Cheyenne Complementation

by

Wayne Leman

FALL 1985, LING 516 LINGUISTICS THEORY: SYNTAX University of Oregon Professor Colette Craig Submitted: March 1, 1986 (minor revisions February 18, 2014)

- 1. Introduction
- 2. Overview of Cheyenne
- 3. Juncture and nexus
- 4. Cheyenne complements
- 4.1 Separate independent clauses
- 4.2 Independent matrix plus dependent complement
- 4.2.1 Embedded question complements
- 4.2.2 Dependent subject complements
- 4.3 Complex complement predicates
- 4.3.1 'tough' controller
- 4.3.2 Other adverbials
- 4.3.3 Purposive
- 4.3.4 Resultatives
- 4.3.5 Control predicate 'pretend'
- 4.3.6 Desideratives
- 4.3.7 Causatives
- 4.3.8 Multiple embedding
- 5. Summary

1. Introduction

This is a study of complementation and complementation-like structures in

Cheyenne. Complementation has typically been described in structural terms,

with definitions given such as "a complement is a clause which acts as the

subject or object of another clause". Hence the underlined portions of the

following English sentences would be complement clauses:

That John will pass the final exam is certa	in (Subject COMP)
I know that he's actually a nice guy	(Object COMP)
I regard him to be a nuisance	(Object COMP)
I suspect John's having made the pizza	(Object COMP)

Another taxonomy of English complementation has been to speak of the three

complementizers, that, (for) to, and POSS...-ing, which are found in the

sentences just listed. (See Bresnan 1970, 1982 for two generative studies of

complementation.)

While I agree with such outlines of English complementation, I find that

they do not adequately prepare us for facing all the phenomena which can be

considered complement-like in so-called "exotic" languages.

Fortunately, there has been a resurgence of interest in describing

non-IndoEuropean languages. A number of such recent studies have investigated

complementation. One such dissertation which contained a significant section on

complementation was by Craig on Jacaltec, later published as Craig (1977).

Givón (1980), Silverstein (1981), and others have noticed a functional

"iconic" relationship between language structures involved with complementation:

the more independent an event or state is, for instance, in terms of tense, aspect, modality, arguments, or control, the more syntactically independent it will be encoded in complementation. And, conversely, the less independent, the more tightly the complement will be bound to the "matrix"/higher predicate. While such observation of iconicity has been important, one weakness of such study has been a lack of detailed attention to the actual syntactic constructions involved with such iconity of complement "binding". Others, such as Lehmann (1985), have attempted to bring greater syntactic precision to this enterprise. Lehmann, in fact, splits the binding hierarchy into a number of different continuua. In this paper we attempt to describe the various syntactic mechanisms involved with the different degrees of binding. I assume throughout this paper that there is value in speaking both of syntactic as well as a kind of semantic complementation. That is, in semantic terms, complementation will involve any construction in which some logical proposition itself serves as subject or object argument of another proposition. While I am not aware of other descriptions of "semantic complementation", this differentiation is, of course, simply another attempt to deal with the perennial

problem of accounting for both form and function in language. We shall use the labels subject and object in the rather intuitive sense as has often been done by linguists. It is not our purpose here to discuss the important theoretical issues concerning the primacy of the notions of subject, object, indirect object, etc. By speaking of semantic complementation, we can broaden the number of constructions which can be included under the rubric of complementation in a particular language. That is, even when a language might have a construction which doesn't "look" syntactically like we are accustomed to seeing complements look in English, we can still speak of complementation in that language if the construction has evidence of semantic complementation.

We also shall broaden our scope to speak of complementation other than that simply limited to subjects and objects. Craig (1977:231) lists three categories

of complements for Jacaltec:

- 1. sentential object
- 2. sentential subject
- 3. sentential complement

The last category has typically not been included in descriptions of

complementation. But we claim in this paper that it makes sense to speak, as

Craig does for the Mayan language Jacaltec, of complements other than just

subject and object complements. Specifically, we shall also find constructions

in Cheyenne where clauses function as purpose arguments of a matrix clause.

Therefore, let us again broaden our description of complementation to something

like the following:

A complement is any logical proposition (clause) which itself functions as an argument of some other clause.

If temporal or locative structures are to be considered arguments of

clauses then we should constrain our definition somewhat, to exclude adverbial

clauses which typically have a temporal or locative function in a clause and

headless relative clauses. We shall see, however, that even though we want to

exclude adverbial and relative clauses in Cheyenne from being considered

complements, there are significant similarities between their syntax and the

syntax of syntactically clausal Cheyenne complements.

2. Overview of Cheyenne

Cheyenne is one of the westernmost members of the large Algonquian language

family of North America. It is also one of the most phonologically divergent members of the family. It remains, however, clearly Algonquian in its overall structure. Many of the observations we will make about Cheyenne complementation can also be made about other Algonquian languages. Few studies of Algonquian complementation have been made, reflecting the traditional focus in Amerindian

linguistics upon phonology and morphology, rather than syntax or pragmatics.

Rhodes (1976:81) spoke of the dearth of syntactic description in his

dissertation on Ojibwa:

the traditional analysis of an Algonkian language is aimed only at identifying morphemes and grouping them into orders of mutually exclusive occurence (sic). Little attempt is made to relate the morphology of the verb to the syntax of the sentence in which it occurs except where that is necessary to identify the meaning of a morpheme.

A small amount of material on complementation in Algonquian languages has begun

to appear in recent years. Beginning observations of the similarities of

several subordinate constructions in Ojibwa, including complements, were made

for Ojibwa by Johns (1982). A reference grammar (Clarke 1982) on Montagnais has

some short sections on complement clauses. A recent paper by Goddard (to

appear) describes some complement phenomena in Fox. No such description has

ever appeared for Cheyenne.

One reason that linguists have been slow to speak of syntax in Algonquian

languages is that the kind of syntax which there is is very often word-internal.

That is, many syntactic relationships are found in word-level morphology, hence,

the title of Rhodes' dissertation was "The Morphosyntax of the Central Ojibwa

Verb" (emphasis added). We shall find that it is necessary to consider syntax within Cheyenne verbs for much of our discussion of Cheyenne complementation. This is not a new thing. One of the positive contributions of the recent text by Foley and Van Valin (1984) has been to show that scope relationships within languages having complex verb constructions, even constructions of verbal polysynthesis, follow similar patterns to those found in more analytic languages. We shall have numerous occasions throughout this study to refer to the approach of Foley and Van Valin (hereafter F&V) to the study of interclausal relationships, particularly through their ideas of juncture and nexus applied to Cheyenne complementation.

Broader descriptions of Cheyenne phonology, morphology, and other aspects of the grammar can be found in W. Leman (1979, 1981). A few brief remarks should be made to set the stage for description of Cheyenne complementation.

Chevenne nouns fall into two gender classes, animate and inanimate. They

are inflected for number and obviation, a tracking mechanism that enables one to know which third person is acting upon which other third person. Verbs fall into four main classes, with marking of an ergative flavor1:

transitive verbs agree in animacy with their objects while intransitive verbs

agree in animacy with their subjects. Verbs also agree in number with both

subjects and objects (as well as with what Relational Grammarians would call

some ch<omeurs). Analysis of the four main verb groups and initials abbreviating

them are due to the pioneering work of Bloomfield in the Algonquian family:

- TA Transitive Animate--object is animate
- TI Transitive Inanimate--object is inanimate
- Al Animate Intransitive--subject is animate
- II Inanimate Intransitive--subject is inanimate

Note that there is an iconic positioning of the abbreviatory initial for

animacy: if there is object agreement (i.e. transitive) the A or I for animacy

value is to the right, TA or TI, while it is to the left for subject agreement

(intransitives), AI or II.

Cheyenne verbs are potentially very complex. Some have more than fifty

phonological segments. Fortunately, morpheme shape is fairly stable, other than

undergoing some rather superficial phonological variation. Morphemes are

generally easily segmentable. The formula for an independent "order" verb is:

PRO-TENSE-DIR-PREVERB-REL-ROOT-MEDIAL-FINAL-EVID

Because of the focus of this paper, we cannot go into much detail about the verb

morphology here, but should briefly describe what this formula means. PRO

stands for the pronominal prefix. The person of the prefix is assigned by the

Algonquian person hierarchy which has often been described in the linguistics

literature:

- 2 1 3 4
- Т

For example, if there is a second person acting upon any other person within a clause the verb prefix will be for the second person, regardless of whether the second person is subject (typically agent) or object (typically patient) of the clause. A verb for which subject is higher on the person hierarchy than object receives "direct" voice marking. One for which the subject is lower on the person hierarchy is marked with "inverse" voice.

Tense is unmarked for 'PRESENT' and 'NEAR PAST'. It is marked by /h-/ for

'FAR PAST' (which could be only as far past as last week, depending on the

perspective of the speaker), and /hte-/ for 'FUTURE'.

Next in a verb there will typically be either of two directionals,

cislocative /neh-/ 'TOWARD' and translocative /ta-/ 'AWAY'. Directionals often

appear in constructions where there is not any real world motion.

There may be one or more preverbs. These are typically aspectual

(including negation) or quantitative.

"REL" stands for a "relative preverb", a morpheme which relates a verb

under consideration to some preceding discourse entity, typically another verb.

Bloomfield (e.g. 1946:120) glossed its meaning as 'thither, thus'. We will see

that this special preverb acts as a kind of complementizer in certain Cheyenne

complement constructions.

Some simple non-complement Cheyenne examples with a relative preverb are:

- é-heše-néméne
 3-thus-sing
 'That's the way he sang'
- 2) é-het-óhta'hāne
 3-thus-story.tell
 'That's the way he told the story' (typical end-story "quote" margin)

The š/t alternation reflects an important (morpho)phonological alternation which

occurred in Proto-Algonquian. Formally, in Algonquianist nomenclature, one can

consider het- to be an "initial", more tightly bound to its following root,

whereas heše- is a preverb, less tightly bound, a little more on the order of an

independent adverb.

The root can be considered to be the most indispensable part of a verb.

Medials are generally nominal in nature. Body parts are often incorporated

into verbs and appear as medials.

In his structuralist description of Algonquian languages, Bloomfield spoke

of "finals". This is a convenient form class label which actually covers

several partially discrete syntactic classes, as emphasized by Rhodes (1976).

For our purposes, we shall regard it as a collection of morphological material at the end of a verb which tells such things as animacy of the object, "instrument" used in the action (such as the standard Algonquian 'by tool', 'by heat', 'by cutting', 'by hand', 'by foot' reflexes). There is also information about number of subjects and objects, and person of whatever person was not cross-referenced on the prefix of a transitive verb.

There is marking for evidentiality. Evidentially unmarked verbs reflect assertions which a speaker claims to have firsthand knowledge of. Marked evidential categories are 'HEARSAY', 'SUPPOSITION', and 'EMPHASIS'² (called

'PRETERIT' in other Algonquian languages).

There are three "orders" of Algonquian verbs: independent, conjunct (consider this equivalent to dependent, for our present purposes), and

imperative. Various modes appear within the different orders.

Independent order verbs function as independent clauses. Conjunct order verbs usually, but not always, function as dependent or subordinate verbs. The distinction between these two orders will be important in our consideration of Cheyenne complementation. Independent (we will often omit the word "order" which should be assumed) verbs take both pronominal prefixes and suffixes.

Conjunct verbs mark pronominal cross-reference only with suffixes. The set of

suffixes used is different from any of the prefixes or suffixes used on

independent verbs. Full paradigms of Cheyenne verb orders and modes are found

in W. Leman 1979. A few examples are sufficient here to show differences in

pronominal affixal marking:

- 3) ná-h-mésehe1-PST-eat'I ate' (INDEPENDENT)
- 4) tsé-h-méséh-éto³
 CJT-PST-eat-1
 'when I ate' (CONJUNCT)
- 5) né-h-vóom-ó-ne-o'o 2-PST-see-DIR:3-1PL-33 'We (incl.) saw them (an.)' (INDEP)
- 6) tsé-h-vóom-ōtse⁴
 CJT-PST-see-1PL:DIR:3(3)
 'We (incl. or excl.) saw him/them' (CONJUNCT)

I use a number of abbreviations in my labeling of Cheyenne morphemes which may

not be immediately understandable. CJT=Conjunct, DIR = Direct "voice" (as

opposed to INV = Inverse "voice"), incl.=inclusive, excl.=exclusive⁵. I mark

pronominal affixes with numbers. A single number such as 1, 2, or 3 indicates

first, second, or third person, respectively. 4="obviative" (an "out of focus"

third person; wl18Feb2014: I would now mark the obviative as 3'). Doubled numbers indicate

plurality, e.g. 33=third person plural [wl18Feb2014: I would now mark third person plural as 3PL].

11=first person plural excl., 12=first person plural incl. When used, "I" in a

gloss indicates an inanimate object, while doubled "II" indicates a plural

inanimate object. There are many details of verb morphology which we cannot

explain further here, for lack of space.

The conjunct verbs just given in 4) and 6) are of an adverbial clause

nature. The "participle" verb of all Cheyenne relative clauses (whether the RC

is headless or not) and the dependent clause of clausal complements are also marked as conjunct verbs. Hence, these three classes of verbs, adverbial,

relative, and complement clauses, form a kind of natural class, all marked as

conjuncts. Note how similar these three classes of verbs can be:

- 7) tsé-h-néménè-se
 CJT-PST-sing-3
 'when he sang' (ADVERBIAL)
- 8) tsé-néménė-stse
 CJT-sing-3
 'he who sings/the singer' (RELATIVE CLAUSE)
- 9) ná-héne'ēn-a tsé-heše-néménė-se
 1-know-I CJT-REL-sing-3
 'I know that he sang' (COMPLEMENT)

As far as I know, relative and complement clauses only take the tsé-

conjunct prefix, which may be viewed as a kind of realis marker. (Certain

embedded question complements also take a éó- prefix; see 4.2.) But other

conjunct verbs may take conjunt prefixes other than tsé-, although tsé- is the most common in terms of numbers. Other conjunct prefixes indicate various mode distinctions such as mäh- 'subjunctive', ho'- 'iterative', momóxe- 'optative'.

There are subtle but important syntactic differences among adverbial, relative, and complement clause verbs. We cannot give all the details here, but should note that adverbial clauses take an obligatory tense/locative /h-/ marker. Complement clauses may take it; relative clause participles cannot. There are slight differences in third person marking among these classes. Only complement clauses take the relative preverb heše-/het- complementizer. (See E. Leman (1985) for further details of Cheyenne relative clauses and a chart of syntactic features differentiating these three classes of conjunct verbs.)

We use labels from the Algonquianist literature, such as preverb, relative preverb, initial, medial, final, and conjunct to make it easier for communication to take place among those working within the Algonquian language family. It seems to be the nature of things that well-established study of a language family develops a vocabulary of its own. Hopefully, use of this familial terminology will be tolerable in this paper. 3. Juncture and nexus

Foley and Van Valin (1984:188ff) have constructed a "universal" framework in which interclausal phenomena ("clause-linkage") can be described. For our

purposes the two most important concepts of this framework are what F&V call

juncture and nexus. Clauses are built of layered units. One can think of them

as layers of an onion (Craig: p.c.). The innermost layer is the nucleus, the

middle layer of a clause is the core, and the outermost layer is the periphery.

A token of one clausal layer may be joined to another token of the same type

(e.g. nucleus + nucleus, core + core). The resulting conjoined construction is

called a juncture of the corresponding type. Hence, nucleus + nucleus yields

nucleur juncture, etc. An individual member of the juncture is a junct. There are certain constituents of each layer. We here list the layers with

their constituents indented:

Layers and their constituents: Nucleus

Predicate (generally a verb) Core

Core arguments (normally pivot plus additional arguments) Periphery

Setting NP's (e.g. time, location)

Secondary participants

An important constraint (1984:188) upon juncture is that the layers which

are joined then form a complex unit which takes operators at the next outer layer. So, for example, a nuclear juncture forms a single unit composed of a complex nucleus. All core and peripheral arguments are shared as arguments of this complex conjoined nucleus.

Every clause is layered whether or not there is juncture. I should point out that while F&V do not explicitly say so, as far as I can see, a layer is composed of any inner layers plus the additional constituents appropriate to it. So, for instance, the core layer is composed not only of the core arguments (e.g. traditionally labeled subject and object), but also of the nucleus. F&V's notation (e.g. Figure 6 on page 188) makes this clear although it is not made as clear as it should be in the text.

Various sets of "operators" have certain layers within their scope. "They are not constituents of the layer, but are operators over the entire layer." (1984:208). There are often relative orderings required by languages when more than one operator applies to a layer. We cannot discuss such orderings here, but refer the reader to the discussion in F&V (1984:210ff)6. For brevity, we simply list here operators appropriate to each layer. Where ordering is required by a language, it can be assumed to be reflected downward in this listing in increasing distance from a predicate:

Layers and their operators: Nucleus

Aspect

Directionals Core

Modality Periphery

Status (e.g. realis vs. irrealis, obligation)

Tense

Evidentiality

Illocutionary force

F&V differentiate three categories (illocutionary force, status, and

modality) which have often been lumped together under a label of mood or modality in grammatical treatments. Illocutionary force refers to notions such as declarative, interrogative, and imperative. Modality, according to F&V, "characterizes the speaker's estimate of the relationship of the actor of the event to its accomplishment, whether he has the obligation, the intention, or the ability to perform it" (1984:214). Status is "the variable of actuality of the event, whether it has been realized or not" (1984:213).

Nexus is the other major concept of the F&V framework which we will use.

While juncture affects levels of layers, nexus pertains to "the nature of the syntactic linkage between two clauses" (1984:238). F&V describe three kinds of nexus: coordination, subordination, and cosubordination. "In coordinate nexus neither conjunct is embedded in the other, and the two are in a whole-whole equivalence relation" (1984:239). In subordinate nexus "one of the two juncts is embedded in the other" and "they are in a part-whole relationship, with the subordinate junct dependent upon the superordinate junct" (1984:239). In cosubordinate nexus neither junct is embedded in the other, yet each junct is "dependent upon the other in terms of shared arguments and operators"

(1984:242).

Because there are three levels of juncture and three types of nexus, there are nine logically possible juncture-nexus combinations. F&V (1984:244ff) present numerous examples, from different languages, of the various

combinations.

4. Cheyenne complements

We now turn our attention to Cheyenne complements themselves. Keep in mind that we are approaching complementation in this paper from two viewpoints,

semantic and syntactic. We will survey Cheyenne complementation from the broad

perspective of semantic complementation. That is, we shall examine all the

constructions which appear to indicate some kind of semantic complementation.

Our primary concern in this paper is answering the question, what syntactic

means does Cheyenne use to encode the various kinds of semantic complementation?

In broad outline, our discussion will lead from examination of complements

which are most independent from their matrix verb to those which are most

dependent. In the vocabulary of Givón's (1980) binding hierarchy, we will move

from study of structures which are least bound to those which are most tightly

bound. We will relate the degrees of binding to F&V's (1984) framework, as we

study clause linkage constructions having the various degrees of juncture and

types of nexus.

In overview, here are the syntactic possibilities open to us for encoding

semantic complementation in Cheyenne, in increasing degree of binding:

- 1. Independent Matrix + Independent Complement
- 2. Independent Matrix + Dependent (Conjunct) Complement
- 3. Lexical Union (Complex verb composed of matrix and Comp predicates)

There are subclasses within these categories which reflect finer gradations of

binding or which are sensitive to the semantics of particular verbs.

Few linguistic phenomena are as simple as models which we use to represent

them sometimes make them out to be. This is true of the recently popular use of

clines to represent various relationships (e.g. degrees of transitivity, degrees of complement binding). A cline can give us a general idea of what main issues are, but one should not conclude that they totally capture all the details of variation which are involved in some phenomenon. Another way of looking at this problem is that the straight-line model of a cline is often better represented as being several related clines. Occasionally, in our presentation, we will loop backwards or forwards when it seems appropriate to better present comparison of data within some cline.

Data in this paper come from two major sources, elicitation and texts⁷. When datasource is indicated (within parentheses), title of a text from which data is taken will appear within quotes while informant initials (or DF=linguist

Donald Frantz fieldnotes) indicate elicited material.

4.1 Separate independent clauses

Quotations have often been considered a kind of complement. A verb of

saying is the matrix verb while the content of the quote is the complement. I am comfortable with some Relational Grammar (hereafter RG) notation and will diagram some constructions as RG networks. So a traditional quote complement analysis of the English sentence 'He said, "I'm hungry"', in RG notation, would



There is debate about the analysis of quote complements. Partee (1973) was one of the first to conclude that "the quoted sentence is not syntactically or semantically a part of the sentence which contains it." Munro (1982) examined cross-linguistic evidence that 'say' verbs are "often less than perfectly transitive, and that the quotations they introduce are often very different from normal objects or object clauses" (1982:302). Longacre (1985) similarly questions regarding quotes are ordinary complement clauses. However, in the same volume with Longacre, in his cross-linguistic survey of complementation, Noonan (1985) refers to complementation involving verbs of saying. The position we take here is to admit that quotations are not good

be:

examples of complements, if we regard complementation purely in syntactic terms.

But we are examining complementation from both semantic and syntactic viewpoints. In my opinion, it remains helpful to regard quotations as a kind of semantic complementation: someone says something. That which is said can be a clause.

If a complement clause is truly an object of a verb, as we might expect a quotation to be, then we would hope to find marking for transitivity of 'say' verbs in those languages which mark transitivity. Cheyenne does mark transitivity on verbs, including on 'say' verbs, but there is absolutely no indication that the contents of Cheyenne quotes are the objects reflected in such transitivity. This observation is in line with Munro's cross-linguistic observations.

The verb of saying may be marked as transitive, but if it is, it is not a

quote margin. So, for instance, we have the verb:

10) é-hést-a 3-say-l 'He said it'

This might be used about someone who said a certain word, or made some

pronouncement. The reference to the inanimate object refers to the word or

pronouncement, not to the actual content of the quote8.

Examples 12) and 13), below, have TA verbs. But their syntactic object is

the person who the speaker was addressing. The fact that those verbs show

animate object agreement would disallow them from referring to a quotation,

which is inanimate.

Cheyenne simply places a quote margin verb of saying, usually as an

independent order verb, after, or sometimes before (occasionally both), in a

paratactic construction with the content of the quote. The most common verb of

saying is he(t)- 'say' in its various inflected forms. This verb is used as a

quote margin to cover the semantic space of several English verbs, including

'say', 'tell', 'ask', and 'answer':

- 11) ná-kahane-otse é-hevoo'o 1-tired-RESULT 3-say "'I'm tired,' he said." (JG)
- 12) tà-hé-ovēšė-stse ná-het-a ná-hko'éehe away-PURP-prostrate-IMPV 1-say-INV:3 my-mother (IMPV=IMPERATIVE) "'Go to bed,' my mother told me." (JG) (PURP=PURPOSIVE)
- 13) né-kahaneotse-he Mó'kéé'e é-het-óho Ame'ha'o (VS)
 2-tired-INTERROG Mo'kee'e 3-say:AN-DIR:4 Ame'ha'e:OBV (OBV=OBVIATIVE)
 'Mo'kee'e asked Ame'ha'e if she is tired' (i.e. "Are you tired?" M. said to A.)

Indirect quotes are rare, if existent at all. In preparation for this

paper I have studied approximately 4,000 clauses. There are many direct quotes,

but no clearcut cases of indirect quotation. There are, however, what might

appear to be a kind of indirect quote construction used with verbs of saying

other than the generic verb he(t)- 'say' which we have seen so far. This

construction involves semantically richer verbs such as 'answer', 'explain',

'discuss'. The construction is that of an independent verb of saying followed

by a complement in the conjunct order containing the relative preverb heše-

which we regard as a complementizer, e.g.

14) mó-x-ho'nó-hke-ó'ee-mé'em-e tsé-to'sė-heše-momáta'-àšé'šė-stove CJT-PST-NEG-regularly-?-explain-x:3 CJT-gonna-REL-angry-drink-IMPRS 'You didn't have to tell you were going to be mean after you were drunk' ("How Alcohol Came to the Cheyennes")

14) is an example of position 2 (Independent verb + dependent complement) on our

broad cline of complement binding in Section 2 above. We shall examine the

syntactic encoding of position 2 in greater detail later. There are

complications in 14) which are really irrelevant to complementation. The first

verb is morphologically of the conjunct order. But it always functions as an

independent verb. It is a special emphatic negation form which can only be

given in the conjunct⁹. The "x" in the gloss indicates an unspecified subject.

"IMPRS" indicates the impersonal construction suffix.

There are a number of similar examples in Cheyenne texts. Many of them

have complements whose complementizer should be glossed as 'how' rather than

'that'. In other words, with complements of semantically rich verbs of saying,

the complement is often (usually?) what has been called a WH-complement (or

sometimes known as an embedded question complement):

15) ná-to'se-évé-hósést-a tsé-x-heše-mé'éstom-óhé-vòse 1-gonna-about-tell.about:INAN-I¹⁰ CJT-PST-REL-explain-x-3PL

tsé-tsehéstahe-se hé'tóhe mane-stötse CJT-Cheyenne-3PL this:INAN drink-NOM 'I'm gonna tell about how Cheyennes were told about this drink (alcohol)'

("How Alcohol Came to the Cheyennes")

We will have more to say about embedded question complements in Section 4.2.1.

Complements of cognition verbs are treated the same as quote complements.

That is, what you are thinking is treated in Cheyenne the same as if you had

said it:

15) é-háomóhtahe ná-heše-tāno
3-sick 1s-REL-mental
'I think he's sick.'

It is possible to specify illocutionary force independently for each

verb in an independent + independent complement construction. Thus, we have

peripheral juncture, in F&V's terms. It is difficult to characterize the nexus

between the two "juncts". Neither conjunct is embedded in the other so the

nexus is not subordinate. But the F&V coordinate nexus requires that "neither

conjunct is embedded in the other, and the two are in a whole-whole equivalence

relation" (1984:239). To my mind, quotation complements, including the

cognitions ones which act the same, are not in a whole-whole equivalence

relation. The only other nexus type F&V allowed is "cosubordination", where

"there are two clauses such that neither is embedded in the other, but one is

dependent upon the other for some feature, e.g. tense inflection" (1984:241).

But there is no such dependence with the quotation complement constructions. I

conclude that the allowed categories of nexus are insufficient to handle direct

quotation complements11.

It is possible to "copy-raise" (see discussion in 4.2.2 below) an argument

of a complement to likewise be an argument of the matrix clause:

16) ná-me'-hó'tahéva ná-heše-tāno

1-should-win 1-REL-mental 'I think I should win'

17) ná-me'-hó'tähéva ná-heše-tanó-'tov-ahtse
1-should-win 1-REL-mental-TRANS-REFL (TRANS=TRANSITIVIZER)
'I think about myself that I should win'

The first person subject of the complement of 16) has been copy-raised to be

syntactic object, marked in reflexivity, in 17). There is thus tighter binding

between the two juncts of 17). In contrast to 16), nexus in 17) may be

cosubordination because the juncts now share a nominal argument.

The relative preverb heše"- would be translated as 'thus' in a quote margin

with a cognition complement, not as a complementizer. Hence, ná-heše-tāno of

15-17) would literally be glossed as something like 'I thusly thought'.

4.2 Independent matrix plus dependent complement

In this section we examine several complement constructions which consist

of an independent matrix verb plus a dependent complement (of the conjunct

order). The verb -héne'ēna 'know (it)' commonly controls a conjunct complement.

From now on, when the relative preverb heše"- functions as a complementizer, I

gloss it as such:

18) mó-0/-s-ta-tónėšė-héne'enovahe-hé-he DUB-3-PST-away-how-knowledgeable-NEG-NONAFFIRM

tsé-heše-móhe-ehné-stove-tse CJT-COMP-gather-go-IMPRS-OBV

'Somehow he found out that there was a meeting' ("The Spit Man")

- 19) ná-héne'ēn-a ma'heo'o tsé-heše-no'kae-se
 1-know-it God CJT-COMP-one-3
 'I know (that) there is one God.' (JG)
- 21) ná-sáa-héne'en-ó-he tsé-hešè-háomóhtahé-otsè-se
 1-NEG-know-it-NEG CJT-COMP-sick-RESULT-3
 'I didn't know (that) he got sick.' (JG)

Note that negation of the matrix 'know' has no effect upon the realis

status of the complement. The same is true in English:

- 22) John knows that I'm a fisherman
- 23) John doesn't know that I'm a fisherman

In both sentences the propositional content of the complement is the same, i.e.

the speaker is a fisherman. If we want irrealis status for the complement of

Cheyenne 'know' we must use a different conjunct prefix and no complementizer:

24) ná-sáa-héne'en-ó-he éó-hoo'kōho
 1-NEG-know-I-NEG CJT:whether-rain
 'I don't know whether it rained.'

While textual evidence overwhelmingly shows 'know' to control a conjunct

complement, speakers today sometimes give an independent complement during

elicitation. I do not know whether or not this represents interference from

English, perhaps from that form of English which omits the complementizer 'that'

in 'know' sentences. One day when I asked how to say 'I know you understand

Cheyenne', I was given:

25) ná-héne'ēn-a né-tsehést-ahtomóne (JG) 1-know-l 2-Cheyenne-hear

There are two independent verbs here. The first admittedly is a TI (transitive)

verb. One could say that this represents a degree of dependence on the part of

the second verb (complement) for the first verb, the syntactic object of 'know'

being the complement verb. But Cheyenne does not have a contrast between 'know'

and 'know it' in this context, so there is a good chance that there is no

syntactic connection between the two independent verbs of 25). Semantic

dependency, yes, but syntactic dependency, probably not.

The verb 'remember' can behave like 'know', taking a conjunct complement:

26) ná-mé'e-tanó-'ta tsé-x-háomóhtah-eto
 1-appear-mental-it CJT-COMP-sick-2
 'I remember that you were sick.'

26) is the first example we have seen in which the complementizer is expressed

by x- rather than the relative preverb heše-. As far as I know there is no

semantic difference between the two markers when they are used as

complementizers. x- is phonemically /h-/ and is the generic

"tense/locative/oblique" marker which follows the conjunct prefix tsé-. Use of

/h-/ instead of /heše-/ represents language change, with /h-/ becoming a generic

marker in the conjunct order.

The verb 'forget' may also take a complement object:

 27) a'e mó-ná-ta-vone-tanó-otse-hé-he soon DUB-1-away-lose-mental-RESULT-NEG-NONAFFIRM
 'I soon forgot

tsé-éšė-heše-nėhpo'evo'k-ōh-o he'nétoo'o CJT-already-COMP-lock-by.tool:INAN-3:I door that he had already locked the door.' (JG)

We can use the Cheyenne verb 'be ashamed of' to illustrate similarities and

differences between relative clauses and complement clauses. (Also see earlier

discussions at the end of Section 2.) 28) contains a headless relative which is

syntactic object of the independent verb 'be ashamed of':

28) ná-tanéhé-tsést-a tsé-més-eto
1-ashamed-mental:INAN-I CJT-eat:INAN-2
'I'm ashamed of what you ate.' (RELATIVE CLAUSE; DF 7/65)

When we place the relative preverb heše"- in the conjunct verb we get a

complement construction:

29) ná-tanéhé-tsést-a tsé-heše-mése-ese

1-ashamed-mental:INAN-I CJT-COMP-eat-3 'I'm ashamed of the way he ate.' (DF 7/65)

30) ná-tanéhe-tsest-omov-o-o'o tsé-heše-mésehé-vose
 1-ashamed-mental-TRANS-DIR-3PL CJT-COMP-eat-3PL
 'I'm ashamed of the way they ate.' ("copy-raising"; DF 7/65)

Whereas relative clauses give nominal, referential information, complement

clauses give assertional information.

4.2.1 Embedded question complements

The underlined portions of the following English sentences are embedded

question complements: HOW--He knew how the window had been broken

WHY--I know why you said that

WHERE--I forget where I bought that necklace

WHEN--Do you know when the concert will begin? Cheyenne can similarly have embedded question complements. Those which I

have seen consist of an independent matrix verb followed by a conjunct

complement. The discourse context or specific morphology of the conjunct verb

indicates which embedded question type the complement is. Some examples are:

31) mó-x-héne'en-ò-hé-he tsé-'-òhkė-hešė-hóest-ó'e-ohtse-tsė-se DUB-PST-know-I-NEG-NONAFFIRM CJT-LOC-regularly-COMP-out-woods-go-OBV-4 'He knew where deer came out of the woods' ("The Round-up of the Deer")

váotsevá-hne deer-OBV

 32) Amé'há'e é-héne'ēn-a Kovááhe tsé-'-oom-aeto Ame'ha'e 3-know:INAN-I Kovaahe CJT-PST-hit:AN-3:1
 'Ame'ha'e knows when Kovaahe hit me' (VS)

The morpheme ['-] (phonemic /h-/) of the conjunct verb of 32) is the same generic

conjunct marker discussed in the last section. So, as far as I know, 32) could

also be glossed as 'Ame'ha'e knows where Kovaahe hit me' and perhaps even

'Ame'ha'e knows why Kovaahe hit me', although typically 'why/because'

constructions take semantically richer morphology.

To my mind, it is not always easy to determine whether a conjunct clause is

functioning as an embedded question complement or as an ordinary complement:

33) móxho'nó-hene'ēn-o Custer tsé-to'sė-heše-énėhóhtsė-se
 CJT:surely.not-know-I Custer CJT-gonna-COMP-end.tracks-3
 '(General) Custer didn't know how his tracks were going to end.' (JG)

Although the translaton was given by a native speaker, and is to be trusted, I

believe it would also be possible to translate the Cheyenne as '(General) Custer

didn't know that his tracks were going to end.' This will require further

checking with informants.

Note that we omitted WHO and WHAT as question words in embedded complements

in our list of English embedded question complement type at the beginning of

this section. Similarly, we have not called any WHO or WHAT clauses complements

in Cheyenne. Such clauses are similar to embedded question complements, but

they are different in a significant way in that they deal with referential

entities. Even though Cheyenne relative clauses, especially of the commonly

occurring headless (or "participle") variety, look very similar to complement

clauses, they function differently from complement clauses.

Conjunct complements do not take illocutionary force independent of their

matrix verb. So juncture of independent + dependent complements which we have

been discussing is core juncture. Ordinary conjunct object complements of

'know' in Cheyenne are core arguments (direct objects) of the matrix predicate,

so nexus is subordinate. Embedded question complements are non-core arguments

of the matrix clause. I believe nexus would still be subordinate, in F&V's

terms.

4.2.2 Dependent subject complements

So far, all of the complements which we have examined have been object

complements. Object complements outnumber subject complements, by far, in

Cheyenne. But a few subject complements do occur, e.g.

34) é-ameha tsé-heše-mé'-o héne véhone-ma'kaeta
 3-lie CJT-COMP-find-3:I that:INAN chief-metal
 'It's written (lies on paper) that he found the gold' ("Black Hills Claim")

Here the matrix verb is in the independent order. It is an (intransitive) II

verb. The inanimate subject of é-ameha is the entire complement sentence,

glossed as 'that he found the gold'. Note that the relative preverb heše"-

appears in the complement sentence, acting as a complementizer. Syntactic

extraposition does not occur in Cheyenne, in contrast to English where the free

translation of 34) has undergone extraposition, with derived 'it' subject. Some Algonquian preverbs have "initial" allomorphs. The Cheyenne relative

preverb heše- has the form het- when it acts an an "initial" preceding a

vowel-initial predicate. 35) contains an embedded question ("how") subject

complement:

35) é-hoháe-hótoanáto tsé-het-öxe'oh-e
3-very-difficult CJT-COMP-write-x:3
'It is really difficult how it is written' ("Literacy Interview")

35) looks very much like a headless relative clause, but contains the relative

"initial" which, to me, sets it apart in this case as a complement clause.

A predicate glossed as 'difficult' reminds us of the "tough-movement"

transformation which has been described for English by generative grammarians.

Through such a transformation, a sentence such as 'A term paper is hard to

write' would be derived through raising from an underlying sentence which has a

matrix predicate 'hard' controlling a complement sentence something like '(for

someone) to write a term paper'. The English surface sentence 'It's hard to

write a term paper' is derived from the underlying sentence by extraposition and

insertion of the 'It' subject. The Cheyenne sentences 34) and 35) reflect their

logical structure rather directly, having undergone neither raising nor

extraposition.

But, in Cheyenne, at least when the agent (subject) of the logical subject

complement is animate, it is possible for the syntactic (surface) subject of the

matrix 'difficult' predicate to be coreferential with the complement subject.

My corpus has an example with the complement verb in the independent order but I

would also expect to find examples with an independent complement verb:

36) ná-ohkė-hótoaná-otse ná-to'sė-hé-moxe'ōh-a
 1-regularly-difficult-RESULT
 1-gonna-PURP-write-I
 'It's hard for me to write it' (JG)

A syntactic process of "copy-raising" has taken the subject of 'write', which

semantically, anyway, is the complement, and raised it to be marked as the

subject of the matrix verb. The complement verb retains first person "I" as its

subject marking. The term "copy-raising" for this process may have come from

Frantz (1978b), but a number of others have also noted that matrix clauses often

are marked for person of a dependent clause argument. See James (1984) for

discussion of related raising phenomena in Cree, another Algonquian language.

It seems to me that 36) is problematical for F&V's categorization of

juncture. The juncts share a core argument so juncture should be nuclear,

according to F&V (1984:188). Yet each junct also has a syntactic copy of its

own argument, which would appear to be core juncture. The fact that both juncts

are of the independent order would lead me to guess that juncture is core.

While there is no overt syntactic dependency, I regard the 'write' verb to be

semantically dependent upon the matrix verb, i.e. there is semantic subordinate

nexus. The fact that there is a shared core argument, yet each verb has a copy

of that argument strikes me as problematical for Sharing of a nominal is tigh Interestingly, the informant also gave the following construction for

another elicited subject complement sentence:

37) é-he'anáto homose-stotse
 3-easy cook-NOM
 'It's easy to cook' (JG)

Here, instead of leaving the complement in a verbal form, the informant

nominalized it. This is, of course, a common means that many languages use to

handle some complementation, as described, for instance, for Nez Perce by Rude

(1985). A more literal gloss of this Cheyenne sentence would be 'Cooking is

easy'. In terms of degrees of "nouniness", Cheyenne nominalization is at least

two degrees more nouny than a complement clause. A nominalized form takes a

deverbal noun stem. It may be pluralized. And it may be possessed. It is a

little nounier than a Cheyenne relative clause which itself is one degree

nounier than a dependent complement clause, both of which take the full range of

person markings. Yet it is not quite as nouny as a Cheyenne noun. Fuller
description of these matters must wait for another treatment.

4.3 Complex complement predicates

It should not be surprising that a considerable amount of complementation

is encoded by means of complex predicate constructions in a polysynthetic

language such as Cheyenne. In this section we will present examples containing

adverbials and aspectuals, purposives, Resultatives [sic; resultatives], desideratives, causatives,

and the predicate 'pretend'.

4.3.1 'tough' controller

We ended the last section with examples with Cheyenne 'tough'-type verbs.

We now consider the 'tough' predicate as part of a single complex verb:

38) é-hótoaná-voxe'-oh-e
3-difficult-write-by.tool-x:3
'It (e.g. Cheyenne language) is hard to write' (JG)

The predicates of 38) combine through nuclear juncture. Neither predicate

is subordinate to the other yet together they take same arguments. So nexus is

apparently cosubordinate. I believe that this combination of nuclear juncture

with cosubordinate nexus will be true for all of the complex verb constructions

described in 4.3, this final major section.

A complex predicate construction is similar to that of verb serialization

common in many African and southeast Asian languages, but there are important

differences as well. One of the most salient differences is that the Cheyenne predicates here are not individual words, unlike descriptions of serial verbs which I have seen. Further analysis would show that the predicate glossed as 'difficult' in 38) functions as a kind of adverbial. Hence, 38) would literally be glossed as something like 'It is written with difficulty'. Rhodes (1978:235) gives some introductory ideas of how modal adverbs in Algonquian languages might be incorporated into verbs, through a process of "Lowering Union". We cannot pursue the analysis further here.

4.3.2 Other adverbials

Many adverbial-like elements appear as preverbs in Cheyenne. A number of them are what have been called phasals, encoding aspectual categories such as inception, cessation, failure, attempt, and purpose. We could say that the main predicate of a Cheyenne verb with a phasal preverb acts as complement of the preverb, illustrated in a RG template, for subject complements (e.g. of

'difficult', 'easy', 'good') as:

PHASAL .

PREDICATE and for object complements (e.g. of 'know how to', 'try', 'afraid') as:

PHASAL HE .

PREDICATE

For both networks, the downstairs complement predicate can be either

intransitive or transitive. For purposes of this survey, we regard the

downstairs predicate as a semantic complement. I hesitate to regard

constructions with a phasal controller as good examples of syntactic

complementation, however. A full study of the language will show that phasal

preverbs distribute morphologically as preverbs like other elements which we

would want to consider adverbial in nature, such as the pehéve- in:

39) é-pehéve-mésehe3-good-eat'He ate nicely'

In 39) the incorporated adverb is not a higher predicate governing a

complement verb, unless we have a very broad definition of complement, with a

resulting sentential gloss something like 'It's good that he ate.'

But, while there is doubt that phasal preverbs govern syntactic

complements, it still seems appropriate to include phasals in a study of

semantic complementation. Semantically, they have within their scope a

downstairs predicate in a manner similar to how a prototypical complement matrix

verb controls a complement verb. In RG terminology, phasals enter into

Equi-subject Clause Union12 constructions. The downstairs and matrix predicate

share a subject nominal.

While the preverb pehéve- 'good' does not function as a predicate

controlling (syntactic) complementation in 39), it typically does in:

40) né-pehéve-ho'-ēhne2-good-arrive-walk'It's good (that) you came'

It is conceivable that 40) can mean 'You arrived nicely', perhaps referring to

the body language used while one arrived walking. But today's Cheyennes,

anyway, typically use 40) as a way of telling someone that they are glad to see

them. This may be a loan translation from English 'It's nice that you came'.

In 40) 'good' functions as the control predicate for the subject complement 'you

came'. A similar nicetie used by today's Cheyennes is:

41) né-pėhév-oom-atse 2-good-see:AN-INV:1 'It's nice to see you'

with the transitive complement clause, logical 'I see you', functioning as

subject of the univalent control predicate pehév¹³-.

The start of an action is encoded with the inceptive preverb ase-:

42) é-ase-mésehe 3-start-eat 'He started to eat' (JG)

The end of an action is indicated with the phasal én(e)-:

43) ná-én-öhomo'he 1-end-dance 'I stopped dancing' (JG)

A preverb which is glossed as 'know how to' is shown in:

44) é-nöhtóv-öhomo'he3-know.how.to-dance'He knows how to dance' (JG)

Semantically, we can consider that the subject (F&V pivot) of 44) knows how to

do SOMETHING. That something is an action, i.e. dancing in 44). The complex

verb is clearly marked as intransitive. There is no way for a phasal to

indicate transitivity, unless it would be encoded in a separate clause. This

fact supports our hesitation to call the phasal preverb constructions examples

of syntactic complementation.

Other examples with preverbs (or initials) which can be considered semantic

controllers of complementation are:

- 45) é-onést-öhomo'he3-try-dance'He's trying to dance' (JG)
- 46) é-hótse-nome3-fail-sleep'He couldn't sleep' (JG)
- 47) é-e'se-ho'-ēhne taa'é-va3-afraid-out-walk night-OBL'He's afraid to go out at night' (JG)

4.3.3 Purposive

We mentioned in the introduction to this paper that Craig (1977) listed

sentential complementation besides object and subject complementation. Cheyenne

forms with the purposive preverb hé- may be examples of sentential

complementation. Others may call this preverb an intentive. Examples of

complex predicates with this preverb are:

- 48) é-ho'-hé-mesehe
 3-arrive-PURP-eat
 'He came to eat' (i.e. 'He arrived for the purpose of eating') (JG)
- 49) é-tà-hé-ohtóva-noto mésèhéstot-o
 3-TRANSL-PURP-buy-DIR:OBV potato-OBV
 'He went to buy potatoes' (JG)

In other Algonquian languages, the cognate of the Cheyenne purposive

element is wii-, which has been semantically broadened to function, in addition

to the purposive, as one of the future morphemes (Rhodes 1985), or desiderative

'want' as shown in this Cree example from Dahlstrom (1983:10):

50) ni-wii-nipah-aa-naan-ak niiso moosw-ak 1-want-kill-DIR-(1)PL-PL two moose-PL 'We wanted to kill two moose'

Dahlstrom, as in our analysis, regards the verb as a complement construction.

She says of 50), "there is a complex verb consisting of the control predicate

wii-, meaning 'want to', prefixed to its complement" (1983:9).

While in Cree we might be able to consider the complement of wii- to be an

object complement, the complement of the Cheyenne cognate hé- 'purpose' cannot

be construed as an object in 48) and 49)14. Instead, the purpose predicate is,

in F&V's terminology, a secondary participant. A purpose argument is a non-core

argument of a clause, so Craig's label sentential complement would seem

appropriate here.

Before leaving discussion of purposives we should mention that it is

possible to encode a purpose complement as a separate clause. The free morpheme

conjunction, nonóhpa, encodes purpose (or perhaps result):

51) sóhpe-éestsé-'tov-enáno ne-vo'estanem-o nonóhpa through-speak-TRANS-2:33:IMPV 2poss-person-PL so.that 'Speak through your people so that

na-htse-éva-hetótae-he'né-ohtsé-me 1-FUT-return-rejoice-separate-go-1PL(excl) we will depart rejoicing' ("A Prayer at a Meeting")

Cheyenne has numerous morphemes encoding various purpose, result, causal

relationships. Further study of them is needed, but 51) can suffice to show

that this semantic area can be encoded with separate clauses as well as by a

single complex verb. We expect to find that syntactic separation of clauses

correlates with a lower degree of semantic binding between controller and

complement clauses. For instance, in 51) the agent speaker of the imperative

verb is second person singular, while the agent subject of the complement clause

is different, first person plural exclusive. This contrasts with the complex

verb purposive constructions in 48) and 49) which require Equi-subject

coreferentiality between matrix and complement predicates.

4.3.4 Resultatives

Whereas there are many preverbs encoding the semantics of aspect such as

those we saw in 4.3.1 and 4.3.215, resultative morphemes appear verb-finally.

Cheyenne has two resultatives, -otse, phonemically /-ote/, and -ohtse /-ohté/,

which I gloss lexically as 'become' and 'process', respectively. We could consider these

as predicates controlling a subject complement verb. Both refer to a change of

state. The first focuses upon resultant state. The semantics of the second is

not entirely clear, but -ohtse seems to indicate a relatively slow process of

change. It may also focus upon being in process of change as opposed to the

resultant state. It is interesting that the two morphemes are so similar

phonologically:

- 52) ná-háomóhtähé-otse 1-sick-become 'I have become sick'
- 53) é-oo'xe-otse3-crack-become'It is cracked/it has become cracked'

The "bare-bones" II verb é-ó'xo 'It is cracked', with no resultative, would

typically be used of something which is cracked as its usual state of affairs.

Contrast 53) with:

54) é-oo'xe-ōhtse 3-crack-process 'It is cracking' I do not know the source of -otse, but I believe that resultative -ohtse has

been grammaticalized from the motion morpheme with identical spelling, seen in

example 51).

4.3.5 Control predicate 'pretend'

Another word-final morpheme, -māne /-mané/, controls complementation in a

complex verb construction. It means 'pretend' or 'act like':

55) é-naóotsé-máne3-sleep-pretend'He's pretending to be asleep'

Morphologically, -mane can be viewed as a derivational verbal suffix. It is

suffixed to verb, as in 55), and noun stems:

56) é-he'é-máne3-woman-pretend'He's pretending to be a woman' (i.e. 'He is a transvestite')

Like all the other complex verb predicates controlling complementation

described in this paper, -māne is only a bound morpheme. The verb é-mane looks

similar but is totally unrelated and means 'he drank (it)'. I mention this

morphological constraint upon these control predicates for the following reason.

In a traditional generative (especially generative semantics) description of

complementation, one would want to regard 'pretend' as a higher predicate taking

an NP subject and a clausal complement, the subject of which is coreferential

with the subject of the matrix predicate. But Cheyenne -māne 'pretend' is not a

full verb in its own right, just as the aspectual preverbs are not, and the desiderative and causative suffixes which we are about to examine are not. These morphemes are not themselves inflected for the usual Cheyenne verbal categories of tense, animacy, person, number, etc. Rather, the complex verb construction created by their union (F&V nuclear juncture), as a whole, is treated as the verb stem which receives the usual inflection. Semantically, I do regard 'pretend', aspectual preverbs, desiderative, and causative morphemes as control predicates of complementation. But they lack some of the features of complement control predicates which can be associated with "best example" syntactic complement controllers such as bivalence (for transitive predicates controlling object complements) or the presence of a complementizer. 4.3.6 Desideratives

A number of recent sytactic studies (e.g. Aissen and Perlmutter 1976, 1983; Frantz 1976a; Cole 1984) have focused upon phenomena involved with the "union" of two clauses. As already mentioned Frantz described Equi-Subject Clause Union, particularly for polysynthetic languages. Clause unions typically involve verbs glossed as 'want' and 'cause' in various languages. Causative clause union for more analytic languages such as French (cf. Comrie 1981:55, 162ff, 172ff) results in changes such as word order and constraints upon the "downstairs" verb, including its infinitivization.

In Cheyenne the 'want' and 'cause' predicates are encoded as suffixes

attached to a "downstairs" verb. We can view the downstairs verb as another

example of a semantic complement.

Cree and Cheyenne are both Algonquian languages. Yet while Cree apparently

has a preverbal desiderative, as in 50), Cheyenne only uses a suffixal

desiderative.

Some of the most interesting syntactic behavior in Cheyenne occurs with desiderative and causative complements. Unfortunately, our space limitations prevent us from giving as much detail here as this section deserves. We must,

however, present some of the syntactic highlights.

Noonan (1985), following Shibatani (1976), refers to complex predicate clause union of the sort found in Cheyenne as lexical union. This is simply a morphological variant of the broader category of clause union. Lexical union is clause union reflected in complex verb constructions. Again, in F&V terminology, we have nuclear juncture. I regard the desiderative or causative

predicates as controlling complementation, semantically, anyway. So nexus is

subordinate. I am not sure if F&V would agree with this analysis of nexus.

The controlling and complement predicates form a complex unit which shares

tense, arguments, illocutionary force, etc. so F&V might say nexus is

cosubordinate.

Cheyenne has a verbal suffix -tāno /-tanó/ which is used to encode

desideratives. Interestingly, this suffix also encodes mental activity which

would not be considered desiderative:

- 57) ná-pehéve-tāno 1-good-MENTAL 'I'm happy'
- 58) é-anove-tāno 3-down-MENTAL 'He's sad'

I regard -tano as being the AI stem corresponding to the TA -átam and TI

-átsest /-áteht/ stems which enter constructions having glosses such as 'regard

(as)' or 'deem':

- 59) ná-pehév-átsést-a1-good-regard:INAN-I'I like it (i.e. I regard it as good)'
- 60) ná-oné'seóm-átám-o1-true-regard:AN-DIR:3'I believe him (i.e. I regard him as true)'

We could subsume the TA, TI, and AI desiderative and mental uses all under

an abstract semantic category of MENTAL. The missionary Petter (1915:706)

correctly noted that /-tanó/ "denotes anything 'minded', of the m(ind)". Hence,

a state (e.g. good, down) that you hold in mind reflects your emotional state.

An activity which you hold in mind is something that you want to do, i.e.

desiderative. A quality about an entity that you hold in mind is an estimation

on your part about that entity. We will only further analyze the desiderative

uses here, i.e. something that someone wants to do, and gloss the following

desideratives as 'want' rather than the more abstract 'MENTAL'.

We must note that this desiderative 'want' is different from the full

Cheyenne verb meaning 'want', which has a stem spelled as -ho'ahe. -ho'ahe only

takes nominal objects, whereas desiderative -tāno only takes clausal complement

"objects":

- 61) ná-ho'ahe ho'évohkötse 1-want meat 'I want meat' (meat is inanimate)
- 62) ná-ho'ahe-nötse¹⁶ váótséva 1-want-TRANS:DIR:3 deer 'I want a deer'

4.3.6.1 Downstairs intransitive

Throughout this paper I use terminology from RG descriptions of clause

unions as a convenience, e.g. downstairs, upstairs, and dead verb. Downstairs,

of course, refers to the complement verb which is controlled by a "higher"

"upstairs" matrix verb. We could consider that a dead verb corresponds to an

infinitive, except that, to my mind, an infinitive typically takes an

infinitivizer such as English to as in 'I want to sleep', or -ar, -er, or -ir of

Spanish infinitives. Cheyenne dead verbs do not take an infinitivizer. If

Rhodes (1976) is correct in viewing modal adverbs as undergoing a lowering union

then the modal control predicate is the dead verb, not the downstairs complement

verb. But from our experience with English and other European languages we

would expect the downstairs verb to become dead, and often infinitivized. So,

there seems value is reserving the term infinitive for its traditional usage and

using a label such as dead verb for a broader category.

If the downstairs verb is intransitive, the resulting complex predicate

has the full downstairs AI verb with desiderative -tano suffixed:

- 63) ná-mésehé-táno
 1-eat-want
 'I want to eat' (cf. ná-mésehe 'I am eating')
- 64) é-naóotsé-táno3-sleep-want'He wants to sleep' (cf. é-naóotse 'He is sleeping')

The upstairs and downstairs clauses share the same argument, the single

subject nominal of both clauses. This is what Frantz called Equi-Subject Clause

Union. Per F&V we have nuclear juncture and cosubordinate nexus.

4.3.6.2 Downstairs transitive

There is more complex morphology if the downstairs clause is transitive.

First, let us review how a simple transitive (independent order) verb is marked:

65) ná-vóóm-o 1-see:AN-DIR:3 'I see him'

Here there is the usual pronominal prefix, followed by the verb stem which is

marked (by -m) as taking an animate object, followed by -o which indicates that

voice is direct (subject is higher on the person hierarchy than object) and the

object is third person singular.

If the downstairs clause is transitive, the resultant complex construction

retains the transitive verb stem marking. The downstairs verb appears as a dead

verb in the middle of the complex. Because person marking only appears on

Cheyenne verbs as prefixes or suffixes the dead verb loses its person marking.

The resultant complex construction, however, suffixes person, animacy, and

number of the downstairs to the word-final desiderative suffix:

66) ná-vóom-á-tanó-'tóv-o1-see:AN-DEAD-want-TRANS:AN-DIR:3'I want to see him.'

I do not know precisely how to identify the -á glossed here as 'DEAD'. It is

possible that this is the same stem-initial -á which appears on the TA -átam and

TI -átsest 'regard (as)' stems described earlier. Or, it is possible that this

is a new -á acting as an infinitivizer when the downstairs clause is

transitive. At this point, further study is required to identify the segment.

The -'tov morpheme is glossed as 'TRANS'. This derivational suffix acts as

TA transitivizer, converting intransitive stems to transitive ones.

If the downstairs clause takes an inanimate object, the dead verb retains

the stem agreement marking (-ht in 67)) for inanimacy, and the resulting complex

verb receives TI word-final marking corresponding to that of the complex TA verb

just seen in 66). For interest, we present a verb with a plural inanimate

downstairs object, showing that number as well as gender of the downstairs

object is reflected on the resultant complex verb:

67) ná-vóoht-á-tanó-'ta-nötse
1-see:INAN-DEAD-want-TRANS:INAN-II:PL
'I want to see them (inan.)'

Cheyenne has no true passive. It does, however, allow verbs with so-called

unspecified subjects which act similar to passives:

68) ná-vóom-āne 1-see:AN-X:1 'I was seen/I am seen'

The reflexive takes yet another suffix:

69) ná-vóom-ahtse 1-see:AN-REFL 'I saw myself/I see myself'

If the downstairs clause has an unspecified subject, with semantic patient

coreferential with the subject of the upstairs desiderative, the resultant

complex verb is not *ná-vóom-ané-táno built on the downstairs unspecified

subject verb which would be expected, but rather:

70) ná-vóom-ähtsé-táno 1-see:AN-REFL-want 'I want to be seen'

I do not know why we have the morphology of the reflexive for the dead verb here

rather than that of an unspecified subject verb. In terms of a process model of

morphosyntax, both are detransitivizing suffixes.

Contrast 70) with 71):

71) ná-vóom-á-tanó-'tov-ahtse 1-see:AN-DEAD-want-TRANS:AN-REFL 'I want to see myself'

Here the downstairs clause is reflexive. This is shown by the reflexive marking

which is suffixed to the resultant lexical union complex predicate. The dead

verb marking with -á glossed as 'DEAD' correlates, as we have seen, with

bivalence of the downstairs verb. It is as if the complex verb of 71) reflects

transitivity all the way until it gets to the word-final REFL marker which is a

detransitivizer.

Finally, we must note that desiderative -tano requires that there be

Equi-subjects. The following attempt to say 'I want you to eat' is

ungrammatical:

72) *né-mésehé-tanó-'tov-atse 2-eat-want-TRANS:AN-INV:1 (DLB) Contrast 72) with 73), which superficially looks similar, but has Equi-subjects,

so is grammatical:

73) né-vóom-á-tanó-'tov-àtse2-see:AN-DEAD-want-TRANS:AN-INV:1'I want to see you' (DLB)

If the downstairs subject is not coreferential with the upstairs subject, a

Cheyenne speaker must switch to a different construction, using a different verb

of wanting in the independent order and the downstairs complement verb in the

conjunct or independent order, e.g.:

74) é-me'-méséhé-stove né-hesetam-àtse
3-should-eat-IMPERS 2-wish:AN-INV:1
'I want you to eat (lit. there should be eating, I'm thinking about you)' (VS)

According to F&V, 74) has peripheral juncture (the two verbs could

conceivably have different illocutionary force). It is a little more difficult

to identify the type of nexus. F&V do not speak of semantic versus syntactic

nexus, but it would appear to me that this may be an example requiring such a

differentiation. Syntactically, neither independent verb in 74) depends upon

the other for any operator or argument. So, syntactically nexus would appear to

be coordination (the juncts are in a whole-whole equivalence relation). But

semantically, I would regard the first verb as depending upon the second for its

notional (understood) subject, i.e. second person singular, hence the first verb

would seem to be in a semantic subordinate nexus relation to the second verb. An alternate way of encoding wishes is to use the optative prefix momóxe-

which governs conjunct verbs:

75) tá'tóhe ne-nésonė-hane momóxė-hé-too'hamė-stse that 2poss-child-1PL.excl OPT-PURP-bathe-3 'I wish for our child to bathe.' (JG)

There is no Equi-subject constraint with this prefix. Functionally, this is

understandable, since the optative prefix assumes a first person singular

speaker making the wish, so this leaves room for other person combinations to be

reflected in the verbal morphology. With -tano, however, attempting to get

non-Equi-subjects introduces too much morphology, cluttering up the verb so much

it is ungrammatical. In light of the apparent Equi-subject constraint on -tano,

the following complicated verb found in a song composed by an old very fluent

speaker is very interesting:

76) né-vé'še-véstähém-ähtsé-tanó-'tov-atse-meno
 2-INSTR-help:AN-REFL-want-TRANS:AN-INV:1-1PL
 'We want you to help us through him' (MF Song #32)

The first word of the song is a vocative, addressed as ma'heo'o 'God'. The

person who is to do the helping, is then introduced as the next word, ne-e'ha

'your (i.e. God's) son'. So there is a third person singular involved

pragmatically anyway in the verb of 76). This third person is registered on the

verb as instrument. Treating 'him' as a RG term or F&V core argument would

apparently complicate the verb too much. The English gloss gives the appearance that the downstairs subject is not coreferential with the upstairs subject (we (excl.) =/ you (sg.)). But this may just be superficial appearance. The downstairs verb has been detransitivized with the reflexive suffix. Second person and inverse voice first person plural are marked, respectively, by the resultant complex predicate prefix and suffixes. I have attempted to analyze the resultant verb with an RG network. The initial relations appear to be:



Even though I have tried a number of RG solutions for final syntactic relations,

such as use of downstairs antipassive (to detransitive), I have been unable to

find an analysis that fully accounts for all the person marking on this verb¹⁷.

One possibility is to say that Algonquian inverse voice verbs are syntactic passives (as claimed by Rhodes (1976), but denied by most other Algonquianists, including RG proponent Frantz (p.c.)). Then, we could perhaps say that the Equi-subject constraint actually is something of a broader Equi-constraint which would allow coreferentiality between the upstairs subject and either the downstairs subject or (in certain contexts, such as inverse forms?) the downstairs object. Clearly, this theoretical impasse is interesting. We will continue thinking about it, but cannot discuss about it further here.

Much more of syntactic interest could be said about desiderative

constructions, but we are limited by space in this survey and must move on to

causatives.

4.3.7 Causatives

Like many other languages Cheyenne has a variety of ways to encode

causation. As has been described for other languages (e.g. Comrie 1981:164ff),

the degrees of syntactic "binding" reflect varying degrees of semantic

parameters such as directness of the causality.

An example of a periphrastic causative is:

77) ná-vonöhósem-a ho'soo'ė-stse 1-urge:AN-INV:3 dance-IMPV 'He made me dance' (DF data 7/68) There are two independent verbs. Juncture is peripheral, since there is an independent verb with indicative illocutionary force followed by a verb with a different illocutionary force, i.e. imperative. Nexus is syntactically coordinate, but I feel that the second verb is semantically dependent on the first, so perhaps there is semantic nexus. The independent verb glossed as 'urge' would also be used when one "sic 'em's" a dog to action. This periphrastic causative uses a semantically rich verb, and I would guess that other possible periphrastic causatives would also.

There are many lexical causatives in Cheyenne. Each of them takes a TA or

TI verb stem. An example is:

78) ná-ná'h-o 1-kill:AN-DIR:3 'I killed him'

In light of the debate stimulated by generative semanticists over 'kill'

being decomposed to 'cause to die', we can note, as an aside, that the

missionary Petter, while not a professional linguist, astutely observed sometime

before 1944 that the verb in 78) means 'I cause him death, (I) kill one'

(1952:89)¹⁸. This comment was made in the middle of discussion of the

"causative mode" of Cheyenne, where focus was placed upon the morphological

causative suffixes of Cheyenne which are TA -'seh and TI -'sestse /-sehté/.

As in other languages, in Cheyenne there are semantic differences between

lexical causatives and morphological causatives. Contrast the morphological

causative

79) ná-mané-'seh-a 1-drink-CAUS-INV:3 'He made me drink.'

with the lexical causative

80) ná-manoh-a 1-give.drink:AN-INV:3 'He gave me a drink/he watered me.'

The morphological causative implies some kind of force on the part of the

causer. The lexical causative does not, in fact, a reading involving force

would be strange with the lexical causative. Unlike with the desideratives, there is no Equi-subject constraint upon

morphological causatives. In fact, as would be expected, the usual situation

would be where the subject of the downstairs clause is specifically not

coreferential with the subject of the upstairs clause. Usually one forces

someone else, not oneself, to do something.

The downstairs verb may be intransitive:

81) ná-mésehé-'séh-o 1-eat-CAUS-DIR:3 'I made him eat.'

or transitive:

82) é-méséhé-'séh-ó-noto
3-eat-CAUS-DIR:OBV-OBV
'He made him (obv.) eat it/them (animate; obv.).'

Because Cheyenne obviative is indifferent as to number, 82) may be glossed as

'He made him eat it (animate 'it' or, of course, 'him')' or 'He made him eat

them (an.)'.

Suffixes on 82) are ordered as follows. The downstairs subject is marked

as upstairs object and immediately follows the causative suffix, while the

obviative marking for the downstairs object is word-final. The RG termhood of

the downstairs object is not entirely clear. Other forms, such as ditransitives

83) and 84), support the claim that Cheyenne has obligatory 3-2 ("Dative-shift")

advancement. Datives are marked as direct objects, even when a proposition

involves a patient which would normally be expected to be direct object:

- 83) ná-mét-o 1-give:AN-DIR:3 'I gave it to him'
- 84) ná-mét-o-nötse 1-give:AN-DIR:3-IIPL 'I gave them (inan.) to him'

The Cheyenne verb 'show' is a morphological causative. Marking for

arguments of 'show' seems to follow the same principles as marking for roles of

ditransitive 'give':

- 85) ná-vóó-'séh-o1-see-CAUS-DIR:3'I showed it to him (lit. I caused him to see it)'
- 86) ná-vóo-'seh-o-notse 1-see-CAUS-DIR:3-II

'I showed them (inan.) to him'

The downstairs subject takes the inner marking, while the downstairs object is the outer (word-final) marking. Appropriate adjustments are made for inverse voice person combinations.

Cheyenne causatives seem to follow the broad outline of person marking which has been described for causative clause unions in many other language, with the proviso of obligatory Dative-shift. Hence, upstairs subject remains upstairs subject. Downstairs object becomes upstairs object. Downstairs subject becomes upstairs indirect object (dative). Cheyenne obligatorily advances animate indirect objects to be direct object. The resulting direct object as well as the former direct object (the 2-ch<omeur) are both marked on the verb.

4.3.8 Multiple embedding

Cheyenne allows multiple embeddings of complements. We illustrate with an

example of a complex predicate taken from a text by ES. Remembering the

discussion on aspectual preverbs in 4.3.2, we assume for now that the preverbs

ohke"- and ase"- are complement controllers:

87) sé'ea'a é-ohke-ase-nohtóve-nestsé-tano-o'o ka'eškóne-ho right.away 3-regularly-start-know.how-speak.language-want-3PL child-PL 'Right away children start to want to know how to talk.' ("Family Harmony")



Scope relations are reflected in the ordering of predicates in the RG network, 88). Lexical unions (Equi-subject Clause Unions, except for putative Lowering Union with ohke- and possibly ase-) combine the various predicates into the resultant complex predicate. Note that several predicates have multiple dependency of their subjects to the pronominal 'they' cross-referenced to the nominal 'children'. This referent ultimately also becomes a dependent of the preverb -ohke. Equi-subject Clause Union gets rid of such redundancy leaving only one marking on the resultant complex predicate for the referent 'they', i.e. with the pronominal prefix for third person and verb-final suffix for

88)

plurality.

5. Summary

There is more that we wish we could say. Some details must await a fuller treatment on another occasion. Some details of uncertainty of analysis call for further thinking. But this treatment does give a rather complete survey of the basics of Cheyenne complementation constructions. We have seen that Cheyenne complement phenomena follow overall considerations of a syntactic binding hierarchy. We have examined various syntactic devices which are used to encode the varying degrees of binding.

We have seen that insights from the Role and Reference Grammar framework of

Foley and Van Valin are, in general, applicable to Cheyenne complementation.

Some phenomena may require additional details added to some of the F&V framework

of juncture and nexus, e.g. a possible differentiation of semantic and syntactic

nexus.

We have seen that important syntactic observations can be made for a polysynthetic language, such as Cheyenne, especially if we allow ourselves to include within the scope of our inquiry details on syntactic relationships reflected within verbal morphology.

We have claimed that it is helpful to speak of semantic as well as

syntactic complementation. Our intention has been to contribute to

cross-linguistic insights on how predicates in different languages can interact.

FOOTNOTES

¹I first became aware of this ergative perspective for Algonquian verbs

from Rhodes (1976).

²W. Leman (1979) labels these three categories as Attributive, Dubitative, and Mediate, respectively. [wl18Feb2014: I would now label them Reportative, Inferential, and Narrative, following Sarah Murray, Evidentiality and Illocutionary Mood in Cheyenne, to appear, IJAL]

³The verb stem is actually -mésehe. Placement of the morpheme boundary is

visually difficult. tsé-h-mésèhe-[to might be more accurate but is confusing.

The pronominal suffix is /-to(n)/. The underlying high pitch raises the pitch

of the preceding vowel, as described in W. Leman (1981). The derived raised

pitch on the penultimate vowel differentiates conjunct first person singular

from second person singular. Both personal suffixes are otherwise identical.

⁴The acute accent ´ indicates a high pitch. The grave diacritic represents a mid tone, e.g. ē. Unmarked tones are low pitched.

⁵The first person plural inclusive/exclusive distinction is neutralized in

the conjunct, as seen in example 6).

⁶We can say that Cheyenne seems to follow the basic ordering patterns given

by F&V in its verbal morphology. This would make a very interesting future

study.

⁷I believe strongly in the primacy of "natural" data. After several years of intensive fieldwork on Chevenne, spoken by a people who are often intimidated by English, the dominant language surrounding them, I have found it necessary to be very careful in trying to ferret out artificiality in data. Distortions of data can come about through inadequate direct elicitation techniques and/or English interference in the fieldwork context. For these reasons, I have a strong personal preference for using data which is found in good quality Chevenne texts. I try to have as much of the data as possible in this paper from such texts. But every fieldworker also knows that limiting oneself only to constructions found in texts also has distinct disadvantages, not the least of which is a time factor. One may look for years for a certain construction which happens not to occur commonly in the available texts, whereas the construction may be a perfectly natural one and can be obtained quickly through proper elicitation. I have tried to only include data in this paper which would be regarded as being "natural".

⁸Note that the verb stem here is hést-, phonemically /heht-/. This is a transitive stem, the transitivity indicated by the ht-. Many other stems in this paper also are marked for transitivity, but analyzing each instance would

unnecessarily complicate our glosses at this point. Rhodes (1976) helpfully analyzes marking such as the ht- here as "stem agreement markers" (SAM's). Hereafter in this paper, we shall indicate transitivity of stems, as, for example, vóom- 'see:AN' and vóoht- 'see:INAN'. While the m- and ht- SAM's are easily seen here, in other forms there are complications with the phonology and morphology of SAM's which are irrelevant to our focus on complementation, and so we will use this simplified method of glossing.

⁹I called this conjunct construction an "intensive negative" in my 1979 grammar treatment. The use of the conjunct prefix (mó)(x)ho'nó- is probably parallel to negative apuu of Montagnais which only governs the conjunct, cf. Clarke (1982). In fact, Cheyenne (ho'nó)-, which some speakers use without word-initial mó-, may be cognate with the Montagnais negative. The mó- is probably the cliticized form of the particle móhe 'really?/maybe' which may act here as an intensifier.

¹⁰The preverb -éve means 'about' as in 'He is walking about' or 'He is about his father's business', not the 'about' of 'He's talking about Oregon'. ¹¹An alternate conclusion would be that contents of quotations or

cognitions really should not be considered as any kind of complement.

Difficulty we face in trying to fit the Cheyenne quotation contents into the nexus framework may be indication that they simply do not belong in the treatment of complements. This would be satisfying syntactically, but would constrain us more than I would like in terms of cross-linguistic description.

¹²This label, an extension of the commonly used Equi-Subject

(Transformation) label, was adopted by Frantz (1976a). Frantz' used it to cover the same kind of phasal phenomena for other polysynthetic languages, including some Algonquian data, which we are describing here for Cheyenne.

 13 The segment /v/ of 'see' is shared phonologically by morpheme-final /v/ of

'good'. 'I see you', without the preverb, is né-vóom-atse.

¹⁴Unless we somehow regarded he- as being transitive-like with a gloss something like 'purpose' as in 'He purposed to eat'. This possibility deserves further study.

¹⁵There are many other aspectual preverbs which an exhaustive treatment of Cheyenne would include, such as hetóse"- 'continually', hoove"- 'mistakenly, fruitlessly', måhov(e)- 'tiredly, tired' (e.g. with 'tired' as control predicate of complement 'work' ná-måhov-otse'ohe 'l'm tired of working'), etc. See a list of preverbs in W. Leman (1979:181). ¹⁶This word-final morpheme is an allomorph of the TA transitivizer -'tov described below in the text. The allomorphy is phonologically conditioned, the subject of a future paper.

¹⁷During my lengthy attempts I kept in mind an RG constraint (Frantz

1978a:196) that only (RG) terms can trigger verb agreement.

¹⁸Petter died in 1947. His grammar was printed posthumously.

REFERENCES

Aissen, Judith L. 1984. Control and command in Tzotzil purpose clauses. BLS

10:559-571.

Aissen, Judith L. and David M. Perlmutter. 1983. Clause reduction in Spanish. In

Studies in Relational Grammar I, ed. David M. Perlmutter. Chicago:

University of Chicago Press.

Bloomfield, Leonard. 1946. Algonquian. In Linguistic Structures of Native

America, ed. Harry Hoijer, 85-129. New York: Viking Fund.

Bresnan, Joan. 1982. Control and complementation. LI 13.343-434.

Bresnan, Joan. 1970. On complementizers: toward a syntactic theory of complement

types. Foundations of Language 6:197-321.

Clarke, Sandra. 1982. North-West River (Shesha-tshi-) Montagnais: a grammatical

sketch. Ottawa: National Museums of Canada.

Cole, Peter. 1984. Clause reduction in Ancash Quechua. In Syntax and Semantics,

Vol. 16: The Syntax of Native American Languages, ed. Eung-Do Cook and

Donna B. Gerdts, 105-121. New York: Academic Press.

Comrie, Bernard. 1981. Language universals and linguistic typology. Chicago:

University of Chicago Press.

Cooreman, Ann. 1984. A semantic basis for the choice of complement clause types

in Chamorro. BLS 10:572-582.

Craig, Colette. 1977. The structure of Jacaltec. Austin: University of Texas

Press.

Dahlstrom, Amy. 1983. Distinguishing inverse from passives. Paper delivered at

the 58th annual meeting of the LSA, Minneapolis. Ms.

Dixon, R.M.W. 1984. The semantic basis of syntactic properties. BLS 10:583-595.

Eilfort, William H. et al. 1985. Papers from the parasession on causatives and

agentivity. CLS.

Foley, William and Robert Van Valin. 1984. Functional syntax and universal

grammar. Cambridge University Press.

Frantz, Donald G. 1971. Toward a generative grammar of Blackfoot. Norman, Okla.:

SIL.

Frantz, Donald G. 1976a. Equi-subject clause union. BLS 2:179-187.

Frantz, Donald G. 1976b. Unspecified-subject phenomena in Algonquian. In Papers

of the Seventh Algonquian Conference, 1975, ed. William Cowan, 197-216.

Ottawa: Carleton University.

Frantz, Donald G. 1978a. Antipassive in Blackfoot. In Papers of the Ninth

Algonquian Conference, ed. William Cowan, 195-203. Ottawa: Carleton

University.

Frantz, Donald G. 1978b. Copying from complements in Blackfoot. In Linguistic

Studies of Native Canada, eds. Eung-Do Cook and Jonathan Kaye, 89-109.

Vancouver: University of British Colombia Press.

Frantz, Donald G. 1980. Ascensions to subject in Blackfoot. BLS 6:293-299.

Givón, T. 1980. The binding hierarchy and the typology of complements. Studies

in Language 4:333-377.

Givón, T. 1984. Syntax: a functional-typological introduction. Philadelphia:

John Benjamins.

Goddard, Ives. To appear. Post-transformational stem derivation in Fox. In

Papers and Studies in Contrastive Linguistics 22, ed. Poznán. Haiman, John and Sandra A. Thompson. 1984. "Subordination" in universal grammar.

BLS 10:510-523.

James, Deborah. 1984. Raising to subject in Moose Cree: a problem for

subjacency. In Syntax and Semantics, Vol. 16: The Syntax of Native American

Languages, eds. Eung-Do Cook and Donna B. Gerdts, pp. 205-213. New York:

Academic Press.

Johns, Alana. 1982. A unified analysis of relative clauses and questions in

Rainy River Ojibwa. In Papers of the Thirteenth Algonquian Conference, ed.

William Cowan, 161-168. Ottawa: Carleton University.

Lehmann, Christian. 1985. Towards a typology of clause linkage. Ms.

Leman, Elena. 1985. Cheyenne relative clauses. Ms.

Leman, Wayne. 1979. A reference grammar of the Cheyenne language. Vols. 1 and 2.
Occasional Publications in Anthropology, Linguistics Series No. 5. Greeley:
Museum of Anthropology, University of Northern Colorado. [revised as Leman, Wayne.
2012. A reference grammar of the Cheyenne language. Raleigh, North Carolina:
Lulu Press.]

Leman, Wayne, ed. 1980. Cheyenne texts: an introduction to Cheyenne literature.

Occasional Publications in Anthropology, Linguistics Series, No. 6.

Greeley: Museum of Anthropology, University of Northern Colorado.

Leman, Wayne. 1981. Cheyenne pitch rules. IJAL 47:283-309.

Longacre, Robert A. 1985. Sentences as combinations of clauses. In Language

Typology and Syntactic Description, ed. Timothy Shopen, 235-286. Cambridge:

Cambridge.

Munro, Pamela. 1982. On the transitivity of 'say' verbs. In Syntax and

Semantics, Volume 15, Studies in Transitivity, eds. Paul J. Hopper and

Sandra A. Thompson, 301-318. New York: Academic Press.

Murray, Sarah E. To appear. Evidentiality and Illocutionary Mood. IJAL.
Noonan, Michael. 1985. Complementation. In Language Typology and Syntactic

Description, ed. Timothy Shopen, 42-140. Cambridge: Cambridge. Pagotto, Louise. 1980. On complementizer adjuncts in the Rapid Lake dialect of

Algonquin. In Papers of the Eleventh Algonquian Conferene, ed. William

Cowan, 231-246. Ottawa: Carleton University.

Partee, Barbara H. 1973. The syntax and semantics of quotation. In A Festschrist

for Morris Halle, eds. S. Anderson and P. Kiparsky. New York: Holt,

Rinehart and Winston.

Petter, Rodolphe. 1915. English-Cheyenne dictionary. Kettle Falls, Wash.

Petter, Rodolphe. 1952. Cheyenne grammar. Newton, Kansas: Mennonite Publication

Office.

Rhodes, Richard. 1976. The morphosyntax of the Central Ojibwa verb. Ph.D.

dissertation. Ann Arbor: University of Michigan.

Rhodes, Richard. 1985. The consequential future in Cree and Ojibwa. IJAL

51:547-549.

Rude, Noel. 1985. Complementation in Nez Perce. Paper presented to the First

Annual Pacific Linguistics Conference. Eugene: University of Oregon. Ms.

Shibatani, M., ed. 1976. Syntax and semantics 6: The grammar of causative

constructions. New York: Academic Press.

Silverstein, Michael. 1981. Case marking and the nature of language. Australian

Journal of Linguistics 1:227-46.