan languages.

1 Introduction

Despite a good deal of evidence supporting the noun/verb distinction on morphological grounds, controversy still surrounds the precise inventory of syntactic categories in the Salishan languages. One point of consensus is that a basic division exists between 'predicate' and 'referring expression' in Salishan syntax. In some Salishan languages, articles are required in referring expressions, making the term 'determiner phrase' a convenient categorial designation. But not all Salishan languages have had their syntax closely studied, and those that have not stand to test the comparative generalizations to which we have become accustomed. One such language is Moses-Columbia, a Southern Interior Salishan language spoken chiefly on the Colville Reservation in north-central Washington. It is arguably the least well documented of these seven Interior Salishan languages: Moses-Columbia, Okanagan, Kalispel, and Coeur d'Alene (Southern Interior Salishan languages); Thompson, Shuswap, and Lillooet (Northern Interior Salishan languages).

At first glance, Moses-Columbia would appear to be as category-neutral at the syntactic level as possible, with neither articles nor word order constraints to distinguish 'predicate' from 'referring expression'.²

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²Predicate-initial word order is common, perhaps basic, but not required.

- (1) *i-síc'əm* *kʷil* or *kʷil* *i-síc'əm*
 1sPo-blanket red
 'My blanket is red' or 'The red one is my blanket'.
- (2) *ʔacwáx* *smiyáw* or *smiyáw ʔacwáx*
 live.there coyote
 'Coyote lives there' or 'The one living there is Coyote'.

These isolated data seem to beg the question of whether the category 'determiner phrase' has any relevance in Moses-Columbia syntax. As this paper will demonstrate based on language-internal evidence, intra-family patterns, and cross-linguistic comparisons, Moses-Columbia does have both determiners and determiner phrases similar to those in closely related languages. There are differences of detail that have not been previously described but which may provide clues to the historical development of determiner phrases in Interior Salishan.

Despite appearances, the freely ordered words in (1) and (2) are not syntactically equivalent. Speakers report that it is possible to insert an article (e.g. *ʔani*) before either of the words.

- (3a) *ʔani i-síc'əm kʷil*
 (3b) *ʔani kʷil i-síc'm*
 (4a) *ʔani smiyáw ʔacwáx*
 (4b) *smiyáw ʔani ʔacwáx*

An article disambiguates the sentence, assuring that the article-word sequence is understood as the referring expression rather than the predicate. Further, an article must not occur before both words simultaneously.

- (5) **ʔani smiyáw ʔani ʔacwáx*

These data suggest the hypothesis, formulated by Higginbotham (1985) and adopted for Salishan by Jelinek (1998) and Matthewson (1996), that articles, as determiners, bind the open variable of a predicate, converting the predicate into a referring expression that is capable of functioning as an argument or adjunct in a clause. Higginbotham's proposal has the practical appeal of allowing all lexical items to function as predicates, as they appear to do in Salishan, while describing a mechanism for creating crucial distinctions at the syntactic level. Notwithstanding null determiners in utterances such as (1) and (2), Moses-Columbia has a set of determiners, most of which are articles, that occupy a fixed position in the determiner phrase.

2 Articles

The Moses-Columbia article set comprises four forms. The non-demonstrative or general article is *ʔani*. The other articles are demonstrative, distinguishing three degrees of proximity relative to the speaker: *ʔaxaʔ* 'close to the speaker',

ʔaci 'away from the speaker', *ʔatuʔ* 'further away from the speaker'. The demonstrative articles are formed on roots *ʔxaʔ*, *ʔci*, and *ʔtuʔ*, respectively, which are found in dozens of lexical items, including demonstrative predicates, pronouns, adverbials, and verb stems.³ Non-demonstrative *ʔani* is formed on a root that is less productive, but which has cognates in other Interior Salishan languages.⁴ The increment *ʔa-* found in each article is a formal determinant of the Moses-Columbia article set.

Although Kinkade (1967) expresses doubt about the existence of articles in Moses-Columbia, a comparison of the articles just listed with those of sister languages Okanagan, Kalispel, and Coeur d'Alene reveals close parallels. The same demonstrative roots are in evidence in each of the four languages; the sound correspondences are, with the exception of unexpected *h* and *xʷ* in Coeur d'Alene and some reinterpretations of the vowels, regular (table 1).

Table 1. Articles of Southern Interior Salish (Based on Kinkade 1967, Vogt 1940, Reichard 1938, A. Mattina 2000).

OK	KA	CR	CM
—	—	—	ʔa-ni
iʔ	ye	he	—
—	—	xʷe	ʔa-xaʔ
—	či	ce	ʔa-ci
tuʔ	tuʔ	te	ʔa-tuʔ

There are notable differences between the articles of Moses-Columbia and those of other Southern Interior Salishan languages. For example, Moses-Columbia articles are bisyllabic, while the articles in sister languages are monosyllabic. The bisyllabic articles closely resemble the demonstrative particles, as shown in table 2. The demonstrative particles have the increment *ʔi-* (and concomitant regularization of the root vowel to *a*) where the articles have *ʔa-*; the same roots are used for both. Elsewhere in Southern Interior Salishan the article forms are shorter than their demonstrative counterparts, all of which are bisyllabic, e.g. Okanagan *ʔaxáʔ* 'this' and *ʔixʔ* 'that' (A. Mattina 1973);

³Kinkade (1967) posits **xaʔ*, **ci*, and **tuwʔ* as deictic roots in Moses-Columbia, Kalispel, and Coeur d'Alene. The larger body of comparative data now available suggests the revised forms given here.

⁴Moses-Columbia is also the only Southern Interior Salishan language to use **ni* in its article inventory, which might suggest that *ʔani* does not belong to the set of articles. However, this root has cognate demonstratives in each of the Northern Interior Salishan languages. van Eijk (1997) describes an article *ni* 'known, absent, singular' as well as the 'anticipatory pronoun' *niʔ* and the 'invisible, singular' demonstrative pronoun *niʔ* in Lillooet. Thompson Salish has a demonstrative pronoun *náʔ(e)* (Thompson and Thompson 1992:136), while Shuswap has a 'deictic stem' *-ʔin(e)* (Kuipers 1974:58). These cognates, together with the *ʔa-* increment, show that *ʔani* has origins similar to the other Moses-Columbia articles.

Kalispel *ʔiʔl* 'this very one', *yeʔl* 'this one', and *ciʔl* 'there, not here' (Speck 1980); Coeur d'Alene *xʷiy'e* 'this' (Reichard 1938:656).

Table 2. Demonstratives and articles.

1. <i>ʔi-xaʔ</i>	'this one (here)'	cf. <i>ʔa-xaʔ</i>	art1
2. <i>ʔi-ca</i>	'this one (there)'	cf. <i>ʔa-ci</i>	art2
3. <i>ʔi-laʔ</i>	'that one'	cf. <i>ʔa-luʔ</i>	art3

In his cross-linguistic survey of determination Seiler (1978) observes that while articles frequently develop from demonstratives, demonstratives may also arise from articles as reinforced forms of articles. He notes that historically "the fixation potential of demonstratives gets weakened, so they turn into articles. New and still stronger demonstratives (or local expressions) have to be added" (p. 323). Such "stronger demonstratives" may be morphologically more complex and are peripheral within the determiner phrase, or as Seiler puts it, they are positioned "so as not to disturb the inner structure of the determiner sequence" (p. 323). Applying these considerations to Southern Interior Salishan, we find that the demonstrative particles are more morphologically complex than the articles and that they occur at the left edge of the determiner phrase, never intervening between the determiner and its complement. Presumably, the typical monosyllabic article of Southern Interior Salishan today developed from a "weakened" deictic particle into an unstressed CV clitic. The original deictic root was recast or "strengthened" into a demonstrative particle with a distinct (non-head) position within the determiner phrase.

In Moses-Columbia, however, the deictic-to-article development did not involve the morphophonological reduction that is observed in the other Southern Interior Salishan languages. Rather, the increments *ʔa-* and *ʔi-* were used to maintain a contrast between articles and demonstratives, respectively, with the result that demonstratives and articles continue to be bisyllabic particles, having developed in parallel fashion. While this morphophonological strategy is unique to Moses-Columbia in its group, its existence supports Seiler's conclusion that "it is mistaken to regard the article as 'nothing but' a weakened deictic" (p. 315) in the description of languages. Data specific to the languages of Southern Interior Salishan show that articles and demonstratives regularly comprise separate form classes.

If the form of articles reflects their demonstrative beginnings, so too does their polyfunctionality. Most Moses-Columbia articles and demonstratives also serve as predicates and pronouns. In (6) and (7), the article *ʔaxaʔ* and the demonstrative *ʔixaʔ* serve as predicates, respectively.

- (6) *ʔaxáʔ* *ʔani* *Mary* *I* *stxʷul-s*
 be.this.one art Mary gen house-3sPo
 'Mary's house is this one'. (i.e. 'This is Mary's house'.)

- (7) *ʔixaʔ kt ʔani in-λ'əʃλ'əʃəʃpm*
 be.here 1pSu art 2sPo-elders
 'Your parents are us'. (i.e. 'We are your parents'.)

In pronoun function, the articles and demonstratives act as previous reference markers (see Anderson and Keenan 1985) as in (8), or immediate (situational) exophora, as in (9) and (10).

- (8) *qʷəc'əw'áy'aʔ cnəw'náw'lx ʔacyú·paʔ*
 Chipmunk running playing
 'Chipmunk was running, playing'

kʷaʔ kkic-s wa syáyaʔ
 and reach(tr)-3Su foc serviceberries
 and he got to the serviceberries.

t'il' wa p'iʔq
 mod foc ripe
 They were really ripe.

ʔicaʔ na·w'lx ʔalkícx
 that.one ran run.back
 He ran back (home)

k'ltuʔ kkiyaʔ-s
 toward grandmother-3Po
 to his grandmother'.
 [Piatote: Chipmunk]

- (9) *swat ʔani*
 who.is the.one
 'Who is he/she?'

- (10) *stam' ʔaci*
 what.is this.one .there
 'What is that?'

The polyfunctionality of Moses-Columbia articles reveals their development from older demonstrative predicates that functioned as articles or pronominals, as they continue to do in modern Coast Salish languages (e.g. Montler 1986:224 on Saanich). Significantly, Moses-Columbia is exceptional in Southern Interior Salishan and Interior Salishan generally in allowing articles to serve as either predicates or pronouns. Even the Moses-Columbia system is split, as the general article *ʔani* cannot serve as a predicate. Against this background, Moses-Columbia appears to be midway between two ends of a figurative continuum that extends between the Coast Salish pattern—where demonstratives serve as articles, predicates, and pronouns—and the Interior Salishan pattern, where articles are functors that are distinct from

demonstratives. That pronominal and predicative function continues to cling to some Moses-Columbia articles connects the two patterns historically, without undermining the generalization that articles and demonstratives form separate classes in Interior Salishan.

1.2 Article phrases

In syntax, Moses-Columbia articles occur at or near the left edge of their constituent. A demonstrative or quantifier may appear to the left of the article.⁵

- (11) *yapkʷánt-xʷ* *ʔaci* *in-yámǰʷaʔ*
 grab(tr)-2sSu art2 2sPo-basket
 'Grab your basket'.
 [Piatote: Chipmunk]
- (12) *ʔ/caʔ* *ʔatuʔ* *ʔanaspəpáʔsət* *sc-ḥawʼiy-míx*
 dem1 art3 seagull asp-work-asp
 'That (there) seagull was working'.
 [Davis: Crow]
- (13) *yaʔyaʔtú* *lx* *ʔani* *smʔámʔəm*
 all pl art women

wikt-s *ʔani* *míxat*
 see(tr)-3sSu art bear
 'All the women saw the bear'.

If the article is present, it must be adjacent to its complement.
 Reversing the order of demonstrative and article, for example, is ungrammatical.

- (14) **wikt-n* *ʔaci* *ʔ/caʔ* *sq!ʔtmíxʷ*
 see(tr)-1sSu art2 dem1 man

Nor can the demonstrative occur without the article if a complement is present.

- (15) **wikt-n* *ʔ/caʔ* *sq!ʔtmíxʷ*
 see(tr)-1sSu dem1 man

Additional evidence that the articles form a constituent with their complement obtains in determiner phrases containing genitive phrases, phrases in which a possessor modifies a nominal head. The basic word order of a genitive phrase is possessor-head. The possessor is optionally marked by the

⁵Demonstratives and quantifiers do not co-occur. Kroeber (1999:70) concludes that "the demonstrative is probably adjoined to the [determiner phrase]" in Interior Salishan languages. Matthewson and Davis (1995) report that demonstratives and quantifiers occupy distinct positions within the determiner phrase in Lillooet.

genitive clitic */*. The clitic is mobile, attaching either to the right or left of the possessor within the scope of the article.

- (16a) *ʔani Mary / stxʷul-s*
 art Mary gen house-3Po
 'Mary's house'

- (16b) *ʔani / Mary stxʷul-s*

- (16c) *ʔani stxʷul-s / Mary*

- (16d) *ʔani stxʷul-s Mary /*

- (16e) **/ ʔani Mary stxʷul-s*

- (16f) **/ ʔani stxʷul-s Mary*

Articles occur only to the immediate left of the genitive phrase; they do not occur within the genitive phrase.

