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Modification, Secondary Predication and Multi-Verb Constructions in Lakota

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Abstract

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and Multi-Verb Constructions in Lakota

by

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This thesis is the first study of secondary predication in a Siouan language, specifically Lakota. It offers analysis on the syntactic, morphological and semantic level in the paradigm of Role and Reference Grammar.

A thorough analysis of secondary predication requires a good understanding of several other morpho-syntactic phenomena. Thus, the first part of this study is concerned with Lakota stative verbs and offers a comprehensive description of all syntactic constructions in which stative verbs function; specifically simple predication, complex predication and ad-nominal modification. The thesis introduces a novel approach to the analysis of constructions in which a stative verb (SV) is adjacent to a N, and shows that the stative verb is not a modifier, for which it has been taken in the research literature so far, but instead it forms a complex predicate with the noun. The SV can be a modifier only when it is internal to a reference phrase (RP), which requires the N+SV structure to be modified with a determiner (with the exception of plural RPs cross-referenced to the object argument). The SV can be a predicate only when the N and SV are separated by a definite article, partitive, quantitative or another word that can function as their separator (excluding indefinite articles). The chapter on stative verbs also makes important discoveries about the coding of the possessor of inalienable nouns, about linking of RPs cross-referenced with core arguments and about bare nouns.

The chapter on secondary predication includes a detailed discussion of the lexical and morphosyntactic composition of secondary predication. Under certain morphosyntactic conditions, there is a structural ambiguity involving Subject oriented Secondary Modification, Object oriented Secondary modification and Clausal complementation.

Secondary predicates are structurally divided into simple, serialized and complex. I claim that Lakota has been undergoing diachronic development from one preferred strategy of expressing depictive and resultative content to another, which is supported by the fact that the number of stative verbs that can function as secondary predicates has been decreasing during the time frame of text documentation (between 1840 and 2018).

The new strategy for expressing depictive and resultative content is one that involves modifiers derived primarily from stative verbs, but also from active verbs as well as from nouns, numerals and quantitatives. Within the RRG framework these modifiers are given the orientation neutral term ‘[derived] modifier’ (DM). They can function as ad-core modifiers (traditionally ‘adverbs’), ad-argument and ad-nominal modifiers (traditionally ‘adjectives’) and rarely as ad-nuclear modifiers (traditionally ‘adjectives’). Much attention is given to the morphophonemic properties of DMs as well as their orientation (to subject or object, to event or participant), to different types of DMs, and DMs with various types of lexical composition, such as modifiers derived from stative verbs, active verbs, nouns, *wo-* nouns, numerals, quantifiers, from passive voice construction, etc.

The last part of the thesis focuses on multi-verb constructions, primarily on Simultaneous Predicate Construction and Purpose Construction. It provides a detailed discussion of the defining properties, shared features and contrastive features of these two constructions that have not been clearly defined and distinguished in the extant literature. The multi-verb constructions are thoroughly analyzed with respect to their syntactic, morphological and semantic properties. The motivation for including a section on multi-verb construction in this study is that Simultaneous Predicate Constructions share many important morphosyntactic and semantic properties with secondary predication.

This thesis, therefore, explores the following four interrelated phenomena of Lakota syntax: (1) ad-nominal modification with stative verbs, (2) modification with derived modifiers, (3) secondary predication, and (4) multi-verb constructions. The study disproves a number of widely held notions about Lakota, clarifies some outstanding issues, and identifies several hitherto unknown features in the language.

The investigation also covers other types of modification, such incorporated premodification. The study provides a novel approach to the analysis of the Lakota passive voice especially with respect to the status of the passive actor and the use of the passive for RP-internal and RP-external modification. The investigation is also concerned with RP linkage, RP cross-referencing to core arguments, noun incorporation and clausal complementation, as all of these areas are relevant for the discussion of modification and secondary predication. For instance, under certain morphosyntactic conditions, there is a structural ambiguity where two identical strings of morphemes can realize two different syntactic structures. Such structural ambiguity exists for instance between secondary modification and clausal complementation.

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Responsibility for any errors in the resulting work remains my own.

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To Ela and Sophie

Abbreviations

A, ACT	actor	INDEF	indefinite
A _T	actor of transitive verb	INST	instrumental
ACC	accusative	INTJ	interjection
ADD	additive particle	imp	Intermediate Phrase
ADV	adverb	IP	Intonational Phrase
AF	aforementioned	IRR	irrealis
AFF	affix	LDP	left detached position
ANIM	animate	LOC	locative
ASSER	assertion	LSC	layered structure of the clause
APPL	applicative	LSNP	layered structure of the noun phrase
AUX	auxiliary	LSW	layered structure of the word
AV	active verb	MOD	modifier
CAUS	causative	M	masculine
CLM	clause-lineage marker	MP	modifier phrase
CLS	classifier	MSP	male speaker
CMPL	complementizer	N	noun
CNTR	contrastive	NEG	negation
CONT	continuative	NI	noun incorporation
DAR	Dakota Accent Rule (see DSR)	NMR	non-macrorole
DAT1	first dative	NOM	nominative
DAT2	second dative	NP	noun phrase
DEC	declarative	NFPF	NP-final position
DEF	definite / definiteness	NPIP	NP-initial position
DEIC	deictic	NUC	nucleus
DEM	demonstrative	NUM	numeral
DER	morphological derivation / derivator	OBJ	object
DET	determiner	P	postposition (preposition)
DIM	diminutive	PART	particle
DIST	distal	PASS	passive voice
DL	1 st dual	PC	purpose construction
DSR	Dakota Stress Rule	PER	periphery
DTR	detransitiviser	PL	plural
ECS	extra-core slot	POSS	possessive
EUPH	euphonic consonant	PoCS	PostCore slot
F	focus	PP	postpositional (prepositional) phrase
FSP	female speaker	PrCS	PreCore slot
FUT	future	PRED	predicate
F0	fundamental frequency of the voice (pitch contour)	PRO	pronoun
HAB	habitual particle	PROG	progressive
HSY	hearsay	PSA	privileged syntactic argument
IF	illocutionary force	Q	interrogative marker
IMP	imperative	QLT	quality
INAN	inanimate		

QNT	quantifier	SUB	subject
PRED	predicate	SUFF	suffix
PriP	primary predicate	SV	stative verb
PROP	proper	TRC	truncated
PSR	possessor	U, UND	undergoer
RC	relative clause	U _T	undergoer of transitive verb
RDP	right-detached position	V	verb
RECIP	reciprocal	V1	verb 1 (the first verb in a two-verb construction)
REFL	reflexive	V2	verb 2 (the second verb in a two-verb construction)
REL	relative	VP	verb phrase
REST	restrictive	XP	phrase of category X
RP	reference phrase	VAG	signals vague property
RFPF	RP final position		
RPIP	RP initial position		
RRG	Role and Reference Grammar	1	first person
SG	singular	2	second person
sb	somebody (for object of transitive verbs)	3	third person
SimPC	Simultaneous Predicate Construction	sg	singular number
smth	something (for object of transitive verbs)	du	dual number
SP	secondary predicate	pl	plural number
SPC	secondary predicate construction	-	morpheme boundary
		=	clitic break
		*	ungrammatical

Sources of data

ACC	Alex Charging Crow manuscript (undated, probably recorded in 1930s)
ASB	Alvin Slow Bear (audio recorded texts)
BBB	Ben Black Bear (1976)
BBBJ	Ben Black Bear, Jr (audio recorded texts, 2005-2018)
BCC	Brian Charging Cloud (audio recorded text, Kili Radio, 1998-2018)
BD	Boas&Deloria: Dakota Grammar, 1941
BEE	Ben Ealk Eagle (audio recorded texts)
BLT	Bill Little Thunder (audio recorded texts, 1992)
BO	George Bushotter (Lakota Texts, manuscript, 1887)
BQ	Bill Quijas (audio recorded texts, 2017-2018)
BQ-WOL	Bill Quijas – Words of Life (audio recorded texts, 1970s)
BT	Buechel Text Collection (Buechel: 1978), collected between 1910 and 1918
Bue	Buechel Dictionary (Buechel 1970)
CLH	Cecilia Looking Horse (short narratives, 1992, 1996)
CWE	Charlie White Elk (audio recorded texts)
DAS	Deloria' archival material, assorted
DBE	David Bald Eagle (audio recorded texts, 2005-2008)
DBW	Dewey Bad Warrior (short Lakota texts written in 2010-2013)
DelID	Deloria's list of idioms and similes
DLH	Darlene Last Horse (audio recorded texts, 2003-2016)
DT	Dakota Texts (Deloria, 1932)
DTA	Delores Taken Alive (audio recorded texts, 2005-2016)
DW	David West (audio recorded texts, 1992-2014)
EDT	Ella Deloria archival texts (Aut: autobiographies, Col: texts in colloquial style, Leg: legends, Misc: Miscellaneous, Inf: Stories in informal style, Spea: speeches, Eth: Ethnographic texts, Tales: Tales)
EFT	Edgar Fire Thunder (written text, 1937)
EJ	Eli James (in CULP reader, 1976)
ELH	Everett Lone Hill (audio recorded texts, 2006-2007)
FFC	Frank Fools Crow (audio recorded texts, 1970s, University of South Dakota Archive)
FREH	Florine Red Ear Horse (audio recorded texts, 1994)
GS	George Sword manuscript (1896-1910)
IEC	Iris Eagle Chasing (audio recorded texts, 2005-2016)
IS	Ivan Star (audio recorded texts, 2003-2012)
IS-LE	Ivan Star: Lakota Eyapaha, Lakota Books, 1996
JAH	John Around Him (audio recorded texts, 1992)
JHR	Johnson Holly Rock (audio recorded texts, 2003-2010)
KBHB	Kayo Bad Heart Bull (audio recorded texts, 2002-2012)
KILI	KILI Radio, South Dakota
KLT	Kenny Little Thunder (audio recorded texts, 2008-2015)
MAH	Marta American Horse (audio recorded texts, 2017-2018)
MARC	Mary Ann Red Cloud (audio recorded texts, 1992-2008)
MAT	Marquette University Archive Lakota texts (1973-1979)
MCE	Marylyn Circle Eagle

ML	Mary Light (audio recorded texts, 1994)
MLH	Mell Lone Hill (audio recorded texts, 1992-2015)
NBC	Norman Blue Coat (audio recorded texts, 2009-2012)
NSB	Neva Standing Bear (audio recorded texts, 1994)
ORA	Olney Runs After (1973, audio narrative recorded by Allan Taylor)
PBT	Pond Brothers' Texts in Dakota and partly in Lakota (recorded around 1840)
PL	Philomine Lakota (audio recorded texts 2003-2016)
PL-SH	Philomine Lakota in Margaret Bateson-Hill, Philomine Lakota: Shota and the Star Quilt, Zero to Ten Unlimited, 1998
PM	Philomine Moran (short texts 2017-2018, grammaticality judgment)
RFB	Richard Fools Bull (audio recorded texts, recorded by Allan Taylor, 1970s)
RFT	Rudy Fire Thunder (audio recorded texts, 1992-1996)
RTC	Robert Two Crow (audio recorded texts, 1992-2018)
SBB	Sandra Black Bear (audio recorded texts, 2008-2016)
SHE	Suella High Elk (audio recorded texts, 1994-2018)
TT	Thomas Tyon manuscript (early 1900s)
VDS	Vine Deloria Sr. (audio recorded texts, unknown date, cca 1960s)
WOL	Words of Life (audio recorded texts, unknown speakers, 1970s)
WS	Lakota texts narrated by William Schweigman (1970s)

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1. Introduction

1.1. Goals

Lakota has traditionally been described as a language that lacks an adjective class because attributive concepts are expressed with stative verbs which can constitute a clause on their own, i.e. they can function without a copula. Due to the assumed lack of adjectives in Lakota we have to ask the following questions:

- 1) How is attributive modification expressed without adjectives?
- 2) Does both RP-internal and RP-external modification exist and if so, are the two types of modification identical or different structurally and morphologically?
- 3) Since Lakota lacks adjectives, does it also lack secondary predicate constructions (a syntactic construction whose lexical composition is predominantly adjectival cross-linguistically)?
- 4) If secondary predication exists, how is it different structurally from other multi-verb constructions which are so salient in Lakota?
- 5) Given the lack of adjectives in Lakota, are there alternative word classes or morphosyntactic constructions used for modification?
- 6) Can Lakota stative verbs be liberated from their predicative function, and if so, how?
- 7) What are the defining properties of attributive modification, stative predication and secondary predication in Lakota?
- 8) What types of modification are there in Lakota?

One of the questions that motivated the investigation in the present thesis is the following: “How does Lakota express attributive concepts given the fact that there are no adjectives?”

This question establishes the most immediate goal of this research as an investigation of modification and other syntactic phenomena that express attributive concepts, such as relative clauses. However, as will be seen in the relevant chapters, ad-nominal modification is divided into RP-internal and RP-external and the latter is interrelated with manner modification (traditionally ‘adverbial’).

Since derived modification shares a common semantic space with secondary predication, the investigation of the latter is also one of the main goals of this thesis.

Secondary predication is a multi-verb construction and it shares numerous morphophonemic properties with Simultaneous Predicate Constructions (SimPCs), whereas the latter shares properties with Purposive Constructions (PCs). Consequently, a thorough description of SimPCs and PCs is also one of the goals of the current research.

From a theoretical perspective, the goals represent a morphosyntactic and semantic exploration of the phenomena listed above within the Role and Reference Grammar framework, establishing the nexus relation and juncture type for each of the investigated constructions.

The selection of syntactic phenomena to be researched was not made randomly, but rather, it was motivated by the fact that they share numerous structural and semantic properties through which they are interlinked.

For instance, stative verb predication and secondary predication are related through the involvement of stative verbs. Attributive modification shares semantic similarities

with both secondary predicates and derived modifiers. And lastly, secondary predicates are syntactically very similar to simultaneous predicate constructions, which in turn share many defining properties with purpose constructions. In this way all of the phenomena under investigation are related syntactically, semantically and morphologically.

1.2. Theoretical framework (RRG)

This and the following section offer an introduction to some of the most relevant features of RRG. This introduction is necessarily very brief. For a more detailed treatment, see Van Valin 2005, on which the following text is largely based.

This thesis is written within the theoretical framework of Role and Reference Grammar [RRG] developed primarily by Robert D. Van Valin Jr, who states the following about the motivation for developing a new theory.

RRG grew out of an attempt to answer two basic questions, which were originally posed during the mid-1970s: (1) what would linguistic theory look like if it were based on the analysis of languages with diverse structures such as Lakhota, Tagalog and Dyirbal, rather than on the analysis of English?, and (2) how can the interaction of syntax, semantics and pragmatics in different grammatical systems best be captured and explained? (Van Valin, 2005: 1)

In order to answer these questions, the theory has developed typologically motivated descriptive tools and theoretical principles, which can be visualized in three main representations: (1) a representation of the syntactic structure of sentences, which corresponds closely to the actual structural form of utterances, (2) a semantic representation representing important facets of the meaning of linguistic expressions, and (3) a representation of the information (focus) structure of the utterance, which is related to its communicative function. (Van Valin, 2005: 1).

There are the following two reasons why RRG was chosen as the theoretical framework for this study. (1) Since the research on Lakota played a key role in the motivation for the development of the new theory, especially with respect to the notion that traditional theories could not satisfactorily explain syntactic phenomena in the Lakota language, RRG holds a promise that it will be able to explain previously unknown or under-analyzed syntactic constructions of Lakota. (2) As this is primarily a study on secondary predication and derived modification, it is intriguing to find out if RRG offers solutions to some of the difficulties in describing these syntactic constructions which were encountered using traditional approaches.

The promise that RRG will be able to satisfactorily explain previously under-analyzed syntactic phenomena in Lakota is articulated by Van Valin (2005: 3) in the two general considerations that a theory of clause structure must meet. They are given in (1).

(1) General considerations for a theory of clause structure:

- a. A theory of clause structure should capture all of the universal features of clauses without imposing features on languages in which there is no evidence for them.
- b. A theory should represent comparable structures in different languages in comparable ways.

These are very strong conditions, especially considering that RRG does not posit any abstract underlying syntactic representations; the syntactic representation of a sentence corresponds closely to its actually occurring form (Van Valin, *ibid*).

1.2.1. The layered structure of the clause

“The layered structure of the clause” [LSC] is the RRG notion of (non-relational) clause structure, which is based in the following two contrasts (Van Valin 2005:4):

- (a) between the predicate and non-predicating elements
- (b) among the non-predicating elements, between arguments and non-arguments, i.e. between those RPs and adpositional phrases which are arguments of the predicate and those which are not.

These two contrasts can be visualized in the box diagram in Figure 1.1

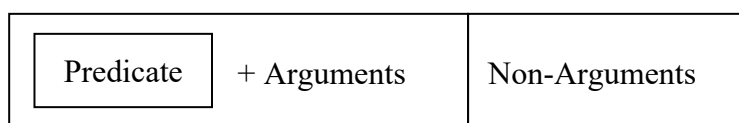


Figure 1.1 *Universal oppositions underlying clause structure (Van Valin, 2005:4)*

Taking these two contrasts as the fundamentals for clause structure, the RRG uses three primary constituent units of the clause. They are (1) ‘nucleus’, which contains the predicate (usually, but not always a verb), (2) the ‘core’, which contains the nucleus and the arguments of the predicate, and (3) a ‘periphery’, which subsumes non-arguments of the predicate, e.g. setting locative and temporal phrases. This may be represented as in the box diagram in Figure 1.2.

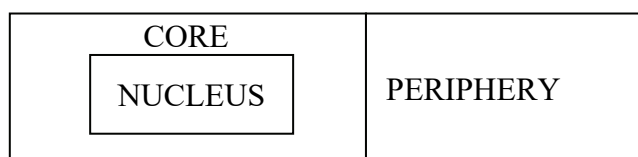


Figure 1.2 *Components of the LSC. (Van Valin, 2005:4)*

An example of the three primary constituent units with actual language is given in Figure 1.3.

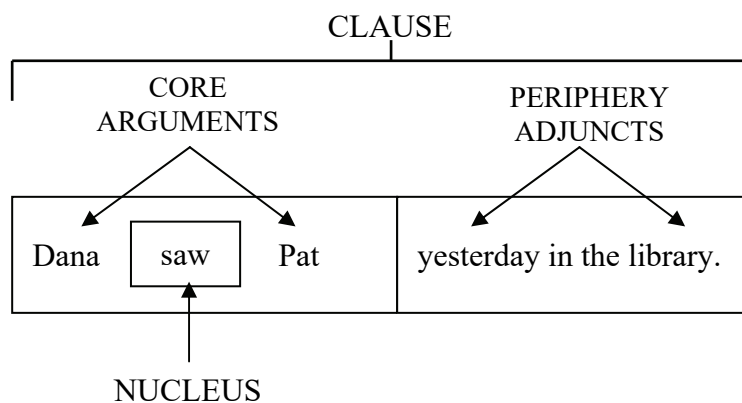


Figure 1.3 *An English example of components of the LSC. (Van Valin, 2005:4)*

Since Lakota is a head-marking language, the representation of arguments in the layered structure of the clause is different from how it is shown in Figure 1.3 for an English sentence. In Lakota, core arguments are obligatorily coded as affixes on the verb and optionally as independent reference phrases (RP). Thus whenever an argument is coded by an independent RP, it is in effect coded twice. The affixes, which are the obligatory part, are in their slots within the verb, while the RP is linked to a position inside the clause but outside of the core (Van Valin, 2005:147).¹

This can be represented informally in the box diagram in Figure 1.4.

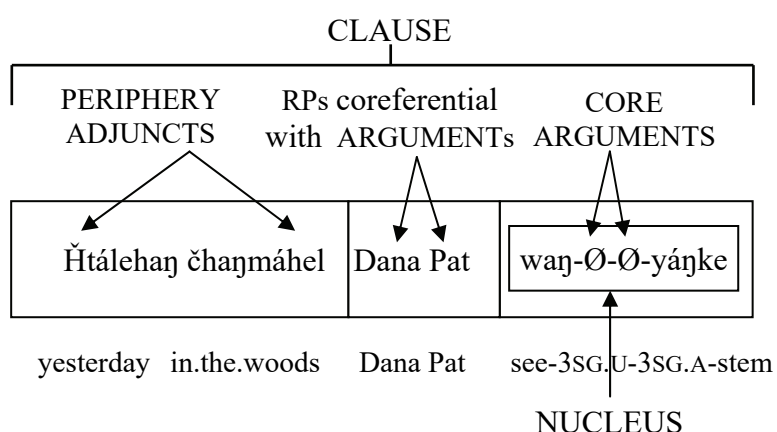


Figure 1.4 *Components of the layered structure of the clause (Lakota).*

¹ It is argued convincingly in Van Valin 2013 that Lakota argument affixes cannot be pronominal but are ‘pronominal anaphors’ instead.

The RRG constituent projection of the sentence in Figure 1.4 is given in Figure 1.5. The tree shows that both of the arguments of the transitive predicate *wanyánka* ‘to see sb/smith’ (which is in the NUCLEUS) are zero coded and are part of the CORE. Cross-referenced with these core arguments are the two reference phrases (RP) representing the actor (Dana) and undergoer (Pat), which are not part of the CORE but are linked to the predicate at the clause level (they are core external but clause internal and their position can be labeled ‘extra-core slot’ or ECS, Van Valin, 2013). The adverbials are in the periphery of the core as they modify the predicate.

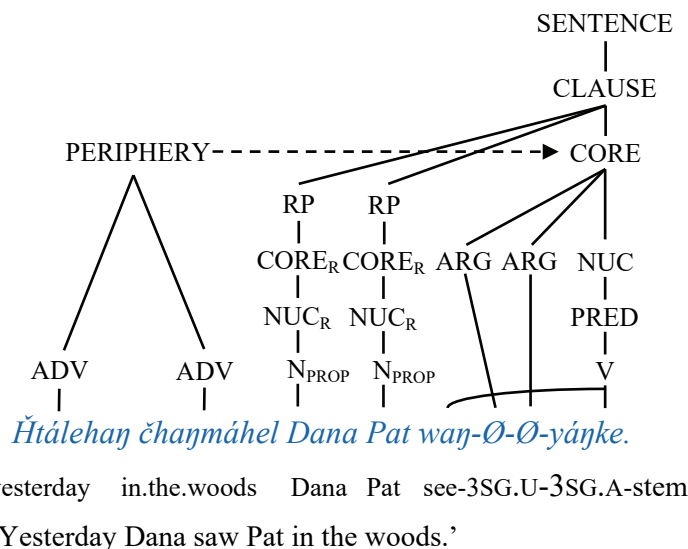


Figure 1.5 Projection of arguments and RPs in Lakota (a head marking language).

In essence this means that in Lakota RPs expressing subject or object are never core arguments, but instead they are optional phrases linked at the clause level. So whenever the text of this thesis talks about subject RP or object RP, the optional phrase linked at clause level are meant, rather than the obligatory core arguments.

The same type of linking is applied to clausal argument, i.e. complement clauses, where the complement clause is cross-referenced to the object core argument in the

matrix clause predicate and linked at the clause level. Therefore, whenever the present study discusses complement clauses, the reference is to clausal arguments cross-referenced to the core arguments and linked at the clause level.

The semantic motivation for the units of the layered structure of the clause is summarized in Table 1.1 (*Van Valin 2005:5*).

Table 1.1 *Semantic units underlying the syntactic units of the LSC*

Semantic element(s)	Syntactic units
Predicate	Nucleus
Argument in semantic representation of predicate	Core argument
Non-argument	Periphery
Predicate + Arguments	Core
Predicate + Arguments + Non-arguments	Clause (= Core + Periphery)

Table 1.1 gives the universal correlations of the LSC but the LSCs of individual languages can vary from it. The LSC in Lakota differs from the universal LSC in that a clause has the following constituents: Clause (=Core + RPs cross-referenced by a core argument + Peripheries). Independent RPs do not constitute a new layer or unit but occur in what is not the ‘expected’ layer, from the point of view of dependent-marking languages (Van Valin, p.c.).

Another important component of the RRG theory of clause structure is the theory of operators. Grammatical categories like aspect, tense, modality and illocutionary force are treated as operators which modify different layers of the clause. Each of the clause levels may be modified by one or more operators and operators are represented in a separate projection of the clause, one that is shown below the sentence. The operators are summarized in Table 1.2 (from Van Valin 2005: 9).

Table 1.2 Operators in the layered structure of the clause

Nuclear operators:

Aspect

Negation

Directionals (only those modifying orientation of action or event without reference to participants)

Core operators:

Directionals (only those expressing the orientation or motion of one participant with reference to another participant or to the speaker)

Event quantification

Modality (root modals, e.g. ability, permission, obligation)

Internal (narrow scope) negation

Clausal operators:

Status (epistemic modals, external negation)

Tense

Evidentials

Illocutionary force

The nuclear operators have scope over the nucleus; they modify the action, event or state itself without reference to the participants. Core operators modify the relation between a core argument, normally the actor, and the action; this is especially true of core directionals and modality. Clausal operators modify the clause as a whole. (Van Valin, 2005).

For a full account of clause and RP operators see Van Valin (2005).

Operators are represented in a separate projection of the clause since are technically not part of the nucleus, core or periphery. Thus operators are shown below the transcription of the sentence in what is called the ‘operator projection’, whereas the top part of the syntactic representation (above the sentence) is termed ‘constituent projection’. The two projections are connected via the nucleus, which is the central element in the clause since it defines the range of possible argument, and because the operator grammatical categories are oriented to it. This is illustrated in Figure 1.6 (Van Valin 2005) which shows a schema of the ‘projection grammar’. This

generalized formalization, based on the investigation of the world's languages, is sufficient to account for the syntactic structures found in those languages.

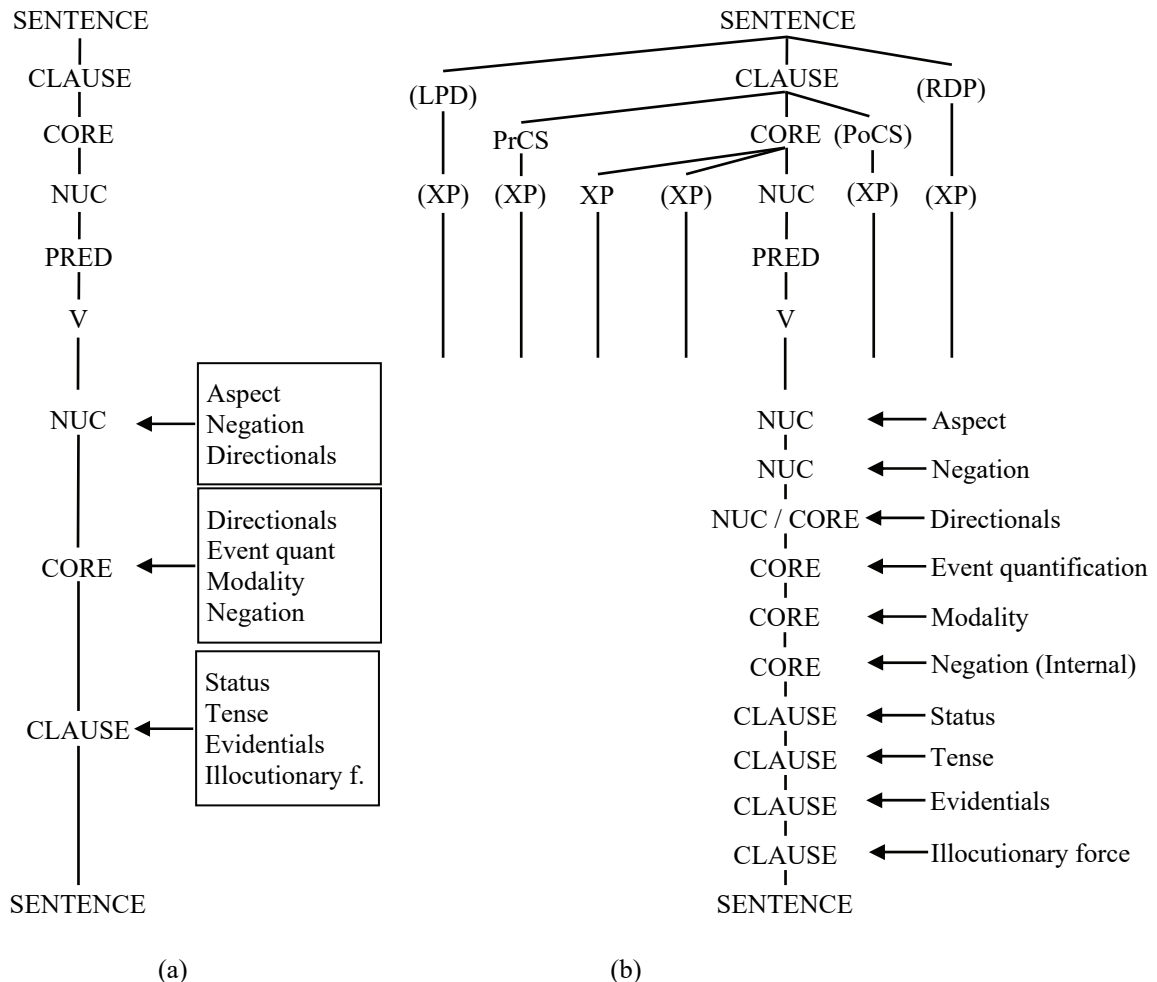


Figure 1.6 *Abstract LSC with constituent and operator projections, extra-core slots and detached positions*

The PreCore Slot (PrCS) is the position in which WH words appear in many languages, and it is also a position of focal and topicalized elements. Some verb-final languages use the PostCore Slot (PoCS) for WH words, which can also be a special position for focal elements. A simple sentence may also include a phrase in a detached position, such as the Left Detached Position (LDP), used for left-dislocation and as a special position for topical elements, and the Right Detached Position (RDP), which is typically used for clarification or afterthought.

RRG employs ‘syntactic templates’ instead of phrase-structure rules. The templates are stored in a ‘syntactic inventory’, which shows substantial cross-linguistic variation across languages. Languages that lack the postcore slot, for instance, will not have the template for it. Languages with fixed word order the templates will be ordered, whereas they would be unordered in languages with flexible word order to various degrees and other factors would determine the ordering in a specific proposition. Templates are merged to form the constituent projection of the syntactic representation of a sentence. For more details on SLC and templates, see Van Valin 2005.

1.2.2. Nexus relations and juncture types

One of the distinctive features of RRG is the fact that it recognizes three, rather than two, interclausal relation types or ‘nexus relations’. Traditional, structural and generative grammar have all worked on the assumption that coordination and subordination are the only possible types of clausal linkages. RRG, on the other hand, recognizes the following three nexus relations: **coordination**, **subordination** and **cosubordination** (a term adopted from Olson, 1981). They may be represented schematically as in Figure 1.7

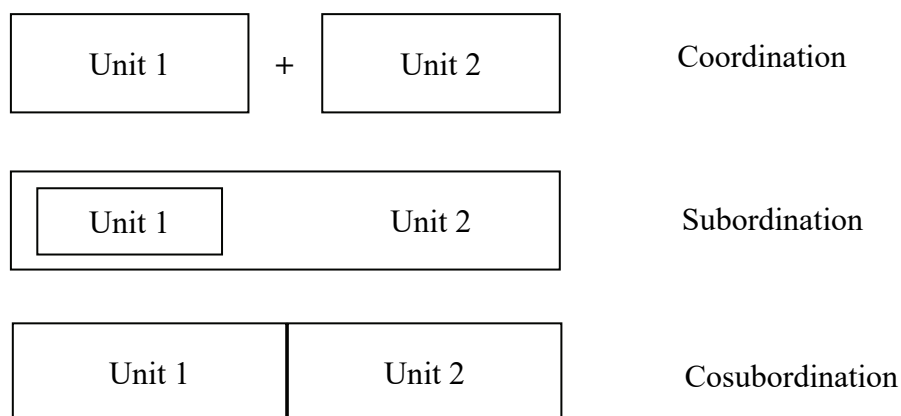


Figure 1.7 *Nexus types (Van Valin, 2005)*

The three nexus types can be described as follows (Van Valin, 2005):

Coordination is characterized by the joining of two or more units of equal size and status, and, in the case of whole clauses, all of the clauses have the form of independent main clauses.

Subordination involves the embedding of one unit in another, and the embedded unit does not normally have the form of independent main clauses. The embedded clause functions either as an argument, as in complementation, or as a modifier, as in adverbial subordinate clauses.

Cosubordination at clausal level is distinguished from coordination by clausal operator dependence. Thus it involves operator dependence between the units, unlike coordination, but not embedding, unlike subordination. Cosubordination at subclausal units is characterized by operator dependence at the level of linkage.

All three nexus types apply not only to clausal units, but also to subclausal units, i.e. the nucleus and the core. The nature of the units being linked is termed ‘juncture’ in RRG, and the three primary juncture types are represented schematically in (2).

(2) Juncture types (Van Valin 2005, 188)

Nuclear juncture:	[CORE ... [NUC ...] ... + ... [NUC ...] ...]
Core juncture:	[CLAUSE ... [CORE ...] ... + ... [CORE ...] ...]
Clause juncture:	[SENTENCE ... [CLAUSE ...] ... + ... [CLAUSE ...] ...]

There are, then, the following three primary levels of juncture: (i) clausal, (ii) core and (iii) nuclear, and there are three possible nexus relations among the units in the juncture: (a) coordination, (b) subordination and (c) cosubordination. All three types of nexus are possible in all three forms of juncture, and this yields nine juncture-nexus types in universal grammar. There are in addition two more juncture-nexus

combinations, which are unique in that for the level of juncture the full range of nexus types is not available. (Van Valin, 2005: 191)

The eleven juncture-nexus combinations are summarized in Figure 1.8.

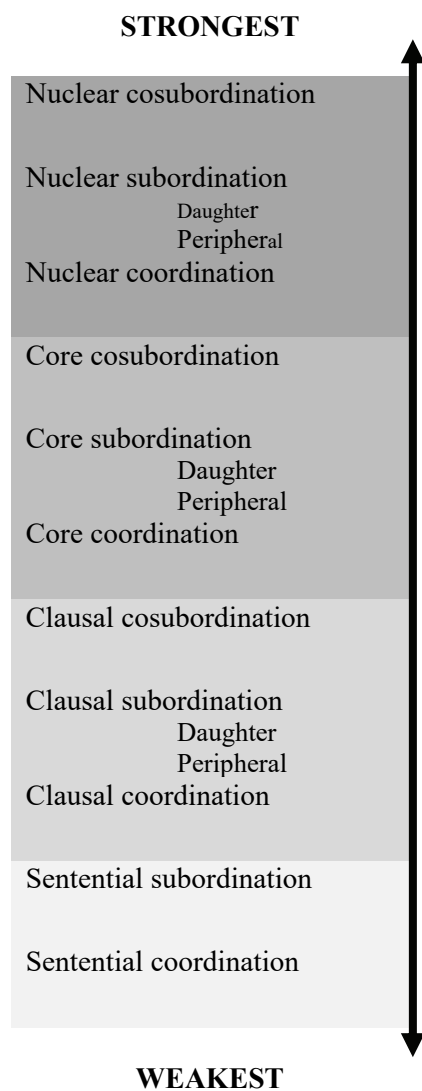


Figure 1.8 *Eleven juncture-nexus types in universal grammar (Van Valin, 2005)*

The juncture-nexus combinations in Figure 1.8 are ranked hierarchically with respect to the strength of the syntactic bond between the units, i.e. based on how integrated the units are into a single unit or how distinctly they are coded as separate units. Note that at three of the four levels, subordination can be realized as a daughter

of the node at the given level or as a periphery of the node. Peripheral subordination involves non-arguments.

The current investigation will map the syntactic constructions under consideration onto this hierarchy.

1.2.3. Semantic Roles and Grammatical Relations

RRG recognizes three levels of semantic roles. The first involves ‘verb-specific’ **semantic roles**, such as speaker, thinker, dancer, etc. The second contains **thematic relations**, which are generalizations of the verb-specific roles, e.g. agent, patient, theme, etc. The third includes semantic roles, which are generalizations over thematic roles, termed semantic macro-roles, **actor** and **undergoer**. The relationships among the three types of semantic roles are summarized in Figure 1.9 (Van Valin, 2005).

Whereas the present study is concerned primarily with the syntactic analysis of the investigated constructions rather than with the linking between semantic roles and syntax, it is nonetheless important to introduce the semantic macroroles in order to explain the terminology used for grammatical relations.

RRG posits a single, construction-specific grammatical relation, which is termed the ‘Privileged Syntactic Argument of a grammatical construction’ [PSA]. The non-PSA syntactic arguments are referred to as Direct Core Argument (DCA) or Oblique Core Argument (OCA). Van Valin (2005: 94) states that “[i]n order for a privileged syntactic argument to exist, there must be a restricted neutralization of semantic roles associated with the privileged function in the construction; if there is no restricted neutralization ... then there are no grounds for positing specific non-semantic relations like subject and direct object.”

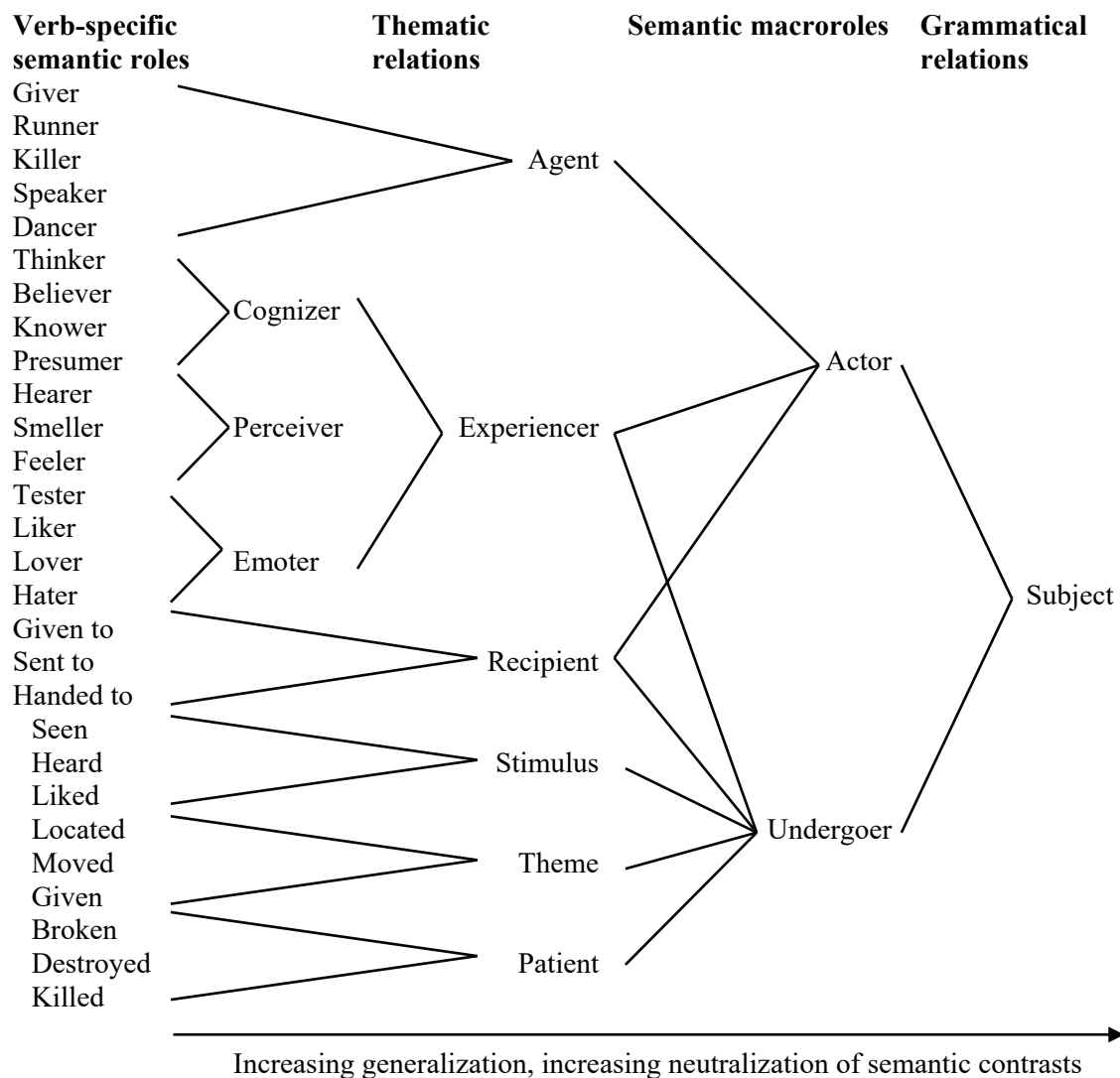


Figure 1.9 *Continuum from verb-specific semantic roles to grammatical relations*

With respect to the Lakota language, there is data suggesting that positing an invariable PSA is plausible. A clear cut PSA property is the ability to be the pivot in an obligatory control construction with a verb like *iyúthA* ‘to try’, as in (3). Actors, regardless of the transitivity of the verb, can function as the pivot in this construction; undergoers of intransitive, but not transitive verbs, can also serve as the pivot. In (3a),

the pivot (omitted shared argument) is a transitive actor, in (3b), the pivot is an intransitive actor, and the data in (3c) is the crucial example showing a construction in which the pivot is the undergoer of an intransitive verb; accordingly, the shared argument cannot be accounted for in purely semantic terms and a syntactic PSA must be posited.

- (3) (a) *Apǎ́ iyúthě.* [Transitive actor]
a-Ø-pǎ́ i-Ø-yúthA
 strike-3SG.U- stem try-3SG.A-stem
 He tried to strike it.
 (data: BD, p74)
- (b) *Inúŋwaŋ iblúthě.* [Intransitive actor]
inúŋwaŋ i-bl-(y)úthA
 swim try-1SG.A-stem
 I tried to swim.
 (data: DT: story 6, sentence 3)
- (c) *Čhaŋtéwašte unǰíyuthapi kte.* [Intransitive undergoer]
čhaŋtéwašte unǰ-íyuthA-pi ktA
 happy 1A-try-PL FUT.IRR
 Let us try to be happy.
 (data: EDT-Col-4: para 287)

The grammatical process illustrated in (3c) shows a restricted neutralization of the semantic roles; the undergoer of the intransitive stative verb *čhaŋtéwašte* ‘to be happy’ is shared as the actor of the transitive verb *iyúthA* ‘to try smth/sb’ (i.e. the construction shows obligatory control with the verb *iyúthA*). Thus, in at least this particular construction, Lakota exhibits a restricted neutralization which means that there is an invariable syntactic PSA, i.e. in traditional terms there is a ‘subject’, albeit it is weakly developed.

The traditional grammatical relations, ‘subject’ and ‘object’ have no theoretical status in RRG, but they are used as descriptive shorthand. The term ‘subject’ is a descriptive shorthand for ‘generalized PSA’, that is for situations where the majority

of constructions in a language exhibit the same PSA, as in English, German or Czech. It is a feature of the grammar as a whole, while PSA is a construction-specific notion; consequently one can talk about ‘subject in German’ but not ‘*subject of a control construction’. (Van Valin, p.c.)

Similarly, the term ‘object’ is the ‘undergoer of a transitive verb’ which may be generalized to include ‘non-direct/primary objects’; (e.g. indirect objects) and ‘non-actor direct/oblique core arguments’ (e.g. the two direct core arguments in the ditransitive construction). On the other hand, the term ‘object’, as used in RRG, does not subsume the undergoer of intransitive verbs, as is done in the generative derivational analysis.

It is within this delineation that the terms ‘subject’ and ‘object’ are used, as a descriptive shorthand, in the present study.

1.3. Literature overview

This section gives a brief review of the extant studies that discuss one or more of the four interrelated phenomena of Lakota syntax explored in the present thesis: They are: (1) ad-nominal modification, (2) ad-core modification, (3) secondary predication, and (4) multi-verb constructions. The previous mentions of Lakota passive voice in the literature are also discussed.

1.3.1. Ad-nominal Modification

The first grammatical descriptions of Lakota (and Dakota) are works by early missionaries who stayed with these tribes during the 19th and early 20th century. Specifically, they are the following two grammars: Stephen R. Riggs, Dakota

Grammar, Texts and Ethnography (1893) and Eugene Buechel, SJ: A Grammar of Lakota (1939). Although Riggs (1893) is a grammar of the Dakota dialect, it describes only the basic grammatical phenomena, most of which are identical in the two dialects.

Neither of the two books offers an actual discussion of ad-nominal modification, but they both term stative verbs in post-nominal position ‘adjectives’, thus indirectly treating them as modifiers, which is also reflected in the translations of the examples they provide (see Riggs, 1893 [1977]: 46, §78., Buechel 1939: 94, §59). Whereas Riggs (*ibid*) provides a rather brief list of Lakota grammatical phenomena, Buechel (*ibid*) is an attempt at a much more comprehensive and structured account of the language, although both of these studies probably used traditional Latin grammars as their model. One of the main issues with the Buechel Grammar is that many of the examples in the data come from translations of liturgical literature, which are at odds with some of the structural and idiomatic characteristics of authentic Lakota texts.

Boas and Deloria (1941) is titled *Dakota Grammar*, but it is, in fact, concerned with the Lakota dialect and it is an extensive and authoritative description of the language which has had a major influence on subsequent research on Lakota as well as on Siouan linguistics. Although their work is much more formal when compared to the descriptive missionary grammars, Boas and Deloria, too, term stative verbs in post-nominal position ‘adjectives’ and they state that “[t]he adjective follows the noun and is subordinate to it. The adjective is identical with the neutral verb. As a verb it retains its independent accent, as adjective it loses it” (Boas and Deloria, 1941: 70). Both of the assertions about modification (i.e. regarding subordination and compounding) are disproved in chapter 3 of the present study.

Although subsequent studies of Lakota maintain that the language lacks a category of adjectives and uses stative verbs instead, most works that directly or indirectly discuss ad-nominal modification adopted Boas' and Deloria's analysis which states that Noun+Stative Verb (N+SV) are constructions in which the latter modifies the former. This includes, among others, de Reuse (1978 and 1994:201), Chambers&Shaw (1980:327), Shaw (1980:44), Williamson (1984, p. 41), Rood&Taylor (1976: chapter 16), who describe NP+SV as compounds, Rood&Taylor (1996: 8.2.1), and Ingham (2003:13). De Reuse (1994:201) analyzes uncompounded instances of N+SV as 'Noun Stripping', a term based on the assumption that the nominal element is stripped of the articles and determiners that usually accompany it. Section 3.4 of the present study provides arguments against the Noun Stripping analysis.

To my knowledge none of the existing studies treat the construction of a noun with an adjacent stative verb as an instance of complex predication, which is the analysis I present in chapter 3 of this investigation.

Furthermore, in the extant literature there is no mention of RP-external ad-nominal modification.

1.3.2. Derived modifiers

One of the main claims of the present study is that many words traditionally categorized as adverbs and treated syntactically as adverbials can in fact function both as event oriented and participant oriented, as discussed in detail in Chapter 5. Within the RRG framework these modifiers are given the orientation neutral term '[derived] modifier'. They can function as ad-core modifiers (traditionally 'adverbs'), ad-argument and ad-nominal (traditionally 'adjectives'), and very rarely as ad-nuclear

modifiers. Ad-argument and ad-core and modifiers are floating modifiers in that they have no fixed position.

Modifiers are one of the numerous areas where the RRG terminology diverges from the standard theoretical approaches in order to satisfy the needs of languages like Lakota, Dyirbal and Tagalog, for which traditional terminology does not apply as it is loaded with concepts that are specific to IE-based and/or Latin grammar oriented linguistics.

‘Derived modifiers’ (DM) are words morphologically derived mainly from stative verbs and marginally from some other word categories (active verbs, numerals, quantitative, particles, simple nouns, *wó-* nouns).

The extant literature categorizes derived modifiers as adverbs and treats them syntactically as adverbials. Boas&Deloria (1941: 137) term them ‘adverbs’ and provide several lists based on various types of derivation, but they offer no discussion of the adverbial function.

Rood&Taylor (1996) state that “[a]dverbs of manner are often single words formed from other classes of words. A frequently used formative of such adverbs is the suffix *-ya*.”

Buechel (1939: 119) provides long lists of various types of adverbs, including a list of “adverbs of manner” in which he includes a number of words with the suffix *-ya*. He discusses the suffix on p. 186 (ibid) where he states “[t]he adverbial suffix *ya* joined to adjectives, some nouns, and some verbs makes of them adverbs of manner corresponding to ‘ly’ in English.” Buechel also discusses the combination of the suffix *-ya* with the affixes *-la*, *-kel*. No discussion of adverbial function is provided except for a statement that “[a] modifier is a word or a group of words used to change

or modify the meaning of another word. It is adverbial when it modifies a verb, an adjective, or an adverb; it is adjectival when it modifies a substantive”. (ibid, 219)

De Reuse (1994:201) includes “Adverb + Verbs” among the seven types of compounds he recognizes in Lakota. The present investigation does not confirm that derived modifiers (traditionally ‘adverbs’) form compounds with the verbs they precede.

Ingham (2003: 43-45) divides adverbs into primitive and derived, and states that derived adverbs are ‘of general manner meaning’. He also mentions the existence ‘of complex phrase adverbs’. Although Ingham notices that the words he terms ‘manner adverbs’ sometimes ascribe adjectival semantics, he provides no analysis or theoretical discussion of what is in effect a contradiction in claiming that adverbs modify nouns.

1.3.3. Secondary predication

A Secondary Predicate Construction (SPC) contains two predicative constituents, one indicating an event or action of the subject and referred to as the Primary Predicate (often termed ‘Main Predicate’), and one expressing a state or property of either the subject or the object and referred to as the Secondary Predicate. To my knowledge, the present thesis is the first investigation of the Secondary Predicate Construction (SPC) in Lakota.

None of the extant explorations of Lakota grammar mention the existence of Secondary Predication in Lakota, although there are studies which integrate instances of SPCs in their examples of two adjacent verbs. This is the case in Boas&Deloria (1941), who, in section § 70 on p. 73 titled “Verb and verb” list numerous instances of two adjacent verbs and at least two of them are in fact examples of secondary

predicate constructions. In their comment about the examples they state that “[w]hen two verbs are conceived as a unitary concept they are compounded”. As I show in Chapter 4, compounding is, in fact, not a morpho-syntactic feature of SPCs. Following their list of V+V examples Boas&Deloria (ibid, 74) state that “[n]eutral verbs are rarely used in such combinations. Generally they take adverbial form with the suffix *ya* and remain independent.” This is an accurate observation, as far as stating that the majority of stative verbs (i.e. neutral verbs) obligatorily take the suffix *-ya* when they occur before another verb. On the other hand, the small number of verbs which can be used without the suffix, function as secondary predicates very frequently. However, whereas Boas&Deloria’s statement cited above is accurate, they contradict it on a number of occasions when they claim that an (unmodified) verb in pre-verbal position is an adverbial. An example is on page 2 where they state that “in combinations of verbs two actions occurring at the same time, as ‘he comes dancing’ are felt as separate units in which *dancing* is an adverb”.

Another study which groups examples (perhaps a single example) of secondary predicate constructions in an investigation of multi-verb constructions is Pustet (2000a), titled Echo Pronominalization and Complementation in Lakota and written within a functional-typological framework. Pustet states that “[t]here are three syntactic patterns for rendering Lakota complement plus main clause structures“ (ibid, p. 150), specifically lower predicate coding, higher predicate coding and echo pronominalization (where the subject shared by the two verbs or the notional subject of the first verb agreeing with the object of the second verb are both coded). She provides example of the three types of complement coding on p. 158-159. While the first two examples are instances of complementation, the third example (in (58) on p.

159, *ibid*) is, in fact, an instance of secondary predicate construction. This is discussed in more detail in 7.2.

1.3.4. Multi-verb constructions

As already mentioned in the introduction, the motivation to include an investigation of multi-verb construction in this study lies in the fact that Secondary Predicate Constructions share numerous morphosyntactic and semantic properties with Simultaneous Predicate Constructions (SimPCs), and at the same time, the latter are often difficult to distinguish from Purposive Constructions (PCs).

Thus, Chapter 10 provides a detailed discussion of SimPCs and PCs, and marginally mentions other multi-verb constructions.

In the extant literature, constructions with two (or more) adjacent verbs are discussed primarily in Boas&Deloria (1941), Scott (1976), de Reuse (2006) and marginally in Buechel (1939: 86) who discusses only directional compounds (see section 10.3), which he terms “double verbs”. Of some relevance is also Pustet (2000b) who focuses primarily on clausal complementation but discusses numerous examples of V+V, where the majority of them contain auxiliary verbs.

Boas&Deloria (1941) state that the V1 in any verb+verb constructions is subordinate and V2 is subordinating. They are the first to establish the form and meaning correlations between SimPCs and PCs, although they are not consistent in applying the correlation and frequently confuse one structure for the other.

Scott (*ibid*) makes an attempt at a highly systematic classification of serial verbs but the result is a complicated description without clear defining properties for individual types of multi-verb constructions.

De Reuse (2006) is the first to use the term ‘serial verb’, to approach analyses of multi-verb construction systematically and to establish some defining properties (albeit some of them problematic, as will be discussed in chapter 10). The main problem of de Reuses’ paper lies in the fact that the author relied exclusively on written (i.e. non-audio) data from Boas&Deloria (1941), which is problematic with respect to the coding of phonological tightness in the transcription. Among the things that I show in chapter 10 is that the data in the extant research literature and traditional grammars violates the form and meaning correlations, and that this is caused primarily by the fact that Boas&Deloria (1941) were not fully aware of the role of V1 truncation and its impact on the level of phonological tightness between V1 and V2, and secondarily because they misinterpreted certain intonational phenomena which they interpreted as compounding. Their data and analysis were then carried over in the subsequent research resulting in inaccurate analysis and description.

De Reuse (2006:303) establishes three types of serial verbs when he states that “[i]n the first type, one stress is assigned as though the compound were one word, that is, generally on the second syllable of the whole construction; in the second type, both members of the compound keep their stresses, but the stress on the second is reduced; and in the third type, both elements are stressed as independent words.” However, in his defining properties of Lakota serial verbs he states that “they are phonologically and prosodically one word (i.e. they are phonologically compounds)”, which contradicts his division into three types of serial verb constructions where the third type is described as uncompounded.

Furthermore, due to his reliance on Boas and Deloria’s transcriptions, De Reuse (ibid) generally overestimates the significance of compounding in Lakota when he states that “Lakota uses compounding extremely frequently, and almost anything can

be compounded with anything else.” (de Reuse 2006:303, citing de Reuse 1994).” As I will show in the chapters on secondary predication and multi-verb constructions, compounded constructions are actually less numerous in type and much less frequent in corpus occurrences when compared to uncompounded ones.

1.3.5. Passive voice

A chapter on passive voice is included in the current investigation for the sake of a comprehensive description of modification in Lakota, as there are three types of modification involved with the passive construction.

As a language with semantic alignment Lakota was for a long time considered to be a language without passive voice, for instance Van Valin (1977, 1985:368) argues explicitly that Lakota has no passive voice, although he cites the sentence *Mathó way ktépi* ‘They killed a bear’ or ‘A bear was killed’ as the closest thing to a passive that the language has. Similarly, Buechel (1939) and Dahlstrom (1984: 74) also state that Lakota has no passive.

Boas&Deloria (1941: 155) are the first to state that Lakota has a “quasi-passive construction *mathó ktépi*” (which can be translated as “he was killed by a bear”). Rood&Taylor (1996) suggest that a true passive might exist in Lakota, and Pustet&Rood (2008) are the first to show convincing evidence that *mathó ktépi* ‘he was killed by a bear’ is in fact a type of passive. Their study, however, does not provide a satisfactory analysis of the syntactic function of the actor nominal. Ullrich (2016) is the first to state that the actor nominal is a verbal modifier rather than an argument of the passive. A thorough syntactic analysis of the passive construction within the RRG framework is provided in Ullrich and Van Valin (2017).

The current investigation offers additional insights into the use of passive for RP-internal and RP-external modification (Chapter 9).

1.4. Sources of data and methodology

The research for this thesis is predominantly text corpus driven.² One of the earliest proponents of corpus linguistics was John Sinclair and in his introduction to John Sinclair's book *Trust the Text* (Sinclair, 2004:4) Ronald Carter describes corpus driven research in the following way:

Descriptions of language are corpus driven in that the corpus tells us what the facts are. And the larger and more representative the corpus the greater the attestation that is possible.

The motivation for using corpus methodology is multifold. Firstly, as someone who has been researching Lakota since 1986 and doing extensive fieldwork with native speakers every year since 1992, I have repeatedly noticed that data obtained through translational elicitation is generally at odds with the structural and idiomatic characteristics of data in spontaneous connected discourse. I used elicitation during my early fieldwork days and I later had to revise much of the data because I gradually realized that it contained constructions that had no counterpart in the authentic texts which I had been studying. Thus I made a decision very early in my work on researching Lakota that I would deliberately avoid translational elicitation and rely solely on corpus data. I became frustrated with a large proportion of the research literature because I could invariably recognize studies in which the data was based on translational elicitation as it conflicted authentic data.

During the past three decades I have spent many long periods of time learning and researching the language in Lakota Country. I have been blessed to meet and make friends with many fluent speakers who were not only highly competent in their native

² This section is a modified and briefer version of an introduction to the pedagogically oriented Lakota Grammar Handbook (2016), as the same text corpus served as the research data for that grammar and for this thesis.

language but also interesting people to get to know. Since 1992 I have participated in thousands of hours of conversation, both as speaker and listener. These conversations revolved around a large variety of topics, including everyday activities and situations as well as more complex, abstract ones. I have heard Lakota used at feasts and ceremonies, as well as for daily communication in family settings, for casual chit-chat and for teasing friends and relatives. I have been audience to visits among fluent speakers, to speeches of praise and honor, and have heard elders share their wisdom in the language; I have also heard Lakota during arguments, heated debates, as well as during happy moments of family life. All in all, I have had the opportunity to be immersed in an environment where Lakota was still spoken across the full spectrum of speech genres and topics.

Additionally I have recorded hundreds of hours of narratives and conversations, and I have worked on transcribing these recordings in order to expand the text corpus needed for the research. Both the immersive experience and the work with the audio recordings have allowed me to develop a high level of comprehension and spoken proficiency which in turn has given me intuitive insights into the language. However, as a general rule I have not used intuition or participant observation as a source of data for analyzing the language, but have relied exclusively on corpus data. Nonetheless, the intuition has helped me considerably because it has allowed me to search and analyze the corpus more effectively.

The introduction of corpus linguistics has been slower in the field of endangered languages due to the fact that large corpora either do not exist for those languages or because it is more difficult to digitize them (for example because few people are literate in those languages). In the case of Lakota a corpus of texts has existed since

the publication of Deloria's *Dakota Texts* (1932) and the digitization started as early as the 1970s. But many researchers have continued to rely on data obtained from translational elicitation, asking native speakers to translate sentences that the researchers felt had specific significance for attesting various points of grammar and hypothesis. For many researchers during the past several decades, fieldwork on Lakota became synonymous with translational elicitation.

Data obtained in this way is problematic more often than not. Not only does it not originate from authentic discourse but the translational method makes the bilingual native speakers produce ungrammatical constructions due to transfer from the language used during the elicitation. John Sinclair put it this way, "one does not study all of botany by making artificial flowers" (Sinclair 1991: 6). Sinclair referred primarily to sentences created by the native speaking linguists, but his statement applies by analogy to sentences obtained via translational elicitation. It is my firm belief that a reliable modern grammatical analysis should be based on authentic data (i.e. corpus data). Indeed, not all of the endangered Native American languages have the luxury of large enough text corpora, but I am convinced that even in such cases it is far more productive and effective to spend time on recording texts from speakers, than it is to elicit sentences from them.

The tradition of using translational data for Lakota grammar analysis started with the earliest grammar descriptions by Riggs (1893) and Buechel (1939 and 1970). Both of these authors collected authentic texts, but they also made heavy use of data from the Dakota and Lakota translations of Christian liturgical texts. Especially the data and analysis from Buechel's grammar subsequently entered the research literature and continues to be recycled in it. Indeed, not all of Buechel's data were incorrect and he

did notice many important findings about Lakota grammar, but the inclusion of unauthentic data makes his grammar less reliable than it could have been.

Boas and Deloria, on the other hand, worked on collecting and analyzing authentic data which resulted in a remarkable contribution to the description of the language. In their grammar (1941), they worked with the texts collected by Deloria from native speakers during the 1920s and 1930s. Unfortunately, they were unable to effectively study and analyze the large text corpus because the tools of modern corpus-linguistics did not exist in their time. This must have been one of the reasons why they often relied on Deloria's intuitive introspection for some of the data analysis and description. That this was the case becomes obvious when we compare Boas&Deloria's conclusions with the corpus based analysis; many of their descriptions are contradicted by the corpus data they had collected. This shows that without the methods and tools of corpus linguistics they were unable to fully utilize the extraordinary collection of data they amassed.

An example of Boas&Deloria's reliance on Deloria's native speaker intuition is their frequent use of terms such as "consent" and "approval" in describing various features of Lakota grammar. For instance, they stated that the difference between the 1st and 2nd dative is one of withholding and giving consent. The difference between *yéš* and *yešáŋ* is described as one of approval. Similarly, the use of the numerous adversative conjunctions, such as *k'éyaš*, *tkhá*, *khés* and *yešáŋ* is also described in terms of approval. Recurring descriptions of this type make it clear that Boas relied on Deloria's intuition in description of various grammatical features. These and other assumptions are contradicted when the valuable data they collected in the form of texts are carefully analyzed.

Much of the description from traditional grammars was adopted uncritically in the later studies and there have been very few attempts to put those descriptions to the test of corpus analysis. Conversely, many of the subsequent researchers working on Lakota grammar once again resorted to translational elicitation and speakers' intuition despite the fact that authentic Lakota texts were easily accessible. Consequently, the research literature on Lakota contains a large number of constructions or usages that have no parallel in authentic texts and that are not only unidiomatic but actually ungrammatical. Such data gets passed around in the research literature and the sad result is that it is then used to attest a typology, a theory or to create textbooks for teaching and revitalizing the language in the Native community.

The biggest paradox lies in the fact that the authentic Lakota texts that have existed, thanks to Boas and Deloria, since the 1930s, actually contain the very data that researchers have been trying to produce by direct elicitation. Furthermore, Lakota is a language that has continued to have a comparatively large number of highly competent speakers during the twentieth century and beyond, so obtaining more corpus data in the form of recorded narratives or dialogs has been an accomplishable task. But many researchers continued to spend hours on eliciting sentences and word lists while they could have spent the same amount of time helping to produce a significantly larger amount of authentic and reliable data. My own frustration with this state of affairs is well articulated by Jeffrey Heath (1984:5) in a comment he made on grammars for less commonly studied languages:

“My concern with documentation reflects my own sad experiences as a reader of other linguists' grammars, which have almost never provided me with the information I wanted to undertake my own (re-) analysis of the language in question. It also reflects my experience that most published grammars are based on material obtained in unreliable direct-elicitation (sentence-translation) sessions, and/or utterances which were produced by

the linguist with, or without "confirmation" from a native informant. I have no confidence whatever in such data, since my own early "data" of this type often turned out to be seriously wrong. Accordingly, other Linguists who express disapproval of my emphasis on documentation I suggest that they try doing an analysis based on a comparable textual corpus and see if it doesn't add to their understanding of their favourite language."