- (17) *laʔkáʔ ʔani kəx-s*
 where.is art Fe.O.sister-3Po
 (**ʔani /* (**ʔani*) *Margaret (*ʔani)*
 gen Margaret
 'Where is Margaret's sister?'

Articles do not float to positions outside the determiner phrase as demonstratives (18) and quantifiers (19) may.

- (18) *ʔixaʔ t'il cnamúlt-m-ən, túm'aʔ*
 dem mod dip.water(tr)-2sOb-1sSu little.mother
 'Here, I dipped some water for you, Mother'.
 [Davis: Crow]

- (19) *kʷkʷin'aʔ ʔit-n Albert / sʔlən-s*
 little eat(tr)-1sSu Albert gen food-3Po
 'I ate a little of Albert's food'.

- (20) **ʔaci ʔit-n Albert / sʔlən-s*

In sum, the article in Moses-Columbia functions as a syntactic head that forms a syntactic constituent with a complement phrase.⁶ The resulting determiner phrase is not predicative, lacking as it is in truth value and

⁶This assumes, for descriptive and comparative convenience, the DP hypothesis (see Stowell 1989, for example) under which the determiner neither modifies nor 'specifies' an NP but is itself a syntactic head that requires a phrasal complement, usually, but not always, NP.

propositional semantics. As previously noted, the article may be null in certain environments in Moses-Columbia. However, its position is fixed and required by the syntax. The type of complement in the determiner phrase varies and affects determiner choice and frequency, as described below.

2 Complement phrases

Complements to the article may be of more than one syntactic category, to include at least NP and VP.⁷ Article use is conditioned by semantic or pragmatic factors rather than syntactic ones. The complement of a determiner may be an unmodified, common nominal as in *wikʔn* DP[ʔani NP[*sqʔtmixʷ*]] ('I saw [a man]'), but more often it is a proper name, possessed nominal, locative nominal, or restricted nominal. Each of these types of complements is described below.

2.1 Proper names

Proper and place names are not preceded by an article in most determiner phrases.

- (21) *Jimmy sac-mán'xʷ-əm*
Jimmy asp-smoke-asp
'Jimmy is smoking (a cigarette).'

- (22) *ʔincá kn mátili*
1sPro 1sSu Mathilda
'I am Mathilda'.

- (23) *kn cnuʔtʰ tʰ stqʷáy'xnəxʷ*
1sSu came loc Blackfeet/Montana
'I came over from Montana'.

In stories, animal and object names can be proper or common, with intonation and context providing the difference. The context of (24) suggests that 'Rock' is proper but in isolation the sentence is ambiguous between a personal and common interpretation of *xʔ'ut*.

- (24) *nasuʔ wikʔt-xʷ xʔ'ut ʔac-t'óp*
fut see(tr)-2sSu rock asp-lie.there
'You will see Rock/a rock lying there'.
[Davis:Turtle]

⁷A full account of syntactic category types in Moses-Columbia is beyond the scope of the present paper. Few analysts have as yet offered formal arguments for syntactic categories in Salishan. Matthewson and Demirdache (1995) argue that in Lillooet NP must be distinguished from AP, and VP. Jelinek (1998) holds that all complements of D are clauses, i.e. IPs. The early evidence is that NP is distinguished from VP in Moses-Columbia, as shown by arbitrary constraints on predicate argument structure, clitic licensing, and restrictive modification.

In (25), reference to Owl, a frequent character in Moses-Columbia traditional stories, is common, not proper.⁸

- (25) *kas-k'ł̥xácáy'-n* *ʔaci* *spétaʔ*
 fut-trick(tr)-1sSu art2 owl
 'I'm going to trick that owl'.
 [Piatote: Chipmunk]

Articles do not occur with vocatives.

- (26) *kn* *txəl'ká·nk* *spa·pétaʔ*
 1sSu go.around little.Owl
 'I'm going around, little Owl!'
 [Piatote: Chipmunk]

- (27) *laʔkáʔ* *ci* *kʷ* *ckicx*, *ttw'it*
 where here 2sSu come boy
 Where did you come from, Boy?
 [Davis: Crow]

Articles may occur before proper names if the predicate is attributive. Speakers seem to prefer sentences such as (28) and (29) with an overt article.

- (28) *man'man'xʷmúl* *ʔani* *Jimmy*
 smoker art Jimmy
 'Jimmy is a smoker'.

- (29) *swiy'númtəxʷ* *ʔaci* *Mary*
 good-looking art2 Mary
 'Mary is good looking'.

It is not clear whether the article in this construction should be analyzed as an attributive marker, familiar from other Interior Salishan languages, or as a relic of a formerly general use of an article before a proper name. In other Interior Salishan languages, articles before proper names are infrequent (e.g. Kalispel and Coeur d'Alene), disallowed entirely (e.g. Okanagan), or required (e.g. Lillooet).⁹ Unfortunately, the historical status of attributive markers in Interior Salishan has not yet been closely studied, so that the relationship between articles and attributive markers remains for the moment indeterminate and outside the scope of this paper.

⁸ A third possibility is a derogatory use of the article before a proper name, as in 'I'm going to give that Bill a piece of my mind!'

⁹ Reichard (1938) suggests that the distribution of articles in Coeur d'Alene may be conditioned by the psychological closeness of a referent to the speaker. She also notes that if proper and place names are used 'in a relative sense' (e.g. 'the one who is Paul'), the article will appear. These possibilities are worth investigating in Moses-Columbia and Kalispel where articles may occur before proper names.

2.2 Genitive phrases

Genitive phrases may be introduced by an article although they frequently lack one. The possessor may be phrasal as in (30), or pronominal, as in (31) and (32).

- (30) *c'əkcínt-xʷ* *wa* *ʔatúʔ* *qʷəqʷəc'əw'áy'aʔ*
count(tr)-2sSu foc art3 little.chipmunk

l *sqaltk-s*
gen body-3Po
'You counted that little chipmunk's body (parts).'
[Davis: Chipmunk]

- (31) *yaʔtú* *qʷəcʷəc'áct-xʷ* *ʔaci* *in-təm'təm'útn*
all fill(tr)-2sSu art2 2sPo-possession

t *tic'*
obl pitch
'Fill all your things with pitch'.
[Davis: Chipmunk]

- (32) *lixənt-m* *sqláw'-t*
lay.down(tr)-1pSu money-1pPo
'We laid down our money'.
[Miller: Stickgame]

Neither the genitive enclitic nor the possessive pronominals are determiners. Within a determiner phrase, the genitive clitic links the possessor to the head of a genitive phrase. The genitive clitic also occurs on fully predicative elements, including independent pronouns and nominal roots.¹⁰

¹⁰ Only lexical predicates that name potential possessors, animate or inanimate, may host the genitive clitic. Predicates with stative or verbal semantics cannot be possessors or host *l*.

- i. **kʷil* *l* *ʔaxaʔ* *yámχʷaʔ-s*
red-3Po gen art1 basket-3Po
(i.e. *'the basket is his red')
- ii. **ʔacwáx* *l* *ʔani* *smiyáw-s*
live.there gen art coyote-3Po
(i.e. *'the coyote is his living.there')
- iii. **χəlq'nt-xʷ* *l* *ʔani* *míχaʔ*
kill(tr)-2sSu gen art bear
(i.e. *'the bear you killed it')

- (33) *cnísəs* / *ʔani* *ʔatəmupíl*
 be.his gen art car
 'The car is his'.
- (34) *in-káx* / *ʔaxaʔ* *sí'aǵt-s*
 1sPo-Fe.O.sister gen art1 friend-3Po
 'This friend is my sister's'.

Note that predicates with the genitive clitic lose their ability to predicate once they are under the scope of an article.

- (35) *ʔitwér* (*ʔani*) *incúl* / *in-yúkaʔ*
 Edward (art) be.mine gen 1sPo.O.brother
 'My brother is Edward'.

Possessive pronominals also occur on open predicates and therefore are not determiners.

- (36) *in-ǵəst-(t)n* *ʔaní* *skintaʔʂʔltn*
 1sPo-good-nom art Indian.food
 'Indian food is good for me'.
- (37) *stxʷul-s* *ʔani* *táw-ən*
 house-3Po art buy(tr)-1sSu
 'The one I bought was his house'.

A genitive phrase may be bound into a determiner phrase or it may function as a syntactic predicate. The genitive clitic and possessor (nominal or pronominal) that occur in a genitive phrase are modifiers that do not convert an open predicate into a referring expression.¹¹ Articles do not occur within the

¹¹ On predicates with nominal semantics or morphology, possessive pronominals neither bind the open predicate into a referring expression nor serve as arguments of the predicate.

- i. *in-ǵəst-(t)n*
 1sPo-good-nom
 'my good/well-being/*It is [for] my good'.
 cf. *kʷ* *inǵəst-(t)n* 'you are good for me'
- ii. *stxʷul-s*
 'his house/*It is his house'.
 cf. *kʷ* *stxʷul-s* 'you are his house'

This is evidence that possessors and possessive pronominals are modifiers rather than arguments within the genitive phrase. The situation is parallel to that of Italian, where possessors lack the syntactic and thematic attributes of either determiners or arguments, as described in Giorgi and Longobardi (1991). Matthewson and Davis (1995) claim that possessors in Lillooet are internal arguments in NP. A broad array of evidence from Moses-Columbia (and Okanagan) support the contention that nouns in Salishan lack

genitive phrase, which demonstrates that genitive phrases are different in kind from their containing phrase, as is expected of complements generally.

2.3 Locative phrases

A small set of locative clitics is usually referred to as the set of prepositions in Salishan. Few Salishan languages have more than four or five and their meanings are broadly interpreted via verb meaning. The locative clitics of Moses-Columbia are: / 'in, at, on'; *k'l* 'into, to, for'; *tl'* 'from, than'; *k'a/* together with'. That the locative clitics should not be equated in function or distribution with European prepositions is best seen in examples where the locative co-occurs with an article. In this case, the locative is found between the determiner and its complement. Okanagan Salish (38) does this with the greatest frequency, but it occurs occasionally in Moses-Columbia as well (39)-(40).

- (38) *kʷu* *npútəls* *iʔ* *l* *sc'íln-tət*
 1pSu satisfied art loc food-1pPo
 'We were satisfied with our food'.
 (A. Mattina 2000)

- (39) *kn* *həmpmnčút* *ʔani* *tl'* *ln-ʔatəmupl*
 1sSu get.down.from art loc 1sPo-car
 'I got out of my car'.

- (40) *niʔxʷlkʷmst-m* *ʔatuʔ* *l* *scyaʔtkʷp*
 rub(tr)-3Su art3 loc fire
 'She rubbed him in the fire'.
 [Davis: Crow]

The locative clitics of Southern Interior Salish are bound modifiers that do not head phrases. They are positionally and semantically similar to directional and positional markers (e.g. *ʔa/-* 'translocative', *k'í/-* 'away from, at a distance') except that the latter are clearly (derivational) prefixes. The close similarity between locative clitics and directional prefixes is seen in words where a locative clitic has fused to a lexical root as in *lsʔawt* 'be behind', *lsc'úw'iʔ* 'be at night', and *tl'ciʔát* 'be from there'. When place names are used as predicates, they may host locative clitics as in (41) and (42). This demonstrates that locatives are not determiners.

- (41) *k'l* *npəʃʷil'x* *ʔani* *Pulln* *y'ay'áwt*
 loc Keller art Pauline today
 'Pauline is in Keller today'.

event structure and therefore do not have argument structure or arguments (following Grimshaw's 1990 theory of argument structure).

- (42) *kn tl' nspíləm*
 1sSu loc Nespelem
 'I am from Nespelem'.

Locative clitics are part of a determiner phrase only when they occur under the scope of an article. In practice, articles and locatives co-occur infrequently in Moses-Columbia which gives the impression that they cannot co-occur. Indeed, on several occasions, speakers rejected some determiner phrases that included both an article and a locative. There may be subtle reasons for these scattered negative judgments. The locative might suppress the article in the way that prepositions are known to do in expressions such as *at home*, *by hand*, or *on foot* (Greenberg 1978). Moses-Columbia (and other Southern Interior Salishan languages) would be particularly susceptible to this phenomenon as non-possessed locative phrases can have a generic interpretation, as in (43).

- (43) *kʷən'ksəntwáxʷ lx / snk'fʷmən*
 marry pl loc church
 'They married in church/a church/the church'.

Since all of the Interior Salishan languages have conditions under which the article is lost in construction with a locative clitic, the tendency to avoid articles and locative clitics in the same phrase in Moses-Columbia may be merely an overgeneralization or extension of a common Interior Salishan pattern whose motivation is not well understood.

Locative phrases may also contain possessors (44), which suggests that the syntactic difference between locative phrases and genitive phrases is minimal.

- (44) *wikt-s sʰálwiʔ-s wa*
 see(tr)-3Su husband-3Po foc

nxəlká-ws ʔatʰuʔ k'al' cpuʔkʷanxáx-s
 embrace art3 loc lover-3Po
 'She saw her husband embracing (with) his lover'.
 [Davis:Crow]

2.4 Restrictive phrases

Articles introduce complex phrases that speakers translate as modified nominals or restrictive relative clauses. These complex phrases are referred to here as 'restrictive phrases'. The modifying element in a restrictive phrase restricts the reference of and characterizes the entity denoted by the containing determiner phrase. The simplest restrictive phrase in Moses-Columbia is an intransitive word (perhaps an adjective phrase) modifying a nominal element.¹² A simple

¹² The term 'nominal' characterizes all heads of restrictive phrases in the natural corpus. In elicitation speakers will form utterances such as 'the heavy one that you wore' but not 'the

modifier immediately precedes the nominal head, and the entire phrase is under the scope of an article, which may be phonologically null.

- (45) *k'əskʷəlíqənt-xʷ* *ʔani* *ʔaasstém* *sʔlʔən*
 throw.out(tr)-2sSu art burnt food
 'You threw out the burnt food'. [Kinkade n.d.]
- (46) *λ'aʔλ'aʔáʔs-n* *nqʷən'qʷən'lwás* *sql'tmixʷ*
 look.for(tr)-1sSu kind man
 'I looked for a kind man'.

The modifier forms a constituent with the nominal and must be adjacent to it.

- (47) **ʔaasstém* *k'əskʷəlíqənt-xʷ* *ʔani* *sʔlʔən*

In isolation, without a determiner, a restrictive phrase may function as a predication. The entity whose reference is restricted in a restrictive phrase is construed as the argument of the attributive predicate head, e.g. *ʔaasstém sʔlʔən* 'the food is burnt' vs. *ʔani ʔaasstém sʔlʔən* 'the burnt food'.

Restrictive phrases may comprise clausal modifiers when they encode grammatical roles 'subject' and 'object'. Such phrases fit prevailing functional definitions of a relative clause (e.g. Keenan 1985, Kroeber 1999) even though the minimal, formal, cross-linguistic hallmarks of a relative clause—relative pronouns and gapping—are missing. The modifying clause occurs to the right or left of the nominal being modified and may be formally intransitive (48a,b) or transitive (49a,b).

- (48a) *λ'aʔλ'aʔáʔs-n* *ʔani* *míxat* *i-sc-ǰəlq'*
 look.for(tr)-1sSu art bear 1sPo-nom-kill
 'I looked for the bear I killed'.
- (48b) *λ'aʔλ'aʔáʔs-n* *ʔani* *i-sc-ǰəlq'* *míxat*
- (49a) *k'əskʷəlíqənt-c-n* *ʔani* *támənt-xʷ* *sʔlʔən*
 throw.out(tr)-2s-1sSu art burn(tr)-2sSu food
 'I threw out the food that you burned'. [Kinkade n.d.]
- (49b) *k'əskʷəlíqənt-c-n* *ʔani* *sʔlʔən* *támənt-xʷ*

The clausal modifier forms a constituent with the head and any adjuncts within the containing determiner phrase.

man saw you who you heard' or 'the one singing who you heard'. I conclude that the heads of restrictive phrases are bare (uninflected) predicates of a distinct category, N. Matthewson and Demirdache (1995) draw a similar conclusion from Lillooet data.

(50) *i-sc-ǰə/q' λ'a?λ'a?ás-n ?ani mǰxat
 1sPo-nom-kill look.for(tr)-1sSu art bear
 'I looked for the bear I killed'.

(51) *lək'-s lx in-?atəmupl
 tie(tr)-3Su pl 1sPo-car

 ?ani ttw'it lləəmɬ-ca-s
 art boy steal(tr)1sOb-3Su
 'They arrested the boy who stole my car'.

(52a) cmístú-nn ?ani ptwin'x" ?acwáx
 know(tr)-1sSu art old.lady live.there

 npəʕ'ly'lx
 in.Keller
 'I know an old lady who lives in Keller'.

(52b) *cmístún-n npəʕ'ly'lx ?ani ptwin'x" ?acwáx

The modifying phrase is not usually introduced by a determiner, although some speakers will accept one.¹³

(53) λ'a?λ'a?ás-n ?ani sq'ltmíx"
 look.for(tr)-1sSu art man
 'I am looking for the man

 ?ani s-tumíst-əx" ntitiyáx
 art asp-sell-asp salmon
 (who is) selling salmon'.

The head of a restrictive clause may be omitted, resulting in an apparent headless relative clause.¹⁴

¹³ Kroeber (1999: 256) notes that Salishan languages vary on this point. Some languages introduce both the head of the relative clause and the restrictive clause itself with a determiner, e.g. Kalispel, Okanagan, Thompson, and Shuswap in the Interior Salishan group. However, Matthewson and Demirdache (1995:72) argue that in Lillooet, a determiner-nominal sequence cannot be construed as the head of a restrictive relative clause, since the head of a restrictive clause must be a bare NP. Conflicting judgments from Moses-Columbia speakers make it difficult to determine which pattern obtains in Moses-Columbia.

¹⁴ One fluent speaker, apparently influenced by the Kalispel language, inserts a subordinating element *tu?* before headless relative clauses.

i. sq'ltmíx"?aci tu? nk"nam
 man art sub sing
 The one who sang is a man.

- (54) *in-ǰmánk* *ʔani* *i-s-táw*
 1sPo-desire art 1sPo-nom-buy
 'I like the one(s) I bought'.
- (55) *ʔaci* *ckicst-xʷ* *kaɬx-c-xʷ* *taʔ*
 art2 bring(tr)-2sSu give(tr)-1sOb-2sSu Imp
 'Give me the one you brought (here)'.
- (56) *stam'* *ʔani* *táwənt-xʷ*
 be.what art buy(tr)-2sSu
 'What is it (that) you bought?'

When the modifier within a determiner phrase is clausal, the article is more likely to appear than in other types of determiner phrases, leading to the surmise that overt articles are favored when modification in a determiner phrase involves embedding. It would be premature to adopt this conclusion just yet, however, as this type of restrictive phrase is infrequent in the natural texts at our disposal and is inconsistently analyzed by speakers in elicitation.

3 Interpretation of determiner phrases

Categories of meaning in the Salishan article systems help determine the reference of a referring expression. While categories such as gender, number, and visibility have been described for other Salishan languages, the chief meaning category among Moses-Columbia articles is speaker-oriented proximity. As noted above, there are three degrees of proximity relative to the speaker. The general article *ʔani* makes no observable proximity distinction. The articles are but one of two kinds of determiners used in Moses-Columbia referring expressions. The second type of determiner comprises a single form, *t*, which is found only with non-locative, adjunct determiner phrases. These adjuncts are syntactically oblique in that, unlike core arguments, they are never cross-referenced on the clause head. They are also semantically oblique in the sense that they consistently show the partiality of reference similar to English *some* and the partitive use of plural and mass nouns, the hallmarks of non-specific phrases cross-linguistically (Ultan 1978). Likely related to this non-

As no other speakers I have worked with use this device, I leave such examples aside. Elizabeth Davis, fluent in both Moses-Columbia and Okanagan, inserts the Okanagan attributive marker *t* (or *t'*) between the article and its complement in headless relatives.

- ii. *ʔica kʷaʔ* *ʔacʰx-s*
 then see(tr)-3sSu
- wa* *ʔaɬuʔ* *t* *ʔac-xʷúʔi*
 foc art3 att asp-fly
 Then he saw the one flying.
 [Davis: Crow]

These discrepant patterns will require further investigation.

specificity is the fact that oblique phrases cannot encode possessors or occur within the scope of a strong quantifier. They are also thematically limited to a small number of semantic roles: instrument (57), theme (58)-(59), and factitive (60).

- (57) *katxn'qínt-xʷ t xλ'ut*
 cover(tr)-2sSu obl rock
 'You cover him with rock'.
 [Davis: Chipmunk]
- (58) *klək'lək'íc'aʔəm t sámən, t slúpalt̃n*
 wrap.up obl salmon obl dried.salmon
 'She wrapped up salmon, dried salmon flakes'.
 [Davis: Crow]
- (59) *háv'iyt-n i-st'ámkaʔ t sq'íʔtəlqs*
 make(tr)-1sSu 1sPo-daughter obl sweater
 'I made my daughter a sweater'.
- (60) *ʔi kʷaʔ háv'w'iy t ʃʃλ'cin*
 pt pt turn.into obl dog
 'Then he made like a dog'.
 [Simon: Rock]

Obliques have low discourse status when compared with non-obliques. They are interpreted as incidental to the course of events, suggesting that they belong to the class of referring expressions identified cross-linguistically by Givón (1978) as 'non-definites', a type of referent whose 'individual identity is not an essential part of the message' (p. 296). By contrast, article phrases are always key to the narrative.

The existence of non-definite reference in Moses-Columbia does not imply that a definite/indefinite contrast obtains in the determiner system. As in other Salishan languages, the absence of this contrast is apparent when it is construed as essentially a 'familiar/novel' contrast (cf. Mathewson 1996, Kroeber 1999, and sources cited therein). In Moses-Columbia, novel participants are typically introduced into the narrative as intransitive subjects, which can be interpreted as definite (especially when proper), indefinite, or generic.

- (61) *ʔacwáx qʷəc'əw'áy'aʔ k'al' k'k'íyaʔ-s*
 live.there chipmunk with Ma.grandmother-3Po
 'Chipmunk was living there with his grandmother'.
 [Piatote: Chipmunk]
- (62) *(ʔani) skəkáʔkaʔ ʔac-xʷúʔi*
 art birds asp-fly
 'Birds fly'/'The bird is flying'/'A bird is flying'.

Familiar participants are encoded as transitive subjects and objects, often reduced to affixal pronominals suffixed to the transitive verb once they have been introduced into the discourse as intransitive subjects. These participants are typically definite and they are restricted to occurring in article phrases, as are the novel participants.

The reference of article phrases and obliques fails also to split along a specific/non-specific distinction. While oblique phrases seem consistently non-specific in their interpretations, article phrases may be specific or non-specific, i.e. generic, as shown above in (63). Therefore, the determiner itself encodes only whether a phrase *may* have a specific interpretation.¹⁵

Ultimately the difference in interpretation between article phrases and oblique phrases involves an admixture of definiteness, specificity, and syntactico-semantic and discourse features that bears closer examination.¹⁶ A preliminary summary of the typical interpretation of determiner phrases, by syntactic role and determiner type appears in table 3.

Table 3. DP interpretation by syntactic role and determiner type.

	Definite/specific	Indefinite	Generic	Non-definite
Articles	Trans. S			
	Trans. O	Trans. O		
	Intrans. S	Intrans. S	Intrans. S	
	Locative	Locative	Locative	
Oblique D				Oblique

The functional and formal differences between the articles and the oblique determiner bespeak separate historical origins that the comparative data substantiate. Cognates of *t* in Southern Interior Salishan pattern with locative clitics.¹⁷ They co-occur with articles, introduce proper names, genitive phrases, and have prepositional meanings, including locative ones. But as in at least two Northern Interior Salish languages, Moses-Columbia developed *t* into a

¹⁵ Moses-Columbia determiners cannot be tested for what Enç (1991) calls the 'specificity effect' which bans specific expressions within the scope of an existential predicate. Existentials in Moses-Columbia are denominal predicates that do not involve determination, e.g. *t'il' ta?-k''k''át'na?* 'There are mice/is a mouse' ('indeed exist-mouse').

¹⁶ Givon (1978) demonstrates how cross-linguistically the grammar of reference in nominal expressions "shades naturally into a number of other sub-systems in the grammar" including case, topicality, agreement, number, and verb typology, as it appears to do in Moses-Columbia.

¹⁷ Only Okanagan and Kalispel have **t* with locative function. In Coeur d'Alene, the relevant form is *?ə* which Doak (1997) refers to as the 'oblique/indefinite determiner' (p. 46). Doak gives at least one example where *?ə* follows an article, i.e. is in the position of a locative, so it is not clear that *?ə* is exclusively a determiner.

determiner whose distribution parallels that of the articles.¹⁸ Significantly, both types of determiner can be omitted when context allows. This omissibility seems to stem from the fact that their semantic load is relatively slight; determiner phrases acquire their reference redundantly from other elements in the clause, discourse, or speech situation. While they contribute to determiner phrase meaning as described, the determiners are primarily functors that serve to mark syntactic structure.

3.2 Referentiality

Kroeber (1999) and Matthewson (1996) have separately claimed that in place of the definite/indefinite contrast in the determiner system, the Salishan languages encode something like a referential/nonreferential contrast. Kroeber applies the term 'referential' to those referring expressions that characterize the referent as 'uniquely identifiable to the speaker', a Salishanized version of definiteness proposed by Kuipers (1967) for the Coast Salishan language Squamish.¹⁹ Kroeber does not attempt a language-by-language analysis for his labels, and the chief motivation for his terminology seems to be that of having an alternative to the ill-fitting 'definite/indefinite' rubric. By contrast, Matthewson (1996) undertakes a wide-ranging, theoretical account of Salishan determiner systems and their cross-linguistic import. Matthewson cites evidence, most extensively from Lillooet, to support her contention that certain Salishan determiners encode the assertion of the existence of a referent, while others encode no such assertion. She concludes that the 'assertion of existence/nonassertion of existence' contrast within Salishan determiner systems arises from a parameter distinguishing languages like English, with a definite/indefinite contrast, from the languages of the Salishan family. Neither Kroeber nor Matthewson examine the determiner systems of Southern Interior Salishan languages in much detail, citing the unavailability of detailed descriptions.

The Salishan determiners examined by both Kroeber and Matthewson fall into sets of 'referential' determiners and 'nonreferential' determiners. On the basis of some parallels in form and distribution, we could expect the Moses-Columbia articles to be the 'referential' determiners, while the oblique determiner would function as the 'nonreferential' one. In fact, the Moses-Columbia article phrases tend to be referential while oblique phrases are more likely to be nonreferential. However, determiner choice is rigidly enforced by syntactic role within the clause, as noted above: core arguments of the clause predicate (e.g. 'subject' or 'object') are expressed in article phrases; locative adjuncts occur in article phrases; non-locative adjuncts must occur in oblique phrases. This system is quite different from that in Lillooet, where, for example,

¹⁸ Case-like article function is attributed to the cognate morph in Shuswap (Kuipers 1974) and in Thompson (Thompson and Thompson 1992).

¹⁹ This differs from one common definition of definiteness that characterizes a 'definite' expression as one where a referent is uniquely identifiable to the *hearer* (see Foley and Van Valin, Jr. 1985 for example).

a transitive clause head must select a nonreferential article for a nonreferential object phrase, as in (63).

- (63) *xʷʔaaz* *kʷ-š* *ʔac'x-ən-aš* *kʷu* *sqayxʷ*
 neg det see-tr-3sSu non.exis.det man
 'She didn't see any men'.
 [Matthewson 1996: 210]

According to Matthewson, any of the referential determiners would be ungrammatical before the noun phrase *sqayxʷ* in (63).

A parallel example from Moses-Columbia shows not only that determiner choice is dictated by the clause head, but that article phrases may have nonreferential interpretations.

- (64) *lut* *wíkt-n* *ʔani/*t* *sλ'aʔcínəm*
 neg see(tr)-1sSu art/obl deer
 'I didn't see any/a/the deer'.

Other non-factual contexts yield the same result. The Moses-Columbia example (65) shows an intensional predicate comparable to that in a Lillooet example in (66).

- (65) *c-λ'aʔλ'aʔ'áʔs-n* *ʔani/*t haw'haw'iymúl'* *sql'tmíxʷ*
 asp-look.for(tr)-1sSu art/obl hard-working man
 'I am looking for a hard-working man (to marry).'

- (66) *xʷúz'-tkan* *xʷíl-ən*
 fut-1sSu look.for-tr

kʷu *škʷəm kʷúkʷmíʔt*
 non.exist.det children
 'I'm going to look for some children'.
 [Matthewson 1996:198]

Furthermore, oblique phrases in Moses-Columbia have both referential (67)-(68) and nonreferential (69)-(70) interpretations. Note that article phrases are not grammatical in place of any of the oblique phrases in these examples because they are not arguments of the intransitive clause head.

- (67) *t'il'* *kn* *ʔac-xák'əm* *t* *siyáyaʔ*
 fact 1sSu asp-pick obl serviceberries
 'I already picked serviceberries.'
- (68) *haw'haw'w'iy* *t* *skəkáʔkaʔ*
 be.made.into(pl) obl birds
 'They all turned into birds.'
 [Davis: Chipmunk]

- (69) *kn skʷiy mǐx t mǐxat*
 1sSu see obl bear
 'I am hunting for bear.'
- (70) *maxʷ nasu kʷ λʰxʷup t sqlawʰ*
 poss fut 2sSu win obl money
 'You might win some money'.

Since oblique phrases have non-definite interpretations, they might be considered to be automatically nonreferential. However, Givón (1978) states that non-definites "may be viewed as a subcategory of referential-indefinite" (p. 296) because the speaker is committed to the existence of a genus rather than to any individual of that genus. Other information in the clause or discourse can force a nonreferential interpretation of an oblique phrase, but the determiner alone does not.

If there were an overt referentiality contrast in Moses-Columbia determiner phrases, it might be expected to obtain in a type of nominal phrase that has been labeled 'irrealis' in some other Salishan languages. Such phrases in Moses-Columbia have *ka-t-* prefixed to the nominal. This prefix, a complex of morphs historically related to the 'future' prefix on transitive and intransitive predicates, always co-occurs with possessive marking when under the scope of a determiner. It indicates that the referent of the nominal is intended for use by the possessor.²⁰ The label 'unrealized possession' best suits the construction illustrated in (71). *ka-t-* is [kɪt-] with first and second singular possessors; elsewhere *ka-t-* is [kaɪt-] with stem-final suffix *-t* for first plural, *-p* for second plural, or *-s* for third possessors.²¹ The *t* is lost before stem-initial *s*.

- (71) *kʷaʔ (l)x mǝrá-s čnísəs ka-sc-ʔlǝn-s*
 and pl gather(tr)-3Su their Unr-nom-food-3Po
 'And they gathered their food.' (lit. '...what will be their food')
 [Walsh: Wenatchee]

Phrases with *ka-t-* may refer to referential or nonreferential referents. In (72), as in (71) above, the reference is definite, specific, and referential.

- (72) *ʔinwɪl ʔaci kɪt-χλʰcɪn*
 be.yours art2 2sUnr-horse
 'This horse will be yours.' [Kinkade p.c.]

²⁰ *ka-t-* does not cause a nominal to have inchoate or other phasal interpretations as might be expected of a 'future' or 'irrealis' marker. That is, *ka-sc-ʔlǝn-s* refers to 'food that will be theirs' and not to a referent that is becoming food. Cognate constructions occur in all four Southern Interior Salishan languages, with similar semantics.

²¹ Possessors are disallowed in oblique phrases unless *ka-t-* occurs on the same nominal. This restriction underscores that *ka-t-* modifies the possessor relation and not the nominal. The cognate construction in Okanagan behaves identically (Mattina 1993, 1996).

In (73), the reference is non-definite, nonreferential.

- (73) *k'íkátx-t-n* *ka-sq'áw'-s*
 send(tr)-1sSu Unr-money-3Po
 'I'll send him some money.'

ka-t- does not require non-factual operators (74), nor is it required by them (75).

- (74) *kn* *tawm* *kił-š'cín*
 1sSu buy 1sUnr-horse
 'I bought a horse.'

- (75) *max^w* *nasu?* *k^w* *λ'x^wup*
 maybe fut 2sSu win

t *?atəmupil*
 obl car
 'Maybe I will win a car.'

Additional evidence that *ka-t-* is not a marker of nonreferentiality is that it co-occurs with the articles. Recall that article phrases typically have referential interpretations.

- (76) *?ica?* *kməxix wa?* *?ani* *ka-sc-?ifn-s*
 be.that only(pl) foc art Unr-nom-food-3Po
 'Their food would be only that (kind).'

[Freidlander: Salmon]

ka-t- does not co-occur with the oblique determiner, although its cognates in sister languages regularly do so. We suppose that this is a minor, perhaps morphophonological, innovation on the part of Moses-Columbia.

Plainly, Moses-Columbia *ka-t-* is not a determiner and does not indicate nonreferentiality as its cognates are said to do in Northern Interior Salishan. More likely is that *ka-t-* is a modifier that is licensed on the complements of verbs with the semantics of creation, exchange, or transformation. The referential/nonreferential contrast in Moses-Columbia simply does not devolve on either *ka-t-* or the determiners of this language.

4 Conclusion

Moses-Columbia is unique in Southern Interior Salish for the clear distinction it makes between two types of determiner phrases: article phrases and oblique phrases. In this regard, Moses-Columbia more closely resembles the Northern Interior languages, where cognates of *t* are described as determiners in two of the three languages. However, the distinction between determiner phrases in Moses-Columbia does not correspond to a referential/non-referential distinction as it reportedly does in Northern Interior Salish.

Determination in Moses-Columbia is notable for the degree to which determiners are omissible in certain contexts. This contrasts with the obligatory nature of articles in two closely related languages, Okanagan and Lillooet. Moses-Columbia reflects the general patterns of Southern Interior Salishan in having a small set of semantically light determiners whose primary function is to build determiner phrases from open predicates. The marking of definiteness and specificity is left to other interacting systems in the grammar. Moses-Columbia lacks a referential/nonreferential contrast in the determiner system, which also parallels the evidence from other Southern Interior Salishan languages, where putative markers of nonreferentiality co-occur with putatively referential ones. These findings highlight the important role descriptive data from Southern Interior Salishan languages ought to play in the development of intra-family and cross-linguistic proposals.

References

- Anderson, Stephen R. and Edward L. Keenan. 1985. Deixis. In *Language Typology and Syntactic Description* 3:259-308, ed. Timothy Shopen. New York: Cambridge University Press.
- Doak, Ivy. 1997. *Coeur d'Alene grammatical relations*. Ph.D. dissertation, University of Texas, Austin.
- Enç, Mervet. 1991. The semantics of specificity. *Linguistic Inquiry* 22: 1-25.
- Foley, William A. and Robert Van Valin, Jr. 1985. Information packaging in the clause. In *Language Typology and Syntactic Description* 1:282-364, ed. Timothy Shopen. New York: University of Cambridge Press.
- Giorgi, Alessandra and Giuseppe Longobardi. 1991. *The syntax of noun phrases*. Cambridge Studies in Linguistics no. 57. New York: Cambridge University Press.
- Givón, Talmy. 1978. Definiteness and referentiality. *Universals of Human Language* 4: 291-330, ed. Joseph Greenberg, Charles Ferguson, and Edith Moravcsik. Stanford: Stanford University Press.
- Greenberg, Joseph. 1978. How does a language acquire gender markers? *Universals of Human Language* 3:48-82, ed. Joseph Greenberg, Charles Ferguson, and Edith Moravcsik. Stanford: Stanford University Press.
- Grimshaw, Jane. 1990. *Argument structure*. Cambridge, MA: MIT Press.
- Higginbotham, James. 1985. On semantics. *Linguistic Inquiry* 16: 547-591.
- Jelinek, Eloise. 1998. Prepositions in Northern Straits Salish and the noun/verb question. In *Salish Languages and Linguistics: Theoretical and Descriptive Perspectives* (Trends in Linguistics, Studies and Monographs 107) 325-346, eds. Ewa Czaykowska-Higgins and M. Dale Kinkade. New York: Mouton de Gruyter.
- Keenan, Edward. 1985. Relative clauses. In *Language Typology and Syntactic Description* 2:141-170, ed. Timothy Shopen. New York: Cambridge University Press.

- Kinkade, M. Dale. 1967. Deictics in Columbian: A work paper. Papers for the Second International Conference on Salish Languages. Seattle: University of Washington.
- _____. n.d. Position indicators in Columbian Salish.
- Kroeber, Paul. 1999. The Salish language family: Reconstructing syntax. Lincoln: University of Nebraska Press.
- Kuipers, Aert H. 1967. The Squamish language: Grammar, texts, dictionary. The Hague: Mouton.
- _____. 1974. The Shuswap language The Hague: Mouton.
- Matthewson, Lisa. 1996. Determiner systems and quantificational strategies: Evidence from Salish. Ph.D. dissertation, University of British Columbia.
- Matthewson, Lisa and Henry Davis. 1995. The structure of DP in St'at'imcets (Lillooet Salish). Papers for the Thirtieth International Conference on Salish and Neighboring Languages 3:55-68. Vancouver: UBC Press.
- Matthewson, Lisa and Hamida Demirdache. 1995. Syntactic categories in St'at'imcets (Lillooet Salish). Papers for the Thirtieth International Conference on Salish and Neighboring Languages 3:69-75. Vancouver: UBC Press.
- Mattina, Anthony. 1973. Colville grammatical structure. Ph.D. dissertation, University of Hawaii.
- _____. 2000. Okanagan sandhi and morphophonemics Papers for the Thirty-fifth International Conference on Salish and Neighboring Languages 3:147-158. Vancouver: UBC Press.
- Mattina, Nancy. 1996. Aspect and category in Okanagan word formation. Ph.D. dissertation, Simon Fraser University.
- _____. 1993. Some lexical properties of Colville-Okanagan ditransitives. Papers for the Twenty-eighth International Conference on Salish Languages 265-284. Seattle: University of Washington.
- Montler, Timothy. 1986. An outline of the morphology and phonology of Saanich, North Straits Salish. University of Montana Occasional Papers in Linguistics 4. Missoula: University of Montana.
- Reichard, Gladys. 1938. Coeur d'Alene. Handbook of American Indian Languages. 3:517-707, ed. Franz Boas. New York: Columbia University Press.
- Seiler, Hansjakob. 1978. Determination: a functional dimension for interlanguage comparison. Language Universals 301-328, ed. Hansjakob Seiler. Tübingen: Gunter Narr Verlag.
- Speck, Brenda J. 1980. An edition of Father Post's Kalispel grammar. University of Montana Occasional Papers in Linguistics 1. Missoula: University of Montana.
- Stowell, Tim. 1989. Subjects, specifiers, and X-bar theory. Alternative conceptions of phrase structure 232-262, ed. Mark Baltin and Anthony Kroch. Chicago: The University of Chicago Press.
- Thompson, Laurence C. and M. Terry Thompson. 1991. The Thompson language. University of Montana Occasional Papers in Linguistics 8. Missoula: University of Montana.

- Ullan, Russell. 1978. On the development of a definite article. *Language Universals* 249-265, ed. Hansjakob Seiler. Tübingen: Gunter Narr Verlag.
- van Eijk, Jan. 1997. *The Lillooet language*. Vancouver: UBC Press.
- Vogt, Hans. 1940. *The Kalispel language*. Oslo: Det Norske Videnskaps-Akademi i Oslo.