There are other reasons for using authentic data, and some of them are well articulated by Mithun (2006:284):

If a grammar is based primarily on translations of the English sentences that underlie current theoretical issues, the potential contribution of that grammar to both the linguistic and local communities is diminished. We will be deprived of some of the most theoretically interesting aspects of the language under consideration, those which would allow us to broaden our theoretical perspective in the most interesting ways. We will also fail to document what makes this language special, a record of the particular culture that shaped it.

Making sure that the data is authentic is one reason for employing the text corpus.

The other reason is that, as John Sinclair put it,

"[The] contrast exposed between the impression of language detail noted by people, and the evidence compiled objectively from texts is huge and systematic ... The language looks rather different when you look at a lot of it at once ..." (Sinclair 1991: 100).

It is only when we see a lot of the language that we can draw significantly more reliable and detailed analyses and conclusions. Various types of frequency analysis can actually reveal much about structure and function.

My early fieldwork method with native speakers changed from translational elicitation into sessions during which I would record authentic dialogues among native speakers as well as elicited narratives, such as life stories, descriptions of experiences and opinions, traditional stories and legends, etc. This became a data bank

of audio recorded data which continued to grow in size over the years and which I gradually transcribed and annotated forming a well searchable text corpus of several million words. This corpus was extended by the digitized versions of Lakota text collections from other researchers, most importantly from Ella Deloria who amassed a large collection of narratives during the 1930s and also worked on older manuscripts dated back to the 1840s and 1890s. Text collections from other researchers were also added, but it was Deloria's texts that were characterized by the greatest level of consistency in both spelling and structure. No doubt this was due to the fact that Deloria worked with highly competent speakers most of whom were mono-lingual, but also because Deloria was a native speaker herself and had gained a lot of insights into linguistics through her collaboration with Boas, and thus was able to capture and transcribe the content of the narratives in a highly reliable way. The only drawback of older collections, such as Deloria's, lies in the fact that their audio version is not available, making it impossible to check the reliability of every aspect of the transcription. As some of the early chapters of this thesis show, the newer data that originates from voice recordings has allowed for important revisions of statements made by early Lakota grammarians and perpetuated throughout Siouan literature.

Combining older texts with those originating from my audio-recordings as well as from older audio recordings done by researchers between the 1960's and 1990's has resulted in a text corpus that is not only of considerable size but also spans a time period between 1840 and 2018. This enabled various other types of research options, specifically, it has allowed for finding trends in language change and a degree of a diachronic approach to Lakota analysis, which, as will be seen in some of the chapters in the thesis, has enabled important findings that contribute to our understanding of Lakota syntax and the state of affairs in the synchronic data.

2. The Lakota language

2.1. Siouan language family (classification)

Lakota is an endangered language spoken today primarily on five reservations in South and North Dakota. The number of fluent speakers has been declining steadily since the 1950s and intergenerational transmission of the language ended during the 1960s, with a very small and decreasing numbers of isolated families continuing to speak Lakota to their children up to the 1990s. Since that time, the number of first language speakers has decreased from approximately 6,000 to about 2 000 speakers today³.

Although Lakota language instruction in reservation schools was introduced as early as 1970s, it did not slow the gradual language shift in the community, arguably due to the low quality of language instruction resulting from lack of linguistic and methodological teacher training, but also due to a variety of socio-linguistic, socio-economic and other factors. Major efforts to reform Lakota language education started in the early 2000s and were spearheaded by the Lakota Language Consortium, a non-profit organization. Resulting from this work, both directly and indirectly, there are now a growing number of second language speakers of Lakota at varying levels of proficiency, as well as numerous immersion schools across the Lakota region. These efforts give some promise for the future of the language.

Lakota is a member of the Mississippi Valley branch of the Siouan language family, sometimes also termed Siouan-Catawban to include the more distantly related Catawban languages. Siouan languages were spoken primarily in the region of the

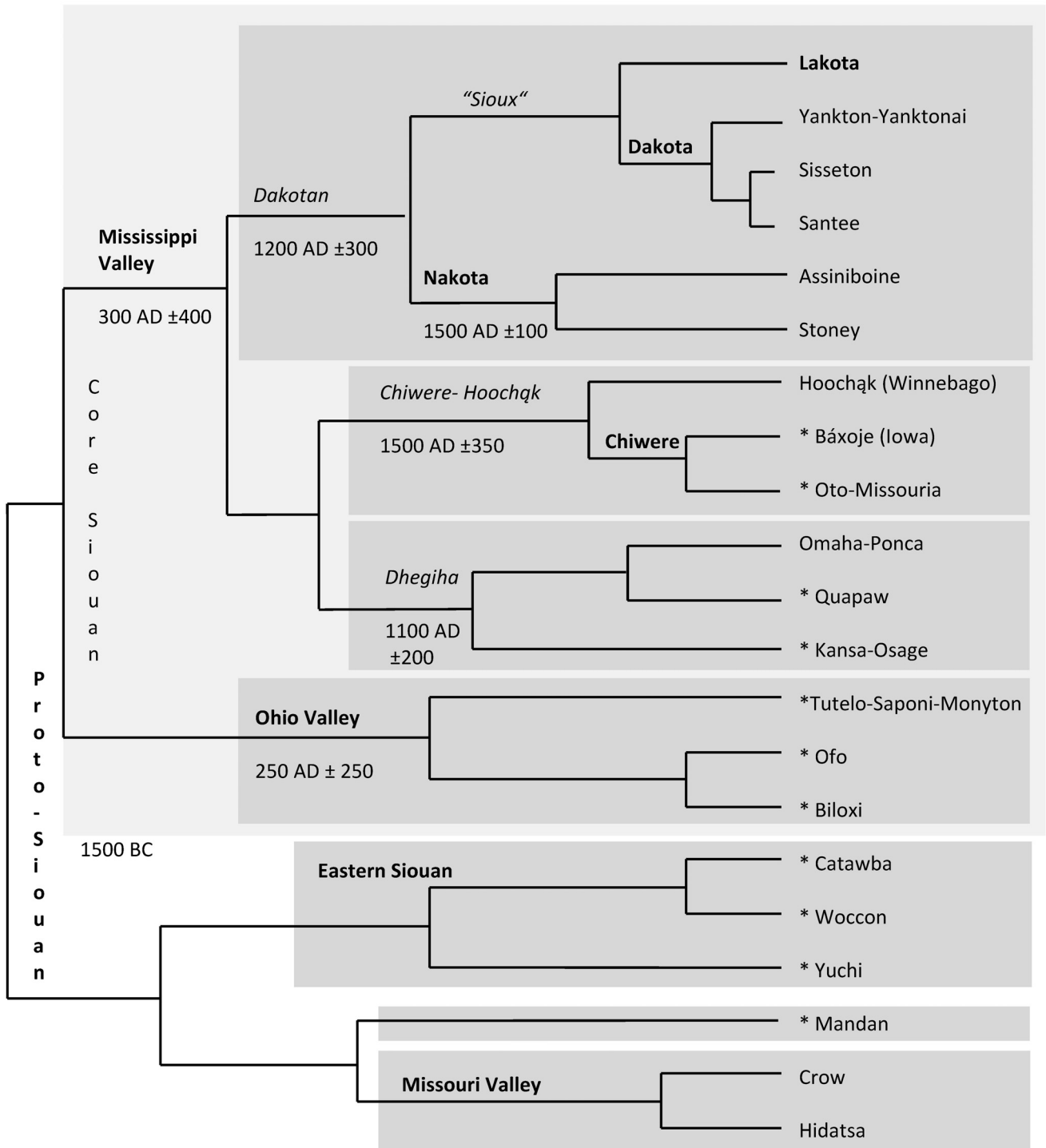
³ Estimates are based on surveys done by the author and the Lakota Language Consortium.

Great Plains, in Ohio and Mississippi valleys, and in a few enclaves to the northwest and southeast and east of North America.

The Siouan classification is provided in Figure 2.1. There are varying analyses of some parts of the Siouan language classification and of some of the subdivisions. The Missouri Valley languages (Crow and Hidatsa) have sometimes been classified as members of Core Siouan (see, e.g. Graczyk 2007, pp. 2), but in his recent study based on a computational approach, Kasak (2016) postulates that these two languages are more peripheral than previously thought. This is in line with Rankin (Graczyk, *ibid*), according to whom the ancestor of Crow and Hidatsa may have constituted the initial split from Proto-Siouan.

Furthermore, Kasak (*ibid*) suggests that Yuchi, traditionally viewed as an isolate or as a very distant relative of Siouan languages, is more closely related to Catawban than previously thought, and that Missouri Valley and Mandan form their own branch with Catawban and Yuchi. Within this analysis, the Core Siouan constitutes the Mississippi Valley, Chiwere-Hoocąk, Dhegiha and Ohio Valley. And the Peripheral Siouan are Mandan, Missouri Valley, Catawban, and Yuchi.

SIOUAN CLASSIFICATION



Adapted from Rankin 2010 and Kasak 2016.
 Note: Dates mark the estimated emergence of subfamilies.
 * extinct

Figure 2.1 *Classification of the Siouan language family*

2.2. Dialects and geography

Lakota is a member of a dialect continuum with five distinguishable languages, listed below:

1. Lakǎ́hóta
2. Western Dakhóta (Yankton-Yanktonai)
3. Eastern Dakhóta (Santee-Sisseton)
4. Assiniboine Nakhóta
5. Stoney Nakhóta

The relationship between the languages in the continuum and their geographic distribution is represented schematically in Figure 2.2.

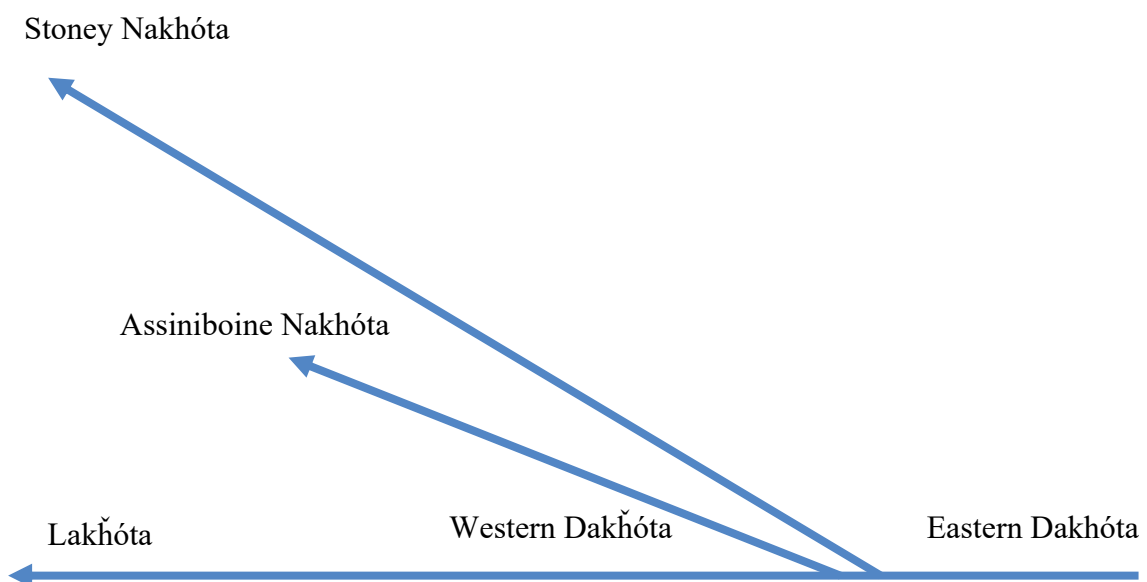


Figure 2.2: *Schematic representation of Lakota-Dakota-Nakota dialect continuum*

In the schematic representation in Figure 2.2, the east-west axis represents the geographical distribution between the traditional Lakhóta territory on the west side of the Missouri River (stretching to the Black Hills and beyond) and the region of the Eastern Dakhóta group in Minnesota and eastern South Dakota. The Western Dakhóta dialect is medial both geographically and linguistically. Phonologically, Western Dakhóta is closer to Eastern Dakhóta, but lexically and grammatically it is more closely related to Lakhóta. About 75% of the lexicon is shared among these three groups, with cognates at varying degrees of phonological variation. Traditional grammars and dictionaries usually describe the three dialects as mutually intelligible, but the level of comprehension between speakers from the three groups depends on numerous factors, chiefly on the level of previous exposure to the other dialect and the speed of speech. Fast speech phenomena make comprehension more difficult for speakers of the geographically (and linguistically) more distant groups, specifically the Lakhóta and Eastern Dakhóta.

The three groups on the east-west axis are also referred to as the ‘Sioux’ (a term borrowed and modified by early French pioneers from the Ojibwa language). During the first half of the 20th century some authors used the name Dakota as an umbrella term for all three groups, for instance Ella C. Deloria published “Dakota Texts” (1932) which is a collection of texts in the Lakota language, and Boas&Deloria published a Dakota Grammar (1941), which is actually a grammar of the Lakota language. In accord with this tradition, the contemporary literature refers to the dialect continuum with the term ‘Dakotan’.

The Assiniboine Nakhóta language, although very closely related to Lakhóta and Dakhóta, is not mutually intelligible with these languages, even though speakers can recognize many cognates in each other’s speech. The Stoney Nakhóta is not mutually

intelligible with any of the languages on this dialect continuum, although some reports state that Stoney speakers can understand Assiniboine speakers better than vice versa. According to historical data the Assiniboine tribe was already politically separated from their ancestral group by 1640, and it is possible that the separation took place as early as 1500. Assiniboine cognates share features common to both Western and Eastern Dakhóta, which suggests that the Assiniboine group left the ancestral tribe before the development of some of the variation within the Dakhóta dialect, hence the position of Assiniboine on the schematic representation, showing that it branched off from a position between Western and Eastern Dakhóta. The Stoney Nakhóta language shares many similarities with Assiniboine, but it is also divergent enough from it to suggest the possibility that Stoney speakers separated from the ancestral group earlier than and independently of the Assiniboine speakers. Thus Parks and DeMallie (1992) classify Stoney as an independent member of the Sioux-Assiniboine-Stoney dialect continuum.

The Lakota language can be divided into two dialects: Northern Lakota represented by the speakers on the Standing Rock reservation and parts of the Cheyenne River Reservation, and Southern Lakota spoken by the Oglála and Síčhánǵu tribes who reside on the Rosebud and Pine Ridge reservations respectively, and by some speakers from Cheyenne River. These two dialects show virtually no phonological variations and are characterized by only a small number of lexical variants.

Each of the two Dakhóta dialects can be further divided into two phonologically defined varieties; the Western Dakhóta sub-dialects are Yankton and Yanktonai, and the Eastern Dakhóta sub-dialects are Santee and Sisseton. Thus the Lakhóta-Dakhóta dialect continuum can produce up to five pronunciation variants illustrated in Table 2.1 with the word for ‘lizard’:

Table 2.1: Phonological variants on the Lakǰóta-Dakhóta dialect continuum

Lakǰóta	Yanktonai	Yankton	Sisseton	Santee
<i>aglěškala</i>	<i>agděškana</i>	<i>akděškana</i>	<i>ahděškana</i>	<i>ahděškadaŋ</i>

Notice that the Sisseton variant shares the suffix *-na* with the Yankton-Yanktonai variants, but their variants differ from it with respect to the consonant cluster (*gl-gd-kd-hd-hd*). The suffix *-na* was probably one of the reasons which led early historians and researchers to erroneously designate the term Nakhóta to the Yankton and Yanktonai groups. In reality, the speakers of these two sub-dialects use *d* as the word initial consonant in common cognates, as illustrated in Table 2.2 with the words for ‘throat’ and ‘to sing’. Included in the table are also the Assiniboine variants.

Table 2.2 Distribution of word initial *d* and *l*

Lakǰóta	Western Dakhóta		Eastern Dakhóta		Nakhóta Assiniboine
	Yanktonai	Yankton	Sisseton	Santee	
<i>loté</i>	<i>doté</i>	<i>doté</i>	<i>doté</i>	<i>doté</i>	<i>noté</i>
<i>lowáŋ</i>	<i>dowáŋ</i>	<i>dowáŋ</i>	<i>dowáŋ</i>	<i>dowáŋ</i>	<i>nowáŋ</i>

The data in Table 2.2 provides evidence that native speakers of Yankton and Yanktonai use *d* word initially in cognates where Lakota uses *l* and Assiniboine uses *n*. This is in accord with the fact that the speakers of these dialects refer to themselves as Dakhóta, something that was documented during fieldwork with numerous native speakers by Parks and DeMallie (1992), as well as by Ullrich (2008). The term Nakhóta, on the other hand, is the self-designation used by the Assiniboine and Stoney speakers (commonly pronounced Nakhóda, due to a progressing tendency to voice intervocalic stops).

2.3. Basic typological description

Lakota is a left-branching, consistently head-marking and strictly verb-final SOV language. It has head-internal relative clauses, many polysynthetic features and no case marking on noun phrases. The subject and object are obligatorily marked as core arguments on the verb, whereas RPs cross-referenced to these arguments are optional. Thus the verb alone can constitute a complete clause, and subject and object can be represented twice, as optional RPs and obligatory arguments. Lakota has an active/stative case marking system (split-intransitivity, split-S), where some intransitive verbs take actor (nominative) coding and other verbs take undergoer (accusative) coding. The active/stative distinction is made only in 1st singular and 2nd persons, while all other grammatical persons neutralize it. The stative affixes are used on transitive verbs to mark the undergoer. Third person singular subjects are never marked overtly, and third person plural object is marked only when the object is animate, in which case the affix *wičha-* is used.

The inflectional morphology is prefixal, but in accord with Lakota grammatical tradition (e.g. Buechel (1939), Boas&Deloria (1941), Rood&Taylor (1996), Van Valin (2005), etc.) the term infix is also used as there are numerous cases where the inflectional morpheme is inserted in stems that are not analyzable synchronically and some that are even difficult to analyze with diachronic or comparative data. Derivational morphology is also prefixal. The term affix is employed as a cover term for prefix, infix and suffix.

2.4. Phonology and orthography

Table 2.3 gives the phoneme inventory of Lakota consonants according to the place and manner of articulation of the corresponding phonemes.

Table 2.3 *Phoneme inventory of Lakota*

		bilabial	dental	alveolar	post-alveolar	Palatal	Velar	Uvular	Glottal
Stops and Affricates	Plosive Plain Voiceless	<i>p</i>	<i>t</i>		<i>č</i>		<i>k</i>		'
	Plosive Glottal Aspirated	<i>ph</i>	<i>th</i>		<i>čh</i>		<i>kh</i>		
	Plosive Velar Aspirated	<i>pħ</i>	<i>tħ</i>				<i>kħ</i>		
	Plosive Ejective	<i>p'</i>	<i>t'</i>		<i>č'</i>		<i>k'</i>		
	Plosive Voiced	<i>b</i>					<i>g</i>		
Fricatives	voiceless plain			<i>s</i>	<i>š</i>		<i>ħ</i>		<i>h</i>
	voiced			<i>z</i>	<i>ž</i>		<i>ǧ</i>		
Nasals		<i>m</i>		<i>n</i>					
Approximants		<i>w</i>				<i>y</i>			
Lateral approximants			<i>l</i>						

The grapheme *ǧ* represents a phoneme that is realized in at least two positions: (i) in slow, formal speech it is pronounced as the **voiced uvular fricative** /ʁ/, (ii) in fast speech it is commonly pronounced as the **voiced velar fricative** /ɣ/.

The grapheme *ħ* is normally pronounced as a uvular fricative but in fast speech it is sometimes realized as a velar fricative.

The voiceless stops with velar aspiration (*kħ*, *pħ*, *tħ*) are allophones of the stops with glottal aspiration (*kh*, *ph*, *th*). The former are pronounced before the vowels *a*, *aŋ*, *o* and *uŋ*, the latter before *i*, *iŋ* and *u*. Both sets are used before the vowel *e*; the distribution before *e* is lexical to a certain extent, although it varies among speakers.

The syllable *kĥe* mostly occurs only when it is the result of ablauted *kĥÁ*. The variant *khe* appears in other cases, as in the word *khéya* “turtle.” Most words involving *phe* or *pĥe* occur with either pronunciation variant, such as *pheží* and *pĥeží* “grass,” *phehín* and *pĥehín* “hair,” *aphé* and *apĥé* “to wait for.” Speakers usually have personal preferences as to the variant they use, but the *pĥe* forms seem to be prevailing for most words and most speakers. Some words with *the/tĥe* seem to allow both variants as well (as *tĥéča* ‘young’ and *théča* ‘young’), but most appear to be lexicalized in one form or another. For instance, *theĥí* ‘difficult’ and all its derivatives have glottal aspiration, while *tĥéhan* ‘far’ is mostly pronounced with velar aspiration.

While very few exceptions exist in regard to the distribution before vowels, one of them is the word for ‘both’ which can be pronounced *nuphín* or *nupĥín*. Moreover, velar aspiration can occur before any *in* or *e* whenever they are the result of ablaut (as in *epĥé* “I said” and *epĥín kte* “I will say,” both from *epĥÁ* ‘to say smth’).

Table 2.4 gives Lakota vowel phonemes:

Table 2.4: *Lakota vowel phonemes*

		Front	Central	Back
high	oral	<i>i</i>		<i>u</i>
	nasal	<i>in</i>		<i>un</i>
mid		<i>e</i>		<i>o</i>
low	oral		<i>a</i>	
	nasal		<i>an</i>	

This thesis uses the orthography established in the New Lakota Dictionary (2008) and referred to as the NLD orthography or the Standard Lakota Orthography (SLO) by some Lakota teachers. This writing system is now employed by the majority of institutions and teachers in Lakota country and is practically on the verge of being considered the standard, even though older native speakers who are not trained

language teachers commonly use simplified spelling based on early missionary orthographies or, more often, employ imprecise ad-hoc spelling.

In its philosophy, the NLD orthography is very much in line with the spelling system established by Boas and Swanton (1911), and adopted by Deloria (1932), in that it consistently marks stress and aspiration, two major phonemic features commonly overlooked by early lexicographers and grammarians among the missionaries. The Boas-Swanton-Deloria orthography was modified in the 1970s by Rood&Taylor who replaced the subscript diacritic used for marking aspiration with the letter h and introduced the marking of intervocalic glottal stop. The NLD orthography differs from the one established by Rood&Taylor in three aspects:

1) nasal vowels are spelled with *ay*, *iy* and *uy* whereas Rood&Taylor use *a*, *i*, *u*. The latter approach is perhaps a better way to represent the phonemes, but the former approach is more practical for purposes of typing and reading. Additionally, the former spelling has a long tradition in the speech community.

2) intervocalic glottal stop is not marked because it is not phonemic and it is always predictable (used in formal speech, weakened or dropped in informal speech). Thus the NLD spelling is, e.g., *aú* and *thi'oblečha* where Rood&Taylor have *a'ú* and *thi'oblečha* respectively.

3) the NLD orthography distinguishes between stops with glottal aspiration (*kh*, *ph*, *th*) and those with velar aspiration (*kħ*, *pħ*, *tħ*). These two groups are in complementary distribution so they are allophones, but there are practical reasons to differentiate them in spelling; second language learners of Lakota tend to find it much easier to learn pronunciation and read texts with both groups marked in the spelling.

2.5. Morphophonemics

This chapter discusses morphophonemic and phonological changes resulting from grammatical processes, particularly those that are relevant for the morphological and syntactic phenomena under consideration of this thesis.

2.5.1. Stress

As a rule, all Lakota words are stressed on the first or second syllable, with a handful of words that are stressed on the third. There are also occasions on which some words with first or second syllable stress are pronounced with third syllable stress for emphasis (e.g. *thákóža* ‘grandchild’ is commonly pronounced *thákožá* when used as a term of address). Second syllable stress is slightly more frequent than first syllable stress. Stress is lexical and phonemic.

When a prefix is added to a word stressed on the first or second syllable, the stress moves to the second syllable of the newly formed word. Consider the examples in (4):

- (4)
- | | | | |
|-----|---------------------------|-----------------------------|----------------------------|
| (a) | <i>oyáka</i> | → <i>okíyaka</i> | → <i>uŋkókiyakapi</i> |
| | <i>to tell smth</i> | → <i>to tell smth to sb</i> | → <i>we told him it</i> |
| (b) | <i>k’ú</i> | → <i>wak’ú</i> | → <i>wičhák’u</i> |
| | <i>to give smth to sb</i> | → <i>I gave it to him.</i> | → <i>I gave it to them</i> |

With a few exceptions listed below, multisyllabic words with first syllable stress keep the stress position when affixes are added after the first syllable. Consider the examples in (5):

- (5)
- | | | |
|-----|----------------------|------------------------|
| (a) | <i>čhékiya</i> | → <i>čhékwiye</i> |
| | <i>to pray to sb</i> | → <i>I pray to him</i> |
| (b) | <i>ókíya</i> | → <i>óuŋkiyapi</i> |
| | <i>to help sb</i> | → <i>we helped him</i> |

An exception to the above rule is represented by a small number (about two dozen) of words with first syllable stress that shift their stress to the second syllable when inflectional affixes are added. Examples are given in (6):

- (6)
- | | | | |
|-----|-----------------|---|------------------|
| (a) | <i>máni</i> | → | <i>mawáni</i> |
| | <i>to talk</i> | → | <i>I walk</i> |
| (b) | <i>nážiŋ</i> | → | <i>naúŋžiŋpi</i> |
| | <i>to stand</i> | → | <i>we stand</i> |

Following is a nearly comprehensive list of words that shift their stress from the first syllable to the second when conjugated: *héčha*, *héčheča*, *héčhetu*, *kákheča*, *kákhetu*, *léčha*, *léčheča*, *léčhetu*, *máni*, *nážiŋ*, *nískokeča*, *tókča*, *tókhetu*, *tókħa*

When the prefix *wa-* (indefinite object marker, detransitiviser) is added to a vowel initial vowel stressed on the second syllable, the vowel *a* from the prefix *wa-* is dropped and the stress shifts to the first syllable of the newly formed word, as in the example in (7):

- (7)
- | | | |
|--------------------------|---|----------------------------|
| <i>iyúŋǵA</i> | → | <i>wíyuyǵA</i> |
| <i>to ask about smth</i> | → | <i>to ask about things</i> |

Stress position and strength is also influenced by compounding, but these changes will be discussed in the individual chapters which are concerned specifically with those morphological processes.

2.5.2. Ablaut

Some Lakota verbs alternate their final vowel depending on what occurs after the word. This is referred to as ‘ablaut’. Lakota has three ablaut grades: *a/aŋ*, *e* and *iŋ*. The a-ablaut is usually considered the default in Siouan literature and used for citation

forms, although there are some indications that it is actually the e-ablaut that is historically older (see Rankin, 2003).

Examples of Lakota ablauting verb are in (8):

(8)	citation	a-ablaut	e-ablaut	iŋ-ablaut
	<i>inyan̄kA</i>	<i>inyan̄ka</i>	<i>inyan̄ke</i>	<i>inyan̄kiŋ</i>
	<i>yútA</i>	<i>yúta</i>	<i>yúte</i>	<i>yútiŋ</i>
	<i>iyáyA</i>	<i>iyáya</i>	<i>iyáye</i>	<i>iyáyíŋ</i>
	<i>hÁŋ</i>	<i>hán</i>	<i>hé</i>	<i>hiŋ</i>

The citation form of ablauting verbs is given with a word final capital *A* or *Aŋ*, a tradition started by Rood and Taylor (1976). Lakota verbs that are not subject to ablauting are cited with non-capital final *a/aŋ*, for instance *yuhá*, *lowán*, *thánka*.

There is small number of verbs that are ablauted by some speakers but not others, examples are *hóta* ‘grey’, *há* ‘to bury smth/sb’, etc.

The ablaut grade is always determined by what follows. The sentence final ablaut grade is *e*. The *iŋ*-ablaut occurs before *ktA* (future-irrealis marker), *na/nahán* ‘and’, *naiŋš* ‘or’, *yethó* ‘familiar command’ and *yé* ‘polite entreaty’.

A number of A-words have somewhat irregular *iŋ*-ablaut form. Most of these words are derivatives of *yÁ* ‘to go there’. Examples are *Mniŋ kte* ‘I will go there’ (from *yÁ*) and *Gniŋ kte* ‘He will go back’ (from *glÁ*).

The e-ablaut and a-ablaut grades are selected by numerous conjunctions, clitics and particles that can follow verbs.

Lakota ablaut is lexical and there is no way to predict whether a word is ablauting or not although there are certain word final syllables that do not contain an ablauting *a* by default.

2.5.3. Truncation

Truncation is a morphophonological processes which involves the loss of the word final vowel following an obstruent, which in turn is sometimes subject to further modification. Truncation is probably the only source of consonant final syllables in the language. Truncation is exemplified in (9) which also summarizes the obstruent modifications.

(9)

	stative verb	truncated form	English meaning	
(a)	<i>šéčA</i>	<i>šél</i>	dry, withered	} change to <i>l</i>
(b)	<i>hóta</i>	<i>hól</i>	grey	
(c)	<i>k'éǵA</i>	<i>k'éh</i>	giving off a grating sound	} devoicing
(d)	<i>khízA</i>	<i>khís</i>	to fight sb	
(e)	<i>šnižA</i>	<i>šniš</i>	withered	
(f)	<i>šókA</i>	<i>šóg / šók</i>	thick	} voicing / no change
(g)	<i>ksápA</i>	<i>ksáb / ksáp</i>	smart	
(h)	<i>iyóyanpa</i>	<i>iyóyanb / iyóyanm</i>	shining	} nasalisation

The voicing of *k* and *p* is determined by the phonological environment following the truncated syllable; the tendency is that if a consonant is followed by a voiced element, such as a vowel, it generally becomes voiced, but if the following consonant is voiceless, the consonant usually remains voiceless. Thus for instance the *p* in *sápA* ‘black’ becomes *b* in *sáb áya* and *sabyá*, but not in *sapsápa*. Boas and Deloria consistently spelled the truncated versions of the syllables *ka* and *pa* with *k* and *p* respectively, regardless of what followed. Due to this as well as to spelling inconsistencies in historical texts, Lakota dictionaries often give two spelling variants of words involving truncated *ka* and *pa*. For example, both *sapsápa* and *sabsápa* are

listed in the New Lakota Dictionary to enable the learner to find the word, even though only the former reflects the pronunciation. Syllables with velar aspirated stops *kħ* and *pħ* are also marginally subject to truncation, hence we find *tħokápħa* reduced to *tħokáb* and *tókħa* to *tók* / *tóg*.

When *pa* or *pħa* follow a nasal vowel, the obstruent can be changed into *p*, *b* or *m* depending on the following phonological environment and speed of speech, where *m* is more common in fast speech (e.g. *iyóyaŋpa* → *iyóyaŋm*).

The truncation of *ta* to *l* is also applied to some words ending with *te* and *tu*. Truncation of *ka* to *g/k* marginally applies to word final *ku*. When reduced *ta* occurs before a consonant, it variably results in *l'* or *t*, thus we can hear both *Lakħól'iyapi* and *Lakħótiyapi* for 'Lakota language' (etymologically *Lakħóta* + *iyápi*) and both *pħel'ókšaŋ* and *pħetókšaŋ* for 'around fire' (*pħéta* + *ókšaŋ*).

Some compounds which involve truncation of the first member before a vowel initial second member of the compound can have two or three alternative pronunciations and spellings, as exemplified in (10).

(10)

slower speech	transitional form	faster speech	meaning
<i>mas'óphiye</i>	<i>maz'óphiye</i>	<i>mazóphiye</i>	<i>a store</i>
<i>haŋp'íkčeka</i>	<i>haŋm'íkčeka</i>	<i>haŋpíkčeka</i>	<i>moccasins</i>
<i>maħ'ičamna</i>		<i>mağičamna</i>	<i>a hoe</i>
<i>Lakħól'iyapi</i>		<i>Lakħótiyapi</i>	<i>the Lakota language</i>
<i>lol'ih'aŋ</i>		<i>lolih'aŋ</i>	<i>to cook</i>
<i>šunċ'ónažiŋ</i>	<i>šunċ'ónažiŋ</i>	<i>šunċónažiŋ</i>	<i>horse barn</i>

Not all Lakota words with the word final syllables indicated in (9) are subject to truncation. Thus in this thesis I will refer to 'truncating' and 'non-truncating' words.

Truncation plays role in reduplication in that when the truncating syllable is reduplicated, its first rendition is truncated. Truncation is triggered by various

syntactic phenomena most of which occur in the constructions investigated in this thesis and will be discussed in the relevant chapters.

2.5.4. Palatalization

When verb inflection or other morphosyntactic processes place *i* before *k* followed by a vowel, the *k* frequently becomes *č*. Consider the examples in (11):

(11) Examples of palatalization

base verb	examples of <i>k</i> changing to <i>č</i>	
(a) <i>kašlá</i> to cut smth low →	<i>kičašla</i> he cut it low for him →	<i>ničašla</i> he cut it low for you
(b) <i>khí</i> to take smth from sb →	<i>ničhí</i> he took it from you →	<i>čhičhí</i> I took it from you
(c) <i>kňÁ</i> to mean smth/sb →	<i>ničhé</i> he is talking about you →	<i>čhičhé</i> I am talking about you
(d) <i>k'ú</i> to give smth to sb →	<i>nič'ú</i> he gave it to you →	<i>čhič'ú</i> I gave it to you
(e) <i>kaksÁ</i> to cut smth off →	<i>khičáksA</i> to cut smth in two →	<i>khiwákakse</i> I cut it in two

This type of palatalization takes place in active verbs, whereas most stative verbs are not subject to palatalization, as in *kňátA* “to be hot” → *nikňáte* “you are hot”, *khúžA* “to be sick” → *nikhúže* “you are sick”. Palatalization on stative verbs takes place only in the following two situations: (i) when a stative verb involves the instrumental prefix *ka-*, and (ii) when the stative verb contains the 1st dative prefix *ki-*. Examples are in (12):

(12) Palatalization in stative verbs

Stative with prefix <i>ka-</i>	Stative with prefix <i>ki-</i>
<i>kakíŷA</i> to suffer → <i>ničákíže</i> you suffer	<i>akísni</i> to recover from smth → <i>aničísni</i> you recovered from it
<i>kaítomni</i> to feel dizzy → <i>ničáitomni</i> you feel dizzy	<i>kiphí</i> it is fit for one → <i>ničíphi</i> it is fit for you

The palatalization rule described in (12) is applied by older contemporary speakers but not by younger ones, suggesting a continued loss of palatalization in the language.

In old Lakota, palatalization was applied across word boundaries in that whenever a word with e-ablaut was followed by a word initial pre-vowel *k* the latter changed into *č*. For instance, *kiŋ* (definite article) would become *čiŋ* after an ablauted word, as in *wéksuye čiŋ hená* “those things that I remember”. This feature disappeared sometime around the 1950s and contemporary speakers do not apply it or recognize it as grammatical. A relic of this rule still occurs after the suffix *-kA* (a generalizer), as seen in *kičhí waúnke čiŋ* – “the one I kind of lived with” or in *théčake čiŋ* “the young ones”. The combination *-ke čiŋ* is felt as one lexical unit by some speakers and they tend to write it as *kečiŋ* or *keči*.

The change of *k* into *č* also takes place in many compounds. For instance, the result of compounding *gli* and *kú* is *gličú*.

2.5.5. Nasalization spread

Syllables *ya*, *yi*, *yu*, *ha*, *hi*, *hu* and *wa*, *wi*, *wu* often become nasalized when a nasal vowel is placed before or after them through morphological processes. An example is the word *unýáŋpi* “we go” which is a form of *yÁ* “to go”. Nasalization does not spread from the left to the right across the instrumental prefixes *ya-* and *yu-* as in *unýúksapi* “we cut it”. Nasalization spread is blocked by *l*, thus *wanyáŋkA* “to see smth/sb” becomes *wanláke* “you saw it”. The nasalization spread is particularly relevant when

infixing the 1st person plural affix *uŋ-*, but for the purposes of this thesis it is most relevant with respect to modifiers derived via affixing the suffix *-ya*, which becomes nasalized after a nasal vowel.

2.6. Verbal morphology – basic sketch

This introduction to Lakota verbal morphology is necessarily limited and covers only the most important features immediately relevant for the current investigation.

2.6.1. Personal affixes (split intransitivity)

Like all Siouan languages, Lakota makes a fundamental distinction between “active” and “stative” (or “neutral”) predicates.

The sole argument of stative predicates is marked with the same set of affixes as the object argument of transitive predicates. This phenomenon is referred to as split intransitivity⁴ (Merlan 1985) and it is illustrated in (13):

- | | |
|---|--|
| <p>(13) (a) <i>Slolwáye.</i>
 <i>slol-Ø-wá-ye</i>
 know-3SG.U-1SG.A-stem
 I know him.</p> | <p>(a') <i>Slolmáye.</i>
 <i>slol-má-Ø-ye</i>
 know-1SG.U-3SG.A-stem
 He knows me.</p> |
| <p>(b) <i>Walówaŋ.</i>
 <i>wa-lówaŋ</i>
 1SG.A-sing
 I sang.</p> | <p>(b') <i>Wamátukħa.</i>
 <i>wa-má-tukħa</i>
 tired-1SG.U-stem
 I am tired.</p> |

Third person singular is coded with Ø for both undergoer, as in (13a), and actor, as in (13a'). The 1st person singular actor in (13a) is expressed by *-wa-*, whereas the 1st person undergoer in (13a') is coded with *-ma-*, which is also used for marking the

⁴ For analysis of split intransitivity in Lakota see, e.g., Merlan (1985), Legendre&Rood (1992) and Latrouite&Van Valin (2014). A different approach is given in Mithun (1991) who analyzes Lakota as an agent/patient language.

sole argument of the stative verb in (13b). These two different cross-reference patterns are reflected only in the first person singular and the second person while all other grammatical persons neutralize it.

Lakota distinguishes three types of plural: animate distributive, animate collective and inanimate. These are illustrated in (14):

- (14) (a) *Ípuzapi.*
í-Ø-púzA-pi
 mouth-3U-dry-PL
 Their mouths were dry. (i.e. They were thirsty.)
- (b) *Íwičhapuze.*
í-wičha-púzA
 thirsty-3PL.COLL-dry
 Their mouths were dry. (i.e. They were thirsty.)
- (c) *Puspúze.*
púzA-púzA
 dry-REDUP
 They (inanimate) were dry.

The animate distributive plural shown in (14a) is marked with the suffix *-pi*. Animate collective plural is marked with the affix *wičha-* on stative verbs and a limited number of intransitive active verbs (e.g. *wičháločhiŋ* ‘they are hungry’). A group of coming-going verbs take the prefix *a-* in collective plural. Inanimate plural is realized via reduplication of stative verbs, as shown in (14c). Inanimate plural marking is not always obligatory, but animate plural marking is.

The split intransitivity is further reflected in the fact that the collective plural affix *wičha-* is also used for cross-referencing third plural animate object of transitive verbs, as shown in the contrastive examples in (15):

- (15) (a) *Slolwičhawaye.*
slol-wičha-wa-ye
 know-3PL.U.ANIM-1SG.A-stem
 I know them (animate).

- (b) *Slolwáye*.
slol-Ø-wa-ye
 know-3SG.U-1SG.A-stem
 I know him/her/it/them(INAN).

The Ø in (15b) can express object in 3rd singular animate/inanimate as well as object in 3rd plural inanimate.

Table 2.5 gives a comprehensive overview of the subject inflection patterns, with stative affixes in the first row. Active verbs are inflected with five sets of affixes and some active verbs have various irregular sets that are most likely relics of older inflection sets that gradually went out of use.

Table 2.5 Overview of subject inflection patterns

subject affixes			1sg	2sg	2pl	3sg	3pl	1d	1pl
stative (undergoer)			ma-	ni-	ni...pi	Ø...	Ø ...pi	uŋ...	uŋ...pi
active (actor)	Class I a		wa-	ya-	ya...pi				
	Class I b	sometimes before ki- or k-	we-	ye-	ye...pi				
	Class II	replaces y-	bl-	l-	l...pi				
	Class III	before uŋ or replacing y	m-	n-	n...pi				
	reflexive	before ič'i- , ikp- , igl-	m-	n-	n...pi				
irregular		various	various	various					

The first dual (1d) expresses a grammatical person which includes the speaker and the listener, thus it can translate into English with “we” only when the meaning is “you and I” (or “you with me” or “I with you”). All other meanings of ‘we’ are expressed with first person plural (1pl).

Object affixes are given in Table 2.6:

Table 2.6 *Object affixes*

object affixes	1sg	2sg	2pl	3sg	3pl	1pl
undergoer	ma	ni	ni...pi	Ø	wičha-	uŋ...pi

The first dual is missing in Table 2.6 because it is never realized as an object.

Note that the suffix *-pi* expresses both the distributive animate plural of the subject (as in Table 2.5), as well as the object in 2nd plural and 1st plural (as in Table 2.6). In consequence, verbs with the 2pl and 1pl affixes from Table 2.6 have more than one meaning, as exemplified in (16):

- (16) (a) *Slolniyanpi.*
slol-ni-Ø-yaŋ-pi
 know-2U-3A-stem-PL
 They know you (sg./pl.). / S/he knows you (pl.).
- (b) *Slol'únyanpi.*
slol-'úŋ-Ø-yaŋ-pi
 know-1PL.U/1PL.A-3A/3U-stem-PL
 We know him. / He knows us. / They know us.

In (16a), the suffix *-pi* can be interpreted as either referring to the subject only (i.e. ‘They know you.sg’) or to both the subject and object (i.e. ‘They know you.pl’) or only to the object (i.e. ‘S/he knows you.pl.’).

In (16b), both the *Ø* and the affix *uŋ-* can be interpreted as expressing the subject or the object, and the suffix *-pi* as referring either to the subject or the object. In consequence, the sentence in (16b) has three possible interpretations.

An overview of the subject-object combinations that can occur on transitive verbs is given in Table 2.7. The table is nearly comprehensive except that it cannot account for certain combinations of the 3rd plural animate object affix *wičha-* with the subject

affix *uŋ* (1st plural), which has a number of variations with vowel initial verbs (for a comprehensive discussion, see Ullrich 2008 and 2016).

Table 2.7 *Combinations of subject and object affixes*

		OBJECT					
		him/her/it; <u>them</u> (INANIMATE)	them (ANIMATE)	<u>me</u>	you (sg.)	you (pl.)	us
S U B J E C T	he/she/it (3s)	<u>øø...</u>	<u>wičhaø...</u>	<u>maø...</u> <u>miø...</u>	<u>niø...</u>	<u>niø...pi</u>	<u>uŋø...pi</u>
	they (3p)	<u>øø...pi</u>	<u>wičhaø...pi</u>	<u>maø...pi</u> <u>miø...pi</u>	<u>niø...pi</u>	<u>niø...pi</u>	<u>uŋø...pi</u>
	I (1s)	<u>øwa...</u> <u>øbl...</u> <u>øm...</u> <u>øwé...</u>	<u>wičhawa...</u> <u>wičhabl...</u> <u>wičham...</u> <u>wičhawe...</u>		<u>čhi...</u>	<u>čhi...pi</u>	
	you (sg.) (2s)	<u>øya...</u> <u>øl...</u> <u>øn...</u> <u>øye...</u>	<u>wičhaya...</u> <u>wičhal...</u> <u>wičhan...</u> <u>wičhaye...</u>	<u>maya...</u> <u>mayal...</u> <u>mayan...</u> <u>miye...</u>			<u>uŋya...pi</u> <u>uŋyal...pi</u> <u>uŋyan...pi</u> <u>uŋye...pi</u>
	you (pl.) (2p)	<u>øya...pi</u> <u>øl...pi</u> <u>øn...pi</u> <u>øye...pi</u>	<u>wičhaya...pi</u> <u>wičhal...pi</u> <u>wičhan...pi</u> <u>wičhaye...pi</u>	<u>maya...pi</u> <u>mayal...pi</u> <u>mayan...pi</u> <u>miye...pi</u>			
	you and I (1d)	<u>uŋø...</u>	<u>wičhuŋ...</u>				
	we (1p)	<u>uŋø...pi</u>	<u>wičhuŋ...pi</u>			<u>uŋni...pi</u>	

The distinction between stative and active verb is pervasive in the language and plays an essential role in numerous morphosyntactic constructions, including those discussed in this thesis. Stative verbs (SV) constitute a very large category. They describe states or conditions and usually imply that one has no control over that state or condition. Active verbs, on the other hand, describe actions that are governed or

controlled by the actor/agent. However, the distinction between active and stative is determined morphologically rather than semantically. For instance, the verb *ločhiŋ* ‘to be hungry’, is active and not stative as might be expected, while *kačégčeka* ‘to stagger’ is stative even though staggering seems to be an activity from English perspective. Stative and active verbs can therefore be reliably identified only by the personal affixes they take.

Words that are categorized as nouns and adverbs in familiar languages take the stative inflection whenever they function as predicates.

2.6.2. Causatives

Lakota has two causative suffixes. They are *-yA* and *-khiyA*. The former is primarily used with stative verbs and the latter with active verbs, although there is a small group of active verbs that can take both affixes, resulting in two different meanings. Another exception is the stative verb *uŋspé* ‘to know how to do smth’ which takes the suffix *-khiyA* rather than *-yA*.

Causative affixes are applicatives (they increase the valence number of the verb they are attached to). Thus for instance *kǎ́tA* ‘it is hot’ becomes *kǎ́lyÁ* ‘to heat smth’, and *káǵA* ‘to make smth’ becomes *kaǵkhiyA* ‘to let sb make smth’.

It is also possible to combine both affixes on a single verb. For instance *sápA* ‘to be black’ becomes *sabyÁ* ‘to paint smth/sb black’ which can become *sabyékhiyA* ‘to let sb paint smth/sb black’.

Some active verbs do not allow either of the two causative suffixes and create the causative form by taking the prefix *yu-* (or *ya-*). An example is the verb *čhéyA* ‘to cry’ which becomes *yučhéyA* ‘to make sb cry’. Some active verbs allow both the suffix *-khiyA* and the prefix *yu-* creating two causative verbs with different meanings. An

example is the verb *inyan̄ka* ‘to run’, which becomes *inyan̄gkhiya* ‘to run smth (as an institution, business), manage, operate, make smth run (as a horse)’, and *yuīnyan̄ka* ‘to get smth going / started / running (as a horse, meeting)’.

For a comprehensive description of Lakota causative affixes, see Ullrich (2008, 2016).

2.6.3. Datives

Lakota has two dative affixes. They are the 1st dative affix *ki-* (DAT1) and the 2nd dative affix *kíči-* (DAT2). The 1st dative has up to seven allomorphs, the 2nd dative has three.

Lakota is a secundative alignment language, which means that the recipients of ditransitive verbs are treated the same as the patients of monotransitive verbs. Therefore, the **primary object** of dative verbs (the person affected) is the object that always agrees with the personal affix on the verb (secundative alignment). The **secondary object** (the object handled) is not indicated on the verb. For this reason, the terms **primary object** and **secondary object** are more fitting for Lakota grammar than the traditional terminology that uses **direct** (secondary) and **indirect** (primary) object. (See also Van Valin 1997: p. 271, and 2001: p. 69)

The two dative affixes are applicatives and they express affectedness, which can have various semantic interpretations, including benefaction, malefaction, recipient, experiencer-recipient, recipient-benefaction, possessor-benefaction. The specific reading is generally determined contextually although the semantics of the verb also play a role. The 2nd dative can additionally encode deputative benefaction (also labeled substitutive benefaction).

Boas & Deloria (1941) describe the difference between the two datives as one of giving or withholding permission or consent, but Ullrich (2013) shows evidence that this is not an accurate analysis and that both datives can express both maleficiary and beneficiary readings, as well as other types of affectedness.

With respect to Lakota dative verbs there is a person case constraint in that the dative verbs cannot to be used for saying things like “I bought it for us” or “I opened it for us.” This is because the subject of a ditransitive dative verb (e.g. “I”) cannot be a member of the primary object (e.g. “us”). In other words, ditransitive dative verbs indicate that the primary object is affected by the action of the subject upon the secondary object. For this reason, certain combinations of affixes, such as the combination of 1st singular subject and 1st plural object, are not possible.

Both dative affixes can also be used on stative verbs. Dative stative verbs express that the subject is affected by the state of the object expressed by the stative verb. An example is given in (17).

- (17) (a) *Wičháša kiŋ pǎéta kiŋ kičisni.*
wičháša kiŋ pǎéta kiŋ Ø-kiči-Ø-sní
 man DEF fire DEF 3SG.U-DAT2-INAN-cold
 The man’s fire went out.
 (more literally ‘The man was affected by the fire going out’.)
 (data: RFT)
- (b) *Pǎéta kiŋ mičisni.*
pǎéta kiŋ m-íči-Ø-sní
 fire DEF 1SG.U-DAT2-INAN-cold
 My fire went out.
 (more literally ‘I was affected by the fire going out’.)
 (data: BBBJ)

The more literal translation of (17a) reflects the fact that *wičháša kiŋ* ‘the man’ is the subject and *pǎéta kiŋ* ‘the fire’ is the object which may feel counter-intuitive as the semantics of the stative verb *sní* ‘to be cold’ make the fire appear as its notional

subject. However, the personal affix *m-* in (17b) clearly indicates the affectee is the subject (For a detailed discussion of dative stative verbs, see Ullrich 2016).

A few active transitive verbs are also used as dative statives, specifically the verbs of coming and going.

2.6.4. Possessive

The possessive affix *ki-* has five allomorphs (*ki-*, *k-*, *gl-*, *kik-*, *glo-*). Examples of verbs with the possessive affix are provided in (18):

(18)	<u>non-possessive verb</u>	<u>possessive verb</u>
(a)	<i>súnj</i> to braid smth	<i>kisúnj</i> to braid one's own
(b)	<i>pazó</i> to show smth	<i>kpazó</i> to show one's own
(c)	<i>kaksÁ</i> to cut smth	<i>glaksÁ</i> to cut one's own
(d)	<i>ahí</i> to bring smth	<i>glohí</i> to bring one's own
(e)	<i>ičú</i> to take smth	<i>ikikču</i> to take one's own

The terminology used for the description of numerous languages makes a distinction between **possessive pronouns** and **reflexive possessive pronouns** in order to differentiate between the possession of an indirect object by the direct object (as in “Lisa gave Mary her book,” i.e. the book belongs to Mary) and the possession of an object by the subject (as in “Lisa gave her book to Mary,” i.e. the book belongs to Lisa). The Lakota verbs in question indicate the possession of an object by the subject, and as such they are reflexive possessive verbs under the above definition. However, since Lakota has no “possessive verbs” that indicate the possession of the secondary object by the primary object, the term possessive verb presents no

ambiguity and is used here to simplify the terminology and avoid the unwieldy term “reflexive possessive verb.”

Many Lakota verbs are possessive in their morphological makeup (by having the possessive affix) but do not bear any possessive meaning, or at least not one obvious from the English translation of the verb or from an English speaker’s perspective in general. Examples of such verbs are *kiksúya* ‘to remember smth/sb’, *hakithuŋ* ‘to get dressed’, *kiktá* ‘to wake up’, *hakikta* ‘to look back’.

The possession of the secondary object by the primary object is not marked directly, instead it is only indicated contextually via affectedness marked by the dative affixes.

2.6.5. Reflexive

The reflexive affix *ič’i-* expresses that (i) the subject and the object refer to the same person, or that (ii) the subject is acting upon the object for himself/herself. Both meanings are possible for many verbs depending on context, but the object is oblique with the second usage. The affix has four allophones: *ič’i-*, *ikp-* and *igl-* and *ič’igl-* (the last one is an alternative to *igl-* use on some verbs by some speakers). Examples of reflexive verbs and their meanings are given in (19):

(19)	<u>non-reflexive verb</u>	<u>reflexive verb</u>
(a)	<i>káġA</i> to make smth	<i>ič’ičhaġA</i> to make oneself into smth, to make smth for oneself
(b)	<i>nážiŋ</i> to stand	<i>naič’ižiŋ</i> to stand for oneself, i.e. to defend oneself
(c)	<i>waksÁ</i> to cut smth	<i>waič’iksÁ</i> to cut oneself, to cut smth for oneself
(d)	<i>kahómni</i> to turn smth	<i>igláhomni</i> to turn oneself
(f)	<i>yužáža</i> to wash smth	<i>iglížaža</i> to wash oneself

All reflexive verbs are inflected with *m-* and *n-* for 1st and 2nd person singular respectively. For a detailed discussion of Lakota reflexive verbs, see Ullrich (2008 [2012]) and Ullrich (2016).

2.6.6. Reciprocal

The concept “*each other*” is expressed by the affix *kičhi-* (*kčhi-* in fast speech) added to transitive verbs, as illustrated in (20):

(20)	non-reciprocal verb	reciprocal verb
(a)	<i>wan̄yáŋkA</i> to see smth	<i>wan̄kičhiyan̄kA</i> to see each other
(b)	<i>ókiyA</i> to help sb	<i>ókičhiyA</i> to help each other
(c)	<i>slolyÁ</i> to know smth/sb	<i>slolkičhiyA</i> to know each other

Note that the verb *ókiyA* in (20b) becomes *ókičhiyA* rather than **ókičhičiyA* because the syllable *ki-* is the 1st dative affix and the dative and reciprocal datives rule each other out.

Another affix which encodes reciprocal reading is *ičhi-*, which is probably a locative in its nature. It is commonly used with stative verbs but also has some application with active verbs.

For a detailed discussion of Lakota reciprocal verbs, see Ullrich (2008 [2012]) and Ullrich (2016).

2.6.7. Indefinite object

Transitive verbs can take the prefix *wa-* to indicate that the object is indefinite. The indefinite object is commonly translated as “things” or “people” but it is often not reflected in the English translations at all. Examples are in (21):

(21)	non-reciprocal verb	reciprocal verb
(a)	<i>kšú</i> to bead smth	<i>wakšú</i> to bead things, to do beading
(b)	<i>ókiyA</i> to help sb	<i>waókiyA (wawókiyA)</i> to help people, to be a helpful person
(c)	<i>iyúkčan</i> to think about smth	<i>wíyukčan</i> to think about things, to cogitate
(d)	<i>iyuŋǵA</i> to ask sb about smth	<i>wíyunǵA</i> to ask sb about things, ask sb questions
(e)	<i>wíyunǵA</i> to ask sb questions	<i>wawíyunǵA</i> to ask people questions

The prefix *wa-* is commonly reduced to *w-* before vowel initial verbs, as shown in (21c) and (21d), but not when the word initial vowel is stressed, as in (21b).

The indefinite object marker *wa-* can also be prefixed to transitive stative verbs. For a detailed discussion of the indefinite object marker, see Ullrich (2008 [2012]) and Ullrich (2016).

2.6.8. Locatives

Lakota has four locative prefixes shown in Table 2.8. Each of the prefixes has a basic meaning which has evolved into various other senses and functions summarized in the table.

Table 2.8 *Lakota locative prefixes and their meanings*

prefix	basic meaning	broader meaning
<i>a-</i>	on the surface of	(1) on, upon, over, on the surface; for a purpose, about, concerning, in addition to, (2) gives comparative meaning to adverbs: more, -er
<i>i-</i>	in contact with	with relation to, on account of, in reference to, by means of, in contact with, in regard to, about, because of, against; by, with (as with an instrument); beside; with local adverbs expresses reference to a particular place, makes adverbs behave as postpositions; creates nouns describing instruments.
<i>o-</i>	inside of	in, into, inside; about, around, in a general way, in a restricted area; creates certain nouns of place
<i>khi-</i>	in the middle of	in two parts, separated in the middle or evenly; divided, distributed evenly among, sharing, in contact

The first three locatives are applicatives although the increase of valence number is not always consistent. For instance, adding *a-* to the transitive verb *ophěthun* ‘to buy smth’ results in the di-transitive *aóphěthun* ‘to buy smth from sb’, whereas adding *a-* to the transitive verb *wányan̄ka* ‘to see smth/sb’ results in *awányan̄ka* ‘to look after smth/sb’ which is transitive rather than di-transitive. The locatives *a-* and *i-* sometimes change stative verbs into active verbs; for instance, *čhan̄zeka* ‘to be angry’, which conjugates with the undergoer set of affixes becomes *ačhan̄zeka* ‘to be angry with sb’ which conjugates with the actor set of affixes. The increase of the valence number by the locative *o-* is very unpredictable and it is often the case that *o-* gives the verb a more generic meaning rather than an additional argument. The locative *i-*, on the other hand, always functions as an applicative.

The reciprocal affix *ičhi-* mentioned in 2.6.6 is likely a combination of the locatives *i-* and *khi-*.

2.6.9. Instrumentals

Lakota has a set of prefixes that can form transitive causative verbs from verbal roots. These prefixes are traditionally termed instrumental prefixes in the Siouanist literature although they primarily encode a type of activity (e.g. away from the body, toward the body) or the source of causative force (e.g. internal force versus external force). Table 2.9 offers an overview of the prefixes.

Table 2.9 Overview of Lakota instrumental prefixes

<i>ka-</i>	by striking/hitting (with an instrument); by action of wind or water; by outer force
<i>na-</i>	(a) by action of foot or leg (b) by visceral natural forces; by inner force, by itself; with electricity or electric devices, by engines
<i>pa-</i>	action away from the body, by pushing or by pressure with the hands or the body
<i>pu-</i>	by pressure (no longer productive)
<i>wa-</i>	by a sawing motion, cutting with a blade or saw
<i>wo-</i>	by impact from a distance; by hitting or poking with a long object; by blowing (with the mouth, the wind/waves); by explosion; by running into (as with a car)
<i>ya-</i>	by physical action of the mouth (as eating, biting, holding in the mouth, inhaling), by talking or singing
<i>yu-</i>	by action of hands directed toward the body; can also express general causation

The two meanings of the prefix *na-* likely originate in two different prefixes (see Rankin, undated draft)

For other discussions of Lakota instrumental prefixes, see Boas and Deloria 1941, § 45; Rood and Taylor 1996, p. 463; Ullrich 2011, pp. 804ff; Ullrich 2016, pp. 430ff.

2.7. Articles

Lakota uses a large number of articles.

There are two definite articles: *kiŋ* and *k'uŋ*, both pronounced as clitics. The definite article *kiŋ* codes definiteness in similar contexts as “the” does in English, but it also occurs in constructions where it does not correspond with the usage of the English definite article (e.g. modifying the RPs cross-referenced with the object of possessive verbs), and contexts in which *kiŋ* is absent when compared to “the”. The article *k'uŋ* codes definite RPs that were established in the discourse previously and it occurs pervasively in relative clauses that express a past event which took place before another past event (cf. also Ullrich, 2016:264-266). The article *k'uŋ* has two allomorphs, *uŋ* and *č'uŋ*, the latter of which occurs after e-grade ablaut in older texts (in modern Lakota it is present only as a fossilized form in some lexicalized expression).

Lakota has an unusually large number of indefinite articles. They are used for marking a fundamental distinction between specific (referential) and non-specific (non-referential) reference phrases. The non-specific articles are further divided into those that mark negative RPs and non-negative RPs. The former occur only with negated verbs whereas the latter are usually used in hypothetical contexts (questions, wishes, in future-irrealis clauses, etc.), but they can also be used in a limited number of contexts with negative verbs, as in sentences like “I have never seen an elephant.”

Table 2.10 gives a schematic representation of specificity marking in Lakota and an overview of the articles corresponding to the individual distinctions.

Table 2.10 Schematic representation of specificity marking and articles in Lakota

```

graph TD
    A[DEFINITENESS] --> B[indefinite]
    A --> C[definite]
    B --> D[non-specific]
    B --> E[specific]
    D --> F[+negative]
    D --> G[-negative]
    C -.-> H[ ]
    E -.-> I[ ]
    F -.-> J[ ]
    G -.-> K[ ]
  
```

Type of reference phrase			NON-REFERENTIAL			REFERENTIAL		
			negative	indefinite non-specific	no article	indefinite specific	definite	definite familiar
Countable	Singular	Concrete	<i>wañžini</i>	<i>wañži</i>		<i>wañ</i>	<i>kiŋ</i>	<i>k'uŋ</i>
		Abstract	<i>tákuni</i>					
	Plural	Human	<i>tuwéni</i>	<i>etáŋ</i>				
		Non-human As individuals	<i>tákuni / etáŋni</i>	<i>wañžígži</i>				
Uncountable				<i>etáŋ</i>		<i>(eyá / k'eyá)</i>		

The empty column represents RPs that are not marked with articles. Note that the column is headed partly by –REF and partly by +REF, reflecting that some unmarked RPs are referential and some are not. For instance incorporated nouns and nouns that

function as co-predicates in complex predicates are always –REF. Unmarked plural or uncountable RPs can be either +REF or –REF depending on pragmatics.

The referential indefinite articles *wan* and *eyá/k'eyá* are used only with referential RPs that are also specific. For instance, the singular article *wan* is used in contexts like “I saw a tall man” or “There was a dog”, but it cannot be used in such contexts as “He is a tall man” and “A dog is a four-legged animal” where the RPs are non-specific. The same is true about the plural article *eyá* ‘some’. This has often been overlooked and some of the existing research literature worked under the assumptions that indefinite articles are used obligatorily with non-referential RPs.

Furthermore, plural indefinite articles are generally not used with plural non-referential RPs (in effect they are bare RPs). This is another aspect not mentioned in the research literature and one that is important for the present study (discussed in detail in 3.4).

In the last row of Table 2.10 I show the plural indefinite article *eyá/k'eyá* in brackets because corpus data provides extremely rare examples of its occurrence in uncountable environments, hence I suspect there are various restrictions for its use with uncountable RPs.

Negative articles are reserved for negative contexts and are generally used with RP cross-referenced with the arguments of predicates negated with one of the negating particles, such as *šni* and *ka*. However, there are contexts in which negative articles are not used in correspondence to the English “no”, as in “There is no wood” or “There are no horses”. Moreover, the non-referential non-negative articles can also be used in some negative contexts. For instance, a distinction is made between “I didn’t see a horse today” (which would employ the negative article *wanžini*) and “I had never seen an elephant” (where *wanži* would be used). The RP in the former context is

non-referential and non-existing (i.e. ‘there is no such horse described as one that I saw today’), whereas the RP in the latter context is non-referential but existing (i.e. ‘I know elephants exist, but I have/had never seen one’).

The negative article *tákuni* is traditionally listed as coding plural non human RPs, which is something that native speakers readily confirm when they are asked about it, but corpus data of this usage is insufficient.

The reduplicated version of *wanžigži* is used in some environments in a way that makes it appear to function as an article. Although it does not seem to code specificity as the other indefinite articles do, there are certain situations in which it cannot be replaced with any of the indefinite articles.

3. Stative verbs as ad-nominal modifiers and predicates

3.1. Introduction

The objective of this chapter is to offer a comprehensive discussion and analysis of all syntactic constructions where stative verbs (SV) function as attributive ad-nominal modifiers or predicates. The motivation for discussing these two functions in one chapter is multifold; firstly, as the discussion will show, they are not always easily distinguishable and trying to describe one without the understanding of the other is not straightforward. Secondly, in traditional Lakota grammars and research literature stative verb predication has been repeatedly mistaken for modification or noun incorporation, and one of the main constructions with SV predication has not been explicitly addressed. Therefore, this chapter offers a comprehensive analysis and provides the defining properties of these two functions of stative verbs.

Lakota stative verbs can participate in several syntactic constructions and each of these will be described in a separate section of this chapter. Only in two of the constructions do stative verbs function as ad-nominal modifiers.

3.2. Noun + stative verb as a complex predicate

3.2.1. Introduction

In this section I will provide a description and analysis of a construction with a noun and stative verb that has not been directly addressed in the existing Siouan literature. Before I can describe this construction it is important to note that Lakota nouns can function as predicates and thus a single noun without any additional words can constitute a complete clause, as shown in (22a). Evidence that the noun functions

as a predicate is given in (22b) where the suffix *-pi*, animate plural marker, is affixed to the noun:

- (22) (a) *Hokšila*.
ho-Ø-kšila
 boy-3SG.U-stem
 He is a boy. / It is a boy.
- (b) *Hokšilapi*.
Ho-Ø-kšila-pi
 boy-3U-stem-PL
 They are boys.

The position of the zero affix indicates where personal affixes are added. The examples in (23) illustrates this with the 1st singular affix *ma-*, 2nd singular affix *ni-* and 1st dual affix *uη-*.

- (23) (a) *Homákšila*.
Ho-má-kšila
 boy-1SG.U-stem
 I am a boy.
- (b) *Honíkšila*.
Ho-ni-kšila
 boy-2SG.U-stem
 You are a boy.
- (c) *Houηkšila*.
Ho-úη-kšila
 boy-1D.U-stem
 You and I are boys.

The use of personal affixes with nouns functioning as predicates is common with nouns describing stages of life, genders, occupations, roles, etc. but it is not restricted to them, because personal affixes can be added to nouns denoting animals (e.g. *mahěňaka* ‘I am an elk’, i.e. ‘I am a member of the elk society’), numerous abstract nouns (see Chapter 6) and theoretically also to nouns denoting inanimate objects (e.g. during children’s play).

Now that it is established that nouns can function as predicates, we can start discussing the construction in which a noun is adjacent to a stative verb (N + SV), exemplified in (24). Notice that the zero affix, which occurred on the noun in (22a) and (22b), appears on the stative verb in (24). The evidence for the position of the affix is given in (24c):

- (24) (a) *Hokšila háŋske.*
hokšila Ø-háŋske
 boy 3SG.U-tall
 He is a tall boy.
- (b) *Hokšila háŋskapi.*
hokšila Ø-háŋska-pi
 boy 3U-tall-PL
 They are tall boys.
- (c) *Hokšila maháŋske.*
hokšila ma-háŋske
 boy 1SG.U-tall
 I am a tall boy.

There are two features of the construction in (24) that the extant literature does not analyze accurately. Firstly, it has been repeatedly claimed that the structure shown in (24) is a compound. This was first postulated by Boas&Deloria (1941) and adopted by numerous other researchers, e.g. de Reuse (1994:201), Chambers&Shaw (1980:327), Shaw (1980:44). De Reuse (1994:201) lists “Noun + Stative Verb” as one of the seven categories of compounds. As I will show in the following discussion, there is evidence that the N+SV construction normally does not form a compound.

Boas&Deloria (ibid) indicate compounding with a hyphen between the two members of the compound and (with some exception) by showing the reduced stress on the second member or the compound (with the grave accent diacritic), as shown in (25):

- (25)(a) *čhéǵa-thàŋka*
kettle-large
large kettle
(Boas&Deloria 1941, p. 21)
- (b) *čhéǵa-zi*
kettle-yellow
a yellow kettle
(Boas&Deloria 1941, p. 67)
- (c) *iŋyaŋ-khàta*
stone-hot
a hot stone
(Boas&Deloria 1941, p. 70)

Boas&Deloria (1941: 70) make the following statement regarding the construction exemplified in (25) (in it, they refer to stative verbs as “adjectives” and “neutral verbs”):

“The adjective follows the noun and is subordinate to it. The adjective is identical with the neutral verb. As a verb it retains its independent accent, as adjective it loses it. *šúŋka kiŋ thàŋka* ‘the dog is large’ *šúŋka-thàŋka* ‘large dog’.”

In the statement cited above, Boas&Deloria make two important assertions. Firstly, according to them, the two words in the N+SV construction form a compound. Secondly, in their interpretation the noun is the head and the stative verb is the dependent attributive modifier. De Reuse (1994), following Chambers (1978), classifies N+SV compounds with reduced stress on the second member as syntactic compounds (as opposed to lexical compounds, which have a single stress).

In the following discussion I will show that these two assertions, which have been at large adopted in the Siouan literature, are not tenable. The stative verb is not dependent on the noun and the two words are normally not compounded. I will also

show that Boas&Deloria’s statement that the stative verb functions as an attributive modifier (‘adjective’) is applicable only in some syntactic constructions, but not in others, and it is, therefore, important to discuss the N+SV construction occurring in full sentences rather than in isolation.

3.2.2. Prosodic properties of N+SV

First, this section provides a discussion of the question of compounding.

I examined a significant number of <Noun + Stative verb> constructions in a large databank of audio recorded narratives and conversations from fluent Lakota speakers. This resulted in much evidence in support of the assertion that the N+SV do not form a phonological word. The stress on the stative verb is maintained, as reflected in the spelling of (26) and supported by evidence that follows after it.

- (26) *Wakhánheža čik’ala ób éгна maŋké.*
wakhánheža čik’ala ób éгна m-aŋká
 child small with among 1SG-sit
 I sat among **small** children.
 (data: JHR01, 2005)

In (26), the stative verb *čik’ala* “small” follows the noun *wakhánheža* “child” and each word is pronounced separately with its own stress.

When the noun and stative verb are pronounced as separate words, the syllables are organized as Strong (S) or Weak (W), and into Feet (F), as shown in (27a). When the construction is compounded, it becomes a complex word, as in (27b), where it has four syllables. However, as in the uncompounded version, each syllable is either S or W, but now the syllables form adjacent feet that have to be formed into a single word,

and a single lexical word usually has one strong foot. In this case, the left foot is strong (F<s>) and the right foot is weak (F<w>). Thus the stress on the 2nd member of the compound is reduced:

- (27) (a) *máza wakháy* “it is a mysterious metal” (a description of metal)
 S W W S
 F F
- (b) *mázawakhàŋ* “it is a gun” (‘mysterious-metal’) (a lexicalized item)
 S W W S
 F<s> F<w>

The data in (27b) is an example of prosody of word formation at the lexical level and such compounds are generally lexicalized nouns (as I will argue in 3.3).

On the other hand, when we examine uncompounded instances of N+SV in discourse, such as that in (27a), what we see is that there is a pitch accent peak (usually H* peak) associated with the stressed syllable of each of the two words and that the H* peak of the N is higher in pitch than the H* peak of the SV.

This is discussed in Mirzayan (2010: 108-126) who further describes this process as follows: “The first, and most important, contribution to F0 drop in the intonational phrases in Lakota is the application of downstep at specific points. Phonetically, downstep lowers subsequent H* peaks inside phrasal units, establishing a new high level for the remaining part of the utterance at each point of application. In this manner, downstep causes the tonal space to contract in a cascading staircase as the utterance progresses.” [F0 is ‘fundamental frequency of the voice’ or ‘pitch contour’.]

This process is illustrated schematically in Figure 3.1 (Mirzayan, 2010:119).

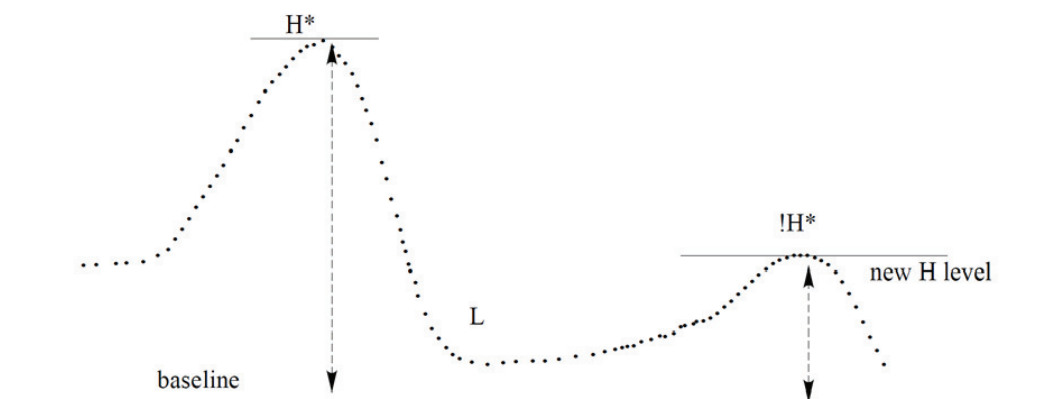


Figure 3.1 Schematic representation of two H^* pitch accents.

The second accent is downstepped relative to first. The tonal space, defined as the amount of pitch range used above a baseline unit, contracts with the application of downstep. (Mirzayan, 2010:119)

In order to test the downstepping of the second H^* peak within an intonational phrase, described by Mirzayan, numerous N+SV sequences occurring in utterances within longer narratives were analyzed with respect to their pitch track, such as the one from (26) shown in Figure 3.2.

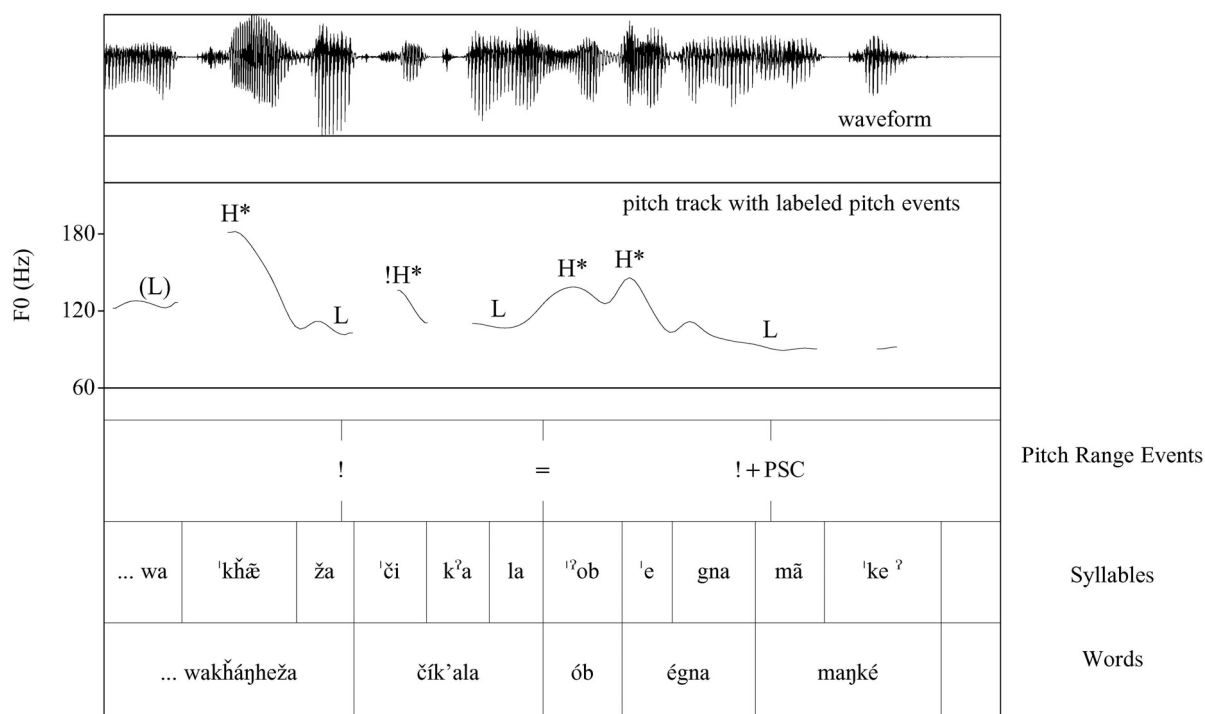


Figure 3.2: Praat speech analysis of H^* pitch downstep in (26)

Figure 3.2 shows that the H* pitch of the SV *čik'ala* 'small' is downstepped relative to the *H pitch of the N *wakħájheža* 'child', thus supporting Mirzayan's description of a pattern occurring in intermediate intonational phrase (a mid-level prosodic phrase that is usually larger than a word, but is included inside an intonational phrase). The sequence can be coded as H* !H*, where ! is the symbol for down step.

In a discussion with Mirzayan, we came to the hypothesis that it might have been this downstep of H* peaks that lead Boas&Deloria into thinking, based on impression, that the 2nd downstepped member of the Intermediate Phrase had lost its independent stress. However, the H* peak downstep is a large (above word level, at the phrase level) prosodic and intonational phenomenon and it is not equal to stress reduction.

As will be seen in the subsequent chapters, this prosodic phenomenon of downstepping of the H* peak has broad and profound implications in several of the syntactic constructions which are discussed in this study, and which had been inaccurately described as instances of compounding in the extant research literature.

The sentences in (28) with examples of the N+SV structure all come from connected discourse. In each case the SV is pronounced with an independent stress, whose H* peak is downstepped relative to the H* peak associated with the stress of the N.

(28)(a) *Wóphila thájka.*

<i>wóphila</i>	<i>Ø-thájka</i>
reason.for.thankfulness	3SG.U-large
It is a great reason for thankfulness	
(data: DTA 01, NSB)	

- (b) *Waḥpé waštémna ičáhiyapi.*
waḥpé waštémna ičáhi-Ø-yapi
 leaf sweet-smelling mix.in-3SG.U-stem-pl
 They mixed sweet smelling leaves in it.
 (data: NSB)
- (c) *Táku šiče.*
táku Ø-šičA
 something 3SG.U-bad
 It was something bad.
 (data: BQ)
- (d) *Tákuni šiče.*
tákuni Ø-šičA
 nothing 3SG.U-bad
 It was nothing bad.
 (data: NSB)
- (e) *Owáčhekiye thánka waḥ ektá wačhékiye-uḥyàḥpi.*
owáčhekiye thánka waḥ ektá wačhékiye-uḥ-yàḥ-pi
 church large a to to.pray-1.A-go-PL
 We went to a large church to pray.
 (data: NSB)
- (f) *Wašiču wakḥáj waḥ waḥyáḥg-wa-ì.*
wašiču wakḥáj waḥ waḥyáḥg-wa-ì
 white.man holy a to.see-1SG.A-arrive.there
 I went to see a doctor.
 (data: NSB)
- (g) *Čháj thánka čha hél háḥ kéye.*
čháj thánka čha hél Ø-hÁḥ kéye
 tree large DET there 3.INAN-stand it.is.said
 It was a large tree that stood there, it is said.
 (data: NSB)

Depending on the tempo of speech and other prosodic aspects, a stative verb in post-nominal position may be perceived as having a slightly weaker stress, but as mentioned earlier, this is a matter of intonation rather than stress reduction. For instance, *čháj thánka* in (28g) is pronounced with clearly enunciated independent stresses on each word, rather than with reduced stress on *thánka* or compounded into

čhaŋtʰáŋka. In (28f), *wašíču wakhánj* is pronounced with independent stress on *wakhánj* despite the fact that this N+SV phrase is a lexicalized expression for “doctor”.

Figure 3.3 shows the pitch curve of (28e), which provides a comparison of an uncompounded and compounded construction.

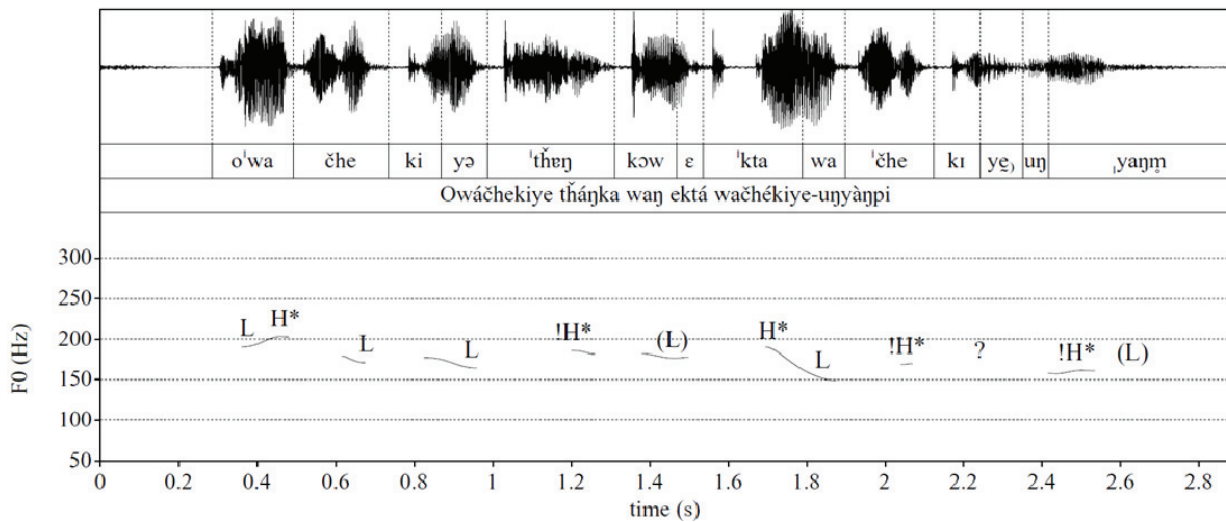


Figure 3.3 *Pitch contour of N + SV*

In Figure 3.3, the N + SV construction *owáčhekiye thánka* ‘big church’ exhibits the H* downstep on the second member, which is characteristic of un-compounded constructions, and shows that the SV *thánka* ‘big’ is pronounced as an independent word. Conversely, the last two words of the clause in Figure 3.3 represent a Purpose Construction (*wačhékiye-uŋyàŋm* ‘we went to pray’), in which they are compounded with the stress on the second verb reduced, showing minimal increase of the pitch accent peak on that verb. This is in contrast with the pitch contour on the N + SV intermediate intonational phrase.

Due to the down-stepped H* peak it is not uncommon that highly frequent and lexicalized combinations of N+SV are pronounced with a reduced stress on the

second member, which is reflected in the traditional spelling of these expressions, such as *čhanjtéwašte* ‘to be glad (literally: to be of good heart)’. However, even such lexicalized expressions are variably pronounced with stress on the second member reduced (*čhanjtéwašte*) or full (*čhanjté wašte*), as we have seen in (28f). Additionally, instrumental prefixes, such as *yu-*, can be affixed before either of the two members, yielding *yučhanjtewašte* and *čhanjté yuwášte* for “to make sb glad.”

Apart from the acoustic measurements and analysis, there is also syntactic evidence that N+SV constructions are not compounds. This evidence will be discussed in the next section.

3.2.3. Syntactic analysis of N+SV

In this section I will address the second assertion made by Boas&Deloria (1941:70) (and adopted in the subsequent Siouan literature), in which they state that in the N+SV construction the noun is the head and the stative verb is the dependent attributive modifier.

For the discussion we will use the example of the N+SV construction in (29), which is identical with the examples provided earlier in this chapter in (24).

- (29) *Wičháša hánske.*
wičháša Ø-hánske
 man 3SG.U-tall
 He is a tall man.
 (data: RFT 1992)

Notice that the translation of the construction in (29) is not “tall man” as given in Boas&Deloria (1941: 70) and in much of the research literature, but it is actually a complete clause with the meaning “He is a tall man” or “It is a tall man.” This is an important observation because it has implications for the syntactic analyses in that the nominal member of the construction (*wičháša* ‘man’) is not an RP. Instead, both of

the overt words function as predicates forming one derived complex predicate with the argument (represented by the zero affix) as its subject, which translates as “he” or “it” (as Lakota has no grammatical gender). The complex predicate translates into English with “is a tall man”. The constituent projection of (29) is given in Figure 3.4,

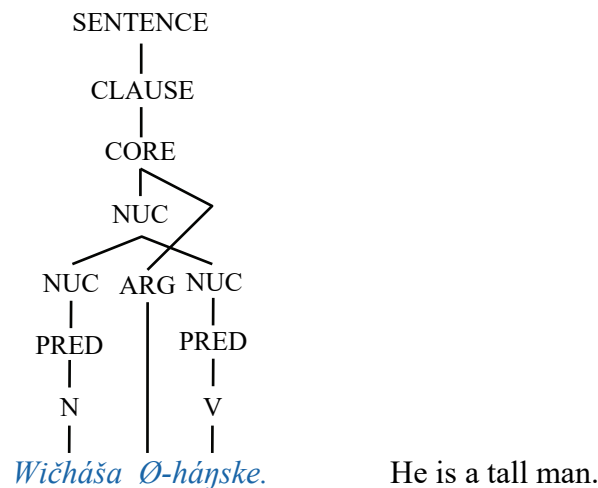


Figure 3.4: *Noun+Stative Verb complex predicate (projection of (29))*

The projection in Figure 3.4 shows that the N and SV form a complex predicate, in which the two verbs are cosubordinated (i.e. co-dependent) forming a nuclear juncture. The evidence for analyzing (29) as nuclear cosubordination rather than core cosubordination lies in the fact that intensifiers and other modifiers, such as *lila* ‘very’, are obligatorily positioned before the N+SV structure, as shown in (30a), and cannot intervene between the two co-predicates, as shown in (30b), which is not grammatical.

- (30) (a) *Lila wiŋyaŋ háŋske.*
lila wiŋyaŋ Ø-háŋske
 very woman 3SG.U-tall
 She is a **very** tall woman.
 (data: RFT 1992)

- (b) * *Winyaŋ lila háŋske.*
winyaŋ lila Ø-háŋske
 woman lila 3SG.U-tall
 She is a **very** tall woman.
- (c) *Winyaŋ háŋske ĥče.*
winyaŋ Ø-háŋske ĥča
 woman 3SG.U-tall really
 She is a **really** tall woman.
 (data: RFT 1992)

It is clear from the data in (30a) that the intensifier *lila* ‘very’ has scope over the entire N+SV construction, which is a further piece of evidence that this is an instance of complex predication and that the SV in this construction is not a modifier.

The sentence in (30b) is ungrammatical due to the position of *lila* ‘very’ between the noun and stative verb. (30c) shows that the clitic *ĥča* ‘really’ has scope over the entire complex predicate. Additional evidence that this is a complex predicate forming a nuclear juncture lies in the fact that the words cannot be independently negated.

For the sake of comprehensiveness it should be said that the N+SV construction under discussion can involve two SVs. In such cases, the SVs are compounded and SV1 functions as a pre-modifier of SV2. The affixation position occurs on the second SV (i.e. on the head), as illustrated in (31):

- (31) *Šuŋka sápa-gleškà.*
šuŋka sápa-Ø-gleškà
 dog black-3SG.U-spotted
 It was a black-spotted dog.
 (data: JAH: 1992)

The premodifier function of SVs is addressed in 8.3.

It is not possible to compound more than two SVs and when more attributes are needed it is usually resolved with relative clauses combined with derived modifiers (a constructions addressed in 5.13.).

3.3. Compounded N+SV

Section 3.2.2. provided evidence that the members of the N+SV structure are normally not compounded, but it was also briefly mentioned in that section, that compounded versions also occur. This is illustrated in the minimal pair in (32)⁵:

- (32) (a) *Blé hiŋšmé.*
blé *Ø-hiŋšmÁ*
 lake 3SG.U-furry
 It is a furry lake (i.e. a lake full of reeds)
- (b) *Ble-hiŋšma.*
Ø-ble-hiŋšma
 3SG.U-lake-furry
 It is a furry-lake. / It is a furry-type of lake.

The sentence in (32a) is a complex predicate which expresses a description of a specific lake, while the compounded version in (32b) is a name of a lake type. Compounds like that shown in (32b) have been termed ‘lexical compound’ (e.g. Chambers 1978, Shaw 1980, De Reuse 1994, 2006) and they are characterized by having a single stress which generally falls on the second syllable of the compound, as predicated by the Dakota Stress Rule (DSR) formalized by Chambers (1978) and Shaw (1980).⁶

The stress position is not the only difference between the two constructions. Note that the SV member of lexical compounds, as that in (32b), lose their ability to ablaut the final *a*, whereas ablauting is maintained in complex predicates, as that in (32a).

⁵ This minimal pair is given by Boas&Deloria (1941: 70) together with a few additional minimal pairs showing the same contrastive feature. Note, however, that Boas&Deloria consider both constructions to be compounds with different levels of phonological tightness. This is shown via their spelling, as they give *blé-hiŋšma* for the first type of compound. This treatment was adopted in subsequent research but it is disputed in 3.2.2.

⁶ Chambers and Shaw (ibid) actually term the rule Dakota Accent Rule (DAR) but I follow Mirzayan (2010 and p.c.) in calling it Dakota Stress Rule since ‘stress’ is more commonly associated with ‘lexical stress’ whereas it is better to reserve the term ‘accent’ for things like ‘pitch accent’.

De Reuse (1994) analyzes constructions like that in (32b) as noun incorporation, but there are some arguments against such analysis. Firstly, nouns in noun incorporation are generally non-referential, e.g. *čhapkhíwa* “he is beaver-hunting.” Secondly, the form resulting from noun incorporation retains the syntactic function which their verb member had before incorporating the noun, so, for instance, both *awànyan̄ka* ‘to look after sb’ and *hokší-awànyan̄ka* “to baby-sit” are verbs and as such they can be intensified with *lila* ‘very’ or *hčA* ‘really’. Conversely, (32b) cannot be intensified with *lila* or other intensifiers because it is not a verb but rather it is a noun that can function as a predicate. Thirdly, active verbs with incorporated nouns take the same personal affixes and take them in the same position, which is not the case for N+SV compounds, as shown in (32) where the position of the zero affix differs between the two members of the minimal pair.

Fourthly, reducible nouns are generally reduced when incorporated into active verbs, but reducible nouns are not always reduced when compounded with stative verbs. For instance, the noun *máza* ‘metal’ is reduced to *mas* when it is incorporated into an active verb, as in *masphégnaka* ‘to wear metal (ornament) in one’s hair’, but it is not reduced when compounded with a stative verb, as in *mázawakḥan̄* ‘gun’ (literally: ‘magical metal’).

It appears that the Lakota N+SV lexical compounds work in a similar way as does adjectival modification in English. For instance, in “*it is a black bird*” the adjective and the noun are independent words. But in “*it is a blackbird*” the two words are compounded and become a phonological word with a single stress (or with a reduced stress on the second member in some instances). While *black bird* is a description of a bird, *blackbird* is a name of a species.

The same generalizations take place in Lakota, as in the examples below:

- (33) (a) *Blé ská.*
lake white
It is a clear lake. (a description of a specific lake)
- (b) *Bleská.*
lake-white
It is a clear-lake. (a lake type name)
- (c) *Čhéga zi.*
kettle yellow
It is a yellow kettle. (a description of a specific kettle)
- (d) *Čheǰzi.*
kettle-yellow
It is a brass-kettle. (a kettle type name)
- (e) *Máza ská.*
metal white
It is white metal. (a description of specific metal)
- (f) *Mázaska.*
metal-white
It is money. (literally: “It is white-metal.”)
- (g) *Ĥé ská.*
mountain white
It is a white mountain.
- (h) *Ĥeská.*
mountain-white
White-Mountains. (proper name, Rocky Mountains)
- (i) *Čháŋ wakháŋ.*
tree holy
It is a holy tree.
- (j) *Čhaŋwákháŋ.*
tree-holy
It is a holy-tree. (i.e. Sundance pole)

Both the non-compounded and compounded versions of the N+SV construction above can constitute a complete clause but they are syntactically different. The non-compounded N+SV forms a complex predicate which takes personal affixes on the second member, whereas the affixation position in the compounded N+SV is in the leftmost position, i.e. before the N member of the compound. Because most N+SV compounds are names of species, place names, names of things or types of things,

they generally take only the zero affix while affixes of other grammatical persons are used only when applicable. For instance the sentences below could be said in a myth where the elk character can speak, as illustrated in (34):

- (34) (a) *Hé ma-ħáká.*
hé ma-ħákÁ
 horn 1SG.U-to.be.branching
 My horns are branching.
- (b) *Mahéħáka.*
ma-heħáka
 1SG.U-elk
 I am an elk.

The structural difference between the two constructions in (34) is shown in their respective constituent projections in Figure 3.5 and Figure 3.6:

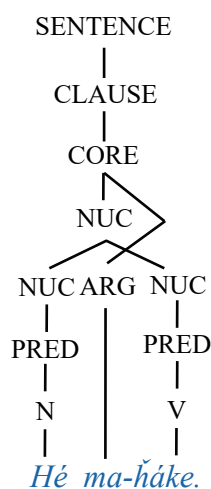


Figure 3.5 *N+SV complex predicate*

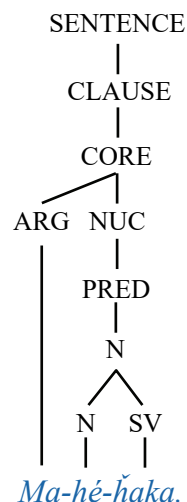


Figure 3.6 *N+SV lexical compound*

The constructions in both Figure 3.5 and Figure 3.6 function as predicates. However, whereas Figure 3.5 is complex predicate, the word *heħáka* 'elk' from Figure 3.6 is genuinely a noun because it can function as a name of a species and as a

noun in plural sentences without a determiner, for instance *Heǰáka waŋwíčhayáŋke* ‘He saw elk (plural)’. The structure in Figure 3.5 cannot function as a noun without first being nominalized with a determiner. Additional evidence that the structure in Figure 3.6 is a predicatively used noun comes from the fact that unlike verbs, it cannot be modified with the intensifier *lila* ‘very’, hence the sentence **Lila mahéǰaka* is ungrammatical, whereas *Lila hé maǰáke* ‘My horns are branching a lot,’ is grammatical.

The a-grade ablaut in the compounded N+SV is generally reserved to proper names, but not all instances of N+SV compounds are proper names. However, the change of the affixation position is true also about compounds that are not names. Compare the contrastive examples in (35).

- (35) (a) *Híŋ mašmé.*
híŋ ma-šmÁ
 hair 1SG.U-deep
 My hair is dense.
- (b) *Mahíŋšme.*
ma-híŋšmÁ
 1SG.U-hairy
 I am hairy.

In conclusion, Lakota N+SV compounds are expressions with generalized meaning. They are lexical compounds and their stress falls on the second syllable, as predicated by the Dakota Stress Rule postulated by Chambers (1978) and Shaw (1980), except for cases where the nominal member is a multisyllabic word with word initial stress, in which case the stress remains on the first syllable of the compound, as in *mázaska* ‘money’.

There are some lexicalized expressions that look like compounds in that they have a single stress but the stress occurs on the monosyllabic body-part member of the expressions. This type of compounding is discussed in 3.6.

3.4. Stative verbs as attributive modifiers

The discussion in section 3.2.3 provided data and evidence in support of the assertion that when uncompounded N+SV constitute a complete clause the function of the stative verb is not one of ad-nominal modification, but that both words function as predicates and form one derived complex predicate in which the two members are in a cosubordination relationship (i.e. they are co-dependent).

This section focuses on the syntactic constructions in which stative verbs do function as ad-nominal postmodifiers. It is divided into the following three subsections: 3.4.1 discusses SV functioning as attributive modifiers internal to marked RPs, 3.4.2 investigates SV modifiers in unmarked RPs, and 3.4.3 is a discussion of bare RPs (which offers findings important for the understanding of the syntactic functions of SVs, despite the lack of the latter in the construction).

3.4.1. Attributive modifiers internal to marked RPs

Consider the examples in (36) which provide a comparison of sentences in which a stative verb (*háňska* ‘to be long’) functions as a co-predicate in the N+SV complex predicate construction, as in (36a) and (36b), with a sentence in which a stative verb occurs inside a reference phrase (RP), as in (36c) and (36d).

- (36) (a) *Hokšila háyske.*
hokšila Ø-háyska
 boy 3SG.U-tall
He is a tall boy. (data: EDT-AUT-10, para 17)
- (b) *Hokšila háyskapi.*
hokšila Ø-háyska-pi
 boy 3U-tall-PL
They are tall boys. (data: JHR 2005, 003)
- (c) *Hokšila háyska way hí.*
hokšila háyska way Ø-hí
 boy tall INDEF.SG 3SG.A-come
 A **tall** boy came. (data: RFT 1992)
- (d) *Hokšila háyska eyá hípi.*
hokšila háyska eyá Ø-hí-pi
 boy tall INDEF.PL 3A-come-PL
 Some **tall** boys came. (data: MLH 1996)

The structures in (36a) and (36b) are complex predicates in which the stative verb functions as one of the two co-predicates. That these structures are predicates is supported, among other things discussed earlier, by the plural affix *-pi* obligatorily added to (36b) to express plurality.

In (36c) and (36d), on the other hand, the stative verb functions as an attributive ad-nominal modifier and it is RP-internal. The evidence that this construction is not merely a nominalization of the one shown in (36a) and (36b) lies in the fact that the stative verb cannot take the animate plural suffix *-pi* when it is followed by an indefinite article, as shown in (36c) and (36d).

When a post-nominal SV is followed by one of the definite articles (*kinj* and *k'unj*) it can function either as an attributive modifier or form a complex predicate with the noun, although the former is used much more frequently. This will be discussed in section 3.7.

Figure 3.7 and Figure 3.8 provide a comparison of the constituent structures of the N+SV as complex predicate given in (36a), and the N+SV as adnominal modification given in (36c).

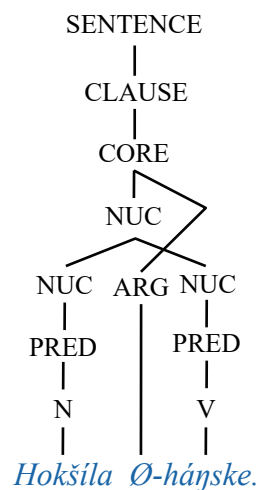


Figure 3.7: *N+SV* as a complex predicate, projection of (36a)

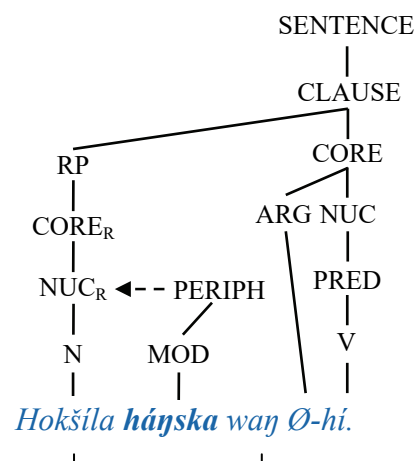


Figure 3.8: *N+SV*, ad-NUC adnominal modification, projection of (36c)

The constituent projection in Figure 3.8 shows that when a SV is RP-internal, it functions as an attributive modifier of the N which forms the head of the RP. This puts the SV in the nuclear periphery of the RP, which is a very different construction from that in Figure 3.7.

In 3.2.3, evidence was provided for the assertion that N+SV complex predicate is not a compound. This is also the case with the SV that functions as adnominal postmodifier (both structures were exemplified in (28)). An important piece of evidence that the SV in N+SV+DET is pronounced as an independent word and functions as an RP-internal ad-nominal modifiers lies in the fact that it can be modified with intensifiers, as illustrated in (37):

- (37) *Šúŋkawakháŋ lila waštéšte k'eyá iyéwičhaye.*
šúŋkawakháŋ lila wašté-šte k'eyá iyé-wičha-Ø-ye
 horse very good-redup indef find-3pl.u.anim-3sg.a-stem
 He found some **very** good horses.
 (data: BO: story 7)

The intervention of *lila* ‘very’ between the N and SV, shown in (37), would not be possible if the two words were compounded or if they constituted a complex predicate. Thus, in (37), the SV clearly functions as a RP-internal ad-nominal modifier.

Not all Lakota stative verbs can be used as attributive modifiers. For example, the verbs *watúkħa* “to be tired” and *čhanžékA* “to be angry” cannot function in this way and can only be used as predicates. Consequently, such verbs can ascribe attributive content only in alternative constructions, such as relative clauses and secondary predicate constructions, which will be discussed in later chapters.

A stative verb functioning as an RP-internal modifier can have scope over multiple coordinated nouns, as illustrated in (38):

- (38) *Waphóštan na míla, wáŋ kħó wakháŋ k'uŋ hená kičhú.*
Waphóštan na míla, wáŋ kħó wakháŋ k'uŋ hená Ø-Ø-Ø-kičhú.
 hat and knife arrow too sacred DEF those 3SG.U-3SG.A-return
 He gave him back the aforementioned magical hat and knife, and also arrow.
 (data: EDT-Col-3: sentence 341)

In (38) the stative verb *wakháŋ* ‘sacred, magical’ modifies all three coordinate nouns. This is another piece of evidence that when SVs function as ad-nominal modifiers, they are not compounded with the noun. The fact that the additive particle *kħó* ‘too’ separated *wáŋ* ‘arrow’ from the modifier is also evidence in support of this assertion.

It is important to state that only stative verbs can function as modifiers of nouns, whereas active verbs cannot be used in this way (as will be discussed in detail in section 8.5).

3.4.2. Attributive modifiers internal to unmarked RPs

The previous section discussed data in which SVs function as RP-internal ad-nominal modifier in RPs marked with a determiner. In this section I show that SVs can also function as modifiers inside unmarked RPs, i.e. RPs that are not modified by a determiner, which in effect means that there is no word intervening between the SVs and the predicate. Such RPs can be referential or non-referential, as the discussion will show.⁷

A prerequisite to a description of this type of construction is a good understanding of how plurality of nominals works in Lakota. As discussed in 3.2.1, animate nouns can take the animate plural suffix *-pi* when they function predicatively, but when they are part of an RP cross-referenced by an argument of the predicate, their plurality is expressed on the verb, either with the animate plural suffix *-pi* (for actor) or with the animate object marker *wičhá-* (for undergoer).

Corpus data provides an ample number of examples in which a bare RP (i.e. unmodified by a determiner) is cross-referenced with the object argument of a transitive verb, resulting in a construction with adjacent (but un-compounded) N+V. This is illustrated in (39).

⁷ Note that ‘referentiality’ is not synonymous with ‘specificity’. This is illustrated in Table 2.10 on page 74.

- (39) (a) *Pté wičhákhuwapi.*
pté wičhá-Ø-khuwa-pi
 buffalo 3PL.U.ANIM-3.A-chase-PL
 They chased **buffalo**.
 (data: BT p. 29, line 101)
- (b) *Túŋweni šúŋkawakháŋ waŋwičhayaŋkapi šni.*
túŋweni šúŋkawakháŋ waŋ-wičha-Ø-yaŋka-pi šni
 never horse see-3PL.U.ANIM-3.A-stem-PL NEG
 They had never seen **horses**.
 (data: BO)
- (c) *Wičháša waŋžígži išnála ománipi čháŋ wanáŋi waŋwičhayaŋkapi kéyapi.*
Wičháša waŋží-gži išnála o-Ø-máni-pi čháŋ
 man one-REDUP alone travel-3.A-stem-PL hab
wanáŋi waŋ-wičha-Ø-yaŋka-pi Ø-kéya-pi
 ghost see-3PL.U.ANIM-3.A-stem-PL 3.A-stem-PL
 They say that when individual people travel alone they see **ghosts**.
 (data: BO)
- (d) *Lakhóta waŋ wičhówe wičháyuze č'uŋ hé ...*
Lakhóta waŋ wičhówe wičháyuze č'uŋ hé
 Lakota INDEF sibling 3SG.A-take DEF.PAST that
 The Lakota who had married **siblings** ...
 (data: DT: story 51, sentence 32)

Note that the nominal in each of the examples in (39) is non-referential or at least non-specific (the ‘siblings’ in (39d) are referential because they were mentioned previously in the story).

If the nominals in (39) were specific, they would require a determiner, as in *wanáŋi eyá/kiŋ waŋwičhayaŋkapi* ‘they saw **some/the** ghosts’, but since they are not specific they cannot be modified with DETs, very much analogous to the way in which the RPs are treated in the English versions of the sentences. The fact that non-referential plural RPs are obligatorily bare (i.e. unmodified by DETs) is an essential point for the following discussion as well as for the description of the various syntactic functions of stative verbs.

Note that the plurality of the bare RPs in (39) is coded with the animate plural undergoer affix *wičha-* on each of the predicates. Such coding is not possible for inanimate RPs, but the plurality of inanimate RPs can be determined from the reduplication of their stative modifiers when the latter are present. This is shown in (40).

- (40) (a) *Íňš-eyá watóhanj šna wóyute waštéšte čhínpila.*
 Ø-íňš-eyá watóhanj šna wóyute wašté-šte Ø-čhínpí-la
 3SG-PRON-also sometime HAB food good-REDUP 3SG.A-want-PL-REST
 They too sometimes want **good meals**.
 (data: IS p. 3)
- (b) *Wókħoyake waštéšte wakúnj.*
 wókħoyake wašté-šte wa-kúnj
 clothes good-REDUP 1SG.A-covet
 I covet **nice clothes**.
 (data: EDT-Col-5, sentence 23)
- (c) *Olówanj waštéšte ahiyaye.*
 olówanj wašté-šte a-Ø-Ø-hiyayA
 song good-redup carry-INAN-3SG.A-stem
 He sang **good songs**.
 (data: EDT-Aut-6, sentence 25)
- (d) *Wikħanj hánskaska káğa ké.*
 wikħanj hánska-ska Ø-Ø-káğA ké
 rope long-REDUP INAN-3.A-make HSY
 He made **long ropes**, it is said.
 (data: EDT-Col-4, sentence 74)
- (e) *Wanħínkpe waštéšte yuhála yeló.*
 wanħínkpe wašté-šte Ø-Ø-yuhá-la yeló
 arrow good-REDUP INAN-3SG.A-have-REST DECL.MSP
 He (little one) had **nice arrows**.
 (data: DT: story 5, sentence 1)

- (f) *Hayáke waštěšte khoyáka čha ...*
hayáke waštěšte Ø-Ø-khoyáka čha
 clothes good-REDUP INAN-3SG.A-wear so

He was wearing **nice clothes** so ...
 (data: DT: story 20, sentence 15)

- (g) *Wičhóiyē waštěšte omáyakilake.*
wičhóiyē waště-šte o-Ø-má-ya-ki-l(y)akA
 word good-REDUP tell-INAN-1SG.U-2SG.A-DAT1-2SG.A-stem

You said **good words** to me.
 (data: BQ-WOF: para 50)

Examples as those in (40) are pervasive in corpus data and they show that in this type of construction the un-compounded N+SV form an RP constituent despite the lack of a modifier or another element separating it from the predicate. Thus it can be concluded, that under certain conditions SVs can function as RP-internal modifiers in unmarked RPs and this is specifically the case when the N+SV represent a plural RP cross-referenced with the object of a transitive predicate. It should also be added, that in (39) each of the RPs are indisputably non-specific, although at least some of them could be referential, as for instance in (40g) where the interlocutor is referring to words he/she just heard from the speaker, and thus the words are referential.

Figure 3.9 shows the syntactic analysis of RP-internal modification of an unmarked RP.

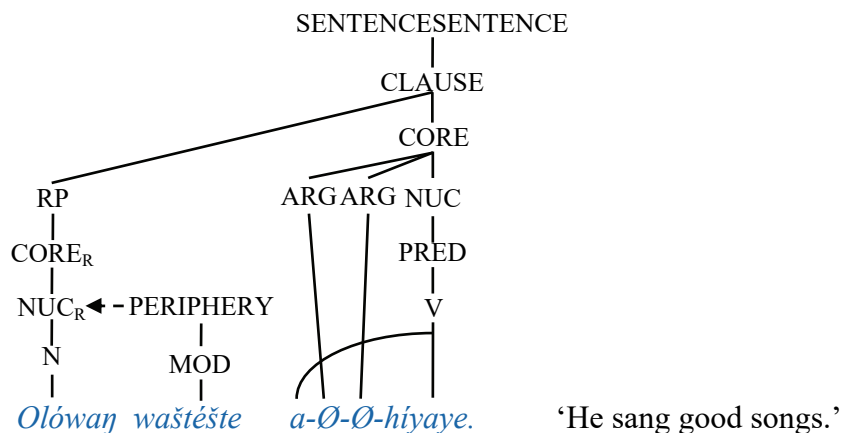


Figure 3.9 Unmarked RP with ad-nuclear modifier; projection of (40c);

A piece of evidence that the SV in Figure 3.9 functions as an RP-internal adnominal modifier lies in the fact that the SV can be modified by an intensifiers, such as *lila* ‘very’ or *ihánkeya* ‘most’ independently of the N. Thus the sentence *Olóway ihánkeya waštéšte ahíyaye*. ‘He sang most beautiful songs’ is grammatical. Such an intervention between the N and SV is not possible when they constitute a complex predicate.

Plural non-referential RPs cross-referenced with the subject do not lend themselves to be used without DETs as easily as plural non-referential RPs cross-referenced with the object. This is discussed in 8.5.

3.4.3. Bare RPs

Since modifiers are non-obligatory, we can assume that certain types of nouns (uncountable and notionally plural) can occur as RPs that have neither determiners nor modifiers. Examples of such bare RPs are given in (41).

- (41) (a) *Wóyute na hayápi ni-Ø-č’ú-pi kte ló.*
wóyute na hayápi ni-Ø-č’ú-pi kte ló
 food and clothes 2SG.U-3.A-give-PL FUT.IRR DEC.MPS

They will give you **food** and **clothing**.
 (data: BT p. 358, line 168)

- (b) *Wikħaŋ káğapi.*
wikħaŋ Ø-Ø-káğ-a-pi
 rope INAN-3SG.a-make-PL

They made **ropes**.
 (data: NSB)

(c) *Iyúha wikh̃añ unyúhapi.*

<i>Iyúha</i>	<i>wikh̃añ</i>	<i>un-Ø-yúha-pi</i>
all	rope	1.A-INAN-have-PL

We all had **ropes**.

(data: VDS)

(d) *Nuphín wikh̃añ aiyaglaška ĥpáyapi.*

<i>nuphín</i>	<i>wikh̃añ</i>	<i>aiyA-Ø-Ø-gl-aškA</i>	<i>Ø-ĥpáyapi</i>
all	rope	tie.onto-INAN-3SG.A-POSS-stem	1.A-lie-PL

They both lay with **ropes** tied onto them.

(data: DT: story 64, sentence 6)

The Ns in (41) are not incorporated because they are not compounded with the transitive verbs ((41b) and (41c) come from audio recorded data). This assertion is also supported by (41a) where there are two coordinated nominals, showing this is not an instance of incorporation. Thus it is evident, that notionally plural inanimate RPs cross-referenced by the object of transitive predicates can be bare (without DETs and MODs). However, it should be added that certain types of nouns are more commonly found as bare RPs than other types. For instance, the examples in (41) show *wóyute* ‘food’ which is semantically a mass noun (but not uncountable in all contexts) and mass nouns are commonly used without DETs, as in *Wakh̃ályapi wach̃ín* ‘I want coffee’. The nouns *hayápi* ‘clothing’ and *wikh̃añ* ‘rope’, are felt as uncountable or perhaps as always occurring in plural, and hence we can find them frequently as bare RPs in sentences like those in (41). An example of a noun that is not readily found as a bare RP is *olówan* ‘song’. The sentences **Olówan wach̃ín* ‘I want songs’, **Olówan ahíyaye* ‘He sang songs’ and **Olówan mak’ú* ‘He gave me songs’ are judged by native speakers as sounding unnatural (BBBJ, IEC, p.c.). Thus it appears that notional plurality and countability of the nominal plays a role in determining which nouns can occur as bare RPs.

The fact that only some nouns can function as bare RPs means that reduplicated modifiers used with such RPs are not dispensable. For example, omitting the modifier from (42a) renders the sentence ungrammatical, as shown in (42b).

- (42) (a) *Olóway waštěšte ahíyaye.*
olóway waště-šte a-Ø-Ø-híyayA
 song good-redup carry-INAN-3SG.A-stem

He sang **good songs**.

(data: EDT-Aut-6, sentence 25)

- (b) **Olóway ahíyaye.*
olóway a-Ø-Ø-híyayA
 song carry-INAN-3SG.A-stem

Attempted meaning: He sang **songs**.

We can conclude that some nouns, such as *olóway* ‘song’ can function as plural RPs only with a DET or with a modifier.

It is interesting to note that some of Deloria’s translations of sentences with bare RPs suggest that she interpreted them as singular which seems strange in the light of the previous discussion. An example is given in (43), where the RP ‘drum’ is bare and translated as singular.

- (43) *Lowáŋpi kiŋ wítayela čhánčheğa aphaŋi na olóway óta ahíyayapi.*
Ø-lowáŋ-pi kiŋ wítayela čhánčheğa a-Ø-Ø-phá-pi
 3SG.A-sing-PL DEF together drum hit-INAN-3.A-stem-PL
na olóway óta a-Ø-Ø-híyayA-pi
 and song many sing-INAN-3.A-stem-PL

“The singers together beat upon **a drum** and sang many songs.”
 (Deloria’s translation)

“The singers together beat upon **drums** and sang many songs.”
 (proposed meaning)

(data: EDT-Aut-08, sentence 31)

Native speakers that I asked (BBBJ, IEC, p.c.) agreed that *čhánčheğa* (43) is felt as plural. Deloria's transcription does not indicate noun incorporation, which would require the following spelling: *čhánčheğa-apĥàpi*. But even if (43) involved noun incorporation, it would allow for both singular and plural interpretation of the N. Additional support for the plural interpretation of (43) lies in the fact that during the pre-reservation era, singers generally used small hand-drums rather than large group drums seen in contemporary pow-wows. Thus when more singers were involved, each was beating his own hand drum. This might also be a partial explanation of why the noun *čhánčheğa* 'drum' can be used as a bare RP whereas *olówanj* 'song' cannot.

Based on the findings in the present section I argue that bare inanimate RPs cross-referenced with the object of transitive predicates are plural. This argument is tentative as it is not one of the main objections of the present study. However, I assert, that bare RPs like those in (40), (41) and (43) are not incorporated nouns because they are not compounded with the predicate, whereas noun incorporation in Lakota involves compounding and often also a reduction of the nominal, as illustrated in (44b).

- (44) (a) *Wakšiča yužáža.*
wakšiča Ø-Ø-yužáža
 dish INAN-3.SG.A-wash
 He washed dishes.
 (data: IEC)
- (b) *Wakši-yužáža.*
wakši-Ø-yužáža
 dish-3SG.A-wash
 He was dish-washing.
 (data: DTA)

In (44), we can see a contrast between a notionally plural bare RP, in (44a), and noun incorporation in (44b). Such oppositions are common in Lakota, although not all

nouns lend themselves for reduction which means that compounding is sometimes the only indicator of incorporation (an example of a non-contracted incorporated noun, *wašiču*, is given in (89e)). Note that the noun *čhánčheğa* ‘drum’ contracts into *čhán* ‘wood’, as in *čhankábu* ‘to do drumming’, which is an additional argument against analyzing (43) as noun incorporation.

A different approach to the analysis of bare RPs is offered in de Reuse (1994), who treats uncompounded N+V in Lakota as instances of Noun Stripping, a term based on the assumption that “the nominal element is stripped of Articles, determiners, and case-marking elements that usually accompany it, and then juxtaposed to the verb” (ibid, 206). As an example in support of the Noun Stripping analysis de Reuse gives the sentence repeated here in (45).

- (45) *Kħokħóyah’añla wówičhak’u.*
kħokħóyah’añla wó-wičha-Ø-k’u
 chicken food-3PL.U.ANIM-3SG.A-give
 He fed chickens. (my translation)
 (de Reuse’s translation: ‘He was feeding the chickens.’)
 (data: de Reuse, 1994, p. 206)

In his translation, de Reuse interprets the bare RP as definite (‘the chickens’). I argue that the sentence in (45) is essentially the same construction as that in (39a), where the RP is arguably non-referential or at least non-specific (*Pté wičhákhuwapi* ‘They chased buffalo.’). However, as was seen in the examples in (39), the specificity of a bare RP is highly context sensitive and when sentences like those in (39a) and (45) are taken out of context the RP specificity can be easily misinterpreted and, in my experience, translations of isolated sentences are not always reliable with respect to specificity. Definiteness, on the other hand, is generally easy to determine in

Lakota as it is always coded with one of the definite articles (*kiŋ* or *k'uy*). Thus the RP in (45) is not definite.

The data and arguments in section 3.4.2 disconfirms the Noun Stripping analysis of uncompounded N+V. Firstly, the data in (39) shows that notionally plural animate non-specific RPs cross-referenced by the object argument of transitive predicates must be bare, and as a consequence there is nothing that could be stripped from them. Secondly, the data in (40) show evidence that the same is true for inanimate RPs cross-referenced by the object of transitive predicates despite the fact that their plurality is not coded on the verb.

De Reuse tentatively argues that Noun Stripping is a form of noun incorporation, although he admits his arguments for it are not strong. Such analysis is disputed in the discussion surrounding the examples in (44).

Although de Reuse supports his Noun Stripping analysis with sentences involving transitive verbs, additional examples of Noun Stripping throughout his paper are instances involving both stative and active verbs (transitive and intransitive). For instance, he shows opposition of *čhaŋté šiča* and *čhaŋté šiča* (stress reduced on the second word) both meaning 'to be sad'. Such minimal pairs do not prove the existence of noun stripping but rather show that the variant with the reduced stress is a lexicalized version of the co-predicate construction with the down-stepping or undershooting of the pitch accent H* peak due to prosodic intonational patterns or tonal crowding respectively, as argued in 3.2.2.

3.5. SV as a simple predicate (N + DET + SV)

So far I have discussed structures in which stative verbs are used as co-predicates (3.2), as members of compounds with nouns (3.3) and as ad-nominal post-modifiers

(3.4). In this section I will show constructions in which stative verbs function as simple predicates.

The first simple predicate construction to be discussed is one where the stative verb itself constitutes a clause, as shown in (46):

- (46) (a) *Háŋske.*
 Ø-*háŋskA*
 3SG.U-tall
 He is tall.
- (b) *Háŋskapi.*
 Ø-*háŋskA-pi*
 3U-tall-PL
 They are tall.
- (b) *Niháŋske.*
ni-háŋskA
 2SG.U- tall
 You (sg.) are tall.

In sentences like those exemplified in (46), the stative verb is the predicate and the personal affix is the subject (a zero or one of the undergoer affixes). The construction in (46) can be nominalized, as illustrated in (47).

- (47) (a) *Háŋske kiŋ hí.*
 Ø-*háŋskA* *kiŋ* Ø-*hí*
 3SG.U-tall DEF 3SG.A-come
 The one that is tall came. (The tall one came.) (data: BBBJ)
- (b) *Háŋskapi kiŋ hípi.*
 Ø-*háŋskA-pi* *kiŋ* Ø-*hí-pi*
 3U-tall-PL DEF 3A-come-PL
 The ones that are tall came. (The tall ones came.) (data: ELH)

The constructions in (47) are essentially headless relative clauses in which the stative verb functions as the predicate and the zero affix as the subject of the relative clause. These are similar to the sentence given earlier in (24b), the only difference

being that here the stative verb does not have the N co-predicate. Note that the SV forming the RC in (47b) is obligatorily pluralized with the suffix *-pi*.

The second construction in which stative verbs function as simple predicates is one where they follow a noun post-modified by one of the definite articles (*kiŋ* or *k'uy*), by a quantifier, partitive or additive particle. These four types of words can function as separators that intervene between the N and the SV and thus cancel their copredication which in turn licenses the interpretation of the noun as a noun phrase allowing the stative verb to function as a predicate, independent of the noun. When no such separator is present, the N and SV are interpreted as co-predicates, as discussed in (3.2.), or as a complex NP, as discussed in (3.3).

The following examples provide a comparison of N+SV complex predicate, given in (48a), with the construction in which the stative verb is an independent predicate separated from the noun, provided in (48b) and (48c) to show singular and plural respectively:

- (48) (a) *Hokšila háŋske.*
hokšila Ø-háŋska
 boy 3SG.U-tall
 He is a tall boy.
 (data: EDT-Aut-10, para 17)
- (b) *Hokšila kiŋ háŋske.*
hokšila kiŋ Ø-háŋska
 boy DEF 3SG.U-tall
 The boy is tall.
 (data: DTA)
- (c) *Hokšila kiŋ háŋskapi.*
hokšila kiŋ Ø-háŋska-pi
 boy DEF 3U-tall-PL
 The boys are tall.
 (data: BBBJ)

In (48b) and (48c) the N and SV are separated by the definite article *kiŋ*. It is important to mention that none of the indefinite articles can function as the separator in this construction, although they do work as separators in relative clauses (discussed in 3.7. and indirectly also in 5.13). Note also that even though the English translation of (48a) involves an indefinite article, the Lakota construction is grammatical only without a determiner because it has no RP, since the N functions as a copredicate.

The data in (49) shows instances where the separator between the N and SV is not a definite article.

- (49) (a) *Lakhóta óta t'ápi.*
Lakhóta óta Ø-t'Á-pi
 Lakota many 3U-dead-PL
 Many Lakotas died. (data: MLH)
- (b) *Lakhóta húnĥ ptéčelapi.*
Lakota húnĥ Ø-ptéčela-pi
 Lakota some 3U-short-PL
 Some Lakotas are short. (data: RFT)
- (c) *Pĥehíŋ, ištá khó sapsápe.*
pĥehíŋ ištá khó Ø-sápA-REDUP
 hair eyes too 3U-long-INAN.PL
 Her hair (and) her eyes too were black. (data: EDT-Col-04: sentence 318)

The separator in (49a) is a quantifier, the one in (49b) is a partitive and (49c) shows an example of an additive particle functioning as a separator.

Some types of words cannot function as separators, for instance intensifiers, such as *lila* ‘very’, which was illustrated in (30).

The argument of an N+SV complex predicate can be cross-referenced with an RP, just like the argument of a simple predicate. An example is in (50), which is a sentence typically heard in traditional Lakota storytelling.

- (50) *Wíŋyaŋ kiŋ lila wíŋyaŋ wašté.*
wíŋyaŋ kiŋ lila wíŋyaŋ Ø-wašté
 woman DEF very woman 3SG.U-beautiful

The woman was **a very beautiful woman**. (data: BT. p. 238)

In (50), the zero coded argument in the core of the complex predicate is the subject and it is cross-referenced with the independent reference phrases (RP) *wíŋyaŋ kiŋ* ‘the woman’. Since Lakota is a head-marking language, the core argument is obligatory whereas the RP is optional. Thus in sentences like (50) the subject (and sometimes also the object) can be represented twice, once by the core argument and once by the independent RP.

Another relevant example is in (51) followed by the constituent projection in Figure 3.10.

- (51) (a) *Lakhóta kiŋ háŋskapi.*
Lakhóta kiŋ Ø-háŋska-pi
 Lakota DEF 3A-tall-PL
 Lakotas are tall. (literally: The Lakota they are tall.)
 (data: RFT)

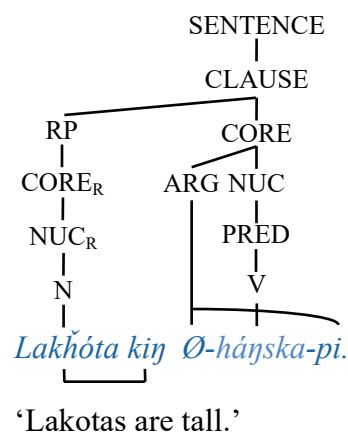


Figure 3.10 *SV as a simple predicate*

The personal affix, which is the obligatory part, is in the argument slot in the core, while the RP is linked to a position inside the clause but outside of the core (Van Valin, 2005:147). The literal translation of the sentence in Figure 3.10 is “The Lakota they are tall” reflecting the double representation of the subject. An important consequence of this analysis is that RPs in sentences like that in Figure 3.10 do not function as the subjects, but rather, they are cross-referenced by the subject coded in the core of the verb. The evidence for this claim lies in data where the subject coded on the verb is in a grammatical persons other than the 3rd, as shown in the example in (52) and in the constituent projection in Figure 3.11.

- (52) (a) *Lakǰóta kiŋ uŋháŋskapi.*
Lakǰóta kiŋ uŋháŋska-pi
 Lakota DEF 1PL.U-tall-PL
 We Lakotas are tall. (literally: The Lakota we are tall.)
 (data: RFT)

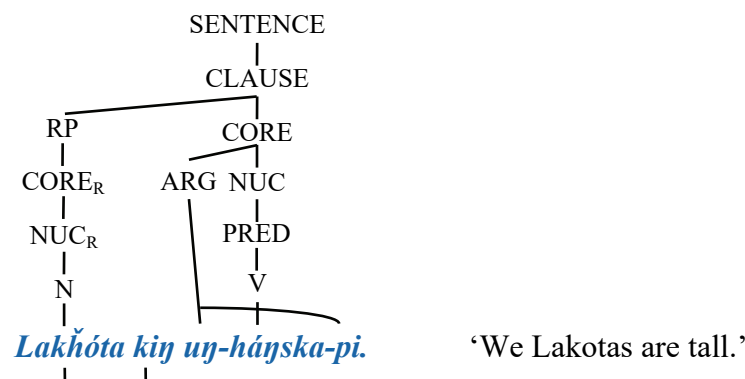


Figure 3.11 1st plural undergoer subject cross-referenced with an RP

In the tree in Figure 3.11., the core argument is coded by the affixes *uŋ-* and *-pi*, and it is cross-referenced with the RP *Lakǰóta kiŋ* ‘the Lakota(s)’, linked at the clause

level. In effect, Lakota RPs appear outside of the core and show no agreement with the main core-internal V, neither in number, nor in grammatical person.

The fact that RPs are never subjects, but rather are cross-referenced with the subject core argument has important consequences for sentential topic. This is illustrated in (53) (which is a repeat of the data in (48)).

- (53) (a) *Hokšila háŋske.*
hokšila Ø-háŋskA
 boy 3SG.U-tall
 He is a tall boy.
 (data: EDT-Aut-10, para 17)
- (b) *Hokšila kiŋ háŋske.*
hokšila kiŋ Ø-háŋskA
 boy DEF 3SG.U-tall
 The boy is tall. (literally: The boy he is tall.)
 (data: DTA)

Notice, that judging only from the translations of the two sentences, one can be easily misled to believing that whereas the subject of (53a) is the zero coded argument, the subject of (53b) is the RP *hokšila kiŋ*. In reality, however, the subject in each of the sentences is the zero coded core argument. The difference between the two sentences, then, lies in the referentiality of the nominal, in that in (53a) it is non-referential, whereas in (53b) it is referential. As a result of the semantics of the propositions, each sentence has a different sentential topic.

3.6. Body part Ns with stative predicates

The findings about complex predication with SVs discussed in 3.2 and simple predication with SVs discussed in 3.5 have important consequences for the treatment of inalienable nouns. In Lakota, inalienable nouns are primarily body parts and

kinship terms. These nouns are characterized by the absence of an overt possessive marker because they are obligatorily possessed by their possessor. However, the syntactic analysis of the possessor has not been described in detail in the research literature on Lakota.

I propose that the possessed inalienable noun is linked to the possessor in the same way that other RPs link to their associated core arguments, i.e. by cross-referencing the core argument and linking at the clause level. Moreover, like other nouns, body parts and kinship terms can function both as nominal predicates in complex predicates with stative verbs and as RPs in constructions with simple stative predication. This is illustrated in (54):

- (54) (a) *Pǎehiŋ háŋskaska.*
pǎehiŋ Ø-háŋskA-ska
 hair 3SG.U-long-REDUP
 His hair is long. (literally: **He is long-haired.**)
 (data: DT story 10, sentence 6; FREH)
- (b) *Pǎehiŋ maháŋskaska.*
pǎehiŋ ma-háŋskA-ska
 hair 1SG.U-long-REDUP
 My hair is long. (literally: **I am long-haired.**)
 (data: BBBJ)
- (c) *Pǎehiŋ kiŋ háŋskaska.*
pǎehiŋ kiŋ Ø-háŋskA-ska
 hair DEF 3SG.U-long-REDUP
 His hair is long.
 (data: DTA)
- (d) *Pǎehiŋ kiŋ maháŋskaska.*
pǎehiŋ kiŋ ma-háŋskA-ska
 hair DEF 1SG.U-long-REDUP
 My hair is long.
 (data: RFT)

In (54a), the zero coded argument is the subject, while the N and SV form a complex predicate. Possessed nominals are generally referential, which is also something suggested by the free translation of (54a), however, the free translation is misleading with respect to the referentiality of the body part N and only the literal translation reflects it correctly. The evidence for this assertion lies in expressions like *hinyzi* ‘buckskin horse’ and *hinyša* ‘sorrel horse’ where the referential expression is the animal, and not to the color of its body hair (*hiny*). That the body part N in (54a) is not referential is in accord with the fact that nominal predicates are normally not referential.

The construction in (54c) involves a simple predication, in which the subject is the zero coded argument in the core of the stative verb and the RP is cross-referenced with it, thus establishing the possessor of the body part. In this case, the body part is referential. Whereas (54a) makes a reference to the possessor of the hair, the sentence in (54c) is a statement about the hair, but the \emptyset argument is the subject of each of the two sentences. Data in (54d) shows evidence that the core argument is coded on the verb.

Another potentially misleading property of the data in (54) is the reduplication of the stative verb, which seemingly contradicts the singularity of the subject because it looks like agreement with the plurality of the hair. That this is not a counter-argument to the analysis can be seen in the data in (55), where the stative verb *hanyška* ‘tall’ is optionally reduplicated and where it can agree only with the subject which is already coded for animate plural with the suffix *-pi*. The only explanation for the reduplication of the stative co-predicate in (55) is that the reduplication is a notional

implication of the bodies of the subject (i.e. of the boys and women respectively), even though the bodies are not overtly represented in the sentence.

- (55) (a) *Hokšila hánskaskapi.*
hokšila Ø-hánskA-ska-pi
 boy 3U-tall-REDUP-PL
 They are tall boys.
 (data: RFT)
- (b) *Wiňyanj kiň hánskaskapi.*
wiňyanj Ø-hánskA-ska-pi
 woman 3U-tall-REDUP-PL
 The women were tall. (literally: “The women, they are tall.”)
 (data: BO-39)

The number agreement mismatch in (55) shows that the reduplication of the stative verb in (54) can be an indirect reference to the hair, despite the fact that reduplication does not agree with the number of the subject.

Additional evidence that the reduplication of the stative verb does not contradict the analysis of subject in (54) is provided in (56), where the SV *óta* ‘to be many’ forms a complex predicate with the inalienable kinship term *čhiňčá* ‘offspring, child’.

- (56) (a) *Čhiňčá óta.*
čhiňčá Ø-óta
 children 3SG.U-many
 He has many children. (literally: He is of many children.)
 (data: EDT-Leg-10, sentence 3)
- (b) *Čhiňčá maóta.*
čhiňčá ma-óta
 children 1SG.U-many
 I have many children. (literally: I am of many children.)
 (data: RFT)
- (c) *Čhiňčá ótapi.*
čhiňčá Ø-óta-pi
 children 3U-many-PL
 They had many children. (literally: They are of many children.)
 (data: FREH)

In (56a), the notional subject of the stative verb *óta* is *čhiŋčá* ‘children’, but the syntactic subject of the complex predicate is the zero coded 3rd singular which refers to the parent. This is why the verb *óta* is not pluralized to agree with the number of the children. This is even more apparent in (56b) where the subject is coded with the affix *ma-*. When the stative verb *óta* is pluralized, as in (56c), the suffix *-pi* signals the plurality of the children’s parents, whereas the plurality of the children is coded only via the semantics of *óta* ‘many’.

It must be concluded that the possessor of inalienable nouns in Lakota is not coded via possessor raising as is done in some languages with inalienable nouns. Instead, two main strategies are employed:

A) the body part N forms a complex predicate with a SV and the subject of the complex predicate is the possessor of the body part, where the latter is a non-referential N, as in *Pěhíŋ háŋske* ‘He is long-haired’. This proposition is about the possessor.

B) the subject coded as the core argument on the verb is cross-referenced with the body part RP, as in *Pěhíŋ kiŋ háŋske* ‘His hair is long’. This proposition is about the possessor’s hair.

In both strategies, the possessor of the inalienable noun is the subject argument of predicate.

For a full understanding of linkage of inalienable noun constituents we also have to discuss sentences in which the possessor is expressed overtly with an RP. This is illustrated in (57), where the body part is non-referential in (57a) and referential in (57b). In (57b) both the possessor and the body part are referential which makes it look as though the intransitive predicate is linked to two RPs, but in fact the two Ns are parts of a single RP, as discussed below the examples.

- (57) (a) *Hakéla p̃héhíŋ šikšičéla.*
Hakéla p̃héhíŋ Ø-šik-šičA-la
 Hakéla his.hair 3SG.U-bad-REDUP-REST
 Hakéla's hair was poor. (literally: Hakéla was of poor hair.)
 (data: DT story 16, sentence 6)
- (b) *Hakéla p̃héhíŋ kin eyá šikšičélake č'éyaš ...*
Hakéla p̃héhíŋ kin eyá Ø-šik-šičA-lakA č'éyaš
 Hakéla his.hair DEF oh.well 3SG.U-bad-REDUP-very but
 Hakéla's hair is, well, rather poor, but ...
 (data: DT story 11, sentence 8)

What appears as two RPs in (57b) is, in fact, a single RP with the following internal structure [_{body part} [_{possessor} *Hakéla*] *p̃héhíŋ kin*]_{RP} - ('Hakéla's hair'), where the body part N is the head and the possessor is dependent on it. This is owing to the fact that in Lakota body parts are obligatorily possessed and do not normally take overt possessor coding.⁸ The same ordering of possessor-possessed occurs with alienable nouns, except that the possession is overtly coded with the verb *tháwa* 'to be his/her' or the prefix *thá-* 'his/her', as in [_{body part} [_{possessor} *Até*] *thášúnke kin*]_{RP} - ('My father's horse') (Data: EDT-Aut-3A, sentence 48).

Figure 3.12 shows a sentence where the body part is a nominal member of a complex predicate (and is therefore non-referential) and the possessor nominal functions as an RP cross-referenced with the subject argument.

Figure 3.13 shows a sentence in which a body part N functions as an RP and the possessor nominal is in the RP initial position (RPIP).

The proposition in Figure 3.12 is about the boy called Hakéla because he is cross-referenced with the subject argument of the sentence, whereas the proposition in Figure 3.13 is about Hakéla's hair because Hakéla functions the possessor internal to the RP *Hakéla p̃héhíŋ kin* 'Hakela's hair'.

⁸ In certain constructions Lakota body parts do take possessive prefixes. For a detailed discussion, see Ullrich (2016: p. 344 and p. 521-522)

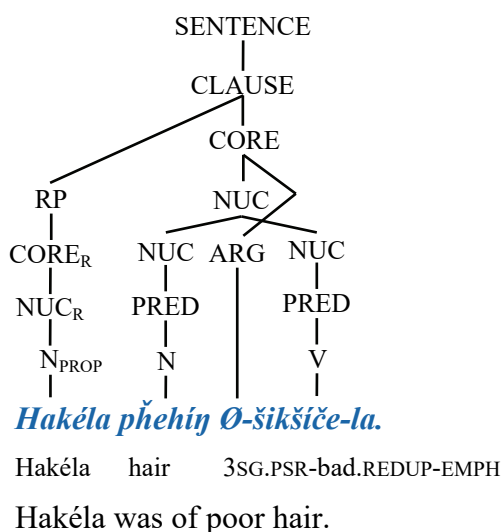


Figure 3.12 *Inalienable noun as a copredicate, projection of (57a)*

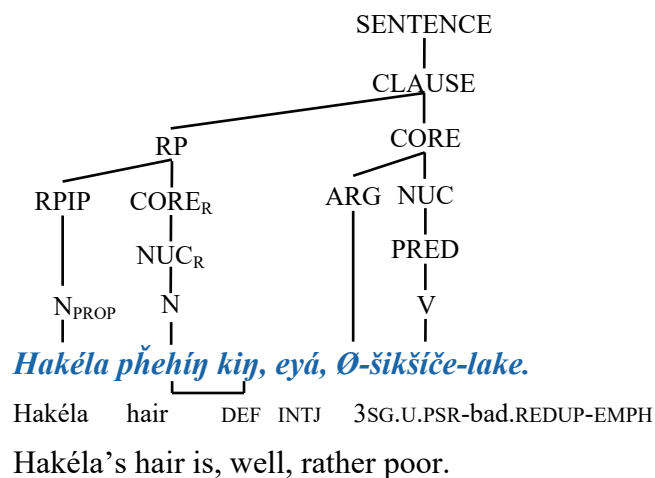


Figure 3.13 *Inalienable noun as an RP, projection of (57b)*

Another piece of evidence in support of the assertion that inalienable nouns can function as nominal predicates in complex predicates with SVs lies in stress initial lexical compounds that involve monosyllabic body part Ns, as those in (58).

- (58) (a) *Ípuze.*
i-Ø-púzA
 mouth-3SG.U-to.be.dry
 He is thirsty. (literally: 'His mouth is dry.')
- (b) *Ínuŋpa.*
i-Ø-núŋpa
 mouth-3SG.A-two
 It is double barreled. (literally: 'It is two-mouthed.')
- (c) *Híŋšiče.*
híŋ-Ø-šičA
 fur-3SG.A-to.be.bad
 It has poor fur. (literally: 'It is bad-furred'.)

The word initial stress of these compounds cannot be accounted for by the *Dakota Stress Rule* (DSR), which was formalized by Chambers (1978) following Boas and

Deloria's observation (1941:21) and which puts an accent on the second syllable of any word or paradigmatic form. Words with first syllable stress are explained by Chambers (ibid) and Shaw (198:30-53) as resulting from vowel epenthesis, vowel coalesce or vowel deletion processes applied after the application of DSR, or by the fact that the second syllable is a clitic. The words in (58) do not involve any of these processes and thus cannot be explained by the DSR. Furthermore, the forms in (58) cannot be accounted for by the Compound Accent Rule (CAR) formulated by Chambers (1974a:9) and Shaw (1980:37-38), which states that in compound words the stress on the second member is reduced from primary to secondary. This is summarized by de Reuse (1994:204) who states that

“[T]he DAR treats Lexical Compounds as one word, and there will be only one stress on the resulting form, which will be on the second syllable, regardless of whether this syllable is in the first or second element of the compound. In the case of Syntactic Compounds, every element of the compound is accented on the second syllable by the DAR, the compounding occurs, and then a further rule, called Compound Rule, weakens the accent that is on the second element of the compound.”

The DSR cannot explain the word initial stress in the words given in (58b) and these words do not conform to the definition of Syntactic Compounds as they have no secondary stress. The word *inunpa*, in (58b), is listed by Shaw (1980:55) as one of the exceptions that the DSR cannot account for and Shaw proposes that the stress position might be explained by a presence of a word boundary. Shaw presents the word as follows “/i#nunpa/ [inunpa]” thus essentially stating that *inunpa* has a secondary stress on the second member, which is not supported by the analysis of audio data. I propose that stress initial compounds with a monosyllabic body part nominal are in fact the same N+SV complex predicates, such as those introduced in 3.1, in which the two co-predicates are connected via nuclear cosubordination and where the H* peak

of the stative verb is prosodically downstepped relative to the H* peak on the Noun, resulting in what appears as stress reduction. In consequence, the construction given in (58a) is a complex predicate with independent stress on each of the co-predicates, but since the N co-predicate is monosyllabic and the SV co-predicate is stress initial, the two H* peaks are adjacent to each other resulting in ‘tonal crowding’, which prevents the onset of the second H* peak. The second H* peak is “undershot” to such an extent that it is essentially phonetically deleted. The complete loss of the stress on the SV makes the construction look like a lexical compound with an unusual stress position, whereas in reality its prosodic property originates from a syntactic process, in which the first copredicate has a stronger H* peak relative to the H* peak of the second co-predicate.

De Reuse (1994:212-213) considers *ípuzA* ‘to be thirsty’ to be an instance of noun incorporation, which is not tenable within the view of the present analysis which treats it as a complex predicate.

Whereas constructions like those in (58) originate in complex predication, many of them undergo gradual lexicalization which explains why the stress of the second member does not normally reappear when an affix is inserted before the second copredicate, as in *imapuze* ‘I am thirsty’.

These findings suggest that lexicalized expressions with word-initial stress on a monosyllabic nominal, in fact, originate from N+SV copredicates, rather than from lexical compounds. Compare for instance the lexical compound *heháka* ‘a branched horn (i.e. elk)’ and *Ĥesápa* ‘Black Hills’ in which the monosyllabic nominal is unstressed, with *hásapa* ‘a black skinned person’ or *hijzi* ‘a buckskin horse (literally ‘to be of yellow fur’)’ in which the monosyllabic nominal is stressed. The syntactic origin of such compounds explains the word initial stress which cannot be accounted

for by the DSR. It will require more investigation to understand the motivation for choosing between the route of lexical compounding and the syntactic strategy. It seems that most lexical compounds are names of entities (e.g. *Ĥeská* ‘Rocky Mountains’) or names of species (e.g. *heĥáka* ‘elk’) whereas compounds resulting from the syntactic construction are classificatory descriptions of nominal types, such as *hiĥtho* ‘a roan horse’, or other descriptions, such as *ipuza* ‘to be thirsty, to have one’s mouth dry’, but there are some exceptions that make such delimitation uncertain. The motivation for choosing between the route of lexical compounding (as in *heĥáka*) and the syntactic strategy (as in *hásapa*) is unclear at this point and beyond the scope of the present study.

The findings discussed in this section with respect to the syntactic treatment of inalienable nouns are important for the investigation of secondary predication and derived modification, as will be seen in later chapters.

Although not directly relevant for the current investigation, it should be added that the coding of the possessor of inalienable nouns is analogical with transitive verbs where the possessor of the body part is the object, as shown in (59):

- (59) (a) *Napé mayúze.*
napé ma-Ø-yúza
 hand 1SG.U.PSR-3SG.A-hold
 He held my hand. (idiomatic for: ‘He shook my hand.’)
 (data: MARC)
- (b) *Napé kiĥ mayúze.*
napé kiĥ ma-Ø-yúza
 hand DEF 1SG.U.PSR-3SG.A-hold
 She held my hand.
 (data: DW)

In (59a), the non-referential body part is cross-referenced with the possessor coded by the affix *ma-* as the object of the transitive predicate. The same is true for (59b)

except that here the body part is referential. In both sentences the possessor of the hand is the object and they differ only with respect to the referentiality of the body part.

The noun in (59a) does not form a complex predicate with the verb, since it does not share the subject with the verb and because *yúZA* is an active verb (rather than a stative verb), and active verbs function differently, as will be discussed in 8.5.

Constructions like that in (59a) have been treated as instances of noun incorporation (e.g. de Reuse 1994: 208), but the fact that the two words are not normally compounded is an additional argument against such analysis, adding to the evidence in support of the N and core argument cross-referencing treatment discussed above. De Reuse (ibid) gives *napé yúZA* and *napé yùZA* as one of a number of contrastive examples of what he terms ‘Stripped Noun’ versus ‘Syntactic Compound’ respectively. Based on analysis of corpus data and audio recorded data, I question the existence of this opposition and propose that the perceived difference is caused by intonational down-stepping of the H* peak associated with the stress on the second member of the syntactic construction, rather than by actual stress reduction.

There are lexicalized expressions which look like instances of noun incorporation, for instance *háyuzA* ‘to skin smth (as an animal)’ (containing *há* ‘skin’ and *yúZA* ‘to take smth’), but these, too, originate in the syntactic construction exemplified in (59a) except that the H* peak on *yúZA* ‘to take’ is undershot (or deleted) due to the tonal crowding created by the adjacent stressed syllables from *há+yúZA*. This is analogical to the N+SV seen in *ípuzA* ‘to be thirsty’ except that here it is N+Active Verb. Thus this is yet another example of compounding that originates in a syntactic construction and as a result of a phrase level prosodic phenomenon rather than from lexical compounding.

3.7. Stative verb as a predicate in relative clauses and clefts

So far I have distinguished constructions in which (i) a post-nominal SV forms a complex predicate with the N, (ii) where it is compounded with the N, (iii) where the SV is an RP-internal attributive modifier, and (iv) where the SV is an independent predicate.

In section 3.4. it was stated that a post nominal SV is an RP-internal attributive modifier whenever it is followed by an indefinite article, but that it is not always so when it is followed by a definite article. When the stative verb is followed by one of the definite articles (*kiŋ* or *k'uŋ*), then it can function as either an RP-internal adnominal postmodifier, as in (60a), or form a complex predicate with the N, as in (60b).

- (60) (a) *Wičháša ksápe kiŋ oyás'iy wóžupi ečéla iyótaŋ yawápi.*
wičháša ksápe kiŋ oyás'iy wóžupi ečéla iyótaŋ Ø-Ø-yawápi
 man wise DEF all planting only most INAN-3A-count-PL
 All **wise** men consider planting as most important.
 (data: PBT-1/41)

- (b) *Thítakuye t'ápi kiŋ hená waŋwičhaglakiŋ kte.*
thítakuye Ø-t'Á-pi kiŋ hená waŋ-wičha-Ø-gl-akA ktA
 his.relative 3U-dead-PL DEF those see-3.PL.ANIM-3A-poss-sten FUT.IRR
 He will see those that are his dead relatives.
 (data: BO: 11)

The subject in both (60a) and (60b) is in 3rd plural, as shown by the zero affix and the animate plural suffix *-pi* on the predicates. But the SV is only pluralized in (60b). This is because the SV in (60a) is an RP-internal attributive modifier of the N, whereas the SV in (60b) forms a complex predicate with the N it follows and this complex predicate functions as a relative clause marked with the definite article *kiŋ*. This is a rather infrequently used type of relative clause. The consequence of the fact that the N is a copredicate is that the RC lacks an RP which would represent its head.

The subject of the RC in (60) is the zero affix and the definite article which marks the RP is followed by a demonstrative, which is characteristic of Lakota relative clauses.

When the head of a RC is represented with an RP involving a nominal, the latter is obligatorily modified by one of the indefinite articles. This is exemplified in (61) where *kħoškálaka* ‘young man’ is the RC internal head and it is followed by the indefinite article *k’eyá*. The semantic difference between the RC in (60b) and the RC in (61) is reflected in their respective translations.

- (61) *Kħoškálaka k’eyá líla wičháša waštéštepí k’uŋ hená tuwépi huwó?*
kħoškálaka k’eyá líla wičháša waštéštepí
 young.man INDEF.PL very man Ø-good-REDUP-PL
k’uŋ hená Ø-tuwépi huwó
 the.mentioned those 3A-to.be.who-PL Q.MSP
 Who are those youngsters **who are** such very **handsome men**?
 (data: EDT-Col-5, sentence 86)

Although the head of the RC in (61) is modified with an indefinite article, the head is interpreted as definite because the RC is marked with a definite article. To maintain the indefiniteness of the head, the RC has to be marked with the article *čha*, as in (62):

- (62) *Hokšíla eyá Ø-háŋskapi čha hípi.*
hokšíla eyá Ø-háŋskA-pi čha Ø-hí-pi
 boy INDEF.PL 3U-tall-PL DET 3A-come-PL
 Some boys that were tall came.
 (data: MARC)

Relative clauses like those shown in (61) and (62) are the only constructions in which indefinite articles can function as separators of N and SV.

If we omit the indefinite article that modifies the head in (62), the resulting construction is a cleft sentence. This is shown in (63) where the N+SV is once again a complex predicate as evidenced by the presence of the suffix *-pi*.

- (63) *Hokšíla Ø-háŋskapi čha hípi.*
hokšíla Ø-háŋskA-pi čha Ø-hí-pi
 boy 3U-tall-PL DET 3A-come-PL
 It was some tall boys that came.
 (data: SHE)

The internal structure of the complex predicate *hokšíla háŋskapi* (which was shown in Figure 3.7) explains why Lakota cleft sentences look like they are head internal.⁹

Another example of the N+SV complex predicate forming a cleft sentence with *čha* is given in (64):

- (64) *Yuŋkháŋ hená khéya tháŋkapi čha mniyátakiyaš glápi.*
yuŋkháŋ hená khéya Ø-tháŋkA-pi čha mniyátakiya-š Ø-glÁ-pi
 and.here those turtle 3U-large-PL DET toward.water-CNTR 3U-go.back-PL
 And here, those **were big turtles** who were indeed going back to the water.
 (data: BO-25, para 4)

If we were to add the indefinite article *eyá* ‘some’ after *khéya* ‘turtles’ in (64), it would result in transforming the cleft sentence into a RC with *khéya* as its internal head (and the demonstrative *hená* would have to be removed from the RC). The constituent projection of (64) is shown in Figure 3.14.

⁹ Van Valin (2012) analyzed them as being ‘head-internal’ due to Lakota RCs being head-internal, but in Van Valin (2018) he claims they are not head-internal but are ‘inverted’ in comparison with cleft constructions in English and other familiar languages.

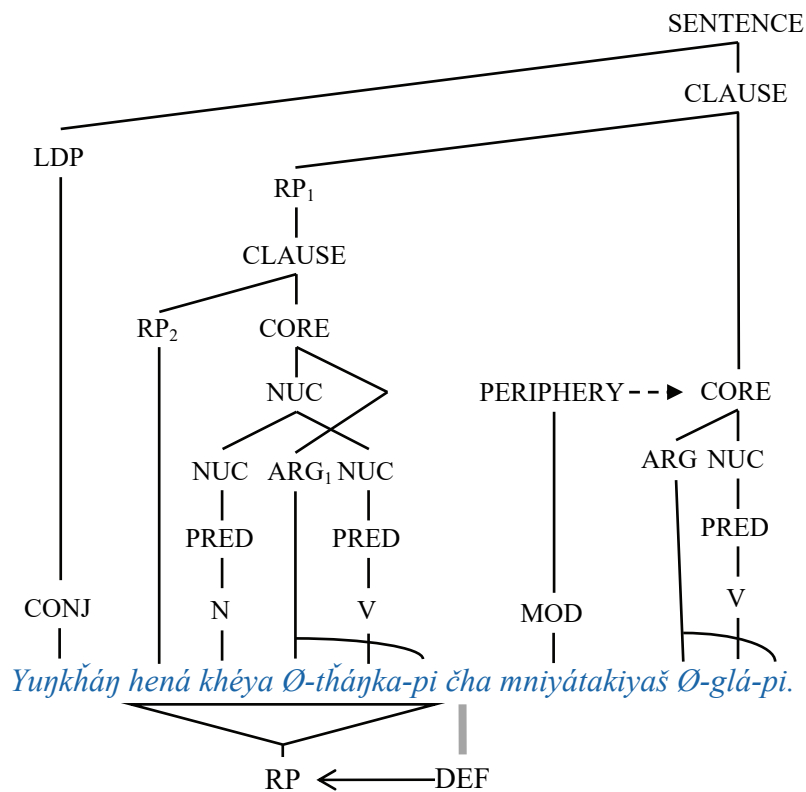


Figure 3.14 *SV+M as a complex predicate in a cleft sentence; projection of (64)*

The fact that the N+SV construction is obligatorily pluralized when it occurs within RCs (as in (61)) and clefts (as in (64)) is another piece of evidence that it is a complex predicate because when a SV functions as a modifier, as in (60a), it is never pluralized.

3.8. Summary

The objective of the current chapter was to provide an exhaustive list and analyses of constructions in which stative verbs function as predicates or ad-nominal modifiers. The motivation for treating SV predication and modification in one chapter emanated from the fact that under certain conditions there is a structural ambiguity between these two functions of stative verbs, and also because the two constructions are best described in contrast to each other. Additionally, traditional Lakota grammars and

research literature do not provide a clear distinction that would separate these two functions. The chapter described the following constructions:

1. N + SV as a complex predicate (nuclear juncture cosubordination)
 - (a) *Wičháša hánske*. ‘He is a tall man.’
 - (b) *Pěhíj hánske*. ‘He is long-haired.’
2. N+SV compounding (lexical compound)

e.g. *heháka* ‘elk’
3. RP-internal attributive modification: N+SV+(DET)
 - (a) *Blé thó wanj wanyáŋke*. ‘He saw a blue lake.’ (in marked RPs)
 - (b) *Blé thóthó wanyáŋke*. ‘He saw blue lakes.’ (in unmarked RPs)
4. Simple stative predication
 - (a) *Hánske*. ‘He is tall.’
 - (b) *Wičháša kij hánske*. ‘The man is tall.’
 - (c) *Pěhíj kij hánske*. ‘His hair is long.’
5. SV as a predicate or N+SV as a complex predicate in RCs and clefts
 - (a) *Hokšila hánskapi čha hípi*. ‘It was some tall boys that came.’
 - (b) *Hokšila k’eyá hánskapi čha hípi*. ‘It was some boys that were tall that came.’

Although extant literature gives examples (occasionally with correct translations) of the complex predicate function of stative verbs, it does not provide an analysis of this construction and does not separate it from the ad-nominal modification function of stative verbs. The chapter provided a revision of the generally accepted views on N+SV compounding.

In addition to the analysis of simple and complex stative predication, and modification with stative verbs, the chapter also offered new insights into the linkage of RPs cross-referenced with core arguments. It has been known that core arguments are obligatorily coded by affixes on the verb and optionally by RP linked at the clause level (Van Valin, 2005:147), but the current investigation extends this analysis to core arguments that are in grammatical persons other than the 3rd.

Additionally, the chapter showed that inalienable nouns in Lakota are either non-referential nominal predicates forming a complex predicate with a SV, or RPs linked with the core argument at the clause level. In the latter scenario, the possessor can be either the subject or the object of the predicate.

SVs can be used in two additional syntactic functions; the secondary predicate construction, which is discussed in Chapter 4, and ad-nominal premodifier, which is introduced in section 8.2.

4. Stative verbs as secondary predicates

4.1. Introduction

Chapter 3 provided a comprehensive discussion of syntactic constructions in which Lakota stative verbs function as predicates or ad-nominal modifiers. The present chapter discusses one additional syntactic construction featuring stative verbs; the secondary predicate construction.

According to Schultze-Berndt&Himmelmann (2004), “One of the essential characteristics of a secondary predicate construction is the fact that a single clause contains two predicative constituents, which do not form a complex predicate in the way serial verbs or periphrastic predicates do.”

There are two major varieties of secondary predicates: (i) depictives and (ii) resultatives. The difference between these two types of secondary predicates lies in their aspectual properties. It has been generally agreed in the literature that depictives convey information that pertains to the participant (subject or object) during the temporal frame of the eventuality expressed by the primary predicate (Schultze-Berndt&Himmelmann: 2004, Rothstein 2003, 2004). In contrast, resultative constructions are generally considered telic in that they describe events with a definite endpoint at which the state denoted by the resultative predicate is attained. As I will show in this chapter, there are reliable tests to confirm this distinction regarding the aspectual properties of these two types of SPCs.

Some researchers recognize a third category of secondary predicates called variably ‘circumstantials’ (Nichols, 1978a: 117; 1981) or ‘conditional secondary

predicates' (Halliday, 1967: 78–81). The data available for this study suggests that in Lakota circumstantials occur very marginally, although future research will be needed to determine this with more certainty.

Secondary predicate constructions are pervasive in languages around the world and they are used commonly in Lakota as well. However, in Lakota, only a very small number of SVs can function as SPs. In contrast, the vast majority of Lakota SVs cannot be used as SPs and instead, when they occur RP-externally or before the predicate, they undergo obligatory morphological modification and function as derived modifiers, which will be discussed in Chapter 5.

There have been significant disputes over the syntactic analysis of secondary predication in the literature, due mainly to the fact that secondary predicates are involved in two syntactic relationships and thus present a challenge for syntactic theory. The first relationship is one between the secondary predicate and the primary predicate, and the second relationship is one between the depictive and the participant.

There are two main approaches to the syntactic analyses of secondary predication offered in the constituency-based discussions. The first one is the small clause analysis (e.g., Chomsky (1981: 110–111), Stowell (1983), and Hoekstra (1988)), in which the secondary predicate is represented as a subordinate clause of its own with an empty category (PRO) as its subject. This is illustrated in (65) (from Chomsky 1981: 111).

(65) John [left the room]vp [PRO angry]sc

The small clause analysis treats the relationship of the SP to the primary predicate in terms of adjunction, and the relationship between the SP and the participant as one of obligatory control of an empty PRO subject by an argument of the matrix clause.

The second of the two main approaches to the analysis of secondary predication is one which treats SPs as simple adjuncts, and the predicative relation between participant and the SP is represented by co-indexing. This is shown in (66) (from Winkler 1997: 51)

(66) *Ray ate the meat_i raw_i.*

The Role and Reference Grammar approach to secondary predication cannot endorse the small clause analysis, because, among other things, RRG does not allow null components in its syntax (null affixes are allowed as they are morphological elements). “Also, small clauses were invented to account for phenomena that RRG handles in terms of nuclear and core junctures, so the concept is superfluous in RRG.” (Van Valin, p.c.)

The simple adjunct analysis is not acceptable within the RRG framework because adjuncthood is understood as a feature defined not only by optionality and dispensability but also by the syntactic position, in that adjuncts are syntactic constituents which occur in a periphery. Secondary predicates, however, are core components by definition of predication, and therefore cannot be treated as adjuncts even though they are (frequently) optional and dispensable.

Role and Reference Grammar offers a solution for both problems with the syntactic analysis of secondary predicates, i.e. (i) the double syntactic relationship of SPs and (ii) their structural position, in that it treats secondary predicate constructions as core junctures in which the two predicates are in a co-subordination relationship (i.e. they are co-dependent). In consequence the two predicates share a central participant and

all circumstantial information, which solves the problem of representing the double syntactic relationship of the SP.

Secondary predicate constructions are core junctures, so even though they share an argument, each predicate can be negated independently of the other. With respect to this they differ from complex predicates which also share an argument but are nuclear junctures and therefore the participating verbs cannot be negated independently.

When the primary predicate is transitive then the secondary predicate (SP) can be subject or object oriented, although the latter is much more frequent in Lakota. The subject or object orientation of the secondary predicate is determined via numerous factors which will be discussed in detail in this chapter.

4.2. Depictives with intransitive primary predicates

The orientation of secondary predicates (SPs) used with intransitive primary predicates is straightforward in that such SPs are by default subject oriented. An example of a SP with an intransitive primary predicate is given in (67):

- (67) *Wičháša kiŋ čhaŋzékA khiglápi.*
wičháša kiŋ čhaŋzékA Ø-khiglá-pi
man the angry 3A-start.to.go.back-PL
The men left **angry**.
(data: RFT 1992)

In (67), the secondary predicate *čhaŋzékA* ‘angry’ shares an argument with the primary predicate *khiglápi* ‘they left to go back’. The two verbs do not involve any unpredictable morphophonemic changes, and they show no morphological modification that would prevent them from functioning as the main verb in a mono-verbal clause. Furthermore, SPCs are mono-clausal and the two verbs are not

compounded but there is no prosodic separation between them either. Ablaut verbs have a-grade ablaut when they function as SPs, as the ablaut verb *čhaŋzékA* in (67).

The constituent projection of (67) is given in Figure 4.1. It shows that the secondary predicate construction is a core cosubordination at core-juncture level, which means that the two verbs both predicate on the same subject but are assigned to the shared argument independently from one another even though they are co-dependent. Subject marking is done on the primary predicate (i.e. the second verb).

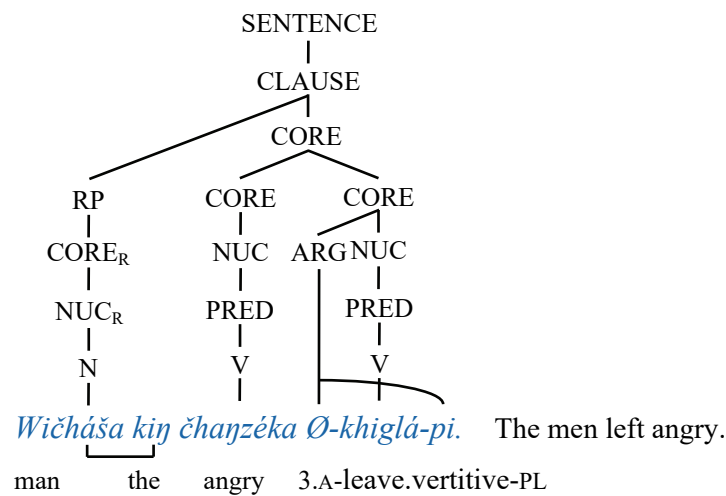


Figure 4.1: *Depictive with intransitive primary predicate, projection of (67)*

In their section titled “Verb and Verb” Boas&Deloria (1941, 74) list an example of V+V which is in fact an instance of SPC with an intransitive primary predicate. They provide the following transcription and translation: “*wayázaŋ-ḥpaya* he lies sick”, where the spelling reflects their statement that “[w]hen two verbs are conceived as a unitary concept they are compounded”. Based on extensive evidence from audio-recorded texts I claim that secondary predicates are not compounded with primary predicates. This is reflected in the spelling I provide in (68).

- (68) *Wayázan ħpáye.*
wayázan Ø-ħpáyA
 sick 3SG.A-lie
 He lies sick.

The pronunciation of (68) involves the downstep of the H* peak associated with the second stress inside the intermediate intonational phrase discussed in 3.2.2. This is shown on the pitch contour analysis of (69) given in Figure 4.2.

- (69) *Na čhaŋzéka úŋpi šni.*
na čhaŋzékA Ø-úŋ-pi šni
 and angry 3A-exist-PL NEG
 And they don't live angry.
 (data: DBW)

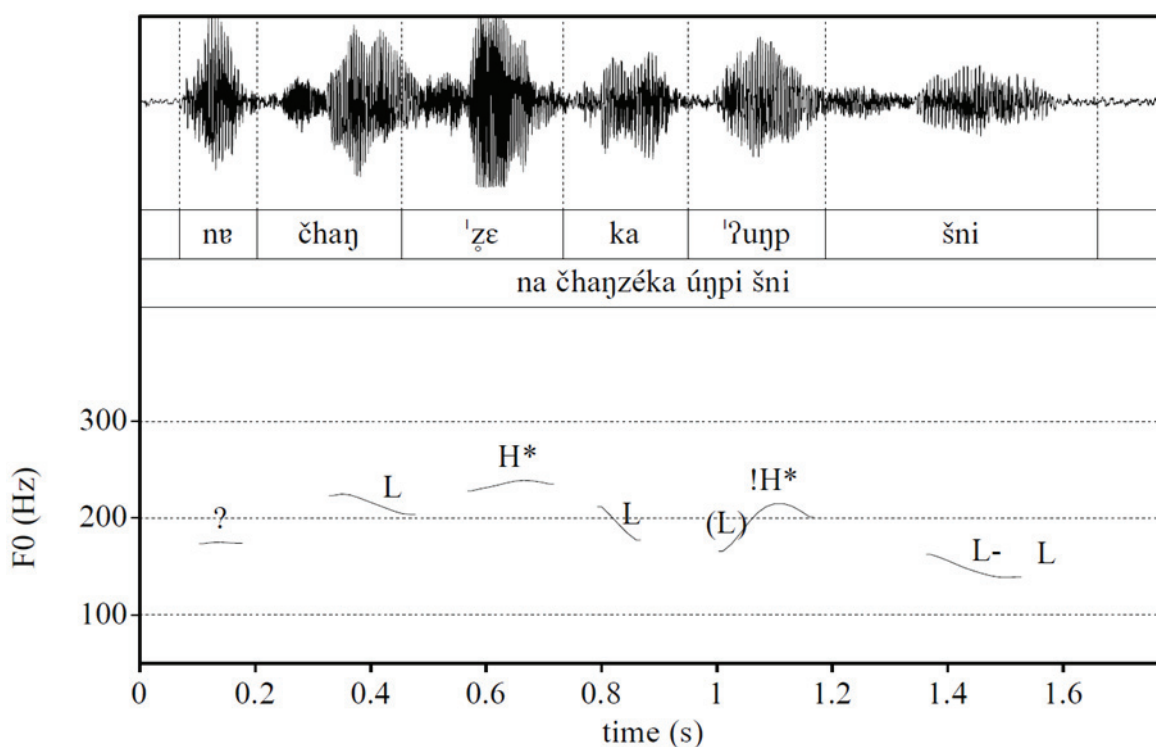


Figure 4.2 *Pitch contour of SPC*

The pitch contour in Figure 4.2 shows the pitch accent downstep (!H*) characteristic of uncompounded words in an intermediate intonational phrase. Thus it can be concluded that SPs are not compounded with primary predicates and that SPCs

represent yet another type of construction in which the prosodic feature of pitch accent downstep has been misinterpreted in previous studies as stress reduction and compounding.

4.3. Depictives with transitive primary predicates

Secondary predicates occurring with transitive primary predicates present a challenge for the interpretation of subject and object orientation as there is no agreement marking between the SP and the participant.

Some languages, for instance Slavic or Romance languages, require agreement between the SP and the participant (controller). Consider the minimal pair (from Czech) in (70) where the depictive in the first sentence is object oriented, whereas it is subject oriented in the second sentence, and the distinction is made easily via the case marking on the depictive adjective:

- (70) (a) *Chlapec viděl matku_i unavenou_i.*
chlapec viděl matk-u unaven-ou
 boy.NOM saw mother-ACC tired-ACC
 The boy saw his mother_i tired_i.
- (b) *Chlapec_i hleděl na matku celý unavený_i.*
chlapec hleděl na matk-u celý unaven-ý
 boy.NOM looked at mother.ACC entire tired-NOM
 The boy_i looked at his mother all tired_i.

The agreement between the depictive and the controlling noun makes the distinction between the subject and object orientation of the secondary predicate constructions transparent. As Lakota SPs have no agreement marking it would be expected that Lakota secondary predicate constructions with transitive primary predicates have only one possible orientation. However, the data in (71) suggests that both subject and object orientations occur and that they are largely determined by the semantics of the primary predicate.

- (71) (a) *Watúkħa wanyánke.* (object oriented); (data: ELH)
watúkħa waŋ-Ø-Ø-yánka
 tired see-3SG.U-3SG.A-stem

1. She_i saw him_i **tired_i**.
2. ?? She_i saw him **tired_i**.

- (b) *Watúkħa ayúta.* (subject oriented); (data: RFT)
watúkħa a-Ø-Ø-yúta
 tired look.at-3SG.U-3SG.A-stem

1. ?? She looked at him_i **tired_i**.
2. She_i looked at him **tired_i**.

In (71a), the argument of the SP *watúkħa* ‘tired’ is shared with the object argument of the primary predicate, whereas in (71b) it is shared with the subject of the primary predicate. This seems to suggest that subject versus object orientation is determined by the semantics of the primary predicate.

There are, however, instances where the interpretation of subject/object orientation is context dependent, as in (72), where the primary predicate is a simultaneous predicate construction with the possessive form of the verb *wanyánka* ‘to see smth/sb’, and whereas this V as a primary predicate resulted in an object oriented SPC in (71a), the reading in (72) is subject oriented.

- (72) *Ítaŋ it’á wanyíčhaglag nážij.* (subject oriented)
ítaŋ i-t’Á waŋ-wíčha-Ø-gl-akA ná-Ø-žij
 proud loc-die see-3PL.U.ANIM-3SG.A-POS-stem stand-3SG.A-stem

1. She_i stood watching them them proud_i unto death.
 2. She stood watching them them_i proud_i unto death.
- (data: EDT-Col-5, sentence 46)

The subject oriented interpretation in (72-1) is semantically in accord with the translation provided by Deloria (“[she] was proud unto death, and stood watching them....”), but the object oriented interpretation given in (72-2) should also be possible because the primary predicate is the same as that in (71a). That this is the case is confirmed by several native speakers I consulted.

More corpus data on object oriented SPs is in (73). The sentences in (73d) and (73e) provide examples with objects in grammatical persons other than 3rd singular.

- (73) (a) *Čhaŋzéka ayúta.* (subject oriented SP)
čhaŋzéka a-Ø-Ø-yúta
 angry look.at-3SG.U-3SG.A-stem
 1. She_i looked at him **angry**_i.
 2. * She_i looked at him_i **angry**_i.
 (data: DT: story 21, sentence 13)
- (b) *Čhaŋzéka wanyáŋke.* (object oriented SP)
čhaŋzéka waŋ-Ø-Ø-yáŋka
 angry see-3SG.U-3SG.A-stem
 1. She saw him_i **angry**_i.
 2. * She_i saw him **angry**_i.
 (data: ELH: audio 03)
- (c) *Tuwá úŋšika wanyáŋke.* (object oriented SP)
tuwá úŋšika waŋ-Ø-Ø-yáŋka
 someone pitiable see-3SG.U-3SG.A-stem
 1. She saw someone_i **pitiful**_i.
 2. * She_i saw someone **pitiful**_i.
 (data: EDT: Col-03, sentence 18)
- (d) *T'á wanyáŋkapi.* (object oriented SP)
t'á waŋ-Ø-Ø-yáŋka-pi
 dead see-3SG.U-3A-stem-PL
 1. They saw it_i **dead**_i.
 2. * They_i saw him **dead**_i.
 (data: PBT: text 1, sentence 20)
- (e) *Ničhéŋpipi čhépa waŋčhíyaŋkapi.* (object oriented SP)
ni-čheŋpi-pi čhépa waŋ-čhí-yaŋka-pi
 2SG.POSS-flesh-PL fat see-1SG.A.2U-stem-PL
 I see your flesh **fat**. / I see you with your flesh **fat**.
 (data: PBT: text 39, sentence 9)
- (f) *Túŋwena čhaŋzé slolwáye šni.* (object oriented SP)
túŋwena čhaŋzé slol-Ø-wá-ye šni
 never angry know.3SG.U-1SG.A-stem NEG
 I have never known her **angry**.
 (data: BD: p. 119)

The data in (73) shows further evidence that subject-object orientation of depictives depends, at least partially, on the lexical properties of the primary predicate. It will require additional research to categorize the transitive verbs in terms of them being used with subject or object depictives. This, however, would be a difficult task without using less reliable research methods, such as elicitation, due to the fact that this type of depictive construction with transitive primary predicates is rare in corpus data. Modifiers derived from SVs (which will be discussed in 5.10) present similar challenges with respect to the analysis of subject-object orientation, except that the available corpus data is more abundant.

SPs whose participant is inanimate do not present the challenges discussed above as they are always object oriented. An example is shown in (74):

- (74) *Thípi waŋ iháŋkeya wašté othí.*
thípi waŋ iháŋkeya wašté o-Ø-thí
 house a most good/beautiful loc-3SG-live-PL
 She lives in a most **beautiful** house.
 (data: EDT, Col-04, sentence 331)

Such object oriented stative verb based depictives are infrequent in Lakota due to the limited number of stative verbs that can function as depictives (the list is given in 4.5) and because of the issues discussed in this section. The data in (75) shows another instance of an object oriented secondary predicate:

- (75) *Čhowičhak'ij na él špáŋ aphe yaŋká-haŋ yuŋkháŋ ...*
čo-wičha-Ø-k'ij na él špáŋ a-Ø-pě
 roast.in.ashes-3PL.U.ANIM-stem and in cooked wait-3SG.U-stem
Ø-yaŋká-haŋ yuŋkháŋ
 3SG.A-sit-CONT and.here
 He roasted them (birds) in ashes and waited for them to be **cooked** in it, and here ...
 (data: DT; story 4, sentence 14)

In (75), the SP is *špájŋ* ‘cooked’ and the primary predicate is *aphé yanġkÁ* ‘he sat waiting’ which constitutes a Simultaneous Predicate Construction. It should be noted that the birds are treated as animate in the first clause, hence they are cross-referenced with the affix *wičha-* on the transitive verb *čhok’iŋ*, but this is not reflected on the SV *špájŋ* because the latter is a SP and SPs do not take grammatical person marking.

Conclusion: This section discussed the subject-object orientation of depictives occurring in clauses with transitive primary predicates. In general the orientation is context dependent, although SPCs with at least some primary predicates are more readily interpreted with one of the orientation that the other.

4.4. Comparison of SPCs and complement clauses

The occurrence of SPCs with transitive primary predicates in texts is highly infrequent and the challenges of interpreting orientation discussed above are likely one of the causes. Another possible cause is the fact that sentences like those in (71) are structurally identical with bi-clausal complement constructions. An important defining property of SPCs is that they are mono-clausal; however, when both the SV and its adjacent transitive verb are in 3rd person singular (i.e. zero coded), they can be interpreted as either mono-clausal (i.e. SPCs) or bi-clausal (i.e. complement clause construction). An example of such structural ambiguity is given in (76) where the two identical strings of morphemes can realize two very different syntactic structures and concomitant semantic representations (as indicated in the glossing, translations and labels in brackets). The ambiguity of this construction is likely one of the reasons why it is not found in texts frequently and why the marked complement clause construction, shown in (76c), is preferred over the unmarked one in (76b).

- (76) (a) *Watúkħa wayánke.* (secondary predicate construction)
watúkħa way-Ø-Ø-yánkA
 tired see-3SG.U-3SG.A-stem
 She saw him_i **tired_i**. (data: BBBJ p.c.)
- (b) *Watúkħa wayánke.* (unmarked complement clause construction)
wa-Ø-túkħa way-Ø-Ø-yánkA
 tired-3SG.U-stem see-3SG.U-3SG.A-stem
 She saw (that) he was **tired**. (literally: ‘He was tired she saw him.’)
- (c) *Watúkħa čha wayánke.* (marked complement clause construction)
wa-Ø-túkħa čha way-Ø-Ø-yánkA
 tired-3SG.U-stem DET see-3SG.U-3SG.A-stem
 She saw that he was **tired**. (data: BBBJ p.c.)

The contrast between the SPC in (76a) and the complement clause construction in (76b) is more apparent when the subject of the first verb is in 3rd person plural, as in (77) where (77a) shows the SPC and (77b) gives the complement clause construction.

- (77) (a) *Watúkħa waywíčhayanke.* (SECONDARY PREDICATE CONSTRUCTION)
watúkħa way-wíčha-Ø-yankA
 tired see-3PL.U.ANIM-3SG.A-stem
 She saw them_i **tired_i**.
- (b) *Watúkħapi waywíčhayanke.* (UNMARKED COMPLEMENT CLAUSE)
wa-Ø-túkħa-pi way-wíčha-Ø-yankA
 tired-3A-stem-PL see-3PL.U.ANIM-3SG.A-stem
 She saw them_i being **tired_i**.
- (c) *Watúkħapi wayánke.* (UNMARKED COMPLEMENT CLAUSE)
wa-Ø-túkħa-pi way-Ø-Ø-yánkA
 tired-3A-stem-PL see-3SG.U-3SG.A-stem
 She saw (that) they were **tired**.

In (77a), the secondary predicate *watúkħa* is not pluralized because SPs do not take subject marking. Conversely, in (77b,c), *watúkħa* is the predicate of the complement clause and as such it requires subject marking and number agreement with the subject, hence it has the plural suffix *-pi*. The object marking on the matrix verb can be

realized in two ways because the object argument in the matrix verb can be cross-referenced either with the actor of the complement clause, as in (77b), or with the whole clause, as in (77c). Note that the complement clause in (77b,c) can also be optionally marked with the complement clause marker *čha* (in fact it is more frequently used with *čha* than without it).

A comparison of the respective syntactic structures of SPCs and complement clauses is given in Figure 4.3 and Figure 4.4.

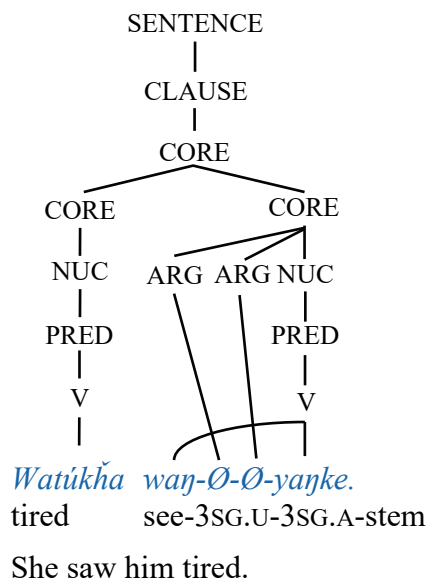


Figure 4.3 Object oriented SPC with 3rd plural object

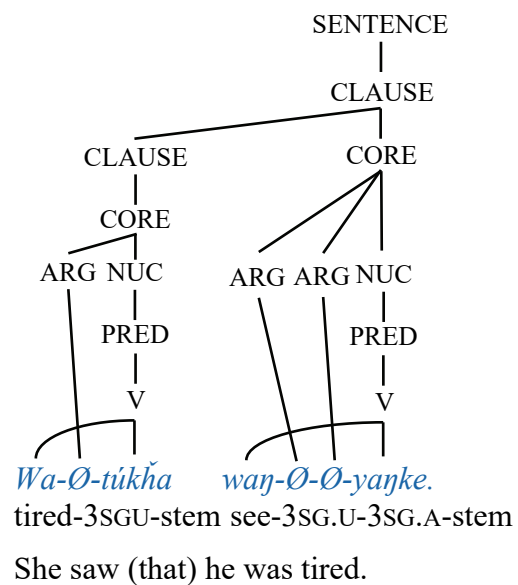


Figure 4.4 Complement clause with 3rd plural subject

Figure 4.3 and Figure 4.4 provide a comparison of the structural ambiguity between SPCs and complement clauses, which occurs when V1 has no overt argument and the object of V2 is zero coded. When the object of V2 is coded with 3pl. animate affix *wičħá-*, the two constructions are no longer structural identical, as shown in Figure 4.5 and Figure 4.6.

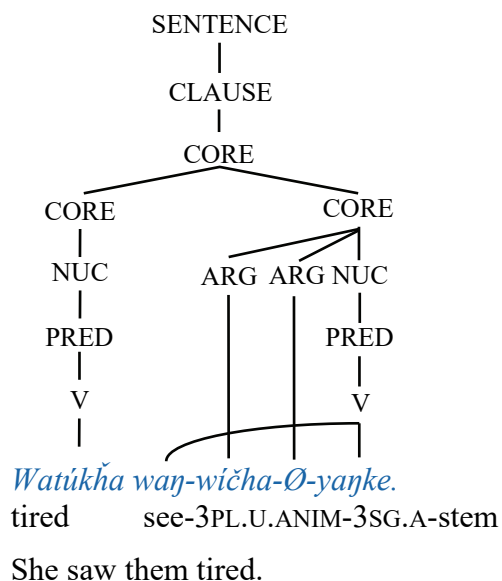


Figure 4.5 Object oriented SPC with 3rd plural object

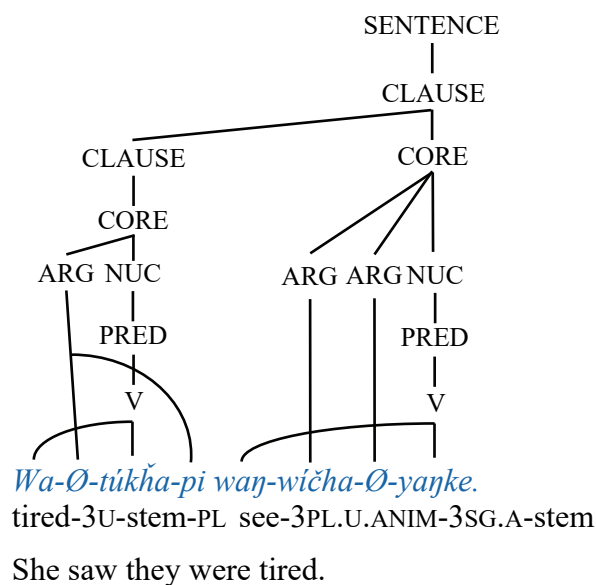


Figure 4.6 Complement clause with 3rd plural subject

A SPC is a core cosubordination, whereas a complement clause is a clause embedded into the matrix clause and thus the constituent projection shows it as a clausal subordination. Yet, Figure 4.3 and Figure 4.4 illustrate that this is a case of structural ambiguity: two identical strings of morphemes that can realize different syntactic structures. This is due to the zero marking for 3rd person singular (and plural inanimate). The resulting polysemy might be a partial explanation of the low corpus frequency of these two constructions.

4.5. Stative verbs that can function as secondary predicates (preliminary list)

The number of Lakota stative verbs that can be used as secondary predicates is very small. A thorough investigation of the text corpus resulted in the list given in Table 4.1. Further research would probably expand this list, even though it is not likely that it would add a significant number of verbs.

Table 4.1 *Stative verbs which can function as Secondary Predicates*

<i>čhaŋtéšičA</i>	“to be sad”
<i>čhaŋzéka</i>	“to be angry”
<i>čhaŋtiyaphā</i>	“to have one’s heart beat hard (as from an emotion or fear)”
<i>iyókišičA</i>	“to sad about smth”
<i>iyúš’inyayA</i>	“to be startled, frightened, shocked, surprised”
<i>t’Á</i>	“to be dead”
<i>úŋšikA</i>	“to be pitiable”
<i>watúkħa</i>	“to be tired”
<i>wayázaŋ</i>	“to be sick”
<i>khúžA</i>	“to be sick”
<i>iwátokhiya</i>	“to be worried about smth”
<i>tókča šni</i>	“there is nothing wrong with one”
<i>ípuzA</i>	“to be thirsty”
<i>uŋthun</i>	“to be hurt / injured”
<i>itómni</i>	“to be drunk”
<i>itóhomni</i>	“to be dizzy”
<i>hušté</i>	“to be lame”
<i>wathógla</i>	“to be wild”
<i>tħaŋka</i>	“to be large”
<i>čik’ala</i>	“to be small”
<i>čisčila</i>	“to be small”
<i>nisko</i>	“to be huge”
<i>niškola</i>	“to be tiny”
<i>niskoħaŋka</i>	“to be huge”
<i>haikčeka</i>	“to be dark-complexioned”
<i>hásapa</i>	“to have black skin”
<i>hónisko</i>	“to be loud”
<i>ožúla</i>	“to be full of”
<i>owóħaŋla</i>	“to straight”
<i>tħéča</i>	“to be new” (marginally)
<i>tħaŋšná</i>	“to be single (unmarried)”
<i>ačhú</i>	“to be covered with dew”
<i>aħéyuyka</i>	“to be covered with frost”
<i>kaħwókA</i>	“to be carried by the wind”
<i>špáŋ šni</i>	“to be uncooked, raw”

It should be noted that this list generally consists of non-truncating verbs, with a few exceptions, such as *khúžA*, *čhaŋtéšičA*, *iyókišičA* and *kaħwókA*. This suggests that it perhaps takes longer for non-truncating verbs to develop into DMs.

Nouns compounded with the postposition *čhóla* “without” are also used as secondary predicates, for example: *sičhóla* “barefoot,” *hačhóla* “naked,” *thičhóla*

“homeless” (these generally function as stative verbs allowing subject marking with the undergoer affixes).

Notice that the first two groups of stative verbs represent SVs that express various negative emotional or physiological states. It is interesting to note that their positive counterparts cannot be used as SPs. An example is *čhaŋtéšičA* ‘to be sad’ and *čhaŋtéwašte* ‘to be glad/happy’, where the former can be used as a SP but the latter has to be morphologically modified, like the vast majority of SVs.

It is assumed that the above list is not comprehensive because it is exclusive to the tokens found in corpus data. More research is required to identify other stative verbs that can function as secondary predicates. However, it can be anticipated that their overall number is small because there are indications that Lakota has been undergoing a shift from using stative verbs as secondary predicates towards employing derived modifiers based on SVs (discussed in Chapter 5). That this is the case is supported by an analyses of the text corpus which shows that some SVs which were still used as SPs in the older parts of the corpus occur only as derived modifiers (DM) in newer texts. For instance, the SV *čhépa* ‘to be fat’ commonly functions as a SP in older texts, but rarely in modern discourse. As a result of this development, the vast majority of SVs cannot be used as SPs (i.e. without morphological modification) and instead they have to be morphologically modified with the suffix *-ya* and used as derived modifiers. Chapter 5 will discuss the DMs as well as the hypothesis for the motivation behind this development.

4.6. Negated secondary predicates

By definition, secondary predicates are part of the same clause as the primary predicate with which they share the argument. In consequence, they are in the scope of higher level operators, such as the question marker and negation marker (a core-

level operator). An example of SPC negation is given in (78a) where *šni* ‘not’ has scope over both predicates, as is compatible with core cosubordination. However, it is also possible to place *šni* ‘not’ directly after the secondary predicate and thus negate it independently of the primary predicate, as shown in (78b). It is very common that when the depictive is negated, the suffix *-ya* is added to it, as shown in (78c). As will be discussed in Chapter 5, this is the same suffix that is obligatory affixed to those stative verbs that cannot function as secondary predicates.

(78) (a) *Úŋt̥huy gli šni.*
úŋt̥huy *Ø-gli* *šni*
hurt 3SG-come.back NEG
He didn’t come back **hurt**.
(data: DBW)

(b) *Úŋt̥huy šni gli.*
úŋt̥huy *šni* *Ø-gli*
hurt NEG 3SG-come.back
He came back **unhurt**.
(data: BBBJ)

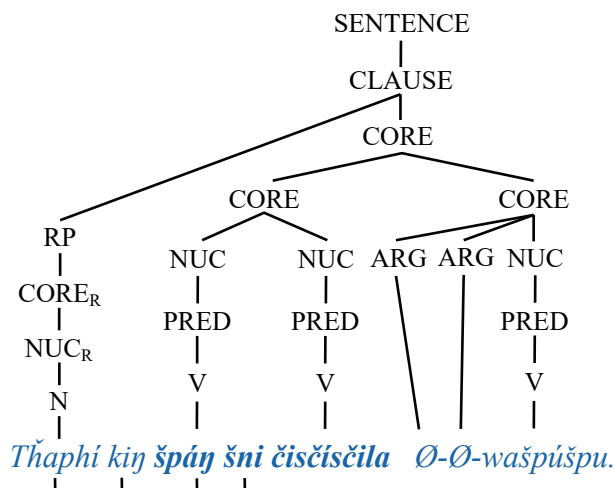
(c) *Úŋt̥huy-šni-ya gli.*
úŋt̥huy-šni-ya *Ø-gli*
angry-NEG-DER 3SG-come.back
He came back **unhurt**.
(data: BBBJ)

It should be noted here, that the way that *šni* is used with secondary predicate constructions, illustrated in (78b) and (78c), is identical to how it is used with simultaneous predicate constructions, as discussed in section 10.2.13.

Negated secondary predicates can be serialized with non-negated ones, as in (79):

(79) *T̥haphí kiŋ špáŋ šni čisčísčila wašpúšpu.*
t̥haphí *kiŋ* *špáŋ* *šni* *čisčísčila* *wa-Ø-Ø-špúšpu*
ruminant.liver the cooked neg small.REDUP cut.up-INAN-3SG-stem
She cut up the liver **uncooked** (into) **small** (pieces).
(data: EDT; Col-3: sentence 385)

In (79), the first SP is a depictive while the second SP is a resultative ('She cut the liver up small', i.e. she cut it up into small pieces). The constituent projection of (79) is given in Figure 4.7.



'She cut up the liver **uncooked** (into) **small** (pieces).'

Figure 4.7 *Serialized Secondary Predicate*

The constituent projection in Figure 4.7 shows that the serialized SPs are connected via nuclear coordination and both of the shared arguments occur on the primary predicate.

Another example is in (80) and it shows how negated SPs can take both the suffix *-ya* and the suffix *-kel* which signals a vague property (discussed in detail in 5.3).

- (80) *Mní sníšniyakel úŋpi.*
mní sní-šni-ya-kel Ø-Ø-úŋ-pi
 water cold-NEG-DER-VAG 3SG.U-3SG.A-use-PL
 They use water (that is) **kind of not very cold**.
 (data: RFT: 1996)

SP negation serves as a good test for differentiating depictives from resultatives, as the latter cannot be negated independently of the primary predicated, as will be discussed later in section 4.10.

4.7. Depictives with event quantification (*šna*, *s'a*)

Marking event quantification is as an important feature of Lakota and it is similar to a kind of habituality aspect. Among the most frequent ways to mark habituality are the conjunction *čhán* (and its variant *čhánna*), and the clitics *šna* and *s'a*. These three are commonly used in concert within a single sentence, but the two clitics are most relevant for the discussion of secondary predication. There is an important difference between the way *s'a* and *šna* are used syntactically; *s'a* is always attached to the predicate heading a clause, while *šna* cannot be used after predicates and, in fact, it is generally not used after verbs, except for secondary predicates and VIs in Simultaneous Predicate Constructions (see 10.2.14). The grammatically possible positions of *šna* and *s'a* in SPCs are illustrated in (81):

- (81) (a) *Watúkħa glí s'a.* (**Watúkħa s'a glí.*)
watúkħa *Ø-glí* *s'a*
 tired 3SG.A-come.back HAB
 He **usually/always** comes back tired.
 (data: CLH)
- (b) *Watúkħa šna glí.* (**Watúkħa glí šna.*)
watúkħa *šna* *Ø-glí*
 tired HAB 3SG.A-come.back
 He comes back **usually** tired.
 (data: KBHB)
- (c) *Watúkħa šna glí s'a.*
watúkħa *šna* *Ø-glí* *s'a*
 tired HAB 3SG.A-come.back HAB
 He **usually** comes back tired.
 (data: BBBJ, SHE, IEC)

Since *s'a* in (81a) is a core-level operator it seems to be a kind of 'event quantification' rather than a type of aspect. The clitic *šna*, on the other hand, has scope exclusively over the depictive, as in (81b). Both clitics can co-occur in one

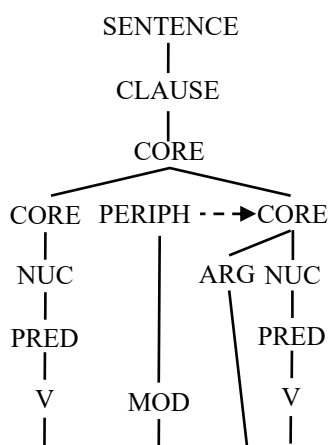
SPC, as shown in (81c). The habituality marker *šna* can be used with both depictives and resultatives.

4.8. Intervention between secondary and primary predicates

Section 4.7 showed clitics which function as event frequency or habituality markers, one of which can follow the secondary predicate. Another type of expression that can intervene between the two predicates is an adverbial of place or time. Examples are in (82):

- (82) (a) *Watúkħa thiyáta khi.*
watúkħa thiyáta khi
 tired home 3SG.A-arrive.back.there
 He arrived back home **tired**.
 (data: RFT; 1996)
- (b) *Tókča šni thimá hiyotakiŋ na ...*
tókča šni thimá Ø-hiyotakA na
 be.the.matter NEG inside 3SG.A-come.sit and
 He came and sat down inside **whole and well**.
 (data: DT; story 29, sentence 11)

In (82a), the adverbial *thiyáta* ‘at home’ is placed immediately between the secondary and primary predicates, and the same is the case for the adverbial *thimá* ‘inside’ in (82b). In these sentences, the SP is not followed by a prosodic break. The adverbial is a core modifier of the primary predicate, as shown in the constituency projection of (82a) in Figure 4.8



Watúkħa thiyáta Ø-khi.

tired home 3.A-arrive.there.vertitive
 He arrived back home tired.

Figure 4.8 Intervention between SP and primary predicate, projection of (82a)

- (84) (a) *Blé waŋ thǎŋka aɣlágla má-Ø-ni-pi.*
blé waŋ thǎŋka Ø-aɣlágla má-Ø-ni-pi
 lake INDEF big INAN-along walk-3A-stem-PL
 They walked along a **big** lake.
 (data: DT; story 27, sentence 8)
- (b) *Lila mayá waŋ thǎŋka ikhiyela thipi.*
lila mayá waŋ thǎŋka Ø-ikhiyela Ø-thi-pi
 very cliff INDEF big INAN-near 3A-camp-PL
 They made a camp near a very **big** cliff.
 (data: BT; p. 251)

In (84a), the SV *thǎŋka* ‘large’ is internal to the postpositional phrase headed by the postposition *aɣlágla* ‘along smth’. In effect the SV does not function as a secondary predicate, but instead it is an RP-external adnominal modifier. Further evidence that *thǎŋka* is bound to the RP is seen in (84b), where *lila* ‘very’ has scope over the RP including its external modifier *thǎŋka*. This position of *lila* would not be possible if *thǎŋka* were a SP. The constituent projection of (84a) is in Figure 4.10.

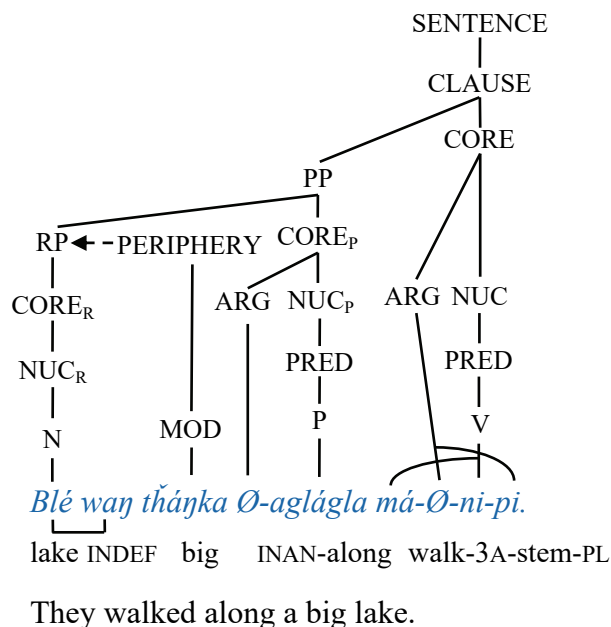


Figure 4.10 RP-external modifier, constituent projection of (84a)

Thus (84) is an example of the rare instances in which unmodified stative verbs can function as RP-external derived modifiers. As will be discussed in chapter 5, RP-external modification is generally restricted to modifiers derived from stative verbs, but those SVs that can function as secondary predicates can also be used like this, albeit corpus occurrences of this construction seem low in number and mostly involve the SVs *tháŋka* ‘to be large’ and *čík’ala* ‘to be small’.

4.9. Numerals, quantifiers and partitives as depictives

Some authors have noted that numerals are depictives when they are in certain syntactic positions. For instance, Schultze-Berndt&Himmelmann (2004:108) state the following:

Numerals and other quantifiers outside a noun phrase are generally analysed either as adverbials or as “floated” quantifiers. These quantifiers usually exhibit a clear semantic relationship to one participant of the main predicate, in that they indicate the size of the set of entities involved as a participant in an eventuality. In other words, they are semantically depictive. ... Strong support for the analysis of these numerals as depictives comes from languages where depictives can be identified by agreement.

Whereas Lakota lacks agreement marking between the participant and the depictive, there is evidence to support the claim that numerals and quantifiers are depictives in Lakota whenever they are RP-external.

Firstly, all Lakota numerals are treated as stative verbs in that they take the undergoer affixes and participate in the same syntactic constructions as stative verbs. In (85a), the noun *khoškálaka* ‘young man’ and the stative verb *yámni* ‘to be three’ form a complex predicate, very much the same construction that was discussed in 3.2. In this construction the stative verb is obligatorily pluralized with *-pi* when the subject is in 3rd plural animate. Compare this with the sentence in (85b) where the numeral

wikčémna is not pluralized and where it can only be analyzed as a depictive. The same holds true for (85c) where the numeral is clearly RP-external. For comparison and comprehensiveness, (85d) is included to show *yámni* as an RP-internal modifier.

- (85) (a) *Kħoškálaka yámni**pi*. (complex predicate)
kħoškálaka \emptyset -*yámni-pi*
 young.man 3U-three-PL
 They are **three** young men. (i.e. There are three young men.)
 (data: BO-4, sentence 1)
- (b) *Kħoškálaka wikčémna iwičhaču*. (secondary predicate)
kħoškálaka *wikčémna* *i-wičha- \emptyset -ču*
 young.man ten take-3PL.U.ANIM-3sg.A-stem
 He took **ten** young men.
 (data: BT p. 130, line 251)
- (c) *Šúnkawakháj kiŋ yámni iwičhaču*. (secondary predicate)
šúnkawakháj *kiŋ* *yámni* *i-wičha- \emptyset -ču*
 horse the three take-3PL.U.ANIM-3SG.A-stem
 He took **three** of the horses.
 (data: MLH)
- (d) *Šúnkawakháj yámni(pi) kiŋ iwičhaču*. (RP-internal modifier)
šúnkawakháj *yámni-(pi)* *kiŋ* *i-wičha- \emptyset -ču*
 horse three(PL) the take-3PL.U.ANIM-3SG.A-stem
 He took the **three** horses.
 (data: BLT)

Note that unlike other stative verbs, numerals can be optionally pluralized when they are RP-internal modifiers. Both pluralized and non-pluralized versions are well represented in the corpus.

One could argue that the numeral in (85b) can be analyzed as RP-internal attributive modifier because the sentence looks structurally identical to those discussed in 3.4.2 (i.e. sentences with attributive modifiers internal to unmarked RP's), since there is no DETs to show whether the numeral is RP-internal or RP-external. There are three pieces of evidence in support of analyzing numerals with

unmarked Ns as depictives. One is shown in (86), where the numeral *núŋpa* ‘two’ is used in its truncated form *núŋp*.

- (86) *Kħoškálaka núŋm iwíčhaču.*
kħoškálaka núŋpa i-wíčha-Ø-ču
 young.man two take-3PL.U.ANIM-3SG.A-stem
 He took **two** young men.
 (data: BT: p. 228, line 118)

In 5.2. it will be discussed in detail that truncating SVs which can function as depictives characteristically allow both the truncated and non-truncated forms. Thus, truncation of numerals in pre-predicate position is evidence that numerals can function as depictives and that in constructions like that in (85b) and (86) they are outside the RP. SVs functioning as RP-internal modifiers, on the other hand, are never truncated.

The second piece of evidence is the fact that some quantifiers can optionally undergo morphological modification via the suffix *-ya* and thus become derived modifiers which typically alternate with secondary predication to express depictive or resultative meanings. In (87), the quantifiers *nuphíŋ* ‘both’ and the partitive *iyókhise* ‘half’ are optionally modified with the suffix *-ya*.

- (87) (a) *Nuphíŋyaŋ iwíčhawakiye.*
nuphíŋ-ya i-wíčha-wa-kiyA
 both-DER to.sympathize.with-3PL.U.ANIM-1SG.A-stem
 I sympathize with both of them.
 (data: EDT-Inf-3, sentence 3)
- (b) *Iyókhiseyela iču.*
iyókhise-ya-la i-Ø-Ø-ču
 half-DER-REST take-3SG.U-3SG.A-stem
 He took only half of it.
 (data: NSB)

Thirdly, the data in (88) shows that numerals in pre-predicate position can take the habitual marking suffix *šna*, which cannot modify nominals or RP-internal modifiers; the ability to take *šna* is typical for depictives, as discussed in 4.7.

- (88) *Yámni šna iwíčhaču.*
yámni šna i-wíčha-Ø-ču
 three HAB take-3PL.U.ANIM-3SG.A-stem
 He takes **usually** three.
 (data: RFT: 1996)

Non-numeral quantitative modifiers and partitives appearing RP-externally are also depictives. Among them are words like *átaya* ‘whole’, *tóna* ‘how many’, *iyúha* ‘all’, *iyóhila* ‘each’, *nuphij* ‘both’, *hanké* ‘a part of’, *húnĥ* ‘some of’, *etánj* ‘some of’, *ožúla* ‘full’, *háeče* ‘empty’, *saŋni* ‘one of a pair’, *iyókhise* ‘half’, etc.

Some examples are given in (89):

- (89) (a) *Wóyuha lila óta agli.*
wóyuha lila óta Ø-Ø-agli
 possession very much 3SG.U- 3.SG.A-bring.back
 He brought back **a lot of** possessions.
 (data: EDT; Aut-3, sentence 64)
- (b) *Napé saŋni gluhá.*
napé saŋni Ø-Ø-gl-uhá
 hand one 3SG.U- 3.SG.A-poss-hold
 He held it (in) **one** hand.
 (DATA RFT: 1996)
- (c) *Wókapĥe waŋ yublél wakápĥapi ožúla yaŋké.*
wókapĥe waŋ yublél wakápĥapi ožúla Ø-yaŋké
 rawhide.container a open pemmican full INAN-sit
 There sat a rawhide container **full** of pemmican.
 (data: DT: story 38, sentence 7)
- (d) *Čhéga kiŋ mni kiŋ ektá ipágmunġ ožúla iču*
čhéga kiŋ mni kiŋ ektá ipágmunġ ožúla i-Ø-Ø-ču
 pail DEF waterDEF at dipping full take-INAN-3SG.A-stem
 At the water she dipped out the pail **full**.
 (data: DT: story 46, sentence 3)

- (e) *Wanáš Lakhóta-wìŋyaŋ kiŋ húnġ wašiču-hingnàyaŋpi.*
wanáš Lakhóta-wìŋyaŋ kiŋ huŋġé wašiču-hingná-Ø-yaŋ-pi
 now Lakota-woman DEF some white.person-husband-3SG.A-have-PL
 By that time **some** of the Lakota women had married white men.
 (data: EDT-Aut-4, sentence 32)

In none of the sentences in (89) can the quantifiers or partitives be cross-referenced with the core arguments of the predicates, and their presence is licensed only through their functioning as SPs. (Note that in (89e) the noun *wašiču* is incorporated into the predicate, hence the latter is glossed as having only the actor argument.)

The word *išnála* ‘alone’ cannot be analyzed as a depictive because it has a pronominal component (the pronoun *iŋš*) and as such it requires person agreement with the predicate, as shown in (90):

- (90) *Nišnála yahí he?*
n-išnálala ya-hí he
 2SG-alone 2.SG.A-come Q
 Did **you** come alone?
 (data: DTA: 2007)

In (90), the prefix *n-* attached to *išnála* shows person agreement with the predicate.

In conclusion, numerals, quantifiers and partitives can function as secondary predicates. Numerals can also function as premodifiers, which is discussed in 8.6

4.10. Resultative secondary predicates

The second of the two main varieties of secondary predicates is the resultative. A resultative describes the state pertaining to its participant as resulting from the action expressed by the primary predicate. An example is in (91):

(91) (a) *Thípi kiŋ thánka káǵapi.*
thípi kiŋ thánka Ø-Ø-káǵapi-pi
 house DEF big INAN-3A-make-PL
They built the house **large**.
 (data: RFT: 1996)

(b) *Thípi kiŋ wašté káǵapi.*
thípi kiŋ wašté Ø-Ø-káǵapi-pi
 house DEF good INAN-3A-make-PL
They made the house **beautiful**.
 (data: RFT: 1996)

The number of resultative secondary predicates tokens in corpus is low for the same reason as those mentioned for depictives, i.e. due to the small number of stative verbs that can function as secondary predicates.

In the languages of the world, the object orientation of resultatives, as in (91), is prevalent, but subject oriented resultatives have also been recognized (see e.g. Daniela Lupsa, 2003). In Lakota, subject oriented resultatives seem to be limited to occurring before the verb *ičháǵA* ‘to grow’ and the reflexive form of the verb *káǵA* ‘to make smth’, which is *ič’ičhaǵA*. Compare (92a), where the noun is a secondary object (i.e. traditionally ‘direct object’) and (92b) where the noun appears to be a resultative.

(92)(a) *Haŋpíkčeka ič’ičhaǵe.*
haŋpíkčeka Ø-ič’i-kaǵA
 moccasin 3SG-REFL-make
 He made himself **moccasins**. / He made **moccasins** for himself.
 (data: BBBJ: 2016)

(b) *Škíbibila ič’ičhaǵe.*
škíbibila Ø-ič’i-kaǵA
 chickadee 3SG-REFL-make
 He made himself into **a chickadee**. / He turned himself into **a chickadee**.
 (data: DT: story 16, sentence 5)

According to contrastive examples given in Boas&Deloria (1941: 139), the sentence in (92a) differs from that in (92b) in that the two words in the latter are compounded, which would mean that this is not an instance of secondary predicate but perhaps one of noun incorporation or nominal modification of the verb. However, analysis of audio data with sentences of the structure in (92b) does not support Boas&Deloria's statement that the two words are compounded. Furthermore, Deloria is not consistent in spelling *ič'ičhağa* as a compound when it follows resultatives. Compare, for instance, *uňšimič'ičhađe šni* 'I do not make myself humble' (EDT-Aut-4: sentence 2) with *okhólakičhiye ič'ičhağapi* 'they made themselves a society' (EDT-Col-2, sentence 79). Deloria's translation of the latter sentence suggests that she treats the noun *okhólakičhiye* as an object, but if this were cross-referenced with the object argument, the noun would require the indefinite article *wan* to agree with her translation (as we have seen, singular RPs require a determiner when they are referential). These inconsistencies in Deloria's treatment and the analysis of the audio are evidence in support of treating the noun in (92b) as a resultative.

Examples of subject oriented resultatives used with the verb *ičháğA* as the primary predicate are given in (93):

- (93)(a) *Hánska / thánka ičháğapi.*
hánska / thánka i-Ø-čháğA-pi
 tall / big grow-3U-stem-PL
 They grew **tall/big**.
 (data: FREH-1994 / EDT-Leg-10: sentence 15)
- (b) *Wičháša ičháđe.*
wičháša i-Ø-čháğA
 man grow-3SG.U-stem
 He grew (into) **a man**.
 (data: ORA: 1973)

The data in (93a) shows a resultative construction with a stative verb (*háŋska* ‘long’ or *tšánka* ‘big’). The stative verb *háŋska* is interesting in that normally it is obligatorily changed into a depictive modifier (*háŋskya*) whereas it can function as a genuine resultative before the verb *ičháǵA* ‘to grow’ and sometimes before *káǵA* ‘to make smth’.

The data in (93b) shows a noun as a resultative. Discussion about nouns used as secondary predicates is given in section 4.13.

Resultatives differ from depictives in their aspectual properties in that the former express the state of the participant as a result of the primary predication event. Due to this difference, resultatives cannot be negated separately from the primary predicate. The example in (94a) shows that the resultative construction can be negated with the negative operator having scope over both predicates, thus contrasting (94b) which indicates that the resultatives cannot be negated independently of the primary predicate. Moreover, the aspectual property of resultatives disables them from being associated with temporal expression of a time period, as in (94c).

- (94)(a) *Háŋska ičháǵapi šni.*
háŋska i-Ø-čháǵA-pi šni
 tall grow-3U-stem-PL NEG
 They did not grow **tall**.
 (data: FREH-1994)
- (b) * *Háŋske šni ičháǵapi.*
háŋska šni i-Ø-čháǵA-pi
 tall NEG grow-3U-stem-PL
 They grew up to not **tall**.
 (data: GJ: BBBJ)
- (c) * *Ómakħa wikčémna háŋska ičháǵapi.*
ómakħa wikčémna háŋska i-Ø-čháǵA-pi
 year ten tall grow-3U-stem-PL
 They grow up **tall** in ten years.
 (data: GJ: BBBJ)

The inability of resultatives to take *šni* ‘not’ and temporal expression of a time period makes them different from depictives which can be used with both.

According to Schulze-Berndt and Himmelmann (2004: 66) (following Halliday (1967) and Winkler (1997)), depictives and resultatives in some language differ prosodically in that depictives can receive their own phrasal stress, while resultatives remain unstressed. No such prosodic difference is observed between depictives and resultatives in Lakota, and they are therefore treated here as one and the same syntactic phenomenon.

4.11. Complex secondary predicates

In section 3.2.3. I provided evidence that under certain conditions adjacent N+SV constitute a complex predicate. Such complex predicates involving SVs can also function as secondary predicates (SPs). An example is given in (95), which represents the lyrics of a song sung by the mythological trickster character *Iktómi* when he tried to trick two women into believing that he was a fat raccoon sitting in a hollow tree.

- (95) *Wičhá čhépa léł maŋké.*
wičhá čhépa léł m-(y)aŋká
 raccoon fat here 1SG.A-sit
A fat raccoon, here I sit.
 (data: DT, story 7, para 13)

In (95), the SV *čhépa* is not an RP-internal modifier, because there is no RP in the clause. The N+SV would constitute an RP only if they were modified by a determiner (i.e. *wičhá čhépa way/kiŋ* ‘a/the fat raccoon’). Instead, the N+SV in (95) constitute a complex predicate which in turn functions as a SP. The construction has all the properties of a SPC, such as allowing an ad-CORE modifier (*léł*) to intervene between the SP and the primary predicate (in fact, the primary predicate *yaŋká* is one of the verbs that obligatorily follow a modifier or another circumstantial expression). The

The stative verbs in (96a) and (96b) do not modify the adjacent nouns, but instead they constitute complex SPs with them. In (96a), the noun *ištá* and the reduplicated stative verb *čikčik'ala* form a nuclear cosubordination (co-predicate) which in turn functions as the SP occurring before the primary predicate *amáyuta* ‘she looked at me’. This is reflected in the constituent projection of (96a), shown in Figure 4.12:

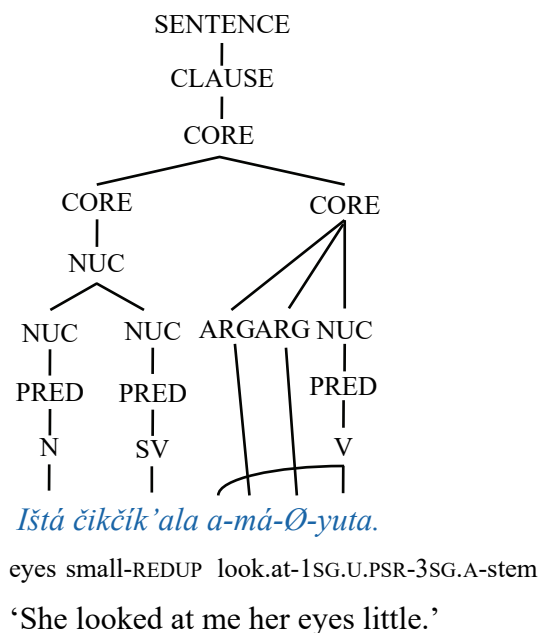


Figure 4.12: *Complex secondary predicate, projection of (96a)*

If we were to replace *ištá čikčik'ala* ‘her eyes are small’ with *ištá thóthó* ‘her eyes are blue’ in (96a), the latter would be obligatorily modified with the suffix *-ya* becoming *ištá thóthóya* ‘her blue eyes’ because the SV *thó* cannot function as a SP. In effect, complex SPs with body part Ns are obligatorily transformed into **complex derived modifiers** (discussed in 5.9.), unless they involve one of the SVs that can function as a SP, as in (96).

Note that a more idiomatic translation of the construction illustrated in Figure 4.12 is “She looked at me with her little eyes”. However, I am avoiding this translation as

it is potentially misleading in suggesting that the Lakota construction involves an instrumental.

A sentence involving a complex SP is given in de Reuse (1994:207, cited from Deloria 1931) as an example of noun stripping. This sentence is repeated in (97).

- (97) *Hokšila úŋšika ič'ičhaḡiy na ...*
hokšila úŋšika Ø-ič'i-čhaḡA na
 boy poor 3sg.a-refl-make and
 He made/disguised himself into a poor boy and ...
 (data: DT story 16, sentence 36)

De Reuse analyzes (97) as involving a syntactic compound (in his spelling: *hokšila úŋšika*) which is stripped of articles and incorporated into the predicate, resulting in what Deloria and de Reuse spell as *Hokšila úŋšikaič'ičhaḡiy na... .* De Reuse admits that “[t]here are typos and errors in the materials written by Boas and Deloria...” and as I have shown this is particularly true with respect to both syntactic compounding and noun incorporation. The spelling I provide in (97) is based on the evidence from 3.2 which shows that N+SV constructions of this type are not compounds, and from 4.10 where I provide evidence that *ič'ičhaḡa* does not compound with resultatives. Thus I propose, that (97) is not an instance of noun stripping and compounding but it is, instead, an example of a SPC with a complex resultative.

4.12. Primary predicates that require a secondary predicate

In Secondary Predicate Constructions the default situation is that both of the predicates involved can potentially head independent utterances. In consequence, SPs are generally optional and dispensable (despite this they cannot be termed adjuncts

because they do not occur in a periphery). However, in Lakota, SPs are not optional for some primary predicates. There is a group of Lakota verbs that obligatorily follow a secondary predicate, simultaneous predicate or peripheral constituent (such as a PP, adverbial or DM; for the use with modifiers, see section 5.7.). These verbs are listed in Table 4.2 together with their 1st singular forms and English glosses.

Table 4.2 *Primary predicates that require a secondary predicate*

<i>úŋ</i>	(1sg: <i>waúŋ</i>)	to be, to exist, to remain
<i>ečhéčá</i>	(1sg: <i>emáčečá</i>)	to be such, to be like that by nature
<i>nážiŋ</i>	(1sg: <i>nawážiŋ</i>)	to stand (animate subject only)
<i>yaŋká</i>	(1sg: <i>maŋké</i>)	to sit
<i>ħpáya</i>	(1sg: <i>waħpáye</i>)	to lie, recline
<i>yuŋká</i>	(1sg: <i>muŋké</i>)	to lie, recline
<i>hÁŋ</i>	(1sg: --)	to stand (inanimate subject only)
<i>škáŋ</i>	(1sg: <i>waškáŋ</i>)	to be busy with a task, carry on an activity
<i>ħ'áŋ</i>	(1sg: <i>waħ'áŋ</i>)	to have done an act
<i>oħ'áŋ</i>	(1sg: <i>owaħ'áŋ</i>)	to act, to behave

The verbs in Table 4.2 generally cannot form a clause without following a secondary predicate, simultaneous predicate, modifier or another circumstantial expression. This is in part due to the fact that these verbs are somewhat semantically impoverished; even though they contribute their own semantics to the SPCs, there is a strong tendency among native speakers to translate SPCs with these verbs with an adjective and the “be” copula. This is especially true about the verbs *úŋ* and *ečhéčá*, but less so about the four stance verbs which usually contribute semantically to the proposition. Examples are given in (98):

- (98) (a) *Aṅpétu óta čhaṅtéšiča úṅ.*
aṅpétu óta čhaṅtéšiča Ø-úṅ
 day many sad 3SG.A-exist
 He **was / remained** sad for many days.
 (data: DT; story 29, sentence 4)
- (b) *Čhaṅtéšiča yaṅké.*
čhaṅtéšiča Ø-yaṅkÁ
 sad 3SG.A-sit
 She **was / sat** sad.
 (data: RFT: 1992)
- (c) *Čhaṅtéšiča waḥpáye.*
čhaṅtéšiča wa-ḥpáyA
 sad 1SG.A-lie
 I **was / lay** sad.
 (data: RFT: 1992)
- (d) *Akičhita kiṅ húṅḥ t'á ḥpáyapi.*
akičhita kiṅ húṅḥ t'Á Ø-ḥpáyA-pi
 soldier the some dead 3A-lie-PL
 Some of the soldier **were / lay** dead.
 (data: BT: p. 156, line 77)

In sentences with stance verbs as the primary predicate, like those in (98), the secondary predicate cannot be omitted without rendering the sentence ungrammatical. Since these verbs obligatorily follow a circumstantial expression, such as a PP, modifier (adverbial) or secondary predicate, they seem to function as quasi-copulas. At the same time, the construction exhibits properties typical for secondary predication, such as the ability to negate the SP independently and to place the event frequency marker *šna* directly after the SP, which is further exemplified in (99):

- (99) (a) *Hónisko šna úṅpi.*
hónisko šna Ø-úṅ-pi
 noisy HAB 3SG.A-exist-PL
 They are / remain **usually** noisy.
 (data: RFT: 1992)

- (b) *Khúže šni úŋpi.*
khúžA šni Ø-úŋ-pi
 sick NEG 3SG.A-exist-PL
 They are / remain **non**-sick.
 (data: BT: p. 342, line 20)

Due to the structural properties exemplified in (99), I do not treat the verbs introduced in this section as copulas. I consider the constructions shown in (98) and (99) to be secondary predicate construction in which the primary predicate obligatorily follows a secondary predicate. We find similar situations in other languages. For instance, in the English sentence in (100) the primary predicate ‘render’ is incomplete without the secondary predicate ‘sick’.

- (100) *The medication **rendered** John **sick**.*
 * *The medication rendered John.*
 * *The medication rendered sick.*

The verb *ečhéčá* is used predominantly with nouns as depictives (which will be discussed in section 4.13).

Another group of verbs which are used after stative verbs should be mentioned here for the sake of comprehensiveness. They are the following verbs: *khiyÁ*, *lá* / *lakÁ*, and *yawá* and they all mean ‘to consider smth/sb as’. The primary meaning of *yawá* is ‘to count smth/sb’. There are reasons not to treat constructions with these verbs as SPCs, and these reasons are illustrated in (101) which shows that the verbs from this group always follow SVs which exhibit no morphological modification regardless of whether they are SVs that can function as SPs or not. For instance, the stative verbs in (101a) and (101d) are normally modified with the suffix *-ya* whenever they appear before other verbs. This is evidence that the verbs from this category do not form SPCs and instead function as auxiliary verbs.

- (101) (a) *Wašté-walake.*
wašté Ø-wa-lakA
 good 3SG.U-1SG.A-consider
 I considered it to be good. (i.e. I liked it)
 (data: DTA: 2010)
- (b) *Wóyuha tókħa-wakhiye šni ye.*
woyuha tókħa wa-khiyÁ šni ye
 possession to.be.the.matter 1SG.A-consider NEG DECL.FSP
 I do not consider possessions to matter. (i.e. I do not care for possessions.)
 (data: BBB 1976, p. 68, traditional song)
- (c) *Táku šni mayálawapi.*
táku šni ma-yál-(y)awá-pi
 something NEG 1SG.U-2A-count-PL
 You (pl.) count/consider me as nothing. (You (pl.) do not value me.)
 (data: PBT: story 1, sentence 58)
- (d) *Miš hé ĥóta blawá šni.*
m-iš hé ĥóta bl-(y)awá šni
 I-PRON that grey 1SG.A-count NEG
 As for me, I do not consider that to be gray.
 (data: BD: p. 75)
- (e) *Nišnála thókeča nigláwa yélakħa?!*
n-išnála thókeča n-igl-(y)áwa yélakħa
 2SG-alone different 2SG.U-REFL-count evident
 Why should you alone consider yourself different?!
 (data: DT: story 10, sentence 14)

Conclusion: this section discussed primary predicates that obligatorily follow a secondary predicate or another peripheral constituent (such as PP, adverbial or modifier; for the use with modifiers, see section 5.7.). In this study, V+V constructions with such verbs are treated as SPCs due to the structural properties they exhibit.

4.13. Nouns as secondary predicates

As was shown in 3.1. in (22), nouns can function as stative predicates. This section shows that Ns can also function as secondary predicates. Examples are given in (102):

(102) (a) *Wayáka yúzapi.*

wayáka *Ø-Ø-yúzA-pi*
 captive 3SG.U-3A-take-PL

They took him captive.

(data: EDT: Leg 03, sentence 2)

(b) *Wínyan wanžígži wayáka wičhá-yuzapi.*

wínyan *wanžígži* *wayáka* *wičhá-Ø-yuzA-pi*
 woman one-REDUP captive 3PL.U.ANIM-3A-take-PL

They took certain individual women **captive**.

(data: BO)

(c) *Akičhita waglí.*

akičhita *wa-glí*
 soldier 1SG.A-come.back

I came back a soldier. (i.e. I came back from military service.)

(data: JHR 2006, file 1: 31:00)

(d) *Akičhita waún.*

akičhita *wa-ún*
 soldier 1SG.A-exist

I was a soldier. (i.e. I lived as a soldier)

(data: JHR 2006, file 1: 22:00)

The sentences in (102a) and (102b) involve resultatives, rather than depictives. In (102b) the nominal expression cross-referenced by the object argument of the predicate is *wínyan wanžígži* ‘certain individual women’ which provides evidence that the nominal *wayáka* ‘captive’ is not cross-referenced as the object and instead functions as a SP.

SPCs with a noun and the verb *ečhéča*, which expresses descriptive predication, are used idiomatically, as illustrated in (103):

- (103) (a) *Wé ečhéča.*
wé e-Ø-čhéča
 blood to.be.such-3SG.U-stem
 He was **blood**. (i.e. He was covered in blood.)
 (data: BO, story 30)
- (b) *Tšaŋčháŋ kiŋ átaya hohú ečhéča.*
tšaŋčháŋ kiŋ átaya hohú e-Ø-čhéča
 body DEF entire bone to.be.such-3SG.U-stem
 His entire body was (nothing but) **bones**.
 (data: BO, story 257)
- (c) *Tšaŋsíl átaya šna wá emáčeča.*
tšaŋ-síl átaya šna wá e-má-čeča
 body-around entire HAB snow to.be.such-1SG.U-stem
 All over my body I would always be entirely (covered with) **snow**.
 (data: EDT, Aut-4, sentence 22)
- (d) *Wičhókhuzé ečhéča.*
wičhókhuzé e-Ø-čeča
 disease to.be.such-3SG.U-stem
 He was infected with a **disease**.
 (data: NSB: 1994: 3,5, 9:43)
- (e) *Táku hayé kiŋ oyás'ij tšahá ečhéča.*
táku há-yÁ kiŋ oyás'ij tšahá e-Ø-čeča
 something skin-use DEF all ruminant.skin to.be.such-3SG.U-stem
 All of his clothes were (made entirely of) **animal skins**.
 (data: BT: p. 115, line 28)

Additionally, nouns are commonly used as SPs with the verb *héča* ‘to be of that kind’ which expresses classificatory predication. A comparison of SPC with *héča* and *ečhéča* is given in (104):

- (104) (a) *Wičhíŋčala ečhéčapi.*
wičhíŋčala e-Ø-čhéča-pi
 girl be.like-3U-stem-PL
They are girls. (descriptive predication)
 (data: BO, story 71)

- (b) *Wičhíŋčala héčhapi.*
wičhíŋčala hé-Ø-čha-pi
 girl be.that.kind-3U-stem-PL
They are girls. (classificatory predication)
 (data: BBBJ, p.c.)

- (c) *Akíčhita hemáča.*
akíčhita he-má-ča
 soldier be.that.kind-1SG.U-stem
I am a soldier. (classificatory predication)
 (data: DW, File 1, 21:15)

Note the difference between (104a) and (104b) where the former is a descriptive predication (coded by *ečhéča*) while the latter is a classificatory predication (coded by *héča*).

4.14. Circumstantials

The examples in (102) and (104) show that SPs composed of nouns can ascribe the participant's role, function or life stage (as in (102d)). However, life stage is expressed with SPs very infrequently and it is preferably rendered with temporal clauses, as in (105).

- (105) *Wimáchiŋčala uŋ héhaŋ pħaŋpħányela mitháwačhiŋ.*
wi-má-čhiŋčala (k')uŋ héhaŋ pħaŋ-pħáŋ-ye-la
 be.girl-1SG.A-stem DEF.PAST that.time soft-red-DER-REST
mi-tháwačhiŋ
 1sg.u-be.of.a.mind
When I was a girl I had delicate feelings. (literally “I was of soft mind”.)
 (data: EDT-Aut-4, sentence 3)

In (105), the temporal adverbial phrase *wimáchiŋčala uŋ héhaŋ* ‘when I was a girl’ expresses what many languages can render via SPCs, as in the English sentence “As a girl I had delicate feelings”. Circumstantial constructions, such as “She died young” are also generally expressed with temporal clauses in Lakota. One exception is

represented by SPCs with the verb *ihúŋni*, which can be used as a primary predicate with both SVs, as in (106a), and Ns, as in (106b).

(106) (a) *Káy ihúŋni-pi.*

káy i-Ø-húŋni-pi
old arrive.there-3.A-stem-PL

They lived to be **old**. (Lit.: They arrive there old.)
(data: BT, p. 330)

(b) *Makhá, uŋčí, tanyáŋ ačhíli na ečhél wičháččala iwáhuŋni kte.*

makhá uŋčí tanyáŋ a-čhí-li
earth grandmother well step.on-2sg.u.1sg.a-stem
na ečhél wičháččala i-wá-huŋni kte
and so old.man arrive.there-1.SG-stem FUT.IRR

Earth, grandmother, may I walk well upon you and live to be **an old man**.
(Lit.: Until I arrive there an old man.)
(data: DAS)

Corpus occurrences of circumstantial secondary predicates, as those in (106), are very infrequent.

4.15. Secondary predicates expressing non-referential nouns

Secondary predication involving nouns is sometimes used for expressing non-referential nominal concepts. Examples are given in (107):

(107) (a) *Čhehthánka wóhe.*

čhéĝa-thánka wó-Ø-hAŋ
kettle-large cook-3SG.A-stem

She cooked (in) **a big kettle**.
(data: BD p. 67)

(b) *Hetáŋhaŋ osní wóyaka-haŋpi.*

hetáŋhaŋ osní wó-Ø-yakA-hAŋ-pi
from.that cold tell.things-3A-stem-CONT-PL

From then they talked (of) **cold weather**.
(data: EDT-Inf-3 sentence 14)

The English translations of (107a) and (107b) make it appear as if these are sentences with transitive predicates. In reality, what appears as an object RP in the translation is expressed via a secondary predicate. In (107a), the predicate *wóhÁŋ* is the intransitive version of *ohÁŋ* ‘to cook smth by boiling (by submerging it)’ and consequently the nominal *čheh̄th̄áŋka* ‘big kettle’ is not cross-referenced as the object of the sentence. A possible explanation of why the transitive *ohÁŋ* is not used is the fact that one cannot literally submerge a kettle to boil it, hence the figurative meaning of “to boil a kettle” is expressed via SPC.

In (107b), the predicate *wóyaka* is the intransitive version of *oyáka* ‘to tell/report smth’. The form *wóyaka* is commonly used in the sense ‘to tell things’ or ‘to talk’. This verb can be made transitive via the applicative instrumental prefix *i-*, resulting in *iwóyaka* ‘to talk about smth/sb’ so its core argument can be cross-referenced with an object RP, as in *Wičháša kin iwóyakapi*. ‘They talked about the man’. The word *osní* ‘it is cold’ is a stative verb and it can be nominalized by a determiner, but creating its non-referential nominalization with determiners is not without obstacles due to the properties of Lakota indefinite articles. Thus, using *osní* ‘cold weather’ as a SP is a strategy of making it non-referential.

4.16. Comparison of secondary predicates with predicates and attributives

The functional domains of primary predication, secondary predication, and attribution share some structural and functional “spaces”. For instance, both SPs and predicative SVs are RP-external, while attributively used SVs are always RP-internal. On the other hand, predicative SVs are obligatorily marked for a grammatical person, while SPs cannot take person marking because they are linked as a non-subordinate

core juncture which necessarily involves a shared core argument coded on the head verb. Since secondary predicates are RP-external, they are syntactically more similar to predicative SVs, but semantically they are closer to attributive SVs because they ascribe an attribute to the participant.

In terms of information structure, stative verbs in the attributive position cannot be focal because they are RP-internal which makes them be part of the background information. This is different from SPs and primary predicates, both of which typically provide focal information and thus generally carry the sentential accent.

The similarities and differences of the three syntactic functions of stative verbs are summarized in Table 4.3:

Table 4.3 *Comparison of attributive, secondary predicate and primary predicate*

stative verb	attributive	secondary predicate	main predicate
followed by a determiner	+ (-)	-	(-/+)
marked RP-internal	+	-	-
unmarked RP-internal (plural non-specific)	+	-	-
RP-external (generally after a determiner)	-	+	+
grammatical person marking	-	-	+
focal exponent	-	+	+

One exception to attributives being obligatory followed by a determiner was discussed in 3.4.2 which showed that stative ad-nominal modifiers can occur as internal to RPs unmarked with determiners, particularly when the RP is non-specific.

Examples of the three functions of SVs are provided in (108b); the SV in (108a) is an attribute, the SV in (108b) functions as a SP, and the SV in (108c) is used as a predicate forming a relative clause.

- (108) (a) *Thípi thánka way othí.* ATTRIBUTIVE
thípi thánka way o-Ø-Ø-thí
 house large INDEF loc-INAN-3sg.A-live
 He lives in a **large** house.
 (data: BT: p. 392, line 198)
- (b) *Thípi way thánka othí.* SECONDARY PREDICATE
thípi way thánka o-Ø-Ø-thí
 house INDEF large loc-INAN-3sg.A-live
 He lives in a house **large**.
 (data: EDT-Inf-11, sentence 7)
- (c) *Thípi way thánka čha él thimá khiglápi.* PREDICATIVE (RC)
thípi way thánka čha él thimá Ø-khiglá-pi
 house INDEF large DET INAN-in inside 3A-go.back-PL
 They went back inside a house **that was large**.
 (data: EDT-Col-4: sentence 159)

In 3.5. I stated that SVs can function as independent predicates with RPs only when they are separated from the RP with a separator but that indefinite articles cannot function as such separators except when they are used in relative clauses. The data in (108) illustrates this assertion as the SV in (108b) can function only as a SP and the sentence would be ungrammatical without the primary predicate.

Three contrastive sentences of the same types as those in (108) are given in Rood and Taylor (1974: CULP 19G1.2), but they present them as patterns that are generally used with all stative verbs and do not mention that the construction type exemplified in (108b) is restricted to a very small number of stative verbs (in fact, they use sentences with the verb *čhépA* which is commonly used as a depictive in old texts but not in modern discourse).

4.17. Summary

Secondary predicate constructions are common in Lakota but are restricted to a small number of stative verbs which can function as depictives, resultatives and circumstantials in such constructions. This chapter provided a preliminary list of these stative verbs and described the syntactic, semantic and morphological properties of secondary depictive constructions, pointing out differences between depictives and resultatives (as well as the marginally occurring circumstantials). Depictives and resultatives can be used as both subject oriented and object oriented. Only depictives can be negated independently from the primary predicate and be associated with temporal information expressing a time period. The habituality marker *šna* is characteristically used as a clitic attached to SPs having scope over the SP independently of the primary predicate.

When Lakota stative verbs are used as secondary predicates they can be omitted without rendering the sentence ungrammatical, except when they are used with one of the stance verbs and verbs like *ečhéča* ‘to be like it’, *úŋ* ‘to be/exist’ and *škánj* ‘to act’.

SPs with intransitive primary predicates are more common than SPs with transitive primary predicates, because the latter present challenges for the interpretation of subject-object orientation as well as for differentiation from complement clauses (when the participant is in 3rd singular).

Among the word categories that can function as secondary predicates, in addition to the small number of stative verbs, are nouns, numerals and non-numeral quantifiers, most of which are also treated as stative predicates and take the same inflections as stative verbs.

Older Lakota texts show a larger frequency of SPC tokens as well as a larger number of stative verbs that can function as secondary predicates, suggesting that

Lakota has been undergoing a transition from using secondary predication towards predominantly employing derived modification, as the vast majority of stative verbs in modern Lakota obligatorily undergo morphological derivation whenever they appear in a position normally occupied by a secondary predicate.

This chapter also showed that those SVs which can function as a SP, can also be used as RP-external modifiers although it is very infrequent and corpus tokens only show the SV *tǎ́ŋka* ‘to be big’ and *čik’ala* ‘to be small’ in this usage (but it is theoretically possible for all other SVs of this group). The RP-external modification by SVs generally happens when the SV occurs inside a PP.

Complex SPs are composed of N+SV complex predicates and make use of any SV including those that cannot function as simple SPs. This, however, is only possible when the semantic argument of the complex SP can be logically shared with the argument of the main predicate. In other cases, the N+SV is obligatorily modified and becomes a complex derived modifier.

Modifiers derived from stative verbs, which compete with secondary predicates in coding depictive and resultative semantics, are the focus of the next chapter.

5. Modifiers derived from stative verbs

5.1. Introduction

Chapter 4 provided a discussion of constructions in which Lakota stative verbs function as secondary predicates, and it was asserted that one of the defining properties of Lakota secondary predicates is that SVs functioning as depictives, resultatives or circumstantials show no morphological modification. It was also stated that only a small number of Lakota SVs can function as genuine (i.e. unmodified) SPs. The vast majority of stative verbs obligatorily undergo morphological derivation whenever they do not function as predicates or RP-internal modifiers. In such instances they generally occur in one of the syntactic positions specified in (109):

(109)

(i) to the immediate left of the predicate

(ii) external to the RP they refer to (either to the right or to the left of the RP)

These two positions often overlap in that a derived modifier can simultaneously occur to the left of the predicate and RP-externally. However, as will be discussed in sections 5.11, RP-external attributive modifiers often do not occur to the immediate left of the predicate or of any verb. Since derived modifiers historically originate from secondary predicates they often have participant oriented reading, in which case can be termed depictive modifiers or resultative modifiers (which is different from depictives proper and resultatives proper). However, the orientation of derived modifiers is very often vague in that they can be interpreted as either participant oriented (depictive or resultative modifier) or event oriented (manner modifier, traditionally “adverbial”).

An example contrasting a secondary predicate construction with one involving a derived modifier is offered in (110):

- (110) (a) *Watúkħa gli.*
watúkħa *Ø-gli*
 tired 3SG.A-come.back
 He came back **tired**.
 (data: DT: story 48, sentence 1)

- (b) *Wakħányan ú.*
wakħány-ya *Ø-ú*
 holy-DER 3SG.A-come
 He is coming **holy**. / **In holy manner** he is coming.
 (data: EDT-Inf-13: sentence 11)

In (110a), the stative verb *watúkħa* functions as a secondary predicate (depictive) and since this is one of the few stative verbs that can be used as canonical secondary predicates, it does not show morphological modification. In contrast, the stative verb *wakħán* ‘holy, powerful, sacred’ is obligatorily modified morphologically when it occurs in one of the positions listed in (109). Thus (110b) involves the derived modifier *wakħányan* which is positioned to the immediate left of the predicate. In (110a) *watúkħa* is indubitably participant oriented, but the orientation of derived modifiers, as in (110b), is less obvious and its interpretation depends on numerous factors, as will be discussed in detail in section 5.10.

There are the follow two ways of changing stative verbs into derived modifiers:

- (i) truncation
- (ii) suffixing *-ya*

Only option (ii) is used with non-truncating SVs. Table 5.1 shows examples of the following three groups of non-truncating stative verbs; **1.** SVs which can function as SPs and not as DMs, **2.** SVs which can function as both SPs and DMs, and **3.** SVs

which function only as DMs, and not as SPs. Groups 1 and 2 are both very small and are covered in the preliminary list given in section 4.5.

Table 5.1 Groups of non-truncating stative verbs wrt SP and modification

Syntactic function	attributive modifier and predicate	secondary predicate	derived modifier
1 Type A	<i>t'Á</i> 'to die, to be dead'	<i>t'á</i> 'dead'	--
	<i>watúkĥa</i> 'to be tired'	<i>watúkĥa</i> 'tired'	--
	<i>wayázan</i> 'to be sick'	<i>wayázan</i> 'sick'	--
	etc.		
2 Type B1	<i>úňšikA</i> 'to be pitiable'	<i>úňšikA</i> 'pitiable'	<i>úňšiya</i> 'pitiable, pitiablely'
	<i>špáj šni</i> 'to not be cooked'	<i>špáj šni</i> 'uncooked'	<i>špájšniyaŋ</i> 'uncooked'
	<i>čhaŋzékA</i> 'to be angry'	<i>čhaŋzékA</i> 'angry'	<i>čhaŋzéya</i> 'angry, angrily'
	etc.		
3 Type C	<i>šá</i> 'to be red'	--	<i>šayá</i> 'red'
	<i>háŋska</i> 'to be tall/long'	--	<i>háŋskaya</i> 'long, tall'
	<i>sutá</i> 'to be solid/hard'	--	<i>sutáya</i> 'solid, hard'
	<i>zí</i> 'to be yellow'	--	<i>ziyá</i> 'yellow'
	<i>čhaŋtéwašte</i> 'to be glad'	--	<i>čhaŋtéwašteya</i> 'glad'
	<i>iyókipĥi</i> 'to be glad about smth'	--	<i>iyókipĥiya</i> 'glad about smth'
	etc.		

Group 3 includes the majority of non-truncating SVs.

Truncating stative verbs fall into two groups, which are exemplified in Table 5.2. Group 4 is very small and contains those truncating SVs which can function both as depictives proper and as DMs (derived via truncation or the suffix *-ya*). The verbs shown in Group 5 are examples of those truncating SVs which cannot function as depictives and always have the suffix *-ya* when they occur in one of the two positions

specified in (109). Group 4 is very small, while group 5 encompasses the majority of truncating stative verbs.¹⁰

Table 5.2: *Derived modifiers from truncating stative verbs*

syntactic function	attributive and predicate	depictive	derived modifier	
			truncated form	suffix <i>-ya</i>
4 Type B2	<i>khúžA</i> 'to be sick'	<i>khúža</i> 'sick'	<i>khuš</i> 'sick'	<i>khušyá</i> 'sick'
	<i>hěcheča</i> 'to be like that'	<i>hěcheča</i> 'such as that'	<i>hěchel</i> 'such as that'	<i>hěchelya</i> 'like that'
	<i>lécheča</i> 'to be like this'	<i>lécheča</i> 'such as this'	<i>léchel</i> 'such as this'	<i>léchelya</i> 'like this'
	<i>čhaŋtéšičA</i> 'to be sad'	<i>čhaŋtéšiča</i> 'sad'	<i>čhaŋšil</i> 'sad'	<i>čhaŋtéšilya/čhaŋšilya</i> 'sad'
	<i>iyókišičA</i> 'to be sad about smth'	<i>iyókišiča</i> 'sad about smth'	<i>iyókišil</i> 'sad about smth'	<i>iyókišilya</i> 'sad about smth'
5 Type C	<i>sápA</i> 'to be black'	--	--	<i>sabyá</i> 'black'
	<i>k'éğA</i> 'to produce a scratching sound'	--	--	<i>k'éhyá</i> 'scratching'
	<i>kakížA</i> 'to suffer'	--	--	<i>kakíšya</i> 'suffer, suffering'
	<i>blihěča</i> 'to take courage'	--	--	<i>blihélya</i> 'taking courage'
	<i>šnížA</i> 'to be withered'	--	--	<i>šnišyá</i> 'withered'
	<i>šóka</i> 'to be thick'	--	--	<i>šogyá</i> 'thick'
	<i>etc.</i>			

As a general rule, non-truncating ablaut verbs always have a-ablaut when they function as SPs (section 4.2). With respect to truncating verbs, the analyses differ for older and newer texts, in that truncating verbs are generally non-reduced in older texts but in newer texts they are more often reduced than not. Although truncation concerns

¹⁰ There is a third group of truncated derived modifiers, but because of their mixed origin they are discussed separately in Chapter 12.

a very small number of secondary depictives, some highly relevant conclusions can be drawn upon their analysis, as will be discussed in section 5.2.

The groups of verbs in Table 5.1 and Table 5.2 form four basic types of morphological marking, Type A, Type B1, Type B2 and Type C. These will be shown in symbolic semantic maps in Section 5.18 together with an additional type D.

An example of a truncating SV is given in (111), where (111a) involves the non-truncated form (i.e. depictive) *khúža* ‘sick’ and the contrasting examples in (111b) and (111c) shows variants of the sentence with truncated and *-ya* suffixed derived modifiers respectively.

- (111) (a) *Khúža ħpáye.* (Secondary Predicate)
khúža Ø-ħpáye
 sick 3SG-lie
 She lay sick.
 (data: EDT: Misc-2, sentence 12)
- (b) *Khúš ħpáye.* (truncated derived modifier)
khúža Ø-ħpáye
 sick 3SG-lie
 She lay sick.
 (data: BBBJ: p.c.)
- (c) *Khušyá ħpáye.* (*-ya* derived modifier)
khúža Ø-ħpáye
 sick 3SG-lie
 She lay sick.
 (data: RFT: 1992)

In older texts *khúža* functions only as a secondary predicate, as in (111a), but in contemporary Lakota all three variants shown in (111) are used commonly. However, for most stative verbs the derived modifier forms are now more common than the secondary predicate. For some stative verbs the truncated form illustrated in (111b) is transitional between the unmodified SV and the *-ya* form.

In terms of syntactic analyses, *khúža* in (111a) is a canonical secondary predicate because it has no morphological modification. The truncated form *khúš* in (111b) as well as the form *khušyá* derived by the suffix *-ya*, in (111c), are derived modifiers and as such their syntactic scope is vague in that they can be interpreted as modifying the participant (in this case the core argument of the predicate) or the predicate (i.e. ad-core modifier). However, in either interpretation they can have participant oriented reading in that they denote a condition of the participant temporally overlapping with the event expressed by the predicate. Consequently, the sentences in (111) are semantically identical despite their structural differences. There are, however, instances where the semantics differ between these constructions, as we will see in the following section.

Ad-core modifiers, like those in (111b-c) can be termed ‘manner modifiers’. However, the term “manner modifier“ is used in the broader sense, i.e. with reference to a event oriented modifier with scope over the predicate, rather than in the narrow sense, in which a modifier is understood to describe a manner in which something is done. The latter are termed “pure manner” modifiers by some authors (see e.g. Himmelmann&Schultze-Berndt, 2005: 6-7, following Geuder 2000: 29–35). We can also use “true manner” in situations where the manner modifier has no semantic scope over the participant.

An example is in (112) where the derived modifier *blihélya* ‘bravely’ has scope over the predicate *škáŋ* ‘to act’.

- (112) *Blihélya škáŋ.*
blihéčA-ya *Ø-škáŋ*
energetic-DET 3SG.A-act
He acts energetically. (i.e. He is energetic.)
(data: DTA)

Syntactically speaking, the modifier *blihélya* ‘bravely’ modifies the core of the predicate and as such it is a manner modifier. I will paraphrase Platt and Platt (1972) to argue that semantically the modifier ascribes a quality to the participant. In (112) we do talk about acting in an energetic manner but in saying this we imply that the man is energetic. It may be objected that the quality of being energetic displays itself in the manner of the acting. This is not denied. The manner of acting is an outward and visible sign of an inner quality of the man. (Platt and Platt, 1972: 237)

It should be added, however, that there is often an aspectual distinction in that attributes ascribed by SVs are more likely to be interpreted as lasting, long-term qualities (*blihéča* ‘he is energetic’), whereas the qualities expressed via DMs modifying the core are more likely temporally restricted to the event expressed by the main verb. Hence the lexical aspect of the main verb, as well as any grammatical aspect coding, play role in the aspectual interpretation of DM. Compare, for instance, *blihélya ħ’áŋ* ‘he did it energetically’ with *blihélya úŋ* ‘he lives energetically (i.e. he is energetic)’, where the DM in the former is interpreted as temporally bounded, whereas the latter DM ascribes a long-term quality to the subject of the predicate, because the predicate is a durative verb.

As will become clear during the discussion in this chapter, Lakota modifiers which are interpreted as syntactically having scope over the predicate (i.e. are event-oriented or manner modifiers) can very often have a participant-oriented reading semantically. This double nature of derived modifiers is a feature that will be discussed in detail in the following section.

5.2. Modifiers derived from truncating stative verbs (*héčhel*)

The analyses of a certain type of Lakota stative verbs can provide revealing facts with regard to secondary predication and derived modification (depictive, resultative and manner modification).

A typical representative of this group of verbs is the stative verb *héčheča* ‘to be like that’. In older texts this verb is commonly used in pre-predicate position in its non-truncated form, i.e. as a canonical secondary predicate. This is shown in (113a). In modern texts, however, the non-truncated secondary predicate form of *héčheča* is rare, and instead the truncated form is used, as shown in (113b). The truncated form, however, results in a semantically vague construction in which *héčhel* can be interpreted either as participant oriented modifier, as in (113b.1), or as an event oriented modifier (i.e. manner modifier), as in (113b.2). To eliminate this vagueness, the suffix *-ya* is added, resulting in *héčhelya* which can be interpreted only as a manner modifier and not as a participant oriented modifier, as shown in (113c).

(113) (a) *Héčheča ičháǵe.*

héčheča *i-Ø-čháǵA*
 to.be.like.that grow-3SG.U-stem
 He grew up to **be like that.** (RESULTATIVE)
 (data: PBT: Story 8, sentence 13)

(b) *Héčhel ičháǵe.*

héčhel *i-Ø-čháǵA*
 like.that grow-3SG.U-stem
 1. He grew up **being like that.** (RESULTATIVE MODIFIER)
 2. He grew up **like that.** (MANNER MODIFIER)
 (data: EDT: Spea-3, sentence 5)

(c) *Héčhelya ičháǵe.*

héčheča-ya *i-Ø-čháǵA*
 like.that-MOD grow-3SG.U-stem
 1. * He grew up **being like that.** (RESULTATIVE MODIFIER)
 2. He grew up **like that.** (MANNER MODIFIER)
 (data: RFT: 1996)

The constituent projections of (113a-c) are given in Figure 5.1, Figure 5.2 and Figure 5.3.

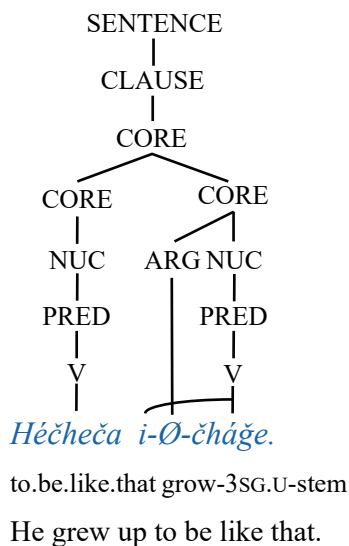


Figure 5.1 Secondary predication

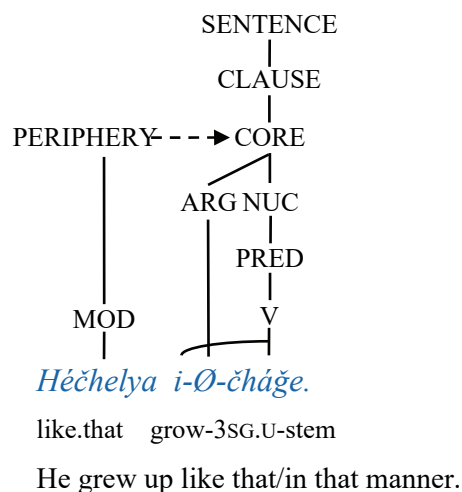
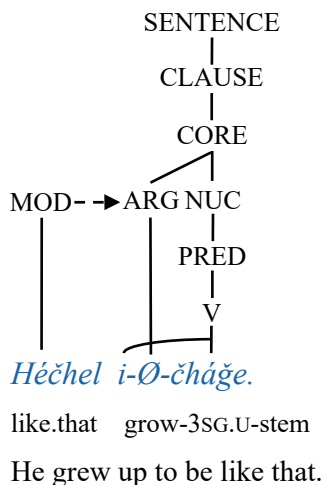
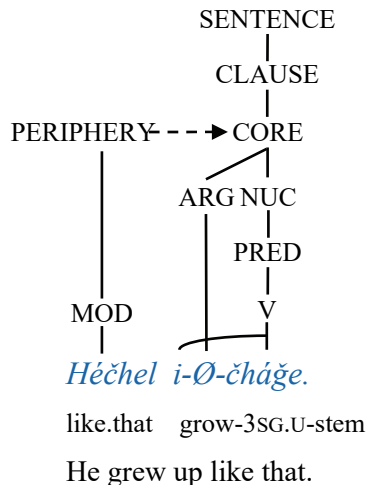


Figure 5.2 Ad-CORE modification



(a)



(b)

Figure 5.3 Ad-ARG and ad-CORE reading of a truncated DM

The constituent projection in Figure 5.1 shows that the stative verb *hěčheča* ‘to be such’ is a SP (and thus it shares an argument with the primary predicate). Figure 5.3 shows that the DM *hěčhel* can be interpreted as having scope over the argument

(participant oriented ad-ARG modification) or over the predicate (event oriented ad-core modification) respectively. Such orientation vagueness is characteristic of many DMs. Note that the DM in Figure 5.3-(b) is not housed in a periphery because it modifies a morphological entity rather than syntactic constituent.

Figure 5.2 shows that the DM *héčhelya* (which is *héčheča* + *-ya*) is interpreted as event oriented and is therefore an ad-core modifier.

Traditional studies of Lakota have treated the suffix *-ya* as an adverbilizer and associated it with manner modification, which is probably due in part to its function shown in (113c). However, as will be seen throughout this chapter, words with the suffix *-ya* commonly (if not more frequently) have a participant oriented reading and function as ad-argument modifiers or RP-external ad-nominal modifiers (traditionally ‘adjectives’). Consequently, the traditional approach that treats these words as adverbs and functioning as adverbials is problematic.

Similarly, the word *héčhel*, which is the truncated form of the stative verb *héčheča*, has been traditionally categorized as an adverb throughout the history of Lakota linguistics. It is labeled as an adverb in all Lakota dictionaries (Riggs 1852, Buechel 1970, Rood and Taylor 1976 and 1996, Ullrich 2008), as well as in Lakota grammars that mention it (Buechel 1939, Boas&Deloria, 1941, Ingham 2005, Ullrich 2016, etc.).¹¹ But sentences like (113b) show that labeling words like *héčhel* as adverbs introduces Indo-European bias because they, in fact, can function as both participant oriented modifiers and event oriented modifiers. Thus, a better category for words like *héčhel* is one termed “[derived] modifiers” as it leaves the orientation open for interpretation based on the semantic and syntactic factors that determine it.

¹¹ Rood and Taylor (1995: 7.2.3.) actually list *héčhel* together with *mánikhel* (sic) and indirectly suggest that *léčhel* is derived from *lé* by suffix *-khel*. While *mánikel* exists, the *k* is not aspirated and *-khel* has not been documented as a suffix.

The double orientation of *héčhel* is even more obvious when the word is used with transitive verbs. Sentences like (114a) below, where *héčhel* is followed by the transitive verb *wanyáŋka* ‘to see smth/sb’ invariably have participant oriented reading rather than event oriented reading (i.e. manner modification). This is evidence that the derived modifier is more tightly bound to the object argument than it is to the event. Further evidence is in (114b), which gives the same sentence except for the reduplicated form of *héčhel*, which is interpreted as referring to the plural number of objects rather than to multiple occurrences of the event.

(114) (a) *Héčhel wanybláke.*

- héčhel wany-Ø-bl-akA*
 like.that see-3SG.U-1SG.A-stem
 1. That is what I saw. / I saw such a thing. (**DEPICTIVE MODIFIER READING**)
 2. * That is how I saw it. (MANNER MODIFIER READING)
 (data: DT: story 5, sentence 21)

(b) *Héčhekčhe wanybláke.*

- héčhel-RED wany-Ø-bl-akA*
 like.that-PL see-3SG.U-1SG.A-stem
 1. I saw such things. (**DEPICTIVE MODIFIER READING**)
 2. * That is how I saw it in every case. (MANNER MODIFIER READING)
 (data: WS)

The interpretation of *héčhel* is different when it is used before transitive verbs which have been made intransitive via the indefinite object marker (detransitiviser) *wa-*. In (115a), *héčhel* is interpreted as an object oriented modifier because the sentence involves an object (whether zero coded or overt), but as no object is present in (115b), *héčhel* can be interpreted only as a manner modifier. The reduplication of *héčhel* in (115c) is interpreted as signaling the plurality of the events, unlike in (114b) where it marks the plurality of the objects.

- (115) (a) *(Táku) héčhel omákiyakapi s'a.*
táku héčhel o-Ø-ma-ki-yaka-pi s'a
 something like.that tell-INAN-1S.U-DAT1-stem-PL HAB
 They would often tell me **such a** thing. (DEPICTIVE MODIFIER)
 (data: DW: file 01: 6:09)
- (b) *Héčhel wómakiyakapi s'a.*
héčhel wa-o-ma-ki-yaka-pi s'a
 like.that DTR.O-tell-1S.U-DAT1-stem-PL HAB
 They would often talk to me **like that**. (MANNER MODIFIER)
 (data: JAH: 1992)
- (b) *Héčhekče wómakiyakapi s'a.*
héčhel-RED wa-o-ma-ki-yaka-pi s'a
 like.that-PL DTR.O-tell-1S.U-DAT1-stem-PL HAB
 They would often talk to me **in such ways**. (MANNER MODIFIER)
 (data: RFT: 1996)

In light of the findings about the stative verb *héčheča* and its truncated form *héčhel* it can be argued that many Lakota words traditionally categorized as adverbs and postpositions are in fact modifiers derived from stative verbs. A similar example is given in (116), where we can see the stative verb *étu* ‘to be at/in (place)’ and its truncated form *él* which is traditionally treated as a postposition.

- (116) (a) *Sičháj kiŋ étu.*
sičháj kiŋ Ø-étu
 thigh DEF INAN-to.be.a.place.where
 It was on his thigh.
 (not referring to an object on his thigh but to a position)
 (data: BO-223a)
- (b) *Tšáčhájwak'iy pšasú étu čha wanhínkpe uŋ okátanyanpi.*
tša-čhájwák'iy pšasú Ø-étu čha
 his-saddle horn INAN-to.be.a.place.where DET
wanhínkpe uŋ okátan-Ø-yan-pi
 arrows with shoot-3A-stem-PL
 It was into his saddle horn that they shot arrows.
 (data: BO-77)

(b) *Sičháj kiŋ él ópi.*

sičháj kiŋ *Ø-él* *čha* *Ø-ó-pi*
 thigh DEF INAN-at DET 3SG.U-stoot-PASS

He got shot on his thigh.

(data: RFT 1996)

Derived modifiers orientation (toward the event or participant) and issues emanating from it will be further explored toward the end of this chapter, in section 5.10, as it is necessary to first discuss the derived modifier morphology and the various types of derived modifiers.

5.3. Morphology of derived modifiers

The introduction to this chapter explained that derived modifiers are of two basic morphological types: truncated and with the suffix *-ya*. This section provides a discussion of morphophonemic changes relevant to the suffix *-ya*, of its allomorphs and other suffixes that are commonly combined with it.

5.3.1. Morphophonemics

When *-ya* is affixed to monosyllabic words, the stress shifts to the second syllable of the derivative, as shown in Table 5.3:

Table 5.3 *Stress shift triggered by suffix -ya*

	stative verb	derived modifier	English meaning
(a)	<i>ská</i>	<i>skayá</i>	white
(b)	<i>zí</i>	<i>ziyá</i>	yellow

Similarly, when *-ya* is affixed to truncating disyllabic words with first syllable stress, the resulting derivative is stressed on the second syllable. The final syllable is reduced and the remaining obstruent undergoes the following changes: *č* and *t* become

l, the consonants *ǧ*, *z* and *ž* are devoiced and thus become *ħ*, *s* and *š* respectively, the stops *k* and *p* become voiced and thus change into *g* and *b* respectively. The truncation and stress shift is illustrated with examples in Table 5.4:

Table 5.4 *Truncation before the suffix -ya*

	stative verb	derived modifier	English meaning	
(a)	<i>šěča</i>	<i>šelyá</i>	dry, withered	} change to <i>l</i>
(b)	<i>ħóta</i>	<i>ħolyá</i>	grey	
(c)	<i>k'ěǧA</i>	<i>k'eħyá</i>	giving off a grating sound	} devoicing
(d)	<i>bléza</i>	<i>blesyá</i>	clear	
(e)	<i>šnižA</i>	<i>šnišyá</i>	withered	
(f)	<i>šókA</i>	<i>šogyá</i>	thick	} voicing
(g)	<i>ksápA</i>	<i>ksabyá</i>	smart	
(h)	<i>sánphǧa</i>	<i>sanmyá</i>	more, further	} nasalization

An exception to the rules exemplified in Table 5.4 is the stative verb *šičA* ‘bad’ which can have both the non-truncated and truncated form after affixing *-ya*, resulting in the following two derived modifiers: *šičáya* and *šilyá*. However, the two forms are used slightly differently; the former is used as simple derived modifier and as a free adjunct, while the latter prevails in complex derived modifiers (discussed in section 5.9.). A stative verb that forms a derived modifier irregularly is *tħókeča* ‘to be different’ (also pronounced *tħókča*) which becomes *tħogyé* (i.e. not **tħogyá*).

When the suffix *-ya* is affixed to a non-truncating multisyllabic word, the stress position of the original word is retained. Examples are in Table 5.5:

Table 5.5 *The suffix –ya with non-truncating multisyllabic words*

	stative verb	derived modifier	English meaning
(a)	<i>óta</i>	<i>ótaya</i>	many
(b)	<i>sutá</i>	<i>sutáya</i>	hard, solid
(c)	<i>wašté</i>	<i>waštéya</i>	good

A common allomorph of *-ya* is *-yaŋ* which results from nasalization spread occurring whenever the suffix follows a nasal vowel or a syllable that has a nasal in the onset, as exemplified in Table 5.6:

Table 5.6 *The –yaŋ allomorph of the suffix -ya*

	stative verb	derived modifier	English meaning
(a)	<i>špáŋ</i>	<i>špaŋyáŋ</i>	cooked
(b)	<i>špáŋ-šni</i>	<i>špaŋšniyaŋ</i>	uncooked
(c)	<i>sni</i>	<i>sniyáŋ</i>	cold

Some stative verbs have integrated the restrictive/diminutive suffix *-la* and have become lexicalized with it. Examples are *owóthāŋla* ‘to be straight’ and *pħāŋžela* ‘to be soft’, neither of which is used without the suffix. Some verbs of this type take the suffix *-ya* before *-la* and some after it, hence the respective derived modifiers of the two verbs are *owóthāŋlaya* and *pħāŋšyēla*. Similarly, *yayála* ‘to be wobbly’ becomes *yayáyēla*.

Some stative verbs have been lexicalized with the suffix *-kA*, which signals a generalization or vague property. For instance, the more commonly used form of *čhaŋzé* ‘angry’ is *čhaŋzéka*, and the stative verb *úŋši* ‘pitiable, helpless, poor’ is generally used in the form *úŋšika*. The modifiers derived from this type of stative verbs are formed by replacing the suffix *-kA* with the suffix *-ya*, as illustrated in Table 5.7:

Table 5.7 Replacement of the suffix *-kA* with the suffix *-ya*

	stative verb	derived modifier	English meaning
(a)	<i>čhaŋzékA</i>	<i>čhaŋzéya</i>	angry
(b)	<i>úŋšikA</i>	<i>úŋšiya</i>	pitiable, helpless, poor

When the suffix *-ya* is affixed to an ablauting non-truncating stative verb, then the vowel before the suffix is *e*, as in Table 5.8:

Table 5.8 Ablaut before the suffix *-ya*

	stative verb	derived modifier	English meaning
(a)	<i>mimÁ</i>	<i>miméya</i>	round
(b)	<i>háŋskA</i>	<i>háŋskéya</i>	long
(c)	<i>h'úŋt'A</i>	<i>h'úŋt'eyA</i>	exhausted

5.3.2. Intensification of derived modifiers

Modifiers derived from stative verbs via the suffix *-ya* can be intensified with independent intensifiers such as *lila* ‘very’ and with the following intensifying suffixes:

- la* mirative (diminutive)
- hčij* ‘really’
- kel* attenuative / emphasis / signals vague property

These affixes, their combinations and semantics will now be discussed in the order given above.

When the suffix *-ya* is combined with the suffix *-la* or *-hčij* the resulting forms are *-yela* and *-yéhčij* respectively and this is the case even after stative verbs with a nasal word-final syllable. Examples are given in Table 5.9:

Table 5.9 *Intensification of the suffix -ya*

	derived modifier	<i>-la</i> intensified		<i>-hčij</i> intensified	
(a)	<i>šayá</i>	<i>šayéla</i>	‘just red’	<i>šayéhčij</i>	‘really red’
(b)	<i>sanyáj</i>	<i>sanyéla</i>	‘just off-white’	<i>sanyéhčij</i>	‘really off-white’

The suffix *-la* lends a mild intensification to the modifier while *-hčij* expresses a strong intensification. The two affixes can be combined, resulting in forms like *šayélahčij* ‘just really red’.

The suffix *-kel* ‘kind of’ signals a vague property and according to Boas&Deloria (1941: 56) it decreases the intensity of derived modifiers. However, there are some indications that the suffix *-kel* is variably interpreted as increasing or decreasing the derived modifier intensity. It is still not well understood how the distinction is made. Furthermore, it seems that some verbs are preferably used with *-kel* rather than with the suffixes *-la* and *-hčij*. For instance, the frequently used derived modifier form of *hópA* ‘to be attractive’ is *hobyákel* while the forms *hobyéla* and *hobyéhčij* are not found in corpus data. Concurrently, the form *hobyákel* is used in contexts that suggest an increase, rather than a decrease of the intensity. Sometimes the choice between *-yela* and *-yákel* seems to be of euphoniousness. For instance, for the derived modifier based on *šmÁ* ‘to be deep’ we find *šmeyá* and *šmeyákel* but not *šmeyéla*.

Judging from the syllable final consonant in *-kel* it can be hypothesized that the affix originates from *kéča* (or less likely from *kéta* or *kétu*). The hypothesis is confirmed by looking into comparative data from the related Assiniboine (or Nakhóta) language where the suffix *-keča* is still productively used for signaling a vague property of stative verbs (Cumberland, 205: 237). What is interesting about the comparative data, however, is that while the Lakota suffix *-kel* (as well as its Dakota variant *-ken/-ked*) changes SVs into modifiers, Assiniboine stative verbs with the

suffix *-keča* seem to be able to still function as stative predicates, which is in accord with the non-reduced form of the suffix.

The intensification coded by the suffix *-la* seems very mild, to a point where *-ya* and *-yela* appear to be sometimes almost interchangeable. Regarding the difference between *-ya* and *-yela*, Boas&Deloria (1941: 59-60) make the following statement:

“The suffix *-ya* may be expanded by the limiting suffix *-la* and takes the form *-yela* ... When both forms occur the simple form in *-ya* refers to a temporary, that in *-yela* to a permanent condition. ... Often the ending *-yela* is used instead of *-ya*, because the latter form is identical with the causative in *-ya*. ... In other cases the difference in meaning rules out the form in *-ya* i.e., speaking of a person *sapyá* as an adverb means that the person appears black at the time, perhaps as silhouetted against a bright sky; *sapyéla* that he is black by nature. In still other cases both forms are used and the general setting decides what is meant; *k^calyá* hotly; *k^calyéla* more emphatic adverb.”

The “permanent” (*-yela*) versus “temporary” (*-ya*) distinction proposed by Boas&Deloria is not supported by corpus data. Consider, for instance, the following sentence (Deloria 1934, p. 114, translation mine):

- (117) *Čhaŋkhé thiyópa kiyúğaŋ yuŋkháj kħoškálaka waŋ šayéla hinápħe.*
čhaŋkhé thiyópa Ø-Ø-Ø-ki-yúğaŋ yuŋkháj
 and.so door INAN-3SG.U-3SG.A-DAT1-open and.here
kħoškálaka waŋ ša-yá-la Ø-hinápħA
 young.man INDEF red-DER-REST 3SG.A-come.out

And so he opened the (sweat lodge) door for him, and here, a young man came out **just red**.

(data: DT: story 20, sentence 4)

In (117), the *-yela* form decidedly refers to a temporary condition, because the redness of the young man’s skin was caused by the heat of the sweat lodge ceremony. Moreover, according to native speakers’ judgment, *šayéla* is interchangeable with *šayá* in (117). This rules out Boas&Deloria’s “permanent versus temporary”

hypothesis, and therefore, the only difference between *-ya* and *-yela* seems to be one of intensity levels. Given that the function of the suffix *-la* is primarily a restrictive one (because it is used as a restrictive and diminutive), it is likely that with derived modifiers it codes a mild mirative mode, thus *šayéla hinápĥe* reads “he came out just red” as opposed to *šayá hinápĥe* “he came out red.” This might also explain, at least in part, why *-yela* is not added to stative verbs expressing psychological states, as shown by the data in (118):

- (118) (a) *Čhaŋtéwašteya napé čhiyúzapi.*
čhaŋtéwašte-ya napé čhi-yúzA-pi
 happy-DER hand 1SG.A.2U-hold-PL
 I am happy to shake your (pl.) hands.
 (data: EDT: Spea-1: para 46)
- (b) **Čhaŋtéwašteyela napé čhiyúzapi.*
čhaŋtéwašte-ya-la napé čhi-yúzA-pi
 happy-DER-REST hand 1SG.A.2U-hold-PL
 I am just happy to shake your (pl.) hands.

In general, stative verbs that describe emotions, mental attitudes, psychological states and some bodily states cannot take the *-yela* ending.

Further help with our understanding the difference between the suffixes *-ya* and *-yela* can be found in the minimal pair in (119):

- (119) (a) *Wakĥányan gli.*
wakĥány-yan Ø-gli
 magic-DER 3SG.A-come.back
 He came back magically/powerfully.
 (data: RFT: 1993)
- (b) *Wakĥányela gli.*
wakĥány-yan-la Ø-gli
 magic-DER-REST 3SG.A-come.back
 It is a wonder he came back. (i.e. It is just magic that he came back.)
 (data: RFT: 1996)

In (119b), the restrictive suffix *-la* adds a connotation of wonder or surprise because it provides the sense of “He came back **only** through magic”.

5.3.3. Continuative with derived modifiers

Another affix that is sometimes used with the *-ya* derived modifiers is the continuative suffix *-hAŋ*. It seems somewhat counter-intuitive that the continuative can be affixed to a non-verb, but this is well represented in corpus data. Note that even though the continuative suffix *-hAŋ* is ablauting, it never ablauts when used with derived modifiers, which is indubitably due to the syntactic position of derived modifiers.

According to Boas&Deloria (1941: 61) the addition of *hán* “expresses a temporary condition”. They provide several examples, three of which are cited in Table 5.10 with Boas&Deloria’s translations.

Table 5.10 *Combination of suffixes -ya and -han*

	derived modifier	<i>-hAŋ</i>	English meaning (Boas&Deloria, ibid)
(a)	<i>ksabyá</i>	<i>ksabyáhan</i>	wisely in regard to a special matter
(b)	<i>tšelyá</i>	<i>tšelyáhan</i>	while still new
(c)	<i>čhebyéla</i>	<i>čhebyáhan</i>	while fat

Since the suffix *-hAŋ* is a continuative it is likely that it codes some kind of temporal information but it is not clear that it codes “while” or “still” as suggested by Boas&Deloria’s glosses.

Below are some examples of corpus data showing derived modifiers with the continuative suffix *-hÁŋ*:

- (120) (a) *Wičháša ksabyáhaŋ wiyukčañ-wačhàŋmi.*
wičháša ksápa-ya-hAŋ wa-iyúkčañ-wačhàŋ-m-i
 man wise-DER-CONT DTR.O-think-attempt-1SG.A-stem
 I aim to be a wisely thinking man.
 (data: PBT: story 9, sentence 5)
- (b) *Ksabyáhaŋ thokátakiya mánipi kte.*
ksáb-ya-hAŋ thokátakiya má-Ø-ni-pi kte
 wise-DER-CONT toward.the.front walk-3A-stem-PL FUT.IRR
 They will walk wisely towards the future.
 (data: NSB 1994, 02: 11:06)
- (c) *Khátij na khušyáhaŋ úŋ.*
Ø-khátA na khúš-ya-hAŋ Ø-úŋ
 3SG.U-hot and sick-DER-CONT 3SG.A-exist
 She had a fever and was sick.
 (data: NSB: 2.17)
- (d) *Š'agyáhaŋ wačhékiye.*
š'ag-yá-hAŋ wačhé-Ø-kiyA
 strong-RED-DER pray.3SG.A-stem
 He prayed strongly.
 (data: NSB-16: 2:20)
- (e) *Blesyáhaŋ úŋ po.*
bles-yá-hAŋ Ø-úŋ po
 clear-RED-DER 3SG.A-exist IMP
 Always live circumspectly.
 (data: BO-101)

Investigating some minimal pairs involving derived modifiers with *-hAŋ* with native speakers was not entirely conclusive but at least some of the statements seem to suggest that rather than temporality, the suffix contributes a type of intensification, one that emphasizes the continuity of the attribute expressed by the derived modifier, almost as if the suffix added the sense of “thoroughly”.

As we will see in section 10.2.15., a very similar use of the continuative suffix *-hAŋ* can be seen in simultaneous predicate constructions.

Another suffix which seems to add a continuative aspect to verbs is *-akhe*. This suffix is found on a small handful of verbs and it appears to be no longer productive. Older dictionaries and texts also give the variant *-akhel*, but this has not been confirmed by contemporary speakers with one exception. The documented words with this affix are in Table 5.11:

Table 5.11 *Stative verbs with the non-productive suffix -akhe*

verb		verb + <i>-akhe</i>	
<i>ló</i>	‘fresh’	<i>loyákhe</i>	‘while still fresh’
<i>haápa</i>	‘with clothes on’	<i>haápakhe</i>	‘with clothes still on’
<i>tšanzániya</i>	‘healthy’	<i>tšanzániyakhe</i>	‘while still healthy’
<i>ánpó</i> + ??	‘dawn’ + ??	<i>ánpóniyakhe(l)</i>	‘while it is still dawn’
<i>ní</i>	‘to live’	<i>niyákhe</i>	‘while still alive’

The verb *ní* ‘to live’ included in Table 5.11 is in fact an active (i.e. not stative) verb, but it is listed here because it is one of the few words documented with this suffix. The fact that as an active verb *ní* groups with stative verbs which take the suffix *-akhe* is highly relevant for the discussion of secondary predication, as will be shown in detail in Chapter 7.1 (on p. 273).

5.3.4. Reduplication of derived modifiers

Reduplication of modifiers derived from SVs follows the same patterns as reduplication of stative verbs. In practice this means that it is the reduplicated form of the stative verb that receives the suffix *-ya* or any of the combination of suffixes that can follow it. Examples given in Table 5.12 are based on the stative verb *šá* ‘to be red’.

Table 5.12 *Reduplication of non-ablauting derived modifiers*

	derived modifier	reduplicated DM
(a)	<i>šayá</i>	<i>šašáya</i>
(b)	<i>šayéla</i>	<i>šašáyela</i>
(c)	<i>šayéhčij</i>	<i>šašáyehčij</i>
(d)	<i>šayélahčij</i>	<i>šašáyelahčij</i>
(e)	<i>šayákel</i>	<i>šašáyakel</i>

The rules of truncation before *-ya* apply for reduplicated truncated verbs as well, so *sabsápa* “black” becomes *sabsábya*. Examples with reduplicated derived modifiers are given in (121):

- (121) (a) *Táku k'eyá sabsábya hiyéya čha wanyánka škhé.*
táku k'eyá sab-sáb-ya Ø-hiyéya čha
 thing some black-redup-DER 3inan-scattered DET
wañ-Ø-yánka škhé
 see-3SG.U-3SG.A-stem HSY

It is said he saw some things that lay there scattered **black**.
 (data: DT: story 46, sentence 3)

- (b) *Ité kij enána zizíya yankápi kta kéyapi.*
ité kij enána zi-zí-ya Ø-yanká-pi kta Ø-kéya-pi
 faceDEF here.and.there yellow-RED-DER 3A-sit-PL FUT.IRR 3A.say-PL

It is said that they would have **yellow** spots on their faces. (if they do that)
 (data: BO-227)

Ablauting SV which reduplicate the ablauting syllable contain two renditions of the e-ablaut syllable (rather than one “a” and one “e” ablaut) when they affix *-ya*. Examples are in Table 5.13:

Table 5.13 *Reduplication of ablauting derived modifiers*

	stative verb	derived modifier	reduplicated DM	English meaning
(a)	<i>mimÁ</i>	<i>miméya</i>	<i>mimémeya</i>	round
(b)	<i>hánska</i>	<i>hánskeya</i>	<i>hánskeskeya</i>	long

5.3.5. Locatives and derived modifiers

Some of the locative prefixes can be affixed to both stative verbs and derived modifiers. Examples are given in Table 5.14:

Table 5.14 *Locative prefixes with derived modifiers*

	derived modifier	locative prefix + DM	English meaning
(a)	<i>šayéla</i>	<i>ašáyela</i>	red on surface, red layer on top
(b)	<i>sabyéla</i>	<i>osábyela</i>	black inside/within an area
(c)	<i>čhantéwaštēja</i>	<i>ičhántewaštēja</i>	happy about smth/sb
(d)	<i>čhantéšilya</i>	<i>ičhántešilya</i>	sad about smth/sb

The examples in (c) and (d) show that while a modifier by definition cannot have a subject argument, the locative suffix *i-* allows to have an object. Examples are in (122).

(122) (a) *Lila ičhántewaštēja naḥ'úŋ.*

lila i-Ø-čhantéwašte-ya na-Ø-Ø-ḥ'úŋ
 very LOC-INAN-happy-DER hear-INAN-3SG.A-stem

He was very happy to hear it. (lit.: He heard it being happy about it.)
 (data: EDT-Leg-5, sentence 40)

(b) *Táku ičhántešilya yaŋké.*

táku i-Ø-čhantéšiča-ya Ø-yaŋká
 thing LOC-INAN-sad-DER 3SG.A-sit

She sat being sad about something.
 (data: RFT: 1992)

The translation of (122a) does not reflect the Lakota original structurally as it makes it look as if the word corresponding to “happy” is the primary predicate, while in reality it is *naḥ'úŋ* ‘to hear’.

The locative *a-* has two functions with derived modifiers; one was already illustrated in Table 5.14 under (a), another function is one of forming a type of null comparative form of derived modifiers. This null comparative is often combined with the suffix *-kel*. Compare the contrasting examples in (123):

- (123) (a) *Waš'ágya úŋpi.*
waš'ág-ya Ø-úŋ-pi
 strong-DER 3A-exist-PL
 They were strong.
 (data: BQ-WOL 1:39)
- (b) *Awáš'agya úŋpi.*
a-waš'ág-ya Ø-úŋ-pi
 COMP-strong-DER 3A-exist-PL
 They were stronger.
 (data: NBC 2010)
- (c) *Awáš'agyakel úŋpi.*
a-waš'ág-ya-kel Ø-úŋ-pi
 COMP-strong-DER-VAG 3A-exist-PL
 They were rather stronger.
 (data: SHE 2017)

The function of locative prefixes with derived modifiers is illustrated in (124):

- (124) (a) *Táku kiŋ iyúha aňólyakel waŋbláke.*
táku kiŋ iyúha a-ňól-ya-kel waŋ-Ø-bl-ákA
 thing DEF everything LOC-grey-DER-VAG see-INAN-1SG.A-stem
 I see everything **covered with a layer** of gray. (with gray on top)
 (data: DTA, p.c.)
- (b) *Pňečhókaŋ ošáyela šna wačhí.*
pňečhókaŋ o-šá-ya-la šna Ø-wačhí
 crown LOC-red-DER-VAG HAB 3SG.A-dance
 It would always dance with its crown red **inside**.
 (data: BO-140, sentence 2)

The sentence in (124a) was recorded from an elderly speaker who was describing her vision problems. The sentence in (124b) is from a narrative about traditional toys and it describes the impression that a spinning top with a red painted crown makes when it spins.

The reciprocal prefix *ičhi-* can also be considered as originating from locative (combining the locatives *i-* and *khi-*) and it also occurs with derived modifiers. The data in (125) provides a comparison of the derived modifier *tħogyé* ‘differently’ and its form with the reciprocal prefix *ičhi-*.

- (125) (a) *Tħogyé ečhúnpi.*
tħogyé e-Ø-Ø-čhún-pi.
 differently do-INAN-2SG.A-stem-pl
 They do it **differently**.
 (data: BO)
- (b) *Lená iyúha ičhitħogye wóglakapi.*
lená iyúha ičhi-tħogye wó-Ø-glaka-pi.
 these all RECIP-differently speak-3.A-stem-PL
 These all speak **differently from each other**.
 (data: MAT)

In (125b), the locative prefix *ičhi-* ascribes a reciprocal reading to the derived modifier.

5.4. Negation marking on derived modifiers

One of the properties that modifiers derived from stative verb share with stative verbs functioning as depictive secondary predicates is their ability to be negated independently of the predicate. (For secondary predicates this was discussed in 4.6., see (78c)). Thus the negation operator *šni* can be used as core-level operator (i.e. after the predicate) or it can negate the derived modifier. This is illustrated in the contrasting examples shown in (126):

- (126) (a) *Iníhanɣan wanyáŋkapi.*
iníhan-yaŋ waŋ-Ø-Ø-yáŋkA-pi
 fear-DER see-INAN-3A-stem-PL
 They viewed it with fear.
 (data: DT story 41, sentence 13)
- (b) *Iníhanɣan wanyáŋkapi šni.*
iníhan-yaŋ waŋ-Ø-Ø-yáŋkA-pi šni
 fear-DER see-INAN-3A-stem-PL NEG
 They didn't view it with fear.
 (data: SHE 2017)
- (c) *Iníhanšniyaŋ wanyáŋkapi.*
iníhan-šni-yaŋ waŋ-Ø-Ø-yáŋkA-pi
 fear-NEG-DER see-INAN-3A-stem-PL
 They viewed it fearlessly. / They viewed it without fear.
 (data: BQ)
- (d) *Iníhanšniyaŋ wanyáŋkapi šni.*
iníhan-šni-yaŋ waŋ-Ø-Ø-yáŋkA-pi šni
 fear-NEG-DER see-INAN-3A-stem-PL NEG
 They did not view it fearlessly.
 (data: GJ: SHE, ICE, PM)

The data in (126d) shows that both the derived modifier and the predicate can be negated.

Notice in (126c) that due to ordered derivational rules *šni* precedes the suffix *-ya* and the morphophonemic consequence of this position is the fact that the verb is in its non-truncated form, i.e. verb \rightarrow verb + *šni* \rightarrow [verb + *šni*] + *ya*. For instance, the negated form of the modifier *wičakišya* ‘suffering for the lack of things’ is *wičakižešniyaŋ* ‘without suffering the lack of things’ which reflects the original form of the verb *wičakižA*. More examples are given in (127):

- (127) (a) *Wičakiš / Wičakišya úŋ.*
wičakiš *wičakiš-ya* *Ø-úŋ*
 suffer.the.lack.of.things suffer.the.lack.of.things-DER 3A-exist
 He lived constantly suffering the lack of necessities.
 (data: RFT 1992)
- (b) *Wičakižešniyaŋ uŋk'úŋpi.*
wičakižA-šni-ya *uŋk'-úŋ-pi*
 suffer.the.lack.of.things-NEG-DER 1A-exist-PL
 We lived without suffering the lack of necessities.
 (data: EDT: Aut-4, sentence 5)

When derived modifiers have resultative reading they cannot be negated. Resultative derived modifiers are discussed in (5.6).

5.5. Habituality marking on derived modifiers

Habituality marking is another property that secondary predicates and derived modifiers have in common. Habituality marking for SPCs was discussed in section 4.7., which introduced the clitics *s'a* and *šna*. The former is a core-level operator and the latter is an adverb that has scope only over the word it immediately follows and is never used with predicating verbs. These two clitics can be used independently of each other but commonly co-occur. The use of these operators with derived modifiers is illustrated in (128):

- (128) (a) *Oiyokhiphiya šna škátapi s'a.*
oiyokhiphi-ya *šna* *Ø-škáta-pi* *s'a*
 enjoying-DER HAB 3A-play-PL HAB
 They always have fun playing. (lit.: 'They always play enjoyably.')
- (data: BO-153)
- (b) *Waš'ágya šna náziŋpi.*
waš'ág-ya *šna* *ná-Ø-žiŋ-pi*
 strong-DER HAB stand-3A-stem-PL
 They usually stand strong.
 (data: MAT 51)

- (c) *Wakḥáŋkḥaŋyaŋkel šna ínɣaŋkapi.*
wakḥáŋ-kḥaŋ-yaŋ-kel šna Ø-ínɣaŋkA-pi
 powerful-REDUP-DER-VAG HAB 3A-run-PL

They run usually pretty mightily.
 (data: BO-242)

- (d) *Úŋšišiya šna t'ápi.*
úŋši-ši-ya šna Ø-t'Á-pi
 pitiful-REDUP-DER HAB 3U-die-PL

They would usually die pitiful.
 (data: RFT 1992)

The particle *šna* can be used with depictive modifiers, as shown in (128), as well as with resultative modifiers, as illustrated in (129):

- (129) (a) *Skayéla šna špáŋ.*
ská-ya-la šna Ø-špáŋ
 white-DER-RESTHAB 3U-cooked

It is cooked usually (until) white.
 (data: BO-207)

- (b) *Tḥoyéla šna wíyuyŋpi.*
tḥó-ya-la šna wí-Ø-Ø-yuyŋ-pi
 blue-DER-REST HAB paint-INAN-3A-stem-PL

They paint it usually blue.
 (data: RFT 1992)

The habituality marker *šna* can be used not only after derived modifiers with the suffix *-ya* but also after truncated forms. Examples are in (130):

- (130) (a) *Héčhel šna wéksuye.*
héčhel šna Ø-wa-kiksúyA
 being.that.way HAB INAN-1SG.A-remember

Such a thing I usually remember. / That is how I usually remember it.
 (data: FREH-2-20: 2:30)

- (b) *Tḥaŋkál šna héčhuyŋpi.*
tḥaŋkátu šna héčh-Ø-uŋ-pi
 outside-DER HAB do.that-3A-stem-PL

They do it usually outside.
 (data: JAH 1992)

It is also possible to place the habitual marker *šna* after negated DMs, as in (131):

- (131) *Óthañijšniyaŋ šna iyúŋkapi.*
óthañij-šni-yaŋ šna i-Ø-yúŋkA-pi
 invisible-NEG-DER HAB 3U-cooked
 They lie down usually invisibly. (to hide themselves)
 (data: BT p. 131, line 278)

5.6. Resultative modifiers derived from stative verbs

Derived modifiers also occur in resultative constructions. Examples are in (132):

- (132) (a) *Míla waŋ ġañġányela yumápi čha yuhá.*
míla waŋ ġañġáŋ-ya-la Ø-yumÁ-pi čha Ø-Ø-yuhá
 knife INDEF thin.sharp-DER-REST 3SG.U-file-PASS DET INAN-3SG.A-have
 She had a knife that was filed **sharp**.
 (data: EDT-Leg-8: sentence 21)
- (b) *Tháhčha-há k'eyá čisčiyela yušpápi.*
tháhčha-há k'eyá čis-či-ya-la Ø-Ø-yušpÁ-pi
 deer-skin INDEF.PL tiny-REDUP-DER-REST INAN-3SG.A-cut.up-PL
 They cut up some deer hides into **small** pieces.
 (data: EDT-Aut-6: sentence 39)
- (c) *Thaló kiŋ háŋskeskeya šna sósopi.*
thaló kiŋ háŋskA-skA-ya šna Ø-Ø-só-so-pi
 meat DEF long-REDUP-DER HAB INAN-3SG.A-cut.into.strips-REDUP-PL
 They would always cut the meat into **long** strips.
 (data: MARC 1992)
- (d) *Kpaŋyela wašpúšpupi.*
kpaŋ-ya-la wa-Ø-Ø-špú-špu-pi
 fine-DER-REST INSTR(knife)-INAN-3A-pieces-REDUP-PL
 They cut it up into **fine** pieces.
 (data: EDT-Col-3: sentence 289)
- (e) *Makhá kiŋ miméyelaħčij k'ápe ló.*
makhá kiŋ mimÁ-ya-la-ħčij k'Á-pi-ye ló
 ground DEF round-DER-REST-really 3A-dig-PL-DECL DECL.MSP
 They dug an **exactly circular** hole in the ground.
 (data: TT)
- (e) *Ĝéĝeya otkéyapi.*
ĝéĝe-ya o-Ø-Ø-tkéyA-pi
 dangle-DER hang-INAN-2A-stem-PL
 They hung it up **dangling**.
 (data: NSB 3-5: 2:05)

Like resultatives proper, derived resultative modifiers can be modified with the habitual marker *šna*, as shown in (132c).

Constructions with the derived resultative modifier can be negated at the core level, but the aspectual property of resultatives precludes the derived resultative modifier from being negated directly. This is a property that resultative modifiers share with resultatives proper (as discussed in 4.10, see (94c)).

5.7. Predicates that require modifiers

Section 4.12 provided a list of verbs which, despite each having their own semantic content, seem to be often interpreted semantically like copulas when used with secondary predicates. The same group of verbs, repeated here in Table 5.15 for convenience, has the copula-like reading when used with derived modifiers:

Table 5.15 *Primary predicates that require a secondary predicate (repeated)*

<i>úŋ</i>	(1sg: <i>waiŋ</i>)	to be, to exist, to remain
<i>ečhéča</i>	(1sg: <i>emáčeča</i>)	to be such, to be like that by nature
<i>nážiŋ</i>	(1sg: <i>nawážiŋ</i>)	to stand (animate subject only)
<i>yaŋkÁ</i>	(1sg: <i>maŋké</i>)	to sit
<i>h̄páye</i>	(1sg: <i>waḥpáye</i>)	to lie, recline
<i>yuŋkÁ</i>	(1sg: <i>muŋké</i>)	to lie, recline
<i>hÁŋ</i>	(1sg: --)	to stand (inanimate subject only)
<i>škán</i>	(1sg: <i>waškán</i>)	to be busy with a task, carry on an activity
<i>h̄'áŋ</i>	(1sg: <i>waḥ'áŋ</i>)	to have done an act
<i>oḥ'áŋ</i>	(1sg: <i>owáḥ'áŋ</i>)	to act, to behave

The verbs in this list generally require the presence of a secondary predicate, simultaneous predicate, modifier or derived modifier in the clause they head (or another peripheral constituent, such as PP or an adverbial clause).

Examples of sentences with these verbs used in concert with derived modifiers are in (133):

- (133) (a) *Maḥpíya kiṅ tḥoyá yuṅké.*
maḥpíya kiṅ tḥo-ya Ø-yuṅká
 sky the blue-DER INAN-lie
 The sky **was/lay blue.**
 (data: NSB 4-4: 0:10)
- (b) *Makḥóche kiṅ oiyokpazA-ya Ø-hÁṅ ké.*
makḥóche kiṅ oiyokpazA-ya Ø-hÁṅ ké
 land the dark-der INAN-stand HSY
 They land **was/stood dark**, it is said.
 (data: RFT 1992)
- (c) *Bló španyáṅpi eyá sniyáṅ hé.*
bló Ø-špáṅ-ya-pi eyá sní-ya hÁṅ
 potato INAN-cooked-CAUS-PASS some cold-DER INAN-stand
 Some cooked potatoes **stand** there **cold.**
 (data: ELH)
- (d) *Wičháḥpi waṅ tokhéčela iyóyamyá yaṅká ké.*
wičháḥpi waṅ tokhéčela iyóyapA-ya Ø-yaṅká ké
 star a barely glow-DER INAN-sit HSY
 There **was/sat** a star (there) **barely glowing**, it is said.
 (data: PL-SH)
- (e) *Waš'ágya náziṅ.*
waš'áka-ya Ø-náziṅ
 strong-DER 3SG.A-stand
He stands strong. / He is strong.
 (data: MTA-45)
- (f) *Šayéla ečhéča.*
šá-ya-la e-Ø-čhéča
 red-DER-REST to.be.such-3SG.U-stem
It was red.
 (data: EDT-Leg-8, sentence 22)
- (g) *Zaniyaṅ uṅk'úṅpi.*
zani-ya uṅk'-úṅ-pi
 healthy-DER 1A-exist-PL
We are healthy. / We exist healthy.
 (data: EDT Aut-3, sentence 182)
- (h) *Oḡiyela tókčhuṅphičašniyaṅ hé.*
oḡi-ya-la tókčhuṅphičašni-ya Ø-hÁṅ
 rusty-DER-REST worthless-DER INAN-stand
 It was/stood **worthlessly rusty all over.**
 (data: EDT Aut-8, sentence 67)

The verbs that follow DMs in the sentences given in (133) can be interpreted as having their own semantic content, even if impoverished, or as contributing no semantic content at all. Due to this and to the fact that DMs in this construction are not optional, it is tempting to analyze the DM as a predicate and the verb as an auxiliary connected via nuclear subordination (daughter) (i.e. in traditional terms the DM would be a predicative complement). A strong arguments against such analysis is the fact the construction illustrated in (133) allows various elements to intervene between the DM and the V, such as the habitual marker *šna*, and that the DM can be serialized, as shown in (133h). These structural properties make it identical with the DM constructions discussed in this chapter so far.

Therefore, I treat these derived modifier constructions as having verbs that obligatorily follow a circumstantial expression, such as a Secondary Predicate (see 4.12), Derived Modifier (current section), Simultaneous Predicate (see Chapter 10), a PP or an adverbial.

5.8. Serialized and multiple derived modifiers

Derived modifiers are frequently serialized, i.e. used in such a way that two or more DMs occur adjacent to one another. Serialized DMs are never compounded, unlike two coordinate stative verbs discussed in 3.2.3 (see (31)). Examples are given in (134). Note that (134a) shows a *-ya* derived modifier combined with a truncated derived modifier, and the data in (134b), (134c) and (134d) show two, three and four serialized modifiers respectively. The sentence in (134e) involves six serialized DMs, one of which (*pěta iyéčhel* ‘like fire’) is a complex DM (discussed in 5.9).

- (134) (a) *Sabyéla ħugnáñ ħpáya škhé.*
sápa-ya-la ħugnáğA Ø-ħpáya škhÁ
 black-DER-REST burned INAN-lie HSY
 It lay **burned black**, it is said.
 (data: EDT: Aut-11, sentence 21)
- (b) *Mní wañ thoyéla šmeyá yañká čha ikhiyela škhé.*
mni wañ thó-ya-la šmÁ-ya Ø-yañká čha Ø-ikhiyela škhÁ
 water INDEF blue-DER-REST deep-DER INAN-sit DET INAN-near HSY
 It was near a (body of) water sitting (there) **blue (and) deep**.
 (data: BO-20, sentence 1)
- (c) *Ité kiñ oglésyela ġiğíya šašáya emácheča.*
ité kiñ oglézA-ya-la ġi-ğí-ya šá-šá-ya
 face DEF streaked-DER-REST brown-REDUP-DER red-redup-DER
e-má-čeča
 to.be.like-1SG.U-stem
 My face was **streaked** with **red** and **brown** strips.
 (data: EDT Aut-6, sentence 31)
- (d) *Iyóyanbya iléya ziyá šayákel ečhéča.*
iyóyanpa-ya ilé-ya zí-ya šá-ya-kel e-Ø-čhéča
 glow-DER ablaze-DER yellow-DER red-DER-VAG to.bu.such-INAN-stem
 It was **ablaze glowing yellow** (and) **reddish**.
 (data: EDT Inf-3, sentence 16)
- (e) *Mní kiñ čhokáñyañ mahél šayéla pħéta iyéčhel iyóžanžanyañ thátóheya hiyáya škhé.*
mni kiñ čhokáñ-ya mahé-l(tu) šá-ya-la pħéta iyéčhel-Ø
 water the middle-DERdeep-DER red-DER fire be.like.it-DER
iyóžanžan-ya thátóhe-ya Ø-hiyáya škhé
 glow-DER upstream-DER INAN-go.by HSY
 Deep **within in the middle** of the water it travelled **upstream glowing red like fire**, it is said.
 (data: BO-60)

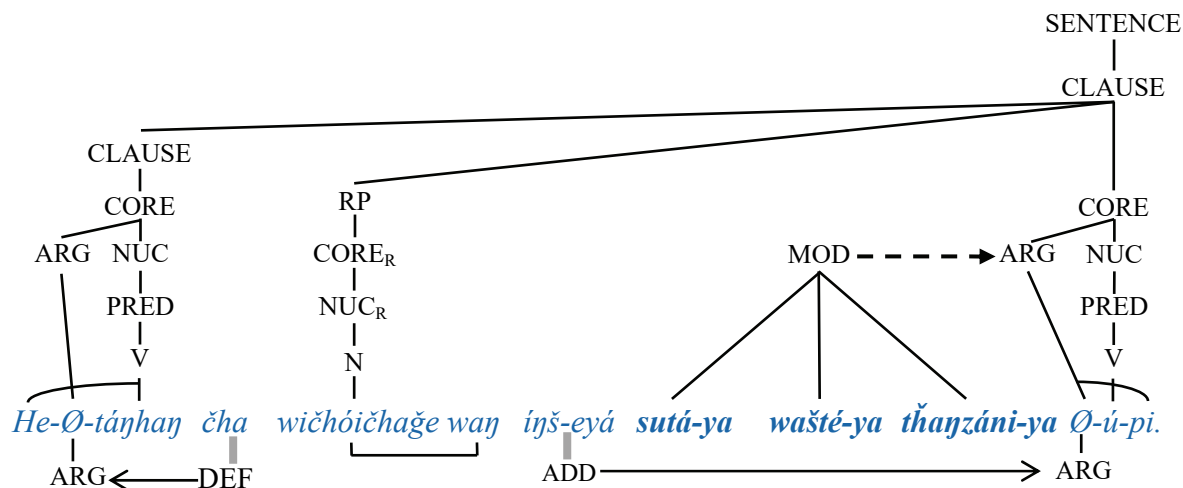
Sentences like the one in (134e) illustrate the prevalence and importance of derived modifiers in Lakota syntax. An additional example is given in (135) and followed by its constituent projection in Figure 5.4.

(135) *Hetáňhaň čha wičhóičhađe waň iš-eyá sutáya waštéya tháňzániya úpi.*

he-Ø-táňhaň čha wičhóičhađe waň iňš-eyá
 from.that-3sg-stem DEF generation DEF 3SG.too

sutá-ya waštéya tháňzáni-ya Ø-ú-pi
 sturdy-DER fine-DER healthy-DER 3A-come-PL

It is from that that a generation, too, is coming sturdy, fine [and] healthy.



from.that-3s-stem DEF generation DEF 3SG.too sturdy-DER fine-DER healthy-DER 3A-come-PL

‘It is from there that a generation, too, is coming **sturdy, fine** [and] **healthy**.’

Figure 5.4 *Serialized ad-ARG derived modifier*

Any of the serialized DMs can be followed by the habitual operator *šna* and it is not uncommon for native speakers to place *šna* after more than one of the serialized DMs. Similarly, most of the serialized DMs can be intensified with *lila* or with any of the intensifying suffixes. One or more serialized DMs can be negated when this is felicitous contextually.

Derived modifiers can also co-occur with secondary predicates, i.e. with those stative verbs that require no morphological modification when they are RP-external.

Examples are provided in (136):

- (136) (a) *Kál čhokáb thipi waŋ tháŋka skayéla háŋ ké.*
kál-Ø čhokáb-Ø thipi waŋ tháŋka ská-ya-la Ø-hÁŋ ké
 there-DER middle-DER tipi a large white-DER-REST INAN-stand HSY
 There in the middle stood a tipi **large** (and) **white**.
 (data: DT story 38, sentence 1)
- (b) *Pahála k'eyá čikčik'ala pažóžoya hiyéye čiy hená ...*
pahá-la k'eyá čik-čik'ala pažó-žo-ya Ø-hiyéyA
 hill-REST INDEF REDUP-small conical-REDUP-DER INAN-to.be.scattered
čiy hená
 DEF those
 Those little hills that are standing scattered **small** (and) **conical** ...
 (data: BO-79)
- (c) *Pħaŋšyéla wašté yuštáŋpi ké.*
pħaŋza-ya-la wašté Ø-yuštáŋ-pi ké
 soft-DER-REST good INAN-finish-PASS HSY
 It was made **nice** (and) **soft**. (literally: softly good)
 (data: EDT Col-3, sentence 232)
- (d) *Uħmá ečhíyatanħaŋ špáŋ šni šayéla háŋ-hé ló.*
uħmá ečhíyatanħaŋ špáŋ šni šayéla Ø-hÁŋ-hÁŋ ló
 other from.side cooked NEG red 3SG.U-stand-CONT DEC.MPS
 From the other side it continued to be **red uncooked**.
 (data: BO-42)

In (136), the stative verbs *tháŋka* ‘large’, *čik'ala* ‘small’ and *wašté* ‘good’ are stative verbs that can be used as secondary predicates and thus they show no morphological derivation in these sentences, but they are each combined with a derived modifier. These SP-DM combinations express two attributes pertaining to the participant, and the fact that they can be combined is evidence that SPs and DMs are semantically and syntactically related. The usual sequence is SP+DM, as shown in (136a) and (136b). Both the SP and DM are participant oriented (depictive) although the orientation of the DM is sometimes vague, as discussed before.

Figure 5.5 gives the constituent projection of (136a) and shows that the SV *tháŋka* ‘large’ is a SP connected with the primary predicate via core cosubordination,

whereas the intervening MD *skayéla* ‘white’ modifies the argument shared by the two co-predicates.

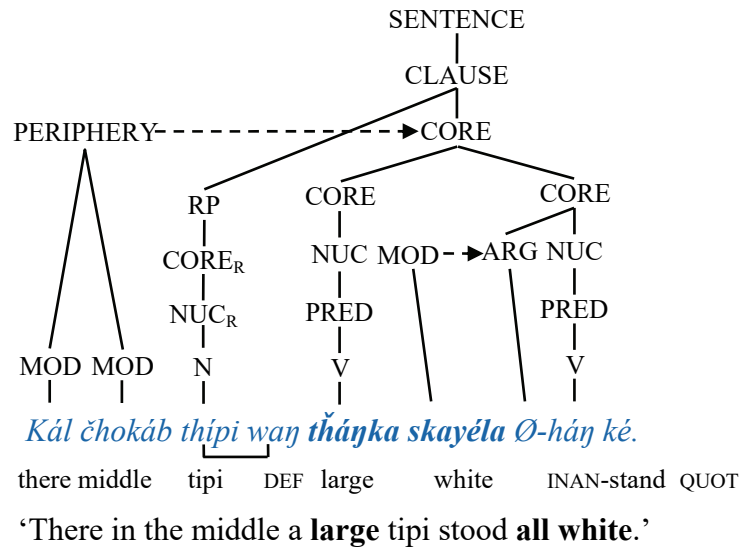


Figure 5.5 ARG-modifier inside a SPC, constituent projection of (136a)

The internal word order of the combined expression is different in (136c) where the DM precedes the SP *wašté* ‘good’, which is due to the fact that the DM modifies the SP. This is the usual sequence when *wašté* is involved as a SP. The constituent projection is given in Figure 5.6.

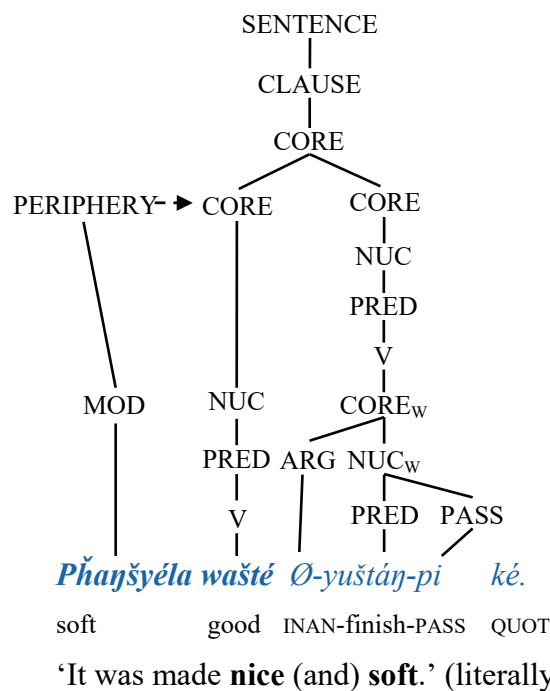


Figure 5.6 Core modification of a secondary predicate, projection of (136c)

This section showed that derived modifiers are commonly serialized and that they can also be combined with secondary predicate constructions, where they can modify the argument shared by the two co-predicates or the core of the secondary predicate.

5.9. Complex derived modifiers

This section discusses a construction in which N+DM form a constituent unit, which is a structure derived from the N+SV complex predicate described in section 3.2.3 and offered here for a review in (137a). This is contrasted with (137b) in which the same N is part of an RP cross-referenced to the subject of a SV simple predicate.

- (137) (a) *Pǎ́éta wiyákpakpa.* (N + SV complex predicate)
pǎ́éta Ø-wiyakpa-kpa
 fire INAN-sparkle-REDUP

It is a **sparkly** fire.
 (data: RFT)

- (b) *Pǎ́éta kiŋ wiyákpakpa.* (RP + simple SV predicate)
pǎ́éta kiŋ Ø-wiyakpa-kpa
 fire the INAN-sparkle-REDUP

The fire **is sparkly**.
 (data: RFT)

In (137a), the N is not an RP and instead it constitutes a complex predicate (a nuclear cosubordination) with the SP, where the zero coded argument in the SV is the shared subject. In (137b), on the other hand, the N+DET is an RP cross-referenced to the argument of the SV. It is only due to the separator (i.e. the DET) that the N and the SV are separate constituents.

Understanding the structure of (137a) is important for the analysis of complex derived modifiers, exemplified in (138a) and contrasted with a construction involving a simple DM in (138b).

- (138) (a) *Pǎ́éta wiyákpakpayela yanǰé.* (complex DM)
pǎ́éta wiyakpa-kpa-ye-la Ø-yanǰá
 fire sparkle-REDUP-DER-REST 3SG.A-sit

He sat with/having **sparkly fire**.
 (data: JAH, see also DT: Story 1, sentence 23)

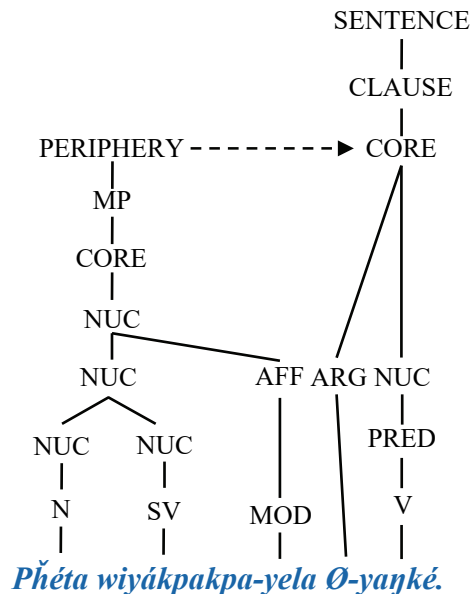
- (b) *Pǎ́éta kiŋ wiyákpakpayela yanǰé.* (simple DM)
pǎ́éta kiŋ wiyakpa-kpa-ye-la Ø-yanǰá
 fire the sparkle-REDUP-DER-REST INAN-sit

The fire sat/was **sparkling**.
 (data: BBBJ)

In (138a), the zero coded subject of the predicate *yanǰá* ‘to sit’ refers to a human actor, hence the sentence could also begin with a reference phrase, as in: *Wičháša kiŋ pǎ́éta wiyákpakpayela yanǰé*. ‘The man sat with/having a sparkly fire.’ In consequence it is clear that *pǎ́éta* cannot be an argument of the intransitive predicate and the only thing that licenses a non-subject noun (*pǎ́éta*) in the clause headed by an intransitive predicate is the fact that *pǎ́éta wiyákpakpa* is converted into a modifier via the suffixation of *-yela*. This modifier is then in the periphery of the predicate’s CORE and is a manner modifier, rather than a depictive modifier of the predicate’s argument.

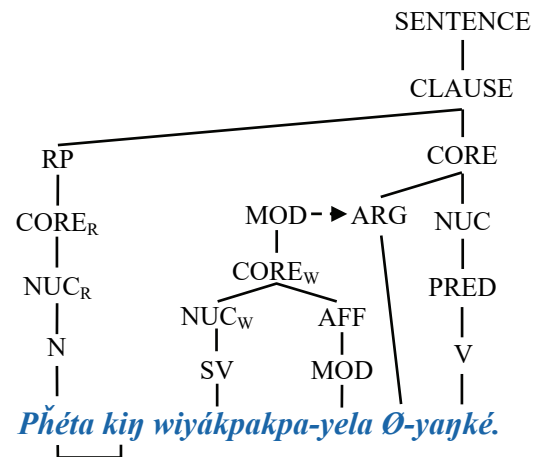
In contrast to (138a), the RP *pǎ́éta kiŋ* ‘the fire’ in (138b) is cross-referenced with the subject argument of the predicate *yanǰá*. This is licensed by the presence of a separator between the noun (*pǎ́éta*) and the derived modifier (*wiyákpakpayela*) which liberates *pǎ́éta* from being interpreted as part of a complex modifier. The semantic orientation of the modifier *wiyákpakpayela* in (138b) is vague, as it can be interpreted both as a depictive modifier with scope over the CORE (‘The fire sat sparkling’) or as a manner modifier (‘The fire sat sparklingly’) with syntactic scope over the ARG of the predicate. In consequence, *yanǰá* ‘to sit’ is functioning differently in (140a, b): in (a) it is a literal stance verb, while in (b) it is a quasi-copula and not a stance verb.

Figure 5.8 and Figure 5.8 provide the respective constituent projections of (138a) and (138b):



fire sparkle-DER 3A.SG-sit
‘He sat having/with a sparkling fire.’

Figure 5.8: Complex derived modifier, constituent projection of (138a)



fire DEF sparkle-DER 3.SG-sit
‘The fire was/sat sparkling.’

Figure 5.8: Derived modifier, constituent projection of (138b)

The projection in Figure 5.8 shows the internal structure of the complex derived modifier inherited from the complex predicate illustrated in (137a). By suffixing *-yela*, the complex predicate is converted into a complex modifier (a Modifier Phrase) which in turn modifies the CORE of the predicate *yaŋká*. In Figure 5.8 on the other hand, *pǎéta kiŋ* ‘the fire’ and *wiyákpakpa* ‘sparkly/sparkling’ are not linked via nuclear juncture and instead they form a separate constituent each. The orientation of the DM *wiyákpakpa* is vague and thus it can be interpreted as participant oriented and having scope over the argument of the predicate, as shown in Figure 5.8, or as an event modifier appearing in the periphery of the core. On the other hand, the complex DM in Figure 5.8 can be interpreted only as event oriented (i.e. core modifier).

Complex derived modifiers are pervasive in Lakota and among the lexical categories which frequently partake in their composition are body part Ns. Examples are given in (139).

(139) (a) *Ištá sabyéla owóhinyan̄syela awičhayuta.*

ištá sab-yéla owóhinyan̄s-yela a-wičha-Ø-yuta
 eyes black-DER cruel-DER look.at-3ANIM.U-3SG.A-stem

It was looking at them cruelly with **its black eyes**.
 (data: EDT Col-3, sentence 167)

(b) *Pḥehin̄ wičhá-yuzá-pi čhaṅkhé pḥá šayéla yuṅká-pi.*

pḥehin̄ wičhá-yuzá-pi čhaṅkhé pḥá ša-yéla Ø-yuṅká-pi
 hair 3PL.U.ANIM-take-PASS and.so head red-DER 3A-sit-PL

They were scalped so they lay (there) with **their heads red**.
 (data: BO-69)

(c) *Sí ḥolyéla mawáni.*

sí ḥol-yéla ma-wá-ni
 foot grey-DER walk-1SG.A-stem

I walked **with gray feet** (from dust because of being barefoot).
 (data: BO-108)

(d) *Ištá aéčhetušniyan̄ wawányan̄kela.*

ištá a-ečhétu-šni-ya wa-wán-Ø-yan̄ka-la
 eye loc-right/normal-NEG-DER DTR-see-3SG.A-stem-DIM

She had **poor eyesight**, poor thing. ('She saw things with **abnormal eyes**.')

(data: EDT Col-3, sentence 128)

(e) *Hó čhaṅčhányela hóthaniṅ.*

hó čhaṅčhány-ya-la hó-Ø-thaniṅ
 voice shake-DER-VAG voice-3U-audible

He spoke **with a shaking voice**.
 (data: DT story 57, sentence 10)

(f) *Napé ožúlašniyan̄ ičú.*

napé ožúla-šni-ya Ø-Ø-ičú
 hand full-NEG-DER 3SG.U-3SG.A-take

He took it **with his hand not full**. (i.e. He took **less than a handful**.)
 (data: RFT)

Like simple DMs, complex DMs are characteristically vague with respect to being participant oriented or event oriented, except for complex DMs involving body part

Ns, which have scope over or the participant (subject), because body parts are treated as inalienable possessions and generally have a reference to a person (or animal). This is shown in the constituent projection for (139c) in Figure 5.9:

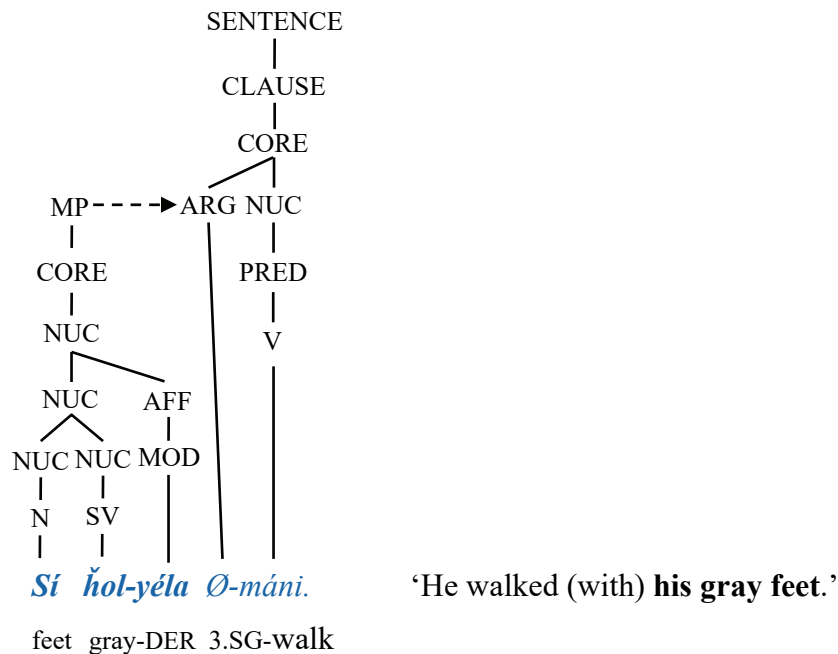


Figure 5.9: Complex DM involving a body part N, projection of (139c)

The tree shows the ARG as being modified by the Modifier Phrase directly rather than being housed in a periphery because arguments are morphological entities.

In 3.6 it was described that inalienable possessions (such as body parts) are linked with their possessor at the clause level by cross-referencing the ARG. In sentences where a body part N is a member of a complex DM, as in (139), the body part N is not an RP and thus cannot be linked to the core argument at the clause level. Instead, the possessor-possessed relationship is expressed via modification of the core argument by the derived modifier. This also explains why complex DMs with body part nouns are predominantly subject oriented.

More evidence complex DMs involving body part Ns generally have subject orientation comes from the contrasting examples in (140):

(140) (a) *Táku waštéya wanyánke.*

táku wašté-ya waŋ-Ø-Ø-yánkA
 thing good-DER see-3SG.U-3SG.A-stem

He saw something **good**.

(data: GS)

(b) *Čhaŋté waštéya wanyánke.*

čhaŋté wašté-ya waŋ-Ø-Ø-yánkA
 heart good-DER see-3SG.U-3SG.A-stem

1. He was happy to see it/him/her. (literal.: With a **good** heart he saw him.)

2. * He saw him_i happy_i.

(data: BO-253)

The two sentences in (140), differ only with respect to the nominal component of the complex derived modifier, which is *táku* ‘thing’ in (140a) and *čhaŋté* ‘heart’ in (140b), but this difference determines the interpretation of subject-object orientation of the complex derived modifier. The DM *waštéya* ‘good’ in (140a) is object oriented, as characteristic of DMs in general, whereas the complex DM in (140b) is subject oriented because it involves a body part N.

Since complex DMs with body part Ns are generally interpreted as subject oriented, one has to ask the question whether it is possible for body part Ns within complex DMs to be cross-referenced with the object of a transitive verb. The answer lies in the data in (141):

- (141) (a) *Ištá sabyéla wanyáŋke.*
ištá sápa-ya-la waŋ-Ø-Ø-yáŋka
 eye black-DER-REST see-3SG.U-3SG.A-stem
 1. She saw him **with her black eyes**.
 2. * She saw him **with his black eyes**.
 (data: RFT)
- (b) *Ištá kiŋ sabyéla wanyáŋke.*
ištá kiŋ sápa-ya-la waŋ-Ø-Ø-yáŋka
 eye DEF black-DER-REST see-3SG.U-3SG.A-stem
 1. She saw **his black eyes**.
 2. * She saw him with her black eyes.
 (data: BBBJ)

In (141a), the MP can be interpreted only as subject oriented. In (141b), on the other hand, the body part *ištá* ‘eye’ is followed by the article *kiŋ* which separates it from the derived modifier *sabyéla* and allows it to function as an RP cross-referenced with the object argument of the predicate. As the N and DM in (141b) are separated, they do not constitute a complex DM.

Complex derived modifiers inherit their internal structure from N+SV complex predicates, which means that they involve a nuclear juncture. This is shown in the constituent projection of (141a) in Figure 5.10. The constituent projection of (141b) is given in Figure 5.11 for comparison to show that the Modifier Phrase (MP) in Figure 5.10. modifies the actor argument, whereas the Modifier (MOD) in Figure 5.11 has scope over the undergoer argument.

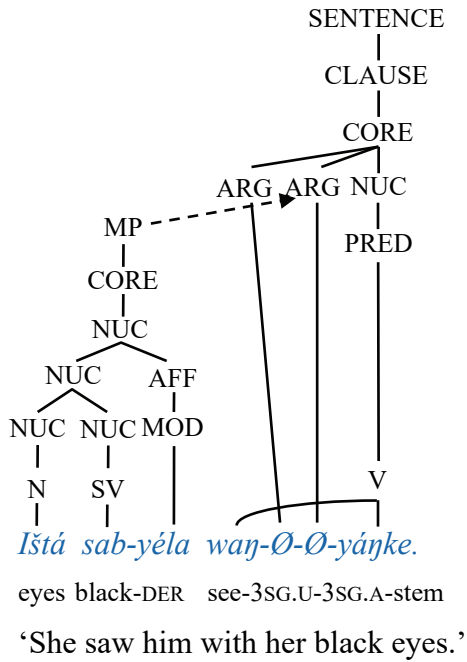


Figure 5.10 Subject oriented complex DM, projection of (141a)

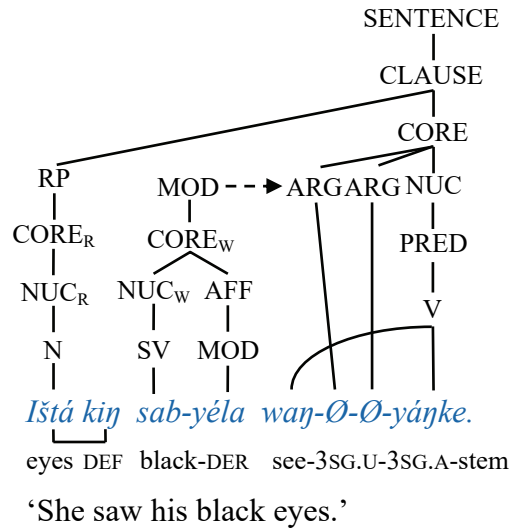


Figure 5.11 Object oriented DM, projection of (141b)

Note that if we omit the nominal component (*ištá* ‘eyes’) in Figure 5.10 or the RP (*ištá kiŋ* ‘the eyes’) in Figure 5.11, the DM in the resulting sentence *Sabyéla waŋyáŋke* ‘She saw him black’ is object oriented which is the canonical orientation of DMs in transitive clauses.

Complex derived modifiers can be serialized, as shown in (142) and followed by the constituent projection in Figure 5.12.

- (142) *Ištá ġiyéla pħehiŋ žižiyela waúŋ.*
ištá ġi-ye-la pħehiŋ ži-ži-ye-la wa-úŋ
 eye brown-DER-REST hair tawny-REDUP-DER-REST 1SG.A-exist
 I am of **brown eyes (and) tawny hair.**
 (data: BO: story 227)

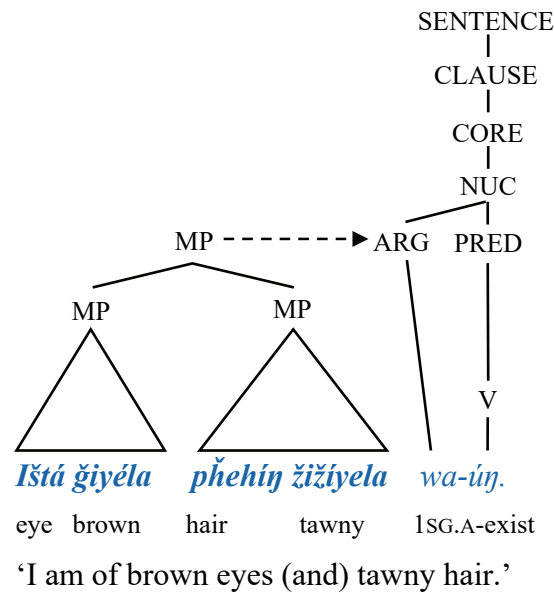


Figure 5.12 Serialized modifier phrase (constituent projection of (142))

Complex DMs can also be serialized with simple DMs. This is illustrated in Figure 5.13 which is a constituent projection of (139a).

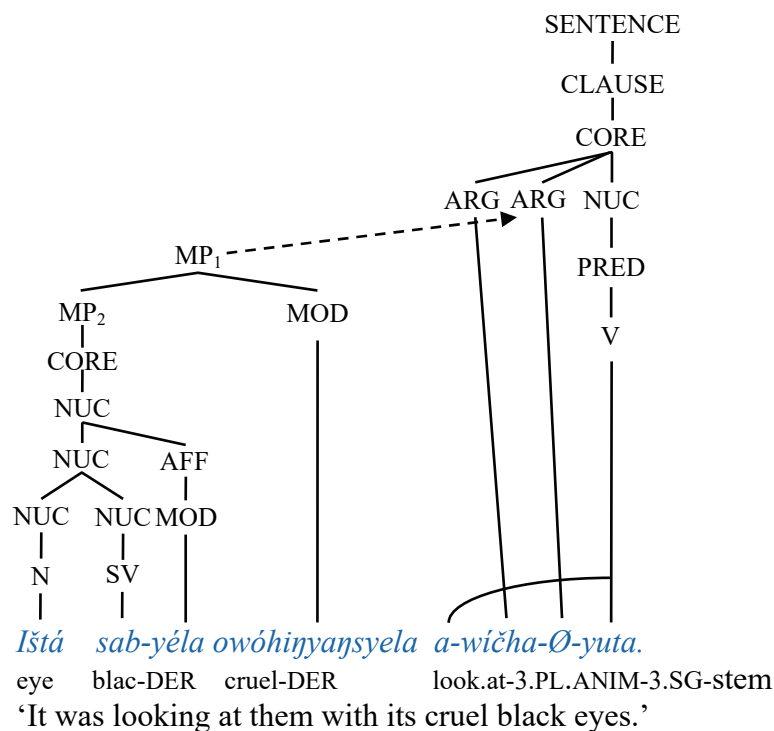


Figure 5.13 Serialization of complex and simple DM

Note that the complex DM and the simple DM in Figure 5.13 contribute to the higher MP independently. This is because only a N with a single DM can constitute a complex DM, a property inherited from the fact complex DMs originate in N+SV complex predicates.

The lexical composition of complex derived modifiers is not restricted to body part Ns. An example is in (143):

- (143) *Okó wanilya akáhpetħuŋpi.*
okó waničA-ya akáhpe-Ø-Ø-ħuŋ-pi
 space non-existant- DER cover-INAN-3SG.A-PL
 They covered it **leaving no open spaces.**
 (data: RFT)

Complex derived modifiers can serve a wide range of semantic functions. For instance, the examples in (144) are manner modifiers but they have locative readings.

- (144) (a) *Makħá ikčéya ištiŋme.*
makħá ikčé-ya Ø-ištiŋmA
 ground mere-DER 3SG.A-sleep
 He slept **on bare ground.** (Literally: He slept ground-merely.)
 (data: RFT)
- (b) *Mayá thánka waŋ wakpá iyúweħya háŋ ké.*
mayá thánka waŋ wakpá iyúweħ-ya Ø-hÁŋ ké
 cliff large INDEF creek across-DER INAN-stand HSY
 A high cliff stood **across the creek,** it is said.
 (data: ACC p. 103)

A different semantic function is shown in the example in (145a) which involves a sentence that was traditionally said by young men who wanted to proclaim their courage and readiness to die in battle.

- (145) (a) *Íňše lé šunġmánitu oyásmiyaŋ muŋkiŋ kta čha waúŋ.*
íňše lé šunġmánitu oyásmi-ya m-(y)uŋkÁ kta čha wa-úŋ
 only just wolf gnaw-DER 1SG.A-lie fut.irr so 1SG.A-exist
 I live only so that I can lie **having wolves pick meat from my bones.**
 (Idiomatic for: “My only purpose of life is to die in battle.”)
 (data: BT p. 350, line 26)
- (b) *Thimá pĥelsniyaŋ yaŋké.*
thimá pĥéta-sní-yaŋ Ø-yaŋkÁ
 indoors fire-cold-DER 3SG.A-sit
 He was sitting **(with/beside a) dead fire.**
 (data: EDT-Col-4, sentence 4)

The complex derived modifier *šunġmánitu oyásmiyaŋ* ‘having bones picked by wolves’ in (145a) involves the verb *yasmi* ‘to pick smth (i.e. bones) bare with the mouth, to eat the meat off (bones), to gnaw (bones) clean’, and the noun *šunġmánitu* ‘wolf, coyote’ is a notional subject of this verb. The complex DM in (145b) is composed of *pĥéta* ‘fire’ and *sní* ‘cold’.

There are some rare instances of complex derived modifiers that are lexicalized as nouns. A typical example is the word *thiikčeya* which is a compound of *thi* ‘house’ and *ikčeya* ‘common, mere’ and which was originally used as a modifier, as shown in (144), but became reanalyzed as the noun meaning “tipi”, as in (146):

- (146) (a) *Lakĥóta kiŋ thiikčeya wičhóthi.*
Lakĥóta kiŋ thi-ikčé-ya wičhá-o-thi
 Lakota DEF house-common-DER COLL-LOC-dwell
 Lakotas lived (collectively) **in tipis.**
 (data: RFB)
- (b) *Héčhiya thiikčeya waŋ thánka háŋ yuŋkhánj*
héčhiya thi-ikčé-ya waŋ thánka Ø-hÁŋ yuŋkhánj
 there house-common-DER INDEF large INAN-stand and.here
A tipi stood there large, and here ...
 (data: EDT-Leg 4, sentence 69)

The lexicalization of complex derived modifiers as nouns is extremely rare and in fact many speakers alternate *thiikčeya* with *thiikčeka* which is more in line with the generally used nominal morphology. Nonetheless, the existence of words like *thiikčeya* is an indication that the *-ya* forms are undergoing reanalysis and are beginning to be able to function as RP-internal modifiers, albeit very rarely (this is discussed in more detail 5.15).

A somewhat puzzling example is given in (147), where two expressions involving a DM each are coordinated with the conjunction *naiṅš* ‘or’. DMs do not normally occur before conjunctions and the data in (147) show a very rare exception.

- (147) *Wiphá thoyá naiṅš wiphá sabyá kǎó thiówa óta yeló.*
wiphá tho-yá naiṅš wiphá sab-yá kǎó
 tipi.flap blue-DER or tipi.flap black-DER too
thiówa Ø-óta yeló
 painted.tipi INAN.many DECL.MSP

There were many painted tipis **with blue flaps** or **black flaps**.
 (data: DT: story 1, sentence 20)

The fact that each of the MPs involve a nominal component might have something to do with the presence of the conjunction. Another possible explanation is that the N+DM sequences (*wiphá thoyá* ‘blue tipi flaps’ and *wiphá sabyéla* ‘black tipi flaps’) are not complex MPs but instead they are RPs with RP-internal DMs because they originate from bare RPs with notionally plural Ns (because the tipi flaps always come in pairs). However, such hypothesis is not tenable because RP-internal DMs would not be able to function as CORE modifiers, which is how they seem to function in (147). The two conjoined MPs are licensed by the fact that they constitute a manner modifier of the intransitive complex predicate *thiówa óta* ‘painted tipis were many’.

Furthermore, the DM licenses the noun phrase *wiphá* to be plural without a determiner or quantifier; a stative verb would not allow this because *wiphá thó* (optionally reduplicated *wiphá thóthó*) would be interpreted as a complex predicate with the meaning “they are blue wind flaps” unless followed by a transitive predicate.

The complex DM in (147) can be treated as either participant oriented, in which case it modifies the zero coded argument of the complex predicate *thiówa Ø-óta* ‘painted tipis were many’, or as event oriented, in which case it is an ad-core modifier of the predicate. Both analyses result in expressing an attribute of the tipis, but the event orientation reading is more felicitous because the tipis are not expressed via an independent RP and instead are expressed within the first member of the complex predicate as an incorporated noun (i.e. *thí* in *thiówa*).

A subcategory of complex derived modifiers is illustrated in (148). It is composed of expressions like *onáh’uŋ wašté* ‘it is good/pleasant to hear’ and *onáh’uŋ šičá* ‘it is hard/difficult/unpleasant to hear’, which are formed by the locative prefix *o-* affixed to an active verb adjacent to *wašté* ‘good’ or *šičá* ‘bad’. These are then morphologically derived with the suffix *-ya*.

- (148) (a) *Táku kiŋ iyúha onáh’uŋ waštéya yaŋkápi.*
táku kiŋ iyúha o-náh’uŋ wašté-ya Ø-yaŋká-pi
 thing DEF all LOC-hear good-DER 3A-sit-PL

They sat (**in such a manner/position/distance**) that everything was **easy to hear**.
 (data: TT)

- (b) *Onáh’uŋ waštéya hóthañiŋla.*
o-náh’uŋ wašté-ya hó-Ø-thañiŋ-la
 LOC-hear good-DER voice-3U-audible-REST

He spoke in voice that was **pleasant to hear**.
 (data: EDT-Col-3, sentence 418)

(c) *Ogliču šilyá ĥpáya ké.*

o-gličú *šiča-ya* *Ø-ĥpáya* *ké*
 LOC-get.back bad-DER 3A-lie HSY

He lay **in a manner in which it was difficult to get out**, it is said.
 (data: DT story 34, sentence 12)

(d) *Ité kiŋ oíyekiye šilyá oič'iwapi.*

ité *kiŋ* *o-iyékiya* *šiča-ya* *o-Ø-ič'i-wa-pi*
 face DEF LOC-recognize bad-DER paint-3A-REFL-stem-PL

They painted their faces **in such a way that they were hard to recognize**.
 (data: BO-64)

The locative prefix *o-* nominalizes the active verb, which means that like other complex DMs these MPs are formed by a [[N+SV]-*ya*].

It should be noted that not all instances of adjacent N + DM are complex derived modifiers. Since plural and uncountable nouns are not obligatorily marked with determiners (cf. 3.4.2), we can find data like that offered in (149) where *pheží* ‘grass’ is an RP cross-referenced with the subject of the predicate *hinápĥe* and *šayá* ‘red’ is an independent DM, instead of forming a complex DM with the N.

(149) *Pheží šayá hinápĥe.*

pheží *šayá* *Ø-hinápĥe*
 grass red-DER INAN-emerge

Grass emerged red.
 (data: GS, IS)

Since the N in (149) is an RP and the DM *šayá* does not form a complex DM with it, I hypothesize that the prosodic properties of (149) are likely different from those of complex DMs. Complex DMs are derived from N+SV complex predicates, which means that the H* peak of the DM component is down-stepped relative to the H* peak of the N (as discussed in 3.2.2., see (26)). It is very likely that the DM in (149) maintains a higher level of the H* peak or that there are other prosodic features that

differentiate this construction from a complex MP. More research with authentic audio data is required to confirm this hypothesis.

Conclusion: complex derived modifiers or modifying phrases (MP) are pervasive in Lakota. They are composed of N+DM and they are the modified version of the N+SV complex predicate from which they inherit their prosodic properties, i.e. the N and DM are uncompounded but the H* peak associated with the stress of the second member is down-stepped relative to the H* peak of the first member. An important function of the MPs is that they allow for a nominal expression to occur in the clause without functioning as an RP, which enables expressing various functions with non-referential Ns. MPs are typically vague in their orientation to participant or event, except for MPs involving body part Ns, which are characteristically participant oriented and thus function as ad-argument modifiers. MPs can be serialized, and very rarely (under conditions that are not yet well understood) they can be conjoined with a conjunction.

5.10. Participant and event orientation of derived modifiers

The discussion in section 5.2. revealed that derived modifiers like *héčhel* are typically vague with respect to their orientation to the participant (ad-argument modification) or event (ad-core modification). This section further explores the participant and event orientation of DMs, and discusses intricacies that emanate from its vagueness.

For derived modifiers like *héčhel* there are certain indicators, such as the transitivity of the predicate or the presence of the suffix *-ya*, which help us determine the participant vs. event orientation. The orientation of many other derived modifiers is restricted semantically. Still another group of derived modifiers is almost always vague in its orientation. A typical example of derived modifiers that are usually ambiguous is *waš'ágya* ‘strong’ (derived from the stative verb *waš'ákA* ‘to be strong’). In (150a), *waš'ágya* occupies a position typical for depictives in that it is RP-external, post-RP and directly before the predicate. However, unlike depictives, the DMs can also occur in pre-RP position, as shown in (150b). Note that both versions can have both participant and event orientation reading.

- (150) (a) *Tháté way waš'ágya uyá ké.*
tháté way waš'ág-ya Ø-uyá ké
 wind a strong-DER 3SG-blow QUOT

1. A wind blew **strong**, it is said.
 2. A wind blew **strongly**, it is said.
- (data: EDT-Col-2, sentence 47)

- (b) *Waš'ágya tháté way uyá ké.*
waš'ág-ya tháté way Ø-uyá ké
 strong-DER wind a 3SG-blow QUOT

1. A wind blew **strong**, it is said.
 2. A wind blew **strongly**, it is said.
- (data: BBBJ)

Another derived modifier that is typically vague in its orientation is *wakḥáŋyaŋ* derived from *wakḥáŋ*, which primarily means “to be holy/sacred” but it can also mean “to be mysterious, incomprehensible, magical” as well as “to be mighty, powerful.” The data in (151) provides more examples in which the derived modifier can be interpreted as having either of the two orientations.

- (151) (a) *Wakḥáŋyaŋ škáŋpi.*
wakḥáŋ-yaŋ Ø-škáŋ-pi
 mysterious-DER 3SG.A-act
 1. They acted in holy manner. (manner reading)
 2. They acted being holy. (depictive modifier reading)
 (data: EDT-Inf-4, Sentence 14)
- (b) *Wakḥáŋyaŋ íŋyaŋke.*
wakḥáŋ-yaŋ Ø-íŋyaŋka
 mysterious-DER 3SG.A-run
 1. He ran mightily. (i.e. very fast) (manner reading)
 2. Being mighty he ran. (depictive modifier reading)
 (data: DT story 49, sentence 7)
- (c) *Wakḥáŋyaŋ ská.*
wakḥáŋ-yaŋ Ø-ská
 mysterious-DER 3SG.U-white
 1. It was mightily white. (manner reading)
 2. *
 (data: RFT)
- (d) *Wakḥáŋyaŋ nážiŋ.*
wakḥáŋ-yaŋ Ø-nážiŋ
 mysterious-DER 3SG.U-stand
 1. She stands holy. (depictive modifier reading)
 2. She stands in a holy manner. (manner reading)
 (data: Standing Rock census 1881, aka “Sitting Bull surrender census”)

In (151d), we see chief Sitting Bull’s daughter’s name, commonly translated as “Stands Holy” by 19th century interpreters and family members.

As was the case with *waš'ágya* 'strong', the derived modifier *wakhányan*, too, can occur to the left of the RP, as shown in (152):

- (152) (a) *Makhá kiŋ wakhányan yuŋké.*
makhá kiŋ wakháŋ-yan Ø-yuŋkÁ
 earth the mysterious-DER 3SG.A-lie
 The Earth is/lies sacred. / In a sacred way the Earth lies.
 (data: lyrics from a traditional song)
- (b) *Wakhányan makhá kiŋ yuŋké.*
wakháŋ-yan makhá kiŋ Ø-yuŋkÁ
 mysterious-DER earth the 3SG.A-lie
 In a sacred way the Earth lies. / The Earth is/lies sacred.
 (data: RFT)

We saw in section 5.2. that the suffix *-ya* was used to disambiguate the vagueness in the orientation of *héčhel* and make it clearly event oriented, but the data provided in this section shows that *-ya* does not have this function with other derived modifiers, such as *waš'ágya*, *wakhányan* and many other ones whose participant/event orientation is generally vague regardless of their morphological markup.

The vague orientation of modifiers like *wakhányan* is illustrated in the constituent projections given in Figure 5.14, Figure 5.17, Figure 5.15 and Figure 5.16.

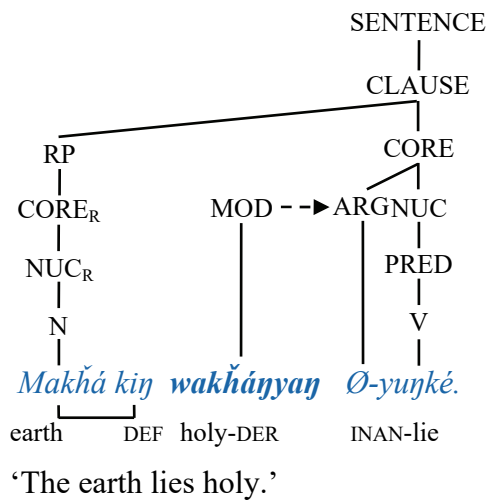


Figure 5.14 Participant orientation reading of a DM occurring after an RP

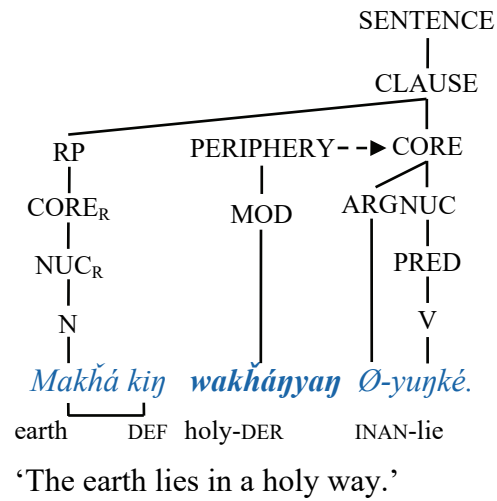


Figure 5.15 Event orientation reading of a DM occurring after an RP

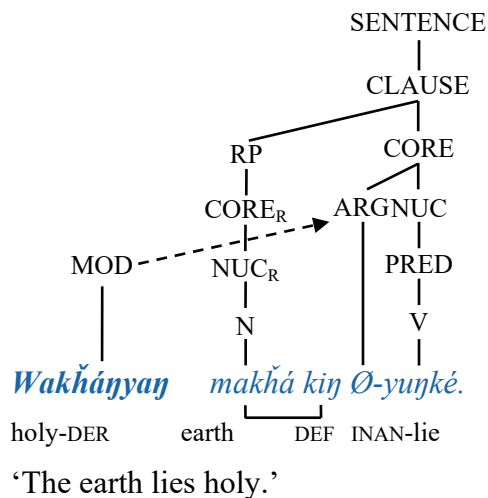


Figure 5.16 Participant orientation reading of a DM occurring before an RP

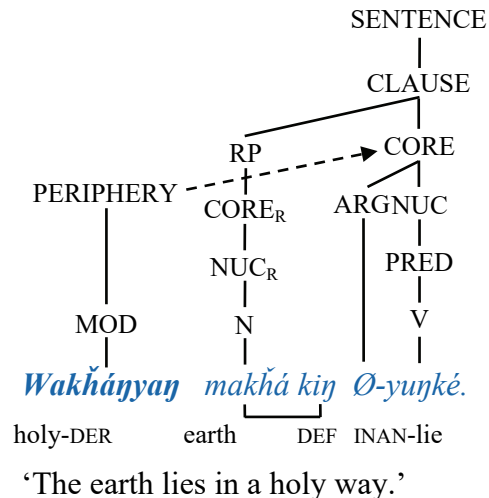


Figure 5.17 Event orientation reading of a DM occurring before an RP

Another group of derived modifiers semantically bound more closely to the participant than to the event is characterized by the fact that they describe physical

appearance or material composition of things and beings, such as colors, textures, etc.

Consider the examples in (153).

- (153) (a) *Čhokáya táku waŋ gmigméya skayéla yaŋká ké.*
čhoká-ya táku waŋ gmigmÁ-ya ská-ya-la Ø-yaŋká ké
 middle-DER thing a round.DER white-DER-REST 3SG.A-sit HSY

In the middle sat something **round** (and) **white**.

(data: DT story 37, sentence 10)

- (b) *Mitháŋkala ġaŋyéla kiktá.*
mitháŋkala ġaŋ-ya-la Ø-kiktá
 my.younger.sister disheveled-DER-REST 3SG.A-get.up

My younger sister got up **all disheveled**.

(data: MARC)

- (c) *Mní kiŋ thoyéla kalúze.*
mní kiŋ thó-yá-la Ø-kalúza
 water the blue-DER-REST 3SG.U-flow

The water was flowing **blue**.

(data: BO-4)

Regardless of whether we interpret the DMs in (153) as modifying the CORE or the ARG, the DMs ascribe an attribute to the participant. If we analyze them as having scope over the ARG, then they denote an attribute directly to the participant. If we analyze them as having scope over the predicate, then they ascribe an attribute to the participant via the modification of the CORE. Thus it is possible to say that manner modifiers assign a property to a participant.

All of the examples in (153) involve subject oriented DMs, but the assertion that DMs which describe physical appearance or material composition are generally participant oriented holds true also about object oriented DMs, as exemplified in (154):

- (154) (a) *Wakǰályapi kǰályéla yatké s'a.*
wakǰályapi kǰál-ya-la Ø-Ø-yatkÁŋ s'a
 coffee hot-DER-REST INAN-3SG.A-drink HAB
 He always drinks his coffee **hot**.
 (data: JAH)
- (b) *Mní kiŋ šayéla yatké.*
mní kiŋ šá-ya-la Ø-Ø-yatkÁŋ
 water DEF red-DER-REST INAN-3SG.A-drink
 She drank the water **red**. (from the chokecherries soaked in it)
 (data: EDT-Leg-1, sentence 55)
- (c) *Táku waŋ pǰaŋšyéla čhaphé.*
táku waŋ pǰaŋš-ya-la čha-Ø-Ø-phÁ
 something INDEF soft(material)-DER-REST stab-3SG.U-3SG.A-stem
 He stabbed something **soft**.
 (data: BBBJ)
- (d) *Pǰaŋšyéla čhaphé.*
pǰaŋš-ya-la čha-Ø-Ø-phÁ
 soft(material)-DER-REST stab-3SG.U-3SG.A-stem
 He stabbed it (being) **soft**.
 (data: DT story 56, sentence 5)
- (e) *Thípi waŋ skayá othí.*
thípi waŋ ská-ya o-Ø-Ø-thí
 house INDEF white-DER live.in-3SG.U-3SG.A-stem
 He lives in a **white** house.
 (data: RFT)

In (154c), the DM describes the density of the object and thus it cannot be interpreted as a manner modifier expressing the intensity of the stabbing (i.e. “softly”). For the latter sense Lakota speakers use words like *iwáštegla* ‘gently’ or *iyús’oya* ‘barely’. In (154c), the object is overt but when there is no RP in the sentence and the object is zero coded, as in (154d), the English translation is not felicitous and does not portray the fact that the DM modifies the core argument.

The constituent projection of (154a) is given in Figure 5.18 and shows that the DM is an ad-argument modifier with scope over the undergoer core argument.

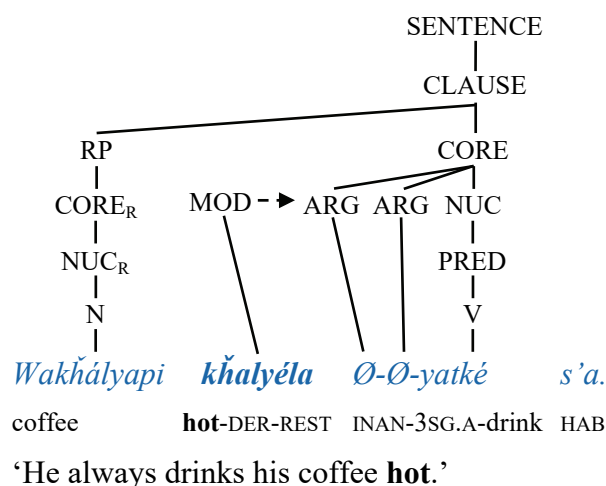


Figure 5.18 Ad-argument modifier with scope over the object argument

Figure 5.18 shows that the DM *kħalyéla* 'hot' modifies the obligatory core argument rather than the optional RP *wakħályapi* 'coffee'.

That some DMs are strongly lexically restricted to participant orientation can be further exemplified with the DM *zaníyaŋ* 'healthy' or 'safe and sound' (from the stative verb *zani*). In (155a) *zaníyaŋ* can be interpreted only as participant oriented, while the manner reading is not considered felicitous by native speakers. The invented sentence in (155b) is judged as ungrammatical by native speakers.

- (155) (a) *Mičhíŋča zaníyaŋ úŋpi.*
mičhíŋča zaní-ya Ø-úŋ-pi
 my.child healthy-DER 3SG.A-exist
 1. My children live/are **healthy**. (ad-argument modification)
 2. * My children live **healthily**. (ad-core modification)
 (data: RFT)
- (b) * *Zaníyaŋ wóte s'a.*
zaní-ya wó-Ø-tA s'a
healthy-DER eat-3SG.A-stem HAB
 Intended: She always eats **healthily**. (ad-core modification)
 (data: GJ: BBBJ, IEC, SBB)

This lexical restriction of *zaníyan* is likely similar to that we have seen with complex DMs with body part Ns, which are also strongly participant oriented and subject oriented (see 5.9.).

The data in (153) and (154) shows the predominant syntactic position of semantically subject oriented derived modifiers, which is to the right of the RP (whenever the participant RP is present). However, subject oriented derived modifiers placed to the left of the RP can also be found in the corpus, as shown in (156):

(156) (a) *Ošílya uká kiŋ šayéla ečhéča.*

o-šíča-ya uká kiŋ šá-ya-la e-Ø-čhéča
 LOC-bad-DER skin the red-DER-REST to.be.such-3SG.U-stem

Infected inside his skin was **red**.
 (data: EDT Leg-8, sentence 22)

(b) *Ĥolyéla mní kiŋ háŋ ké.*

hótA-ya mní kiŋ Ø-hÁŋ ké
 grey-DER water the INAN-stand HSY

The water stood **grey**.
 (data: BO-23)

The position to the left of the participant RP can also be found with object oriented DMs, as in (157):

(157) (a) *Skayá wóyute kiŋ khičhájŋŋyaŋpi s'a.*

ská-ya wóyute kiŋ khičháj-Ø-uŋ-yaŋ-pi s'a
 white-DER food the prepare-INAN-1A-stem-PL HAB

1. We would always prepare the food **in a clean manner**.
 2. We would always prepare the food **clean**. (resultative)
 (data: DTA01, 3:22)

(b) *Iyótaŋ wakhájŋŋyaŋ phezúta yuhá.*

iyótaŋ wakháj-yaŋ phezúta Ø-Ø-yuhá
 most powerful-DER medicine INAN-3SG.A-have

He has the most **powerful** medicines.
 (data: BO-109)

- (c) *Wakháyay táku wanyájkapi.*
wakháy-yay táku way-Ø-Ø-yánka-pi
 mysterious-DER thing see-INAN-3A-stemp-PL
 They saw something **mysterious**.
 (data: RFT)
- (d) *Othájkthájkaya čhankú káh áya škhé.*
othájk-thánka-ya čhankú Ø-káğA á-Ø-ya škhÁ
 wide-REDUP-DER path INAN-make COLL-3A-go HSY
 They went creating **wide** paths. (describing the migrating tribe)
 (data: DT Story 47, sentence 4)

Even though participant oriented DMs occurring to the left of the RP are proportionately less common than those positioned to the right, the data in (156) suggests that syntactically speaking even those DMs that are strongly semantically oriented on the participant are not restricted to the post-RP position. However, even though the DMs in (156) and (157) occur to the left of the RP, they are still ad-ARG modifiers. It is via the cross-referencing between the ARG and the RP that the latter receives the attribute expressed by the DM.

Further evidence that DMs are often more tightly bound to the participant comes from data like that in (158):

- (158) *Miméya inyan nískoskokeča čha léčhiya yanke.*
mimÁ-ya inyan ní-Ø-sko-sko-keča čha léčhiya Ø-yanke
 round-DER rock huge-INAN-STEM-REDUP-STEM DET there INAN-sit
 They were some **huge round** rocks that sat there.
 (data: VDS)

In (158), the DM is placed before the RP which is inside a cleft clause marked with *čha*. Consequently, the DM is not in the clause headed by the main verb and thus cannot be event oriented. Note also that the modifier *léčhiya* ‘there’ is in the matrix clause and modifies the matrix predicate. The constituent project of (158) is given in Figure 5.19.

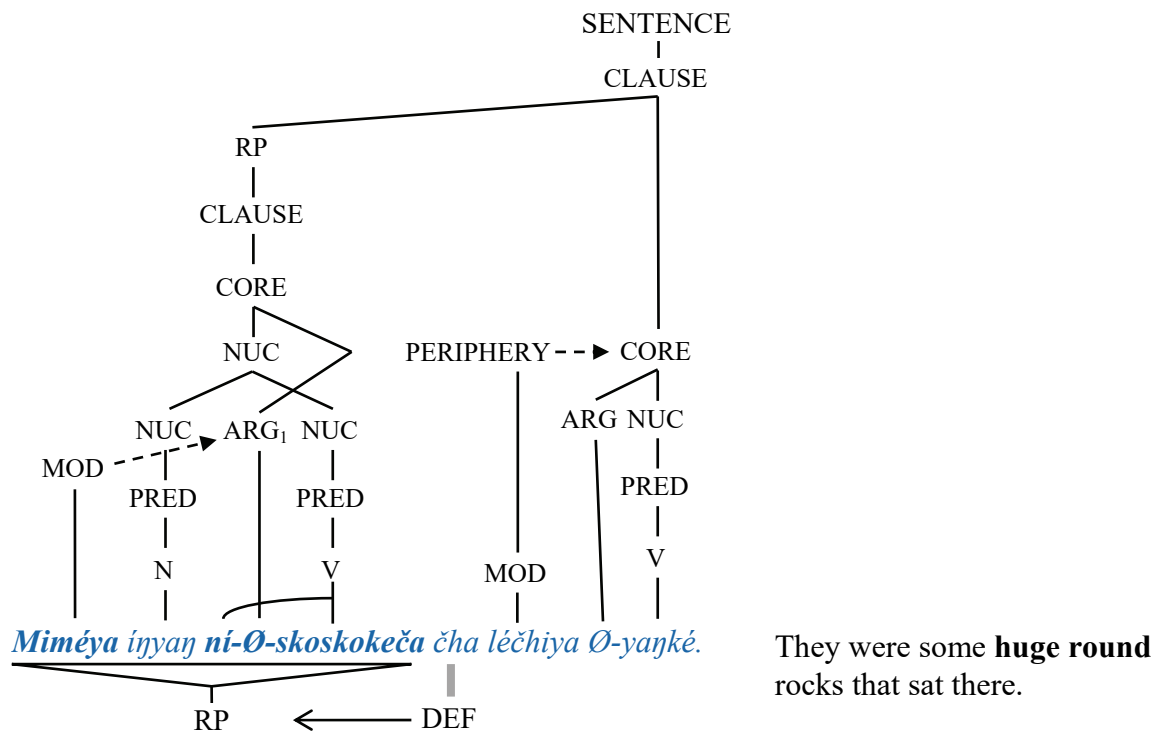


Figure 5.19 Modifier with scope over ARG of a cleft, projection of (158)

As a participant oriented DM, *miméya* ‘round’ in Figure 5.19 has scope over the ARG. The syntactic position of the DM *miméya* is the only one possible in that sentence because the DM (or anything else) cannot come between the two co-predicates connected via nuclear cosubordination and it cannot occur to the immediate left of the cleft marker *čha* which can follow only predicates.

Another piece of evidence for participant orientation of DMs comes from their reduplication, as was already discussed with the reduplicated form of *héčhel* in (114). An example is in (159a), where reduplication of the T-word *táku* reveal that the RP is plural and consequently the reduplication of the derived modifier agrees with the plurality of the RP and does not code the plurality of the event. In (159b), on the other hand, the participant/event orientation of the DM is vague, so its reduplication can

refer to either the plurality of the object RP (*táku óta* ‘many things’) or to the habitual (repetitive) aspect of the event marked with the frequency operator *s’a*. The reduplication of the DM in (159c) clearly indicates its participant orientation.

- (159) (a) *Takúku ikčéčkěyakel uŋ wóglag naúŋžipi.*
táku-ku ikčé-kče-ya-kel uŋ wóglag na-úŋ-žip-i
 thing-REDUP ordinary-REDUP-DER-VAG about talk stand-1A-stem-PL
 We stood talking about **inconsequential** things.
 (data: EDT-Inf-5, sentence 16)
- (b) *Táku óta wakháŋkháŋyaŋ ečhúŋ s’a.*
táku óta wakháŋ-kháŋ-ya ečh-Ø-Ø-úŋ s’a
 thing many mysterious-REDUP-DER do-INAN-3SG.A-stem HAB
 He would always do many mysterious things.
 (data: BO-61)
- (c) *Háŋskeskeya yuksápi.*
háŋskA-skA-ya Ø-Ø-yuksá-pi
 long.long-DER INAN-3A-cut-PL
 They cut them long. (sticks)
 (data: EDT-Inf-13, sentence 6)
- (d) *Túŋweni léčhekče hayápi múnj šni.*
túŋweni léčheča-čheča hayápi Ø-m-úŋ šni
 never such.as.this-REDUP clothes INAN-1SG.A-use NEG
 I never wore **such** clothing as these.
 (data: EDT-Aut-6, sentence 9)

There are, of course, cases where the semantics of the DM restrict it to being event oriented, as in the example in (160):

- (160) *Osníyaŋ ophič’iya po.*
osní-ya ophi-Ø-ič’i-ya po
 cold-DER conduct.oneself-3SG.A-REFL-stem IMPER-PL
 Stay **cool**.
 (data: RFT)

In (160), the DM originates in the stative verb *osní* ‘it is cold’ which is used only in reference to air temperature. Thus it cannot be participant oriented. The literal

translation of (160) is something like “Maneuver yourselves/Stay in a cold air manner.” Thus (160) is a true manner modifier in that it does not ascribe an attribute to the participant.

Conclusion: The data and the discussion in this section showed that some DMs are semantically restricted to being participant or event oriented, and some DMs are vague with respect to participant or event reading. Participant oriented DM’s are ad-ARG modifiers, whereas event oriented DMs are ad-CORE modifiers. When the participant is represented by an RP (which is always optional), the DM can occur in the post-RP or pre-RP position, regardless of the orientation of the former. DMs which describe physical appearance or material composition ascribe an attribute to the participant and generally function as ad-argument modifiers.

Object oriented DM’s have scope over the undergoer argument of transitive predicates.

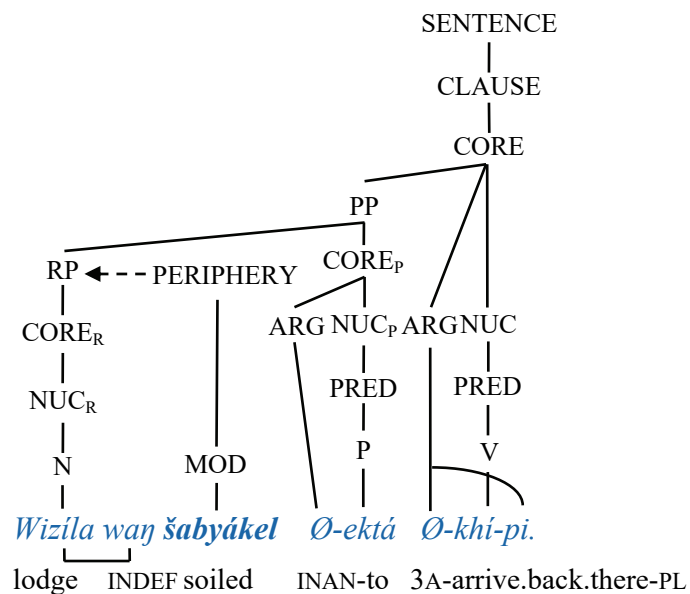
5.11. RP-external ad-nominal modification

Section 5.10 showed that DMs function primarily as ad-argument and ad-core modifiers, and that many of them are vague in their participant and event orientation. In this section I will show examples where DMs are RP-external ad-nominal modifiers.

The first example is provided in (161), where the RP modified by a DM is within a postpositional phrase.

- (161) *Wizíla way šabyákel ektá khípi.*
wizí-la way šápA-ya-kel Ø-ektá Ø-khí-pi
 lodge-DIM a dirty-DER-VAG INAN-to 3A-arrive.back.there-PL
 They arrived back there at a **rather soiled** little lodge.
 (data: EDT-Col-5, sentence 82)

The sentence in (161) comes from an old legend in which two poor boys use magic to make themselves look handsome and desirable, and wear magically beautiful clothes. This broader context is one of a number of indications that the DM *šabyákel* “rather soiled” in (161) is neither event oriented nor actor oriented, i.e. it does not mean “they arrived back all rather soiled.” Instead, *šabyákel* qualifies the lodge at the time the boys returned to it. Notice that the DM *šabyákel* precedes the postposition *ektá*, which makes it PP internal even though it is RP-external. Figure 5.20 provides the constituent projection of (161).



They arrived back at a rather soiled little lodge.

Figure 5.20 RP-external modification inside a PP, constituent projection of (161)

The DM in Figure 5.20 is decidedly not a floating clause level modifier but rather it is closely bound to the RP it modifies and its syntactic position is the only one possible. If the DM *šabyákel* is moved to the front of the sentence or to the left of the predicate *khípi*, it would become an ad-argument or ad-core modifier and in consequence it would refer to the physical appearance of the boys rather than the lodge.¹²

Another example of a complex sentence with a DM functioning as an ad-nominal modifier is in (162), where the DM *ħobyákel* ‘handsome’ is closely bound to the subject RP and it is separated from the predicate by a postpositional phrase.

- (162) *Eháš wičháša waŋ ħobyákel wihákakta k’uŋ kičhí ayáŋpa škhé.*
eháš wičháša waŋ ħob-yá-kel wihákakta k’uŋ
 too.much man a handsome-DER-VAG younger.daughter DEF
Ø-kičhí a-Ø-yáŋpa škhé
 3SG-with spend.the.night-3SG.U-stem QUOT

A most **handsome** man spent the night with the younger daughter.
 (data: DT Story 39, sentence 18)

The syntactic position of the DM in (162) is again the only one allowing the modification of the subject RP (all other positions of the DM were judged as ungrammatical by native speakers I consulted (SHE, BBBJ, IEC, pc.)). Additional evidence of how tightly the DM is bound to the RP is the sentence initial intensifier *eháš* ‘too much, most’ which modifies the entire RP, including the derived modifier.

An even more complex sentence is in (163), where the DM-modified RP is the internal head of a relative clause. Thus the DM *ħobyákel* ‘handsome’ is also relative

¹² The PP in Figure 5.20 is treated as a semantic goal and it is therefore shown as an oblique core argument in the constituent projection.

clause internal which is evidence that it modifies the RC-internal RP and not the argument or the core of the predicate in the matrix clause.

- (163) *Kħoškálaka waŋ ĥobyákel ištá čikčik'ala-wiyàkpa-kpa čha čhokáb Ø-hiyú.*
kħoškálaka waŋ ĥob-yá-kel ištá
 young.man a handsome-DER-VAG eye
čik-čik'ala-Ø-wiyàkpa-kpa čha čhokáb Ø-hiyú
 small.RED-3SG.U-shiny-RED DET middle 3SG.A-come.forth
 A **handsome** young man who had small shiny eyes stepped into the center.
 (data: EDT-Col-1, sentence 56)

Once again, native speakers rejected any other position of DM other than the position shown in (163). Figure 5.21 offers the constituent projection of (163):

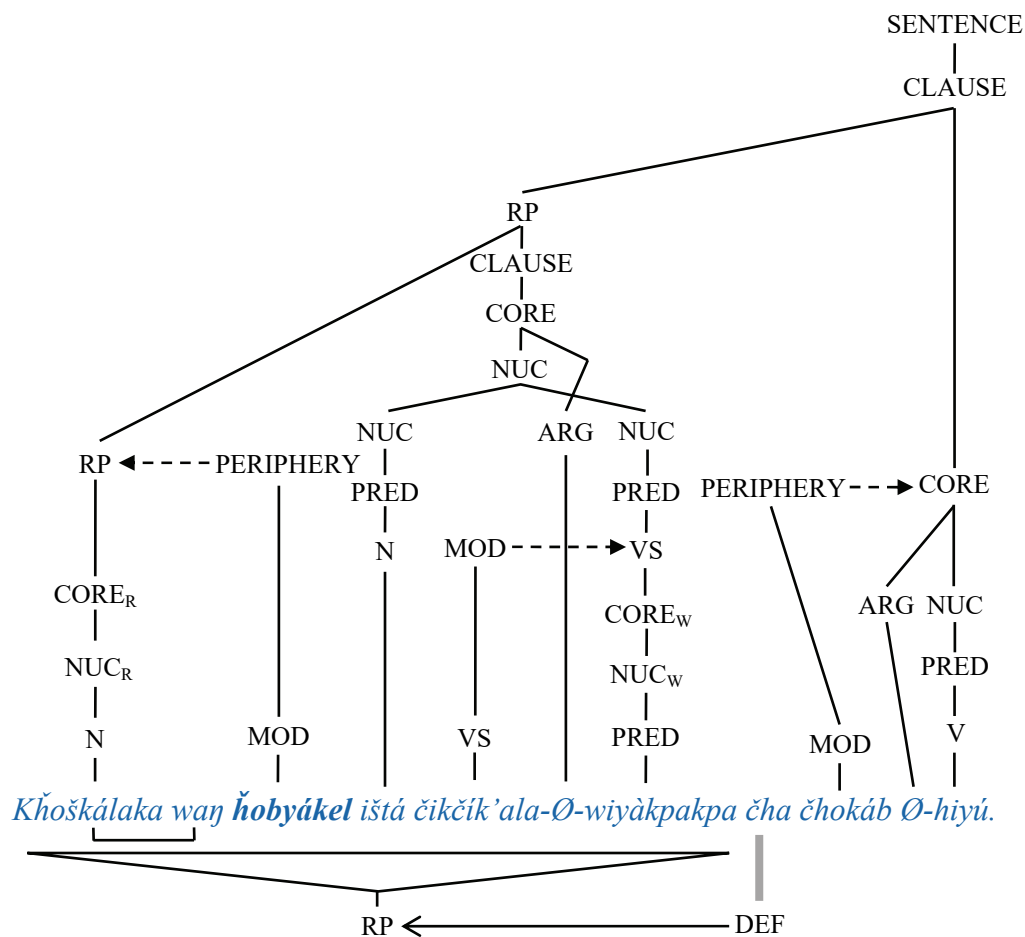


Figure 5.21: RP-external modification inside a RC, constituent projection of (163)

The constituent projection in Figure 5.21 shows that the DM *hobyákel* is syntactically bound to the participant and has no syntactic relationship with the matrix verb. Thus it functions as an RP-external ad-nominal modifier. One could argue that the DM *hobyákel* could have scope over the ARG or the CORE of the stative predicate in the relative clause, but this is not possible because the DM inside the relative clause is licensed via the presence of the RP that functions as the RC-internal head. Omitting the head and not the DM would result in an ungrammatical construction, which is evidence that the DM cannot have scope over the ARG or the CORE of the predicate of the RC.¹³

Conclusion: DMs can function as RP-external ad-nominal modifiers (traditionally ‘adjectives’). This usually happens when they modify an RP which occurs inside a subordinated clause (such as a RC), inside a PP, or when they are separated from the matrix verb by a PP or another constituent. In such situations the DM can occur only to the right of the RP it modifies and is licensed only by the presence of the RP.

Thus it can be stated that in complex sentences these DMs gravitate away from the predicate and closer to the RP they modify which shows they are tightly bound to the latter. We can assume that the dependency length minimization is in part responsible for the proximity of DMs to their nominal RPs and their distance from the predicate. If this is so, it would suggest that the function of these derived modifiers is more similar to that of attributives than to the function of canonical manner modifiers (traditionally adverbials).

¹³ The SV+SV comopund (*čikčik’ala-wiyàkpa*) in Figure 5.21 and its internal structure is addressed in section 8.3.

5.12. Subject-object orientation of derived modifiers

This section discusses derived modifier orientation to subject and object.

It was already mentioned in section 5.9 that complex DMs which involve body parts are generally subject oriented (for data, see (140) and (141)). Also, the examples in section 5.10 under (154) showed that DMs can be object oriented, but all of the examples in that section involved inanimate objects which do not present a problem for determining the subject-object orientation. When the object is animate, on the other hand, the orientation is less obvious. This is largely due to the fact that Lakota derived modifiers, like secondary predicates, are not marked for agreement with the RP cross-referenced by the core argument. Thus, the difficulties with analyzing DM orientation to subject and object are very similar to those described for secondary predicates (discussed in section 4.3.).

Since Lakota derived modifiers have no agreement marking with the RP cross-referenced with the core argument, we could assume that sentences with an animate object and a DM are either ambiguous with respect to subject-object orientation or allow only one reading. The data in (164) shows evidence for the latter:

- (164) *Hokšíla kiŋ t̥aŋkšítku_i kiŋ zaníyaŋ_i gloglí.*
hokšíla kiŋ t̥aŋkšítku kiŋ zani-ya Ø-Ø-gloglí
 boy the his.younger.sister the healthy-DER 3SG.U-3SG-A-bring
 1. The boy brought his sister_i back **healthy**_i. (i.e. sound and safe)
 2. * The boy_i brought his sister back **healthy**_i.
 (data: MARC)

To test the possibility of changing the subject-object orientation, I modified the above sentence by moving the DM *zaníyaŋ* to the right of the actor RP *hokšíla kiŋ*, as shown in (165a). Native speakers' grammaticality judgment of (165a) was mixed in

that two speakers thought *zaniyaŋ* describes the boy while nine speakers were puzzled and unsure as to what *zaniyaŋ* referred to, and suggested its removal or rephrasing of the sentence entirely. Moving *zaniyaŋ* to the front, as shown in (165b), did not seem to improve the score and speakers suggested going back to the original version in (164).

- (165) (a) ?? *Hokšila kiŋ zaniyaŋ tʃaŋkšítku kiŋ gloglí.*
hokšila kiŋ zani-ya tʃaŋkšítku kiŋ Ø-Ø-gloglí
 boy the healthy-DER his.younger.sister the 3SG.U-3SG-A-bring
 ?? **Healthy**_i, the boy_i brought his sister.
- (b) ?? *Zaniyaŋ hokšila kiŋ tʃaŋkšítku kiŋ gloglí.*
zani-ya hokšila kiŋ tʃaŋkšítku kiŋ Ø-Ø-gloglí
 healthy-DER boy the his.younger.sister the 3SG.U-3SG-A-bring
 ?? **Healthy**_i, the boy_i brought his sister.

The object orientation of *zaniyaŋ* is clearly evident when no RPs are present in the sentence, as in (166a):

- (166) (a) *Zaniyaŋ gloglí.*
zani-ya Ø-Ø-gloglí
 healthy-DER 3SG.U-3SG.A-bring
 1. He brought her_i back **healthy**_i.
 2. * He_i brought her back **healthy**_i.
 (data: RFT 1992)
- (b) *Wiŋyaŋ kiŋ čhiŋčá zaniyaŋ waŋgláke.*
wiŋyaŋ kiŋ čhiŋčá zani-ya waŋ-Ø-Ø-gl-ákA
 woman the her.child healthy-DER see-3SG.U-3SG.A-POSS-stem
 1. The woman saw her child_i **healthy**_i.
 2. * The woman_i saw her child **healthy**_i.
 (data: EDT Col-3, sentence 329)

The object oriented reading of *zaniyaŋ* is in line with the findings about *héčhel* which is also object oriented when used with transitive verbs, as discussed in 5.2.

However, replacing *zaniyaŋ* in (165) with *čhaŋtéwaštēja* ‘happy’ results in subject oriented reading of both sentences, because *čhaŋtéwaštēja* is in fact a complex DM

involving a body part N (*čhanťé* ‘heart’) and such DMs are generally subject oriented (as discussed in section 5.9.).

The DM *wakħányan* described in section 5.10 as being variably participant or event oriented seems to never have subject orientation in sentences with animate subject and object. An example is offered in (167):

- (167) *Winyan wan wakħányan wanyánke.*
winyan wan wakħány-yan wan-Ø-Ø-yánkA
 woman INDEF mysterious-DER see-3SG.U-3SG.A-stem
1. He saw a **mysterious** woman.
 2. * He_i saw a woman **mysterious**_i.
- (data: RFT 1992)

In conclusion we can say that derived modifiers are object oriented when used with transitive verbs. An exception of this is represented by complex derived modifiers involving body part Ns.

5.13. Comparison of DMs, attributive and predicative stative verbs

In order to better understand the motivations for the prevailing use of derived modifiers as opposed to secondary predicates, we need to compare derived modifiers with attributive and predicative stative verbs.

In 3.5 I stated that SVs can function as independent (i.e. non-complex and non-secondary) predicates only in two cases; when they are the only word in a sentence and when they follow a noun modified by a definite article, quantifier, partitive or additive particle (i.e. when there is a separator between the N and the SV).

When a N is modified by one of the four indefinite articles (i.e. *wan*, *wanží*, *eyá*, *etán*), then it can be followed by a SV predicate only if the SV functions as a

predicate of a RC. This is shown in the pattern-based contrastive examples given in (168), where (168a) has a SV as a simple predicate, (168b) is ungrammatical because the SV *tšó* ‘blue’ cannot function as a SP and thus cannot occur before another verb, but it can be a predicate in a RC, which is shown in (168c) where the RC is marked with *čha* and in (168d) where the RC is marked with *kiŋ*.

(168) (a) *Blé kiŋ tšó.*

blé kiŋ Ø-tšó
lake the 3SG.U-blue

The lake was **blue**.

(b) **Blé waŋ tšó waŋyáŋke.*

blé waŋ Ø-tšó waŋ-Ø-Ø-yáŋkA
lake a 3SG.U-blue see-INAN-3SG.A-stem

He saw a lake **blue**.

(c) *Blé waŋ tšó čha waŋyáŋke.*

blé waŋ Ø-tšó čha waŋ-Ø-Ø-yáŋkA
lake a 3SG.U-blue DET see-INAN-3SG.A-stem

She saw a lake **that was blue**.

(d) *Blé waŋ tšó kiŋ waŋyáŋke.*

blé waŋ Ø-tšó kiŋ waŋ-Ø-Ø-yáŋkA
lake a 3SG.U-blue DEF see-INAN-3SG.A-stem

She saw the lake **that was blue**.

(data: pattern based: BBBJ, IEC, KLT)

(e) *Blé tšó waŋ waŋyáŋke.*

blé tšó waŋ waŋ-Ø-Ø-yáŋkA
lake blue a see-INAN-3SG.A-stem

She saw **a blue lake**.

(data: pattern based: BBBJ, IEC, KLT)

In (168a) the SV can function as a predicate because it is separated from the N by a definite article. The same structure with an indefinite article, given in (168b), is felt by native speakers as incomplete and ill-formed, whether it is followed by an active verb or not followed by a verb at all (**Blé waŋ tšó*). The indefinite article, on the other

hand, is obligatory when the N is a head of a RC formed by a SV, as in (168c) and (168d), where the RCs are marked by the articles *čha* and *kinj* respectively.

What the data in (168) show is that SVs can function as predicates, as in (168a), (168c) and (168d), or as RP-internal modifiers, as in (168e), but not as RP-external modifiers (i.e. ad-ARG or ad-CORE modifiers) or secondary predicates (with a few exceptions, discussed in section 4.5.).

In order for the majority of stative verbs to be used as RP-external modifiers, they first have to be liberated from their predicative function; they have to be morphologically modified (by the suffix *-ya*) in order to signal to the interlocutor that the SV is not the clause-final predicate and that something else follows. This is illustrated in (169a). For contrastive comparison, a relative clause version is provided in (169b) and an RP-internal modification version is given in (169c).

- (169) (a) *Héčhiya blé waŋ tšoyá ħpáye.*
héčhiya blé waŋ tšoyá Ø-ħpáyA
 there lake a blue 3SG.A-lie

There a lake lay **blue**.

- (b) *Héčhiya blé waŋ tšó čha ħpáye.*
héčhiya blé waŋ Ø-tšó čha Ø-ħpáyA
 there lake a 3SG.U-blue DET 3SG.A-lie

There lay a lake that **was blue**.

- (c) *Héčhiya blé tšó waŋ ħpáye.*
héčhiya blé tšó waŋ Ø-ħpáyA
 there lake blue INDEF 3SG.A-lie

There lay a **blue** lake.

(data: pattern based: BBBJ, IEC, KLT)

In (169b), the stative verb *tšó* ‘to be blue’ functions as a predicate forming a RC which licenses its predication on a N modified with an indefinite article. In (169a),

there is no RC and thus the SV is obligatorily modified with the suffix *-ya* which licenses the RP-external position of the attributive modifier *tǎoyá*.

The data in (169c) is included for comparison with (169a), to illustrate the difference between these two types of SV modification, RP-internal and RP-external respectively. Note that the sentence with the DM *tǎoyá* in (169a) does not have the same translation as the sentence with the RP-internal SV modifier in (169c), in that the translation of the former suggests this is in fact depictive modification. Another difference is that the sentential stress in (169a) falls on the depictive (*tǎoyá*), but in (169c) it is on the N member of the RP (*blé*). This corresponds with a different focal structure of the sentences since SPs and RCs are strongly associated with the focal expression, while RP-internal modifiers are focal only under certain circumstances. The RP in (169c) is focal and so the attribute *tǎó* is a component of the focal expression, but in (169a) and (169b) the attributive information is more strongly focal.

Based on the above discussion it can be hypothesized that one of the motivations for the shift from using secondary predication to employing morphologically derived modifiers lies in the high structural and morphological similarity between secondary predicates on the one hand, and modifiers and predicates on the other. In many languages, especially in those where secondary predicates have adjectival lexical composition, these three syntactic functions are distinguishable via their position in the sentence or the presence or lack of a copula. This is exemplified in (170) where both the Czech sentences and their English translations show that the three functions of the adjective *veselý* ‘cheerful’ are easily distinguishable.

- (170) (a) *David přišel domů veselý.* (secondary predicate)
David-Ø přišel domů vesel-ý
 David-NOM came home cheerful-NOM
 David came home **cheerful**.
- (b) *David byl veselý.* (predicate with a copula)
David byl vesel-ý
 David-NOM was cheerful-NOM
 David **was cheerful**.
- (c) *Veselý David přišel domů.* (modifier)
vesel-ý David přišel domů
 cheerful-NOM David-NOM came home
Cheerful David came home.

In both Czech and English the attributive modifiers, adjectival predicates and secondary predicates are morphologically identical, but their syntactic position clearly distinguishes them.

This is different in Lakota, a language in which adjectives do not exist and in which attributive (RP-internal) modification is coded by stative verbs, i.e. words that can function as predicates without a copula. Consequently, a sentence with stative verb predication looks structurally identical to that with a secondary predicate up to where the latter is followed by the primary predicate. This is illustrated in the minimal pair offered in (171):

- (171) (a) *Wičháša kiŋ wayázaŋ.*
wičháša kiŋ wa-Ø-yázaŋ
 man the sick-3SG.U-stem
 The man **was sick**.
 (data: MARC)
- (b) *Wičháša kiŋ wayázaŋ ħpáye.*
wičháša kiŋ wayázaŋ Ø-ħpáye
 man the sick 3SG.A-lie
 The man lay **sick**.
 (data: BQ, see also EDT Aut-3: sentence 23, and BD: 73)

Such structural similarity can lead to problems with real time parsing, i.e. the listener can be lured into an incorrect parse of (171b). Thus it seems that at least part of the motivations for the modification of SVs in depictive position is to avoid garden paths and create as much functional transparency as possible. The fact that there are stative verbs like *wayázan*, *t'Á* and other verbs listed in 4.5 which can still function as genuine depictives (i.e. without being modified by suffixing *-ya*), is evidence that Lakota has been undergoing diachronic development from one preferred strategy to another. Additional evidence in support of this hypothesis is the fact that a number of stative verbs that are found in older parts of the text corpus functioning as SPs, can only function as DMs in modern Lakota (e.g. *blaská* 'flat' versus *blaskáya* 'flat').

Furthermore, as mentioned earlier, SPs are RP-external and therefore syntactically more similar to predicative SVs, but semantically they are closer to attributive SVs. Modifying them morphologically helps to alleviate this double similarity and it makes them more closely similar to attributives.

Another hypothesis for the motivation of derived modification is that it helps to simplify embedded relative clauses. An example of an embedded RC is offered in (172a) and contrasted with the data in (172b) where the embedded RC is replaced with a derived modifier:

- (172) (a) *Táku k'eyá sapsápa čha hiyéya čha wayáŋka škhé.*
táku k'eyá sápa-sápa čha Ø-hiyéya čha
 thing some black-REDUP DET INAN-scattered DET
waŋ-Ø-Ø-yáŋka škhé
 see-INAN-3SG.A-stem HSY

It is said he saw some things that lay there scattered **that were black**.
 (data: modified from the sentence below, GJ: SHE, BBBJ, ICE)

- (b) *Táku k'eyá sapsábya hiyéya čha wayáŋka škhé.*
táku k'eyá sápa-sápa-ya Ø-hiyéya čha
 thing some black-REDUP-DER INAN-scattered DET
way-Ø-Ø-yáŋka škhé
 see-INAN-3SG.A-stem HSY

It is said he saw some things that lay there scattered **black**.
 (data: DT story 46, sentence 3)

Embedded RCs are quite common in Lakota and the corpus provides examples with as many as 5 stacked clauses, but using derived modifiers instead of RCs is a common strategy to avoid RC embedding. Another example is offered in (173).

- (173) *Hú way thóyela nuŋnúžela čha hinápħa ké.*
hú way thó-ya-la nuŋnúž-a-la čha hiná-Ø-pħA ké
 stalk INDEF green-DER-REST tender-REST good emerge-INAN-stem HSY

A stalk sprung up that was **green** (and) **tender**.
 (data: EDT Col-1, sentence 229)

By definition DMs cannot function predicatively and consequently they cannot form a RC by themselves, but they can be part of a RC with a predicative element, as does the DM *thóyela* with the SV *nuŋnúžela* in (173).

Section 4.4 showed a comparison of SPC and unmarked complement clauses which revealed that there is a structural ambiguity between these two constructions whenever there are no overt personal affixes. This fact is very likely another reason why most SPs based on stative verbs have been undergoing diachronic replacement with derived modifiers, i.e. in order to reduce the ambiguity.

The diachronically more modern approach is shown in (174), where (174a) is a construction with a DM which makes it easily distinguishable from the unmarked complement clause in (174b).

- (174) (a) *Úŋšiya wanyáŋke.* (DM construction)
úŋši-ya wany-Ø-Ø-yáŋka
 pitiful-DER see-3SG.U-3SG.A-stem
 She saw him; pitiful.
 (data: BT: p. 228, line 113)
- (b) *Úŋšika wanyáŋke.* (unmarked complement clause construction)
úŋšika wany-Ø-Ø-yáŋka
 pitiful see-3SG.U-3SG.A-stem
 She saw (that) he is pitiful.
 (data: RFT 1992)

The verb *úŋšika* is one of the few stative verbs that can still function both as SPs and DMs. But the majority of stative verbs can no longer function as SPs and therefore cannot partake in constructions that are ambiguous with respect to secondary predicate and complement clause constructions.

5.14. Free adjuncts in LDP and RDP

Derived modifiers can also function as free adjuncts, that is, adjuncts that are only loosely attached to the clause headed by the predicate. In Lakota, such free adjuncts are separated with a strong prosodic break so they occur in the right-detached position (RDP) of the layered structure of the clause (LSC) constituting a clause-like unit of their own. Examples are given in (175):

- (175) (a) *Kitányan-kayéš míčigli yé, zaníyan!*
kitányan-kayéš m-Ø-kíči-gli yé zaníyan
 fortunately 1SG.U- 3SG.U-DAT2-come.back DECL.FEM healthy
 Fortunately mine has returned to me, healthy!
 (data: EDT Eth-12, para 3)
- (b) *Él étuŋwe šni anákičhigwag uŋk'úŋpi, oíyokšilyela!*
él étuŋwAŋ šni aná-kíči-gwag uŋk-'úŋ-pi oíyokšilyela
 at look not kick.in.protest-RECIP-stem 1A-exist-PL sad
 We bicker at each other not paying attention to it, how pathetic!
 (data: IS, p. 31)

(c) *Hí yazáŋpi háŋtaŋhaŋ hé iyógnakapi kte, pusyákel.*

hí yazáŋ-pi háŋtaŋhaŋ hé i-y-ó-Ø-Ø-gnaka-pi
tooth ache-PL if that mouth-EUPH-loc-INAN-3A-put-PL

kte pusyákel

FUT.IRR dry

If they have a toothache, they put that in their mouths, **dry**.

(data: FREH 3-23: 1:31)

In (175a), the derived modifier *zaníyaŋ* can also be placed before the primary predicate *míčigli* ‘mine has returned’ or sentence initially. In this sentence *zaníyaŋ* is an object oriented depictive modifier because it has scope over the object argument of the stative dative verb *kičigli* which takes undergoer affixes for subject marking.¹⁴ An alternative translation of (175a) that reflects the subject-object relationship is “Fortunately I was affected (beneficially) by the return of mine, healthy.”

In (175b), the derived modifier *óiyokšilyela* could stand in three other positions; before each of the three verbs depending on which part of the clause is being described as sad or pathetic; *óiyokšilyela él étuŋwe šni* ‘**sadly**, not paying attention’, *óiyokšilyela anákičhigwag* ‘**sadly** bickering at each other’ or *óiyokšilyela unġ’úŋpi* ‘we are **pathetic**’ or ‘**in a pathetic way** we exist’. Since the stative verb *óiyokišičA* never takes an animate argument, the modifier derived from it is more likely a manner modifier than a depictive modifier.

In (175c), the depictive modifier *pusyákel* can be placed to the left of the predicate.

The post-clausal position of the derived modifiers in (175a) and (175b) is an intensification strategy, it accentuates the modifier whose stressed syllable is usually pronounced with a higher pitch.

The contrasting examples in (176) compare free adjunct DMs in RDP and LDP with the canonical DM position given in (176a):

¹⁴ For a detailed description and analysis of Lakota stative dative verbs, see Ullrich 2016: pp 196 and pp 510).

- (176) (a) *Hokšila kiŋ zaniyaŋ glí.* (ad-ARG modifier)
hokšila kiŋ zani-ya Ø-glí
 boy the healthy-DER 3SG.A-come.back
 The boy came back safe and sound.
 (data: MARC)
- (b) *Hokšila kiŋ glí, zaniyaŋ!* (DM in RDP)
hokšila kiŋ Ø-glí zani-ya
 boy the 3SG.A-come.back healthy-DER
 The boy came back, safe and sound!
 (data: BBBJ, p.c.)
- (c) *Zaniyaŋ, hokšila kiŋ glí.* (DM in LDP)
zani-ya hokšila kiŋ Ø-glí
 healthy-DER boy the 3SG.A-come.back
 Safe and sound, the boy came back.
 (data: BBBJ, p.c.)

Free adjuncts can also be used in complete isolation from another clause, as in

(177):

- (177) (a) *Oiyokšilyela!*
oiyokšičA-ya-la
 sad-DER-REST
 ‘How sad.’
 (data: IS-LE: p. 31)
- (b) *Úŋšiyakel!*
úŋši-ya-kel
 poor-DER-REST
 ‘Poor thing!’
 (data: BT p. 80, line 11)
- (c) *Glí he? – Háŋ, zaniyaŋ!*
glí he háŋ zani-ya
 3SG.A-come.back Q yes healthy-DER
 ‘Did he return? – Yes, sound and safe/healthy!’
 (data: RFT)
- (d) *Theŋiyakel!*
theŋi-ya-kel
 dreadful-DER-VAG
 How dreadful!
 (data: MARC)

The examples in (177) show instances in which DMs are used in elliptical structures. There are indications that this usage might be responsible for the fact that DMs have begun to be reanalyzed and to be used in other syntactic functions, which is discussed in the following section.

5.15. Other syntactic functions of *-ya* forms

In some instances it is not easy to determine whether the words modified with the suffix *-ya* function as free adjuncts forming elliptical structures (as seen in 5.14) or as actual predicates. Exemplified are in (178):

- (178) (a) *Šičáya k'éyaš takómni tókhel ħ'anphiča šni yé.*
šičáya k'éyaš takómni tókhel ħ'an-Ø-phiča šni yé
 bad but certainly how act-3SG.U-possible NEG DECL
It is bad, but there is nothing to be done.
 (data: RFT)
- (b) *Olépi k'éyaš itúya.*
o-Ø-lé-pi k'éyaš itúya
 look.for-3SG.U-3A-stem-PL but in.vain
 They looked for him, but **(it was) in vain**.
 (data: DT story 48, sentence 4)

The modifier *šičáya* in (178a) is conjoined with another clause with a conjunction making it appear as a genuine predicate. It is obligatorily translated with “it” into English. In (178b) it is less obvious that *itúya* functions predicatively.

The evidence that words with *-ya* in fact sometimes do function predicatively lies in the position of the negation particle *šni*. As explained in 5.4, the negation particle *šni* can function as a core-level operator to negate the predicate but it can also negate the DM independently, thus the DM of the stative verb *sápa* ‘to be black’ can be either *sabyá* ‘black’ or *sápešniyaŋ* ‘not black’. The fact that *šni* occurs before the

suffix *-ya* indicates that *šni* functions as a nuclear operator with scope exclusively over the DM. There are, however, some rare instances where *šni* is placed after the suffix *-ya* suggesting that the *-ya* word does not function as a modifier, but rather as a predicate. Examples of this are provided in (179).

- (179) (a) *Wičhóh'aŋ kiŋ lé oéčhuŋ šiće, itéšniyaŋ, ikčéya šni.*
wičhóh'aŋ kiŋ lé oéčhuŋ Ø-šiće Ø-itéšniyaŋ
 custom def this doing INAN-bad INAN-serious
i-Ø-kčéya šni
 ordinary-INAN-stem NEG

This custom is difficult to do, (it is) serious, it is not for fun.
 (data: BCC)

- (b) *Tákeye k'uŋ hená áwičakħeya šni kéyapi.*
táku-Ø-eyÁ k'uŋ hená áwičakħe-ya šni Ø-kéya-pi
 thing-3SG.A-say DEF those true-DER NEG 3SG.A-say.that-PL

They say that those things she had said were untrue.
 (data: BO)

- (c) *Líla ħčij šičáya šni.*
líla ħčij šičá-ya šni
 very really bad-DER NEG

It wasn't really that bad.
 (data: RFT)

In (179), not only are the *-ya*-forms negated at the core level, but they also appear to head their respective clauses as genuine predicates.

Even though examples like those in (179) are rare in corpus data, they indicate that the words derived by *-ya* are being reanalyzed. It appears that the elliptical structures with DMs shown in (178) are examples of a transition between the free adjunct function of the *-ya* words shown in (176) and their predicative function illustrated in (179), suggesting a process of reanalysis of the *-ya* words is underway.

One of the *-ya* words that functions with equal frequency as a predicate and a modifier is *wanĵátuya* 'high' / 'to be high', illustrated in (180).

- (180) (a) *Mayá glihéya waŋ lila waŋkátuya háŋ čhaŋkhé ...*
mayá glihéya waŋ lila waŋkátu-ya Ø-háŋ čhaŋkhé
 cliff steep INDEF very high-DER INAN-stand and.so
 A steep cliff stood (there) **high**, and so ...
 (data: NSB)
- (b) *Ziŋtkála kiŋ waŋkátuya kiŋyáŋpi*
ziŋtkála kiŋ waŋkátu-ya Ø-kiŋyáŋ-pi
 bird DEF high-DER 3A-fly-PL
 Birds fly **high**.
 (data: BT p. 344)
- (c) *Waná wí waŋkátuya čha hukhútakiya étuŋwaŋ yaŋká-he.*
Waná wí Ø-waŋkátuya čha hukhútakiya étuŋwaŋ Ø-yaŋká-hAŋ
 now sun INAN-high so downward look 3SG.A-sit-CONT
 The sun was **high** now so he sat looking downward.
 (data: DT Story 50, sentence 27)
- (d) *Pahá waŋkátuya waŋ akáŋl hé.*
pahá waŋkátuya waŋ akáŋl hÁŋ
 hill high INDEF on INAN-stand
 It stood on a high hill.
 (data: RFT)

In (180a), *waŋkátuya* functions as a DM ascribing attributive content to the participant. It can also be used as a manner modifier, as in (180b). In (180c), on the other hand, it functions predicatively heading a clause, and in (180d) it functions as an RP-internal modifier, a syntactic function normally restricted to (morphologically unmodified) stative verbs. The fact that *waŋkátuya* can take personal affixes (e.g. *mawáŋkatuya* ‘I am high’) is another piece of evidence that it can function predicatively. The words *hukhúčiyela* ‘low’, *otháŋkaya* ‘broad’ and *očik’ayela* ‘narrow’ are additional examples of syntactically multifunctional *-ya* words. Another example of RP-internal (i.e. ad-nuclear) modification with *-ya* was given in (146b).

Whereas it is extremely rare for *-ya* forms to function as RP-internal modifiers, their predicative use is less uncommon and both of these function suggest that these words are undergoing reanalysis and that the distinction between modifier and predicate is becoming fuzzy with respect to the *-ya* forms.

5.16. Derived modifiers in expressions of change of state

Three of the Lakota verbs of transportation are used for indicating aspectual change into the state ascribed by the stative verb (or modifiers derived from it). They are given in (181).

(181)

<i>ahí</i>	‘to bring smth/sb’	(1sg: <i>awáhi</i>)
<i>áyA</i>	‘to be taking smth/sb there’	(1sg: <i>áble</i>)
<i>au</i>	‘to be bringing smth/sb here’.	(1sg: <i>awáu</i>)

The verb *ahí* indicates a finalized change of state, whereas the other two verbs express that the change of state is in progress. (The verb *au* is documented in older texts but contemporary speakers seem to use *áyA* exclusively for the progressive change.) When used for coding grammatical aspect of change of state, these transportation verbs inflect as stative verbs, which in effect means that they have a single argument. This is illustrated in (182).

(182) (a) *Khúš amáye.*

khúžA a-má-yA
sick-DER become-1SG.U-stem
I am getting sick.
(data: SBB)

(b) *Tšawáčhiŋ hiŋyáŋs awíčhaye.*

tšawáčhiŋ hiŋyáŋzA a-wíčhá-yA
mind cruel-DER become-3PL.COLL-stem
People are becoming cruel.
(data: EDT-Aut-10, sentence 129)

- (c) *Ičháǰ áyapi.*
ičháǰA á-Ø-ya-pi
 grow-DER become-3U-stem-PL
 They are growing.
 (data: BQ-WOL)

The examples in (182) show that the transportation verbs in the change of state construction inflect as stative verbs, hence the undergoer affix *ma-* in (182a) codes 1st singular subject and the affix *wičha-* in (182b) codes the collective plural subject, whereas the zero affix in concert with the plural suffix *-pi* in (182c) code distributive animate plural subject, as in (182c).

There has been a tendency in the Siouan literature to treat the travel verbs in this construction as auxiliary verbs (e.g. Rood&Taylor 1996:9.2.2.2, Ullrich 2008:732). This, however, calls for a revision, because the morpho-syntactic properties of these constructions differ from those involving auxiliary verbs, which are characterized mainly by the following properties: (i) compounding, (ii) e-ablaut and (iii) truncation. These morphosyntactic properties are illustrated in (183) which shows four examples with the jussive auxiliary verb *ší* ‘to ask sb to do smth’. All four sentences show compounding which results in shifting the primary stress to the second syllable of the compound, as in (183a) and (183b) or reducing the stress on the auxiliary verb whenever the main verb continues to have two or more syllables after the compounding took place, as in (183c) and (183d). The examples in (183a-b) illustrate truncation of the main verb and (183d) shows that the auxiliary triggers e-grade ablaut in the preceding verb.

- (183) (a) *Škal-wičhawaši.*
 škátA-wičha-wa-ši
 play-3PL.ANIM.U-1SG.A-ask.to.do
 I asked them to play.
 (data: BBBJ)
- (b) *Kaň-wičhawaši.*
 Ø-káġA-wičha-wa-ši
 INAN-make-3PL.ANIM.U-1SG.A-ask.to.do
 I asked them to make it.
 (data: BBBJ)
- (c) *Wóglag-wičhàšipi.*
 wóglakA-wičha-Ø-ši-pi
 speak-3PL.ANIM.U-3.A-ask.to.do-PL
 They asked them to speak.
 (data: EDT-Col 3, para 311)
- (d) *Wóhe-šipi.*
 wóhAη-Ø-Ø-ši-pi
 cook-3SG.U-3.A-ask.to.do-PL
 They asked her to cook.
 (data: EDT-Aut 8, para 54)

Syntactic analysis of auxiliary verb construction is shown in Figure 5.22 and Figure 5.23.

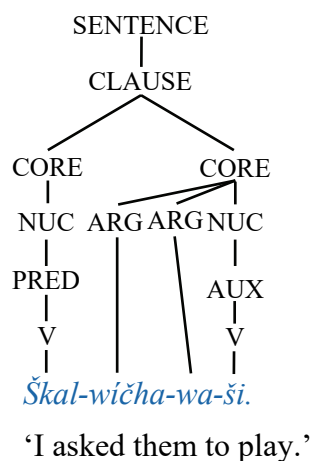


Figure 5.22 Auxiliary with an intransitive verb, projection of (183a)

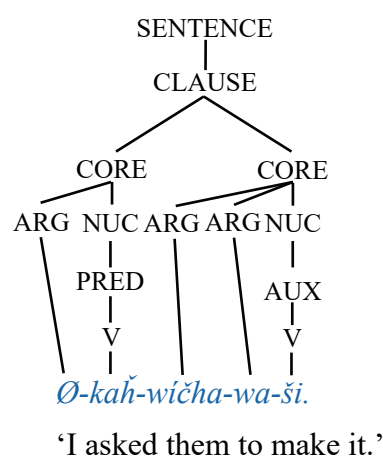


Figure 5.23 Auxiliary with a transitive verb, projection of (183b)

The constituent projections in Figure 5.22 and Figure 5.23 show that auxiliary verbs like *ší* form core coordination with the verb they follow, and that the shared arguments are in the core of the auxiliary verb. Undergoer argument of the transitive main verb remains in the core of the main verb, as illustrated in and Figure 5.23. As the constituent projections show, auxiliary verbs are compounded with main verbs.¹⁵

The construction exemplified in (182), on the other hand, is not compounded and transportation verbs always maintain their own stress. Thus I propose that the syntactic element which the transportation verbs follow in this construction is a derived modifier, rather than merely a truncated verb, which is what the examples in (182) make it look like. The evidence lies in the data in (184), where the words followed by the transportation verbs are clearly DMs as they have the suffix *-ya*.

(184) (a) *Áŋpaó kiŋ ziyá aú.*
áŋpaó kiŋ zí-ya a-Ø-ú
 dawn DEF yellow-DER become-INAN-stem
 The dawn was becoming **yellow**.
 (data: DT story 10, sentence 12)

(b) *Maḥpíya kiŋ sabyéla aú.*
maḥpíya kiŋ sápa-ya-la a-Ø-ú
 cloud DEF white-DER-REST become-INAN-stem
 The cloud was turning **black**.
 (data: BO-22)

In (184), the words *ziyá* ‘yellow’ and *sabyéla* ‘black’ are evidently DMs and thus cannot function predicatively. In contemporary Lakota, this change of state construction generally involves truncated SVs (as those shown in (182)), but older texts provide ample evidence that this is a derived modifier construction allowing both truncated and *-ya* derived modifiers. In effect this means that the construction originates in secondary predication and that in some distant past the stative verbs were

¹⁵ Some Lakota auxiliary verbs function exclusively as operators (e.g. the continuative aspect operator *hAŋ*). Other auxiliaries are nuclear subordinations and still other auxiliaries connect in a cosubordinate core juncture. But all Lakota auxiliaries form a compound with the V they follow.

unmodified. In fact, instances of unreduced truncating verbs in this construction have been documented in both older (written) and modern (audio-recorded) Lakota texts, as shown in (185).

(185) (a) *Waničča áye.*

waničča á-Ø-yA
 none become-INAN-stem
 It is becoming extinct.
 (data: NSB:3-6:7:00)

(b) *Šóka áye.*

šóka á-Ø-yA
 thick become-INAN-stem
 It is becoming thick.
 (data: NSB:7-2)

(b) *Kháta áye.*

kháta á-Ø-yA
 hot become-INAN-stem
 It is becoming hot.
 (data: BT: p361, line 60)

In (185), all of the SVs are truncating verbs and thus could be used in their truncated form in this construction before *áyA*. The fact that they are not is evidence that this change-of-state construction is syntactically a SPC and that *áyA*, *ái* and *ahí* are not auxiliary verbs.

An additional piece of evidence in support of this analysis lies in the ablaut grade. Non-truncated ablauting verbs have “a” ablaut when they occur before *áyA*, as in (185), whereas auxiliary verbs always trigger “e” ablaut in the words they follow, as in *ye-ši* ‘he asked him to go’, which involves the ablauting verb *yÁ* ‘to go’.

Further support for analyzing this construction as a SPC lies in the fact that it can involve nouns, as in *zuzéčča áye* ‘he was becoming/changing into a snake’.

Another verb traditionally treated as an auxiliary coding a change of state designated by a SV it follows, is *hinglá*. This verb, too, is pronounced with an

independent stress and variably follows truncated and non-truncated SVs. The verb is illustrated in (186).

- (186) (a) *Čhaŋtéšiča mahiŋgle.*
čhaŋtéšiča ma-hiŋglA
 sad 1SG.U-become
 I became sad.
 (data: NSB:3-6:7:00)
- (b) *Ablág mahiŋgle.*
ablákA ma-hiŋglA
 quiet 1SG.U-become
 I became quiet.
 (data: IS)
- (c) *Íňyanj hiŋglápi.*
íňyanj Ø-hiŋglÁ-pi
 stone 3U-become-PL
 They turned into stone.
 (data: RFT)
- (d) *Kiksúya mahiŋgle.*
Ø-kiksúyA ma-hiŋglÁ
 INAN-remember 1SG.U-become
 I suddenly remembered it.
 (data: FREH)

In (186a), the truncating SV is unmodified, whereas in (186b), another truncating SV is contracted showing the same pattern used with SVs in secondary predication. Another piece of evidence that *hiŋglÁ* functions as the primary predicate in SPCs and derived modifier constructions, can be seen in (186c) where it follows a noun. Additionally, *hiŋglÁ* can also follow active verbs, as shown in (186d), and the fact that the active verb maintains the a-grade ablaut is further evidence that *hiŋglÁ* is not an auxiliary and does not compound with the verb it follows.

Conclusion: this section showed evidence that the transportation verbs *áya*, *au* and *ahi*, as well as the verb *hiŋglÁ*, all of which express the change into the state designated by the verb they follow, are not auxiliary verbs, but rather function as the

primary predicates in secondary predicate constructions or follow derived modifiers (primarily truncated, marginally modified with *-ya*)

5.17. Prosodic properties of constructions with DMs

De Reuse (1994:201) includes “Adverb + Verbs” among the seven types of compounding he recognizes for Lakota. Analysis of DMs (traditionally ‘adverbs’) in audio recordings studied during the present investigation shows evidence that DMs do not form compounds with the Vs they precede or with any other constituents. Under some prosodic conditions, the H* peak associated with the stress on the V can be down-stepped relative to the H* peak on the DM, but these are not properties of stress reduction, as discussed in 3.2.2.

As an example of the “Adverb + Verb” compound, de Reuse (*ibid*) gives “*phiyá wanyàŋka* ‘he took a better look’” which he cites from Deloria (1932, story 23, sentence 4), although the modifier is given with first-syllable stress whereas Deloria spells it with a second syllable stress. Deloria’s spelling does indicate compounding with hyphenation and grave accent mark (i.e. “*phiyá-wanyàŋka*” *ibid*), this however, is in accord with the hypothesis that Boas and Deloria (1941) mistook phrase level intonational phenomena for stress reduction in compounding (as discussed in 3.2.2) resulting in inconsistent spelling of various constructions, such as N+V, V+V and MD+V. Thus, in her text collection Deloria variably spells the DM *phiyá* as compounded and un-compounded with the verb it precedes. For un-compounded examples, cf. EDT-Aut-8, sentence 75: “*phiyá ophéwathun*” ‘I bought it again’ and EDT-Inf-3, sentence 27: “*phiyá cheúnthipi*” ‘we started a new fire’.

An example of the modifier *phiyá* from an audio recorded section text corpus is given in (187), with pitch curve visualization in Figure 5.24.

- (187) *Tóške ečámuy yuŋkháj akhé phiyá mathúŋpi kta he?*
tóške ečá-Ø-m-uy yuŋkháj akhé
 how do-INAN-1SG.A-stem and.here again
phiyá ma-thúŋ-pi kta he?
 anew 1SG.U-born-PASS FUT.IRR Q
 How should I do it that I am reborn again?
 (data: WOL)

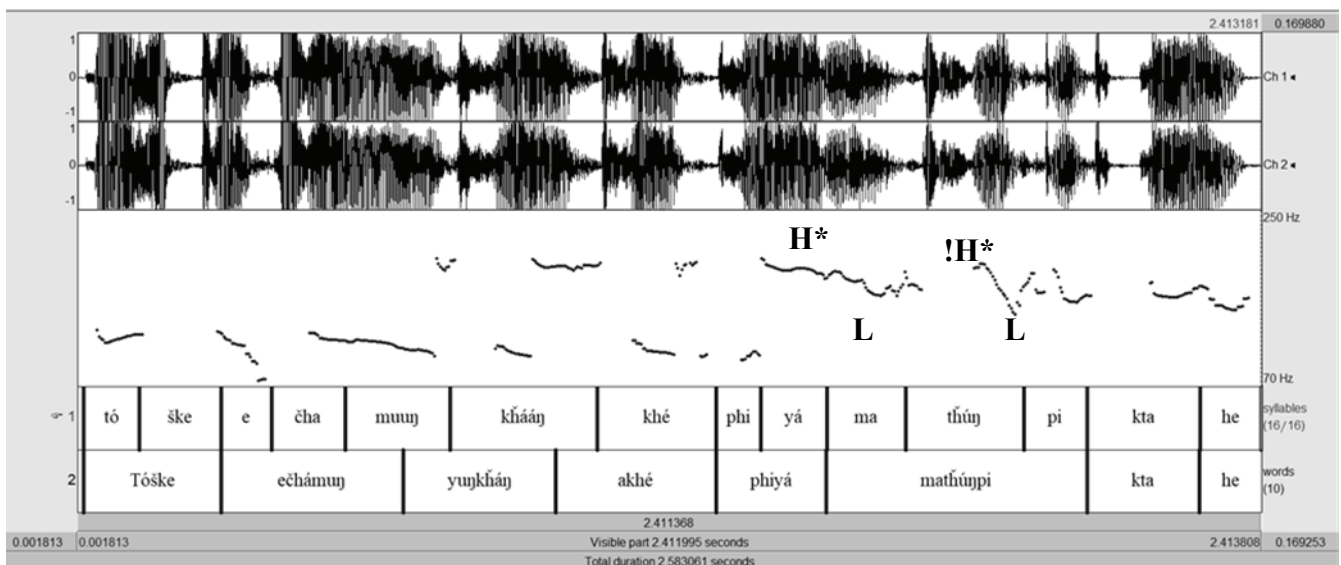


Figure 5.24 Pitch contour of ad-core modifier + V

Another example of DM + V is provided in (188) and the pitch contour is given in Figure 5.25.

- (188) *Čha éyaš skayéla nážij čha waŋbláke.*
čha éyaš ska-yá-la ná-Ø-žij čha waŋ-Ø-bl-á-ka
 well but white-DER-REST stand-3SG.A-stem DET see-3SG.U-1SG.A-stem
 But I saw her **stand** (there) **all white**.
 (data: NSB)

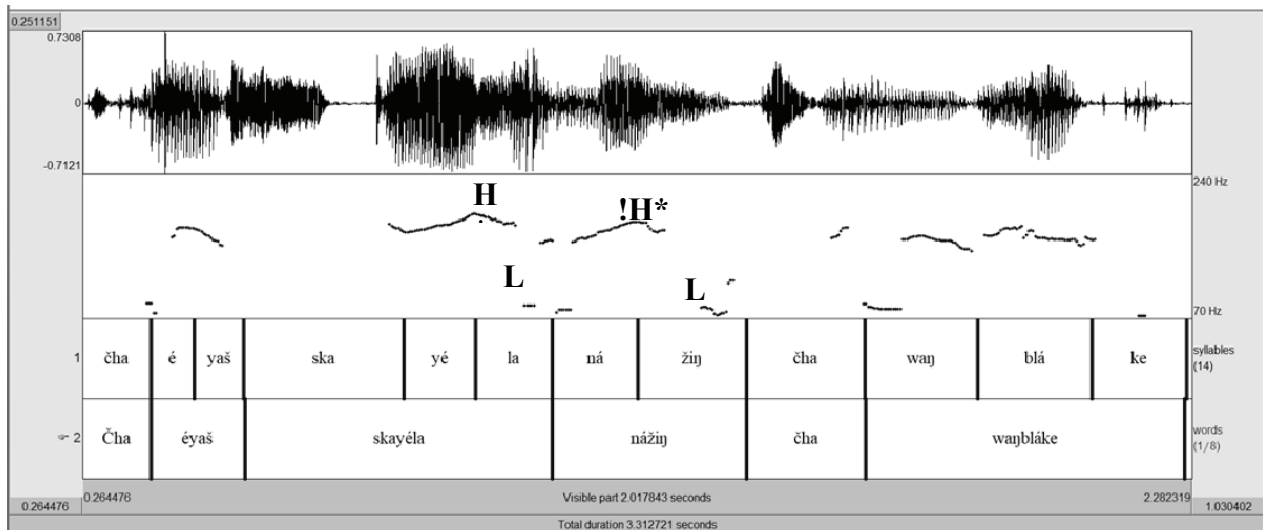


Figure 5.25 *Pitch contour of ad-core derived modifier + V*

The pitch contours in Figure 5.24 and Figure 5.25 show the pitch accent peak downstep (H* !H*) characteristic of Lakota phrase level intonation, but not identical with stress reduction. Thus it can be concluded that derived modifiers do not form compounds with the verbs they precede, as proposed by de Reuse (1994) following some of the transcriptions in Deloria's texts and in Boas&Deloria (1941).

5.18. Semantic map of morphological marking of SPs and DMs

The present chapter showed that Lakota has been undergoing a diachronic development from one preferred strategy for expressing depictive and resultative information to another. This shift in combination with the different morphophonemic properties of the various types of stative verbs results in three basic approaches to morphological marking of depictive and resultative information. These can be symbolically represented in schematic semantic maps.

The semantic maps are created with the idea that SPs stand between the predicative function (PRED) of stative verbs and their attributive function (ATTR), because on the one hand SPs are predicates, but on the other hand they ascribe an attribute to the participant. Note however, that the ATTR function opposite of the PRED on the axes,

is restricted to RP-internal attribution. The dotted line indicates that those functions encircled by it share the same morphological marking (or in this case the lack of it).

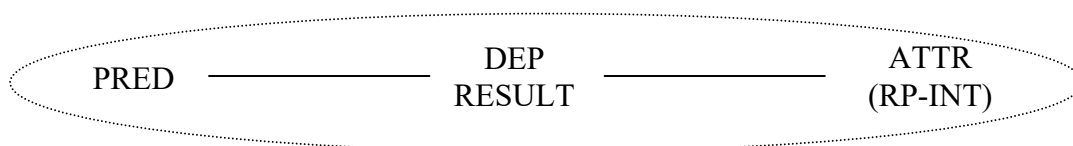


Figure 5.26 Type A (like *wayázan*, *t'Á*, *watúkħa*) – a small group

Stative verbs of Type A (Figure 5.26), have no morphological marking on PRED, DEP/RESULT and ATTR (RP-INT). These stative verbs do not form derived modifiers.

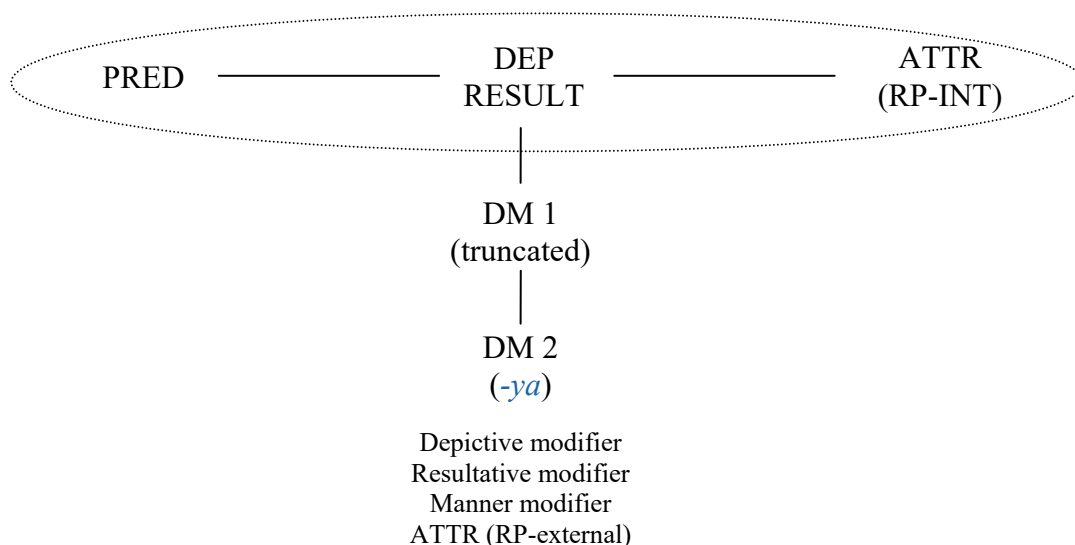


Figure 5.27 Type B2 (like *khúža*, *héčheča*) – a small group

Stative verbs of Type B2 (Figure 5.27) have no morphological marking on PRED, DEP/RESULT and ATTR (RP-INT). They form two types of derived modifiers; one via truncation, and one by suffixing *-ya*. Derived modifiers can have depictive, resultative, manner reading and they can also function as RP-external attributives.

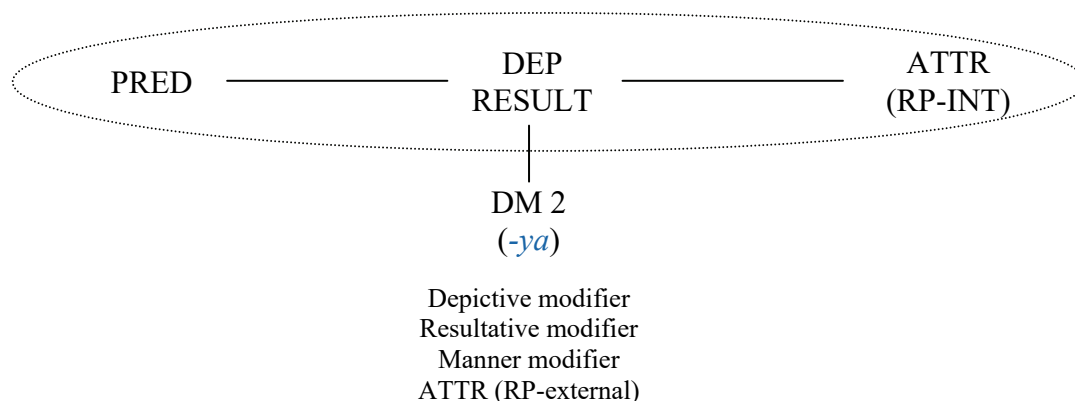


Figure 5.28 Type B1 (like *úňšika*, *čhanžéka*, *čhanžéšičA*) – a small group

Stative verbs of type B1 (Figure 5.28) have no morphological marking on PRED, DEP/RESULT and ATTR (RP-INT), and they form DMs via suffixing *-ya*. Most of the SVs from this small group are characterized by their ability to function as both SPs and DMs (e.g. *čhanžéka glí* ‘he came back angry’ and *čhanžéya glí* ‘he came back angrily’).

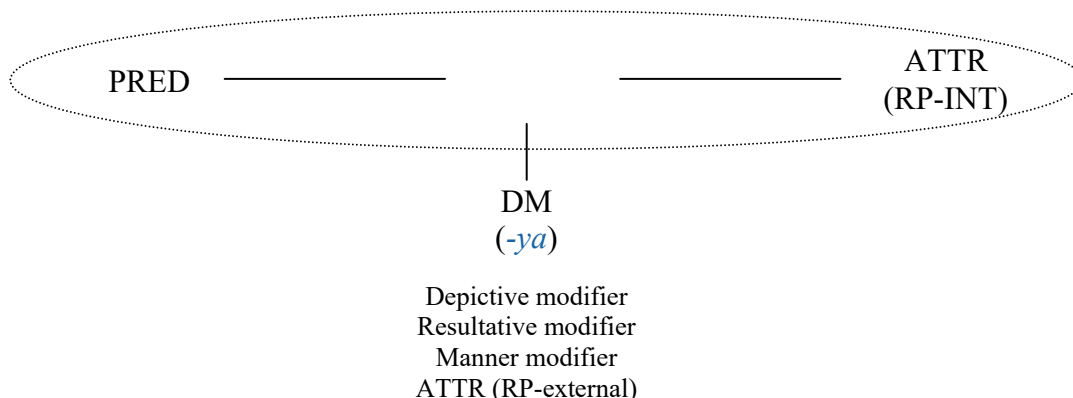


Figure 5.29 Type C (like *šá*, *sápA*, *zani*, *čhanžéwašte*) – majority of stative verbs

Stative verbs of Type C (Figure 5.29) have no morphological marking on PRED, DEP/RESULT and ATTR (RP-INT). These stative verbs form derived modifiers only by suffixing *-ya*.

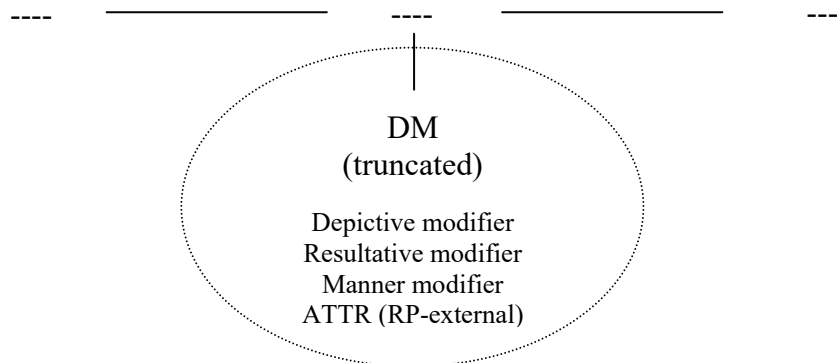


Figure 5.30 *Type D (like kabláš) – a small group*

The group labeled Type D (Figure 5.30) consists of words that lost their ability to function predicatively and attributively, and are now used only as truncated derived modifiers. These words are in fact of mixed origin in that they originate from both stative and active verbs. These words are discussed in Chapter 12.

Type (A) is a very small group of fossilized stative verbs which represent the diachronically older stage where all stative verbs used to be able to function as SPs. Type (B) represent a transitional group which shows the shift from secondary predication to derived modification, allowing both constructions. Type (C) constitutes the vast majority of stative verbs in contemporary Lakota and these verbs have shifted fully from secondary predication to derived modification. VSs of this type can function as PRED, ATTR or as DMs with the suffix *-ya*. An additional stage is represented by words of Type (D) which can now function only as DMs and not as predicates, SPs or attributives.

5.19. Summary

This chapter provided a detailed discussion of modifiers derived from stative verbs. It offered a comprehensive overview of the morphology involved in deriving

modifiers from stative verbs and of the morpho-phonemic phenomena surrounding in the modification. The chapter also discussed some hypotheses for the diachronic development which has led to the shift from secondary predication to derived modification. The strongest hypothesis suggests that this change was motivated by the morpho-syntactic similarity between SPs and predicatives, as well as the similarities between SPCs and complement clauses. Thus the shift from SPs to DMs is well motivated by the need for discourse functional transparency as it allows for easier parsing of depictive information and distinguishes SPCs from complement clauses by overt means. Furthermore, DMs offer a syntactically simpler construction when compared to stacked relative clauses.

Since SPs are RP-external they are syntactically more similar to predicative SVs, but semantically they are closer to attributive SVs. Modifying them morphologically helps to alleviate this double similarity and it makes them more similar to attributives.

The chapter provided a detailed discussion of the semantic orientation of derived modifiers. It was asserted that the orientation is determined by the semantics of the DM, as well as by the transitivity and semantics of the predicate. DMs which describe physical appearance or material composition generally tend to be oriented to the participant. Many DMs are vague in that they can ascribe an attribution either to the participant or the predication, and can usually be interpreted as being either manner modifiers or participant modifiers (depictive or resultative modifiers), but both readings generally express an attribute of the participant. The term “manner modifier” is used here in the broader sense in that manner modifiers have scope over the predication, rather than over the participant. They however, do not always express the manner in which something is done, but rather they ascribe an attribute of the participant during the event expressed by the verb heading the clause. This orientation

toward the participant is a key feature shared between SPs and DMs. There are, however, some DMs that function as true manner modifiers (in that they do not ascribe an attribute to the participant) and some DMs that denote “pure-manner” semantics (i.e. they provide answers to question like “in what manner was something done?”).

The orientation of SPs and DMs is summarized in Table 5.16.

Table 5.16 *Summary of SP and DM orientation*

		Syntactic relationship to	SEMANTIC ORIENTATION			Simultaneous with main event
			Participant		Event-oriented	
			subject-oriented	object-oriented		
Depictives		predicate	+	+	-	+
Resultatives		predicate	+ (marginally)	+	-	-
derived modifiers	depictive	participant	+	+	-	+
	resultative	participant	+ (marginally)	+	-	-
	manner	predicate	- / +	- / +	+	+
	pure-manner	predicate	-	-	+	+

The assertion that manner modifiers can ascribe an attribute to the participant seems counter-intuitive, but this is because the semantic orientation to participant or event does not necessarily align with the morphosyntactic properties of the DMs.

Syntactically speaking, DMs function primarily as ad-argument modifiers, ad-core modifier, ad-nominal modifiers, rarely as ad-nuclear modifiers and possibly also as ad-clausal modifiers.

Table 5.17 gives an overview of the modifier types and their orientation to participant or event, as well as the corresponding traditional terms.

Table 5.17 *Summary of derived modifier types based on their scope*

Derived modifier type (RRG term)	Orientation	Traditional term
ad-argument	participant (ARG)	adjective
ad-nuclear (RP-internal)	participant (NUC)	adjective
ad-nominal (RP-external)	participant (RP)	adjective
ad-core	event (CORE)	adverb
ad-clausal	event (CLAUSE)	adverb

The ad-core and ad-argument modifiers are floating in that they have no fixed position in the clause. Ad-nominal modifiers are generally bound tightly to the RP they modify and occur to its right.

Some modifiers (and especially modifier phrases) can function as ad-clausal, although clausal modification is not a part of the present investigation and more research is needed to clarify whether DMs based on SVs can also have this syntactic function. It is possible that DMs do not modify ad-clausally because of the semantics of the SVs they are derived from. That is, the SVs do not take clausal arguments and do not express clause-level modifier semantics, i.e. status, tense, evidentiality, IF, conditionals, concessive, and reason.

Lakota participant-oriented DMs are predominantly object oriented. Complex DMs involving body part Ns are one of the exceptions, as they are generally subject oriented (they usually modify the core argument of the verb heading the clause).

The chapter showed ample evidence that under certain syntactic conditions DMs are not only semantically oriented to the participant but are also bound syntactically to its cross-referenced RP. In such constructions they function as RP-external ad-nominal attributives, traditionally ‘adjectives’ (whereas unmodified stative verbs can function only as RP-internal attributives).

Due to their morphological markup and their frequent syntactic position, traditional studies on Lakota classify derived modifiers as adverbs and their syntactic function as

adverbial. This terminology is problematic in that it suggests that adverbials modify nominal expressions. The RRG terminology and approach offers a solution for this problem.

DMs share a number of properties with Secondary Predicates from which they originated and which are core elements. Among those properties is the ability to take various operators, such as the negation marker, habituality markers, etc. DMs also commonly occur in LDP and RDP as free adjuncts.

The chapter showed evidence that DMs do not form compounds with verbs they precede as indicated in previous studies.

Described in this chapter are also serialized DMs, as well as complex DMs, which are composed of a noun and a DM connected via a nuclear juncture. The internal structure of the complex DM is inherited from the N+SV complex predicate. Thus, understanding of the syntactic structure of N+SV complex predicate is essential for understanding complex DMs, which enable non-referential Ns to occur in clauses without being cross-referenced to core arguments.

A section of the present chapter described a type of verbs that require a DM (or another peripheral expression, or an SP).

The last section provided semantic maps of the four basic types of stative verbs with respect to the morphology involved in predication, secondary predication, RP-internal attributive function and derived modification.

One section of this chapter focused on constructions expressing the change of state, which involve the verbs *áyA*, *ái*, *ahí*, and *hinglÁ*, which have been traditionally treated as auxiliary verbs, whereas the present investigation shows evidence that they are in fact primary predicates in secondary predicate constructions.

6. *Wó-* nouns in predication and derived modification

Many Lakota words which translate into English with abstract nominal concepts are derived from verbs by prefixing the affix *wó-* (which is likely a combination of the indefinite object marker *wa-* and the locative prefix *o-*). Examples are in (189):

(189)

verb		→	wo- noun
(a) <i>yuhá</i>	‘to have smth’		<i>wóyuha</i> ‘possession’
(b) <i>kamná</i>	‘to earn smth’		<i>wókamna</i> ‘income, job’
(c) <i>philá</i>	‘to be thankful’		<i>wóphila</i> ‘gratitude’
(d) <i>slolyÁ</i>	‘to know smth/sb’		<i>wóslolye</i> ‘knowledge’
(e) <i>akhiničA</i>	‘to argue’		<i>wóakhiniče</i> ‘argument, dispute’
(f) <i>aič’ikhiničA</i>	‘to argue with oneself’		<i>wóaič’ikhiniče</i> ‘self-dispute’
(g) <i>ksápA</i>	‘to be wise’		<i>wóksape</i> ‘wisdom’
(h) <i>ičáği</i>	‘to be hindered by sth’		<i>wóičaği</i> ‘an obstacle’

It is important to note that these abstract Ns can be derived from both active and stative verbs. Examples of the former are (a)-(f) and example of the latter is in (g)-(h).

It should also be mentioned that there are numerous Ns that begin with *wó-* but do not belong to this word category. This concerns mainly nouns derived from Vs via the suffix *-pi*, such as *wówapi*, which comes from *wówa* ‘to read things’.

Like simple (non-derived) Ns, these *wó-* nouns can function predicatively in that a *wó-* noun can constitute a complete clause, as in (190):

(190) (a) *Wówan̄yan̄ke.*

wówan̄-Ø-yan̄ke
something.to.see-3SG.U-stem

It was something to see.
(data: ML)

(b) *Hená wówakpamni.*

hená wówa-Ø-kpamni
those something.distributed-3SG.U-stem

Those are annuity goods. (distributed things)
(data: EDT Aut-8, sentence 25)

As mentioned already, the *wó-* nouns can be derived from both stative and active verbs, but when they are used predicatively they decidedly function as SVs for they take the undergoer set of affixes. For instance, the active verb *wačhínyAnj* ‘to rely on smth/sb’ becomes *wówačhínye* ‘(to be) a reliable person/thing’ and the 1st singular of the latter is *wówamačhínye* ‘I am a reliable person’, which has the affix *ma-* from the stative inflection paradigm. Recall that simple nouns also take undergoer prefixes (e.g. the 1st singular of *wičháša* ‘he is a man’ is *wimáčaša* ‘I am a man’).

It should be mentioned, that many of these *wó-* Ns can take an animate subject when it is felicitous and can be pluralized with the animate plural suffix *-pi*. For instance, *wówanyanjke* ‘she/he is something to see’ can be pluralized: *wówanyakepi* ‘they are something to see’.

One justification for classifying the *wó-* words as Ns is the fact that they behave syntactically like simple Lakota Ns in that they can represent RPs without having to be nominalized first. Thus we can find them in sentences where they are cross-referenced by the object argument in transitive clauses, as in (191a), or by the subject of intransitive verbs, as in (191b), where the *wó-* word also takes the possessive prefix *tǎ-* which is also something that only nouns can do.

(191) (a) *Wóphila yuhá.*

wóphila *Ø-Ø-yuhá*
gratitude INAN-3SG.A-stem

He had gratitude.

(data: EDT Spea-3, sentence 13)

(b) *Tǎwóyuha óta.*

tǎ-wóyuha *Ø-óta*
3SG.POSS-property INAN-many

His property is plentiful. (i.e. He has a lot of property.)

(data: BT p. 175, line 53)

The data in (191) provides evidence that these *wó-* initial words can be categorized as Ns because they behave as Ns syntactically. However, unlike simple Ns, some of these *wó-* Ns can also function as attributive ad-nominal modifiers. This is illustrated in the contrastive sentences below where (192a) shows a *wó-* word constituting a complete clause, (192b) is an example of a *wó-* word as the second member of a N+SV complex predicate, and (192c) offers an example with the same *wó-* word functioning as a attributive adnominal modifier.

- (192) (a) *Wókħokipħe.*
wókħo-Ø-kipħe
 something.to.be.feared-3SG.U-stem
 It was a **scary** thing.
 (data: DT Story 42, sentence 9)
- (b) *Šúŋka wókħokipħe.*
šúŋka wókħo-Ø-kipħe
 dog something.to.be.feared-3SG.U-stem
 It is a **scary** dog.
 (data: RFT 1992)
- (c) *Čhaŋkú wókħokipħe waŋ ópta ilániŋ kte.*
čhaŋkú wókħokipħe waŋ Ø-ópta
 road something.to.be.feared INDEF INAN-over
i-l-á-l-A ktA
 go-2SG.A-stem-2SG.A-stem FUT.IRR
 You will go on a **scary** path.
 (data: BO-12)

The functions illustrated in (192b) and (192c) are semantically restricted to only some *wó-* words. For instance, words like *wóyuha* ‘possessions’ are not likely to be felicitous in such contexts. Those *wó-* words that can function as attributive modifiers (ad-nominal and ad-ARG) can also be modified by *lila* ‘very’ when they function as simple predicates, as in *Lila wókħokipħeke* ‘it was a very scary thing’, whereas other *wó-* nouns cannot be thus modified, e.g. **Lila wóyuha*.

However, a fact relevant for the present study is that those *wó-* Ns which can function as ad-nominal modifiers can also be used as derived modifiers with the suffix *-ya*. Several examples from corpus data are given in (193):

- (193) (a) *Wóchet'unglaja čhá ičúpi.*
wóchet'uŋ-Ø-gla-ya *čhá* *Ø-Ø-ičú*
 something.to.be.doubted-stem-DER step INAN-3SG.A-take
 They have **unbelievable** pace. (about fast horses)
 (data: DT story 53, sentence 9)
- (b) *Leháŋl wípħe wókhokipħeya yuhápi.*
leháŋl *wípħe* *wókhokipħe-ya* *Ø-Ø-yuhápi*
 nowadays weapon something.to.be.feared-DER 3SG.U-3SG.A-have
 Nowadays they have **scary** weapons.
 (data: RFT 1992)
- (c) *Wóiħaħayakel ečé eyé s'a.*
wóiħaħa-ya-kel *ečé* *Ø-Ø-eyÁ* *s'a*
 something.to.laugh.about-DER-VAG only INAN-3SG.A-say HAB
 He always says that **for amusement** only.
 (data: BO-227)
- (d) *Oyáte kiŋ lé wówapħethogya tháŋka.*
oyáte *kiŋ* *lé* *wówapħethog-ya* *Ø-tháŋka*
 tribe DEF this something.to.marvel.at-DER 3SG.U-large
 This tribe was **marvelously** large.
 (data: RFT)
- (e) *Wóčhaŋtiyokšilya úŋpi.*
wóčhaŋtiyokšil-ya *Ø-úŋ-pi*
 something.to.be.annoyed.by-DER 3A-exist-PL
 They are an **annoyance**.
 (data: EDT Aut-10, para 70)
- (f) *Táku waŋ wóinihaŋyaŋ waŋbláke.*
táku *waŋ* *wóinihaŋ-ya* *waŋ-Ø-bl-ákA*
 thing INDEF something.to.be.astonished.by-DER see-INAN-3SG.A-stem
 I saw **something** astonishing.
 (data: EDT-Aut-5, sentence 1)

- (g) *Wówičhašašniyaŋ wičhákhuwapi.*
wówičhašašni-ya wičhá-khuwá-pi
 inhumanity-DER 3PL.U.ANIM-stem-PASS
 They were treated **inhumanly**.
 (data: RFT)

These *wó-* initial derived modifiers have all of the syntactic properties typical for other DMs with the suffix *-ya* which have been discussed in detail, for instance with respect to their participant versus event orientation. Thus we can find *wó-* DMs in contexts where their orientation is arguably vague, as well as in sentences where they are decidedly participant oriented or floating clause level manner modifiers.

It should be noted here that there are rare cases in which modifiers are derived from basic nouns (i.e. nouns which do not begin with *wó-*). An example is the noun *pahá* ‘hill’, which can be derived into the modifiers *paháya* / *paháyela* (reduplicated *paháhaya* / *paháhayela*) which means ‘in heaps, in a large amount, abundantly’.

Derivation via the prefix *wó-* is very productive in Lakota and so is the derivation of the *wó-* words with the suffix *-ya*, and we find an ample amount of *wó-* initial DMs in both modern and old texts. Thus, it can be stated that the *wó-* initial DMs represent yet another strategy of the language to express attributive property concepts without having adjectives.

7. Active verbs functioning as SPs and DMs

7.1. Active verbs as Secondary Predicates

Chapter 4 discussed the secondary predicate construction (SPC) and chapters 5 and 6 focused on derived modifiers (DMs). These two competing syntactic constructions were described as being based on stative verbs.

Active verbs, on the other hand, participate primarily in forming Purpose Constructions and Simultaneous Predicate Constructions (SimPC), both of which are discussed in detail in Chapter 10. However, SPCs and SimPCs share most of their morphosyntactic properties, which is illustrated in: (194)

- (194) (a) *Watúkħa glipi.* (Secondary Predicate Construction, **SPC**)
watúkħa Ø-gli-pi
 tired 3SG.A-come.back-PL
 They came back **tired**.
 (data: MARC)
- (b) *Wačhĩkħo glipi.* (Simultaneous Predicate Construction, **SimPC**)
wačhĩkħo Ø-gli-pi
 pout 3SG.A-come.back-PL
 They came back **pouting**.
 (data: JAH)

Both constructions involve two adjacent but un-compounded Vs that are cosubordinated at the core level. In both constructions the two verbs share at least one argument, and the subject is marked only on the last V. There are also important differences which will be discussed in a later chapter, but for the purpose of the current chapter it should be noted that one of the ways to distinguish the above sentences as belonging to different constructions is by determining the conjugation of the first verb. In this case the first singular forms are *wamátukħa* (stative inflection pattern), and *wačhĩwakhõ* (active inflection pattern) respectively. This alone,

however, is not always a reliable indicator for differentiating the two constructions because there is evidence that some active verbs can function as secondary predicates.

The contrastive examples in (195) show evidence that AVs can be used as SPs.

- (195) (a) *Tħaŋkátakiya étuŋwaŋ_i yaŋkápi_i.*
tħaŋkáta-kiya étuŋwaŋ Ø-yaŋká-pi
 outside-toward look 3A-sit-PL

They sat **looking** towards the outside.
 (data: EDT Aut 3, sentence 26)

- (b) *Thípi waŋ_i wí hinápħe étkiya étuŋwaŋ_i ithičağapi.*
thípi waŋ wí Ø-hinápħe Ø-étkiya étuŋwaŋ ithi-Ø-Ø-čağA-pi
 tipi INDEF sun emerge INAN-toward look set.up-3A-stem-PL

They set the tipi up **facing** the rising sun.
 (data: EDT-Leg-1, sentence 51)

In (195a), the active verb *étuŋwaŋ* ‘to look’ (1sg: *éwatuŋwe*) expresses an action occurring simultaneously with the action of the primary predicate *yaŋkápi* ‘they sit’, and the two verbs share the subject. In (195b), on the other hand, the same active verb (*étuŋwaŋ*) does not share the subject with the predicate *ithičağapi* ‘they built it’ because the notional subject of *étuŋwaŋ* is the syntactic object of *ithičağapi*. Consequently, the verb *étuŋwaŋ* in (195b) can only be interpreted as an object oriented secondary predicate, despite the fact that it is an active verb.

Another contrastive example is in (196):

- (196) (a) *Ištíŋme šni ħpáya-he.*
ištíŋmA šni Ø-ħpáya-hAŋ
 sleep NEG 3SG.A-lie-CONT

He continued to lie without sleeping.
 (data: RFT)

- (b) *Ištíŋme šni kakíšyapi.*
ištíŋmA šni kakížA-Ø-Ø-yA-pi
 sleep NEG suffer-3SG.U-3A-CAUS-PL

They tortured him not letting him sleep.
 (literally: Not sleeping they tortured him.)
 (data: BO-90)

In (196a), both Vs predicate on the same subject and as they are both active verbs the construction can be analyzed as a SimPC. Conversely, in (196b), the 3sg object of the transitive predicate is the notional subject of the V1 (*ištíyme šni*). Thus, (196b) violates one of the defining properties of SimPCs which states that the two verbs share one and the same subject. Thus, we must conclude that (196b) contains an object oriented secondary predicate involving an active verb.¹⁶

Another piece of evidence that (196b) is a SPC lies in the fact that *ištíyme šni* can optionally be converted into a derived modifier via affixation of the suffix *-ya*, as shown in (197).

- (197) *Ištíyme-šniyaŋ makhúwapi.*
ištíyma-šni-yaŋ ma-khúwa-pi
 sleep-NEG-DER 1SG.U-treat-PL
 They didn't let me sleep.
 (literally: Non-sleeping-ly they treated me.)
 (data: BO-101)

The sentences in (197) and (196b) differ only in the presence of the suffix *-ya* in the latter.

Such object oriented SPCs as that in (196b) can also involve transitive verbs as the SP, as shown in (198a). When transitive SPs are converted into DMs, they maintain their transitivity, which is evident from the comparison of (198b) and (198c):

¹⁶ The verb *ištíymA* 'to sleep' takes the affix *m-* in 1sg, resulting in *mištíyme*, which makes it somewhat irregular in that it does not clearly group with one of the regular inflectional patterns of active verbs. There are, however, a number of indications that it is an active verb, including the fact that it patterns with active verbs in taking the causative suffix *-khiyA* rather than the causative suffix *-yA*, where the latter is predominantly used with stative verbs.

- (198) (a) *Yúte; šni unkhúwapi_i s'a.*
 Ø-yútA šni uŋ-khúwa-pi s'a
 INAN-to.eat NEG 1.PL-PAT-treat-PL HAB
 They always made sure we wouldn't eat it.
 (data: RFT)
- (b) *Yúte-šniyaŋ; unktépi_i s'a.*
 Ø-yútA-šni-yaŋ uŋ-kté-pi s'a
 INAN-to.eat-NEG-DER 1.PL-PAT-kill-PL HAB
 They always made sure we wouldn't eat it.
 (data: BO-217)
- (c) *Wičháyute-šniyaŋ; unktépi_i s'a.*
 wičhá-yutA-šni-yaŋ uŋ-kté-pi s'a
 3.PL-PAT-to.eat-NEG-DER 1.PL-PAT-kill-PL HAB
 They always made sure we wouldn't eat them.
 (data: RFT)

In (198a), the main verb takes the 1st plural object affix *uŋ* ‘us’ as its object, and this argument is the same as the subject of the SP. The SP takes the zero affix as its object. The sentence in (198b) shows a version where the SP is replaced with a DM. (198c) provides a version of the same sentence with the 3rd plural animate object marker *wičhá-* affixed to the DM, showing evidence of its transitivity.

In (198) the verbs *khuwá* ‘to chase sb’ and *kté* ‘to kill sb’ functioning as the primary predicates are used idiomatically with the meaning “to enforce” or “to make sure”.

A typical representative of active verbs that frequently function as secondary predicates is the verb *ní* ‘to live’ which is conjugated with affixes from the active inflection paradigm (1sg: *waní* ‘I live’). This verb can function as a secondary predicate meaning ‘alive’ which is illustrated in (199):

- (199) (a) *Ní gloglíyaku.*
ní Ø-Ø-gloglíyaku
 live 3SG.U-3A-bring.back
 He was bringing him back **alive**.
 (data: GS)
- (b) *Ní uᅅglúhapi.*
ní Ø-Ø-gl-yuhá-pi
 live 3SG.U-3A-POSS-have-PL
 We kept him (our own) **alive**.
 (data: EDT Aut-1, sentence 170)
- (c) *Ní yúzapi na niyákhe p̣héhíᅅ wašpápi.*
ní Ø-Ø-yúza-pi na ni-y-ákhe p̣héhíᅅ Ø-Ø-wašpÁ-pi
 live 3SG.U-3A-take-PL and live-EUPH-CONT hair INAN-3A-cut.off-PL
 They took him **alive** and scalped him (while) still alive.
 (data: BO-97)
- (d) *Wanáᅅi waᅅží ní waᅅláka huwó?*
wanáᅅi waᅅží ní waᅅ-Ø-l-akA huwó
 ghost a alive see-3SG.U-2SG.A-stem Q
 Have you seen a ghost **alive**?
 (data: EDT Leg-4, sentence 16)
- (e) *Ṭhákóža, ní míčigli yé.*
ṭhákóža ní m-kíči-gli yé
 grandchild alive 1SG.U-DAT2-come.back IMP.(entreaty)
 Grandson, come back to me **alive**!
 (data: EDT Spea-3, sentence 6)
- (f) *Wíᅅyaᅅ kiᅅ lená ní a-wičha-gla po.*
wíᅅyaᅅ kiᅅ lená ní a-wičha-gla po
 woman the these alive take.back-2PL.U- stem IMP.PL
 Take these women back **alive**!
 (data: DT Story 51, sentence 22)

In all of the sentences in (199) the semantic argument of the verb *ní* is shared with the object of the main verb, which means that *ní* functions here as an object oriented SP. Note also that in the second clause of (199c) the verb *ní* is used with the continuative suffix *-akhe* which is no longer productive and apart from *niyákhe* it is found only on DMs based on stative verbs (as discussed on p. 190, see Table 5.11).

The object orientation of *ní* in the data shown in (199) makes it clear that it should be analyzed as a secondary predicate. This is not obvious when *ní* and the main verb share the subject, as in (200) where the V1+V2 are both active Vs and thus have the defining properties of the SimPC. However, the fact that *ní* can function as an object oriented SP suggests that the sentences in (200) are in fact also depictive SPCs.

(200) (a) *Héčhena ní úŋ.*

héčhena ní úŋ
still live 3SG.A-exist

He is still **alive**.

(data: DT Story 22, sentence 7)

(b) *Túŋweni tuwéni héčhiyataŋhaŋ ní glí šni.*

túŋweni tuwéni héčhiyataŋhaŋ ní Ø-glí šni
never nobody from.there live/alive 3SG.A-come.backNEG

Nobody has come back **alive** from there.

(data: EDT Col-4, sentence 184)

(c) *Ní ħpáya ké.*

ní Ø-ħpáyA ké
live/alive 3SG.A-lie HSY

He lay **alive**, it is said.

(data: DT Story 46, sentence 4)

(d) *Lé wakíni čha ní muŋké.*

lé wa-kiní čha ní m-yuŋkÁ
this 1SG.A-come.back.to.life so alive 1SG.A-lie

I came back to life so here I lie **alive**.

(data: DT Story 47, sentence 13)

Another argument for treating *ní* as a SP is the fact that it can be converted into a DM (i.e. *níyákhe*), and it can do so not only when it is object oriented, as was seen earlier in (199c), but also when it is subject oriented, as in (201a) below. The latter is contrasted with (201b) where *ní* is not modified and functions as a subject oriented SP.

(201) (a) *Niyákhe thiyáta yakhípi kte.*

ní-akhe thiyáta ya-khí-pi ktA
 alive-DER.CONT home 2A-arrive.back.there-PL FUT.IRR

You will get back home **alive**.

(data: RFT)

(b) *Ní thiyáta yakhípi kinháŋ wóyaka po.*

ní thiyáta ya-khí-pi kinháŋ wóyaka po
 alive home 2A-arrive.back.there-PL when.FUT.IRR tell IMP

If you get back home **alive**, report things.

(data: EDT Tales-4, sentence 9)

The data in (201) is evidence that the verb *ní* functions as a secondary predicate and should be treated as such regardless of its subject-object orientation.

There are two conclusions that we can draw from the above discussion. Firstly, secondary predication in Lakota is not restricted to stative verbs, but some active verbs can also function as secondary predicates. Consequently, the secondary predicate function is not determined/restricted morphologically but semantically.

Corpus searches have not been successful in finding more active verbs functioning as a secondary predicate in both object and subject oriented SPCs. We can hypothesize that verbs which can be used in this function are most likely those active verbs which express bodily functions and actions over which one has little to no volition control. Possible candidates are the following active verbs: *ločhínj* ‘to be hungry’, *yugó* ‘to be exhausted’, *wačhínjkħo* ‘to pout’, *šiglá* ‘to be resentful’, *nawízi* ‘to be jealous’, *léžA* ‘to urinate’, *čheslí* ‘to defecate,’ *ihéyA* ‘to defecate’, etc. Most of them can be found before intransitive verbs, where it is harder to make a distinction between secondary predication and simultaneous predication (e.g. *šiglá únj* ‘he has been resentful’, *léš yuŋké* ‘he urinated in his sleep/while lying’). Only the active verb *ločhínj* ‘to be hungry’ was found before a transitive verb (the literal meaning of *ločhínj*

is ‘to want food’ and it inflects with the active set of affixes, so it is not a stative predicate, despite the gloss). This is shown in (202b):

(202) (a) *Tanyán ločhín yaglípí.*

tanyán ločhín ya-glí-pí
well hungry 2A-come.back-PL

You came back pretty **hungry**.

(data: NSB 4-2)

(b) *Wakhánheža kin ločhín awičhayagli.*

wakhánheža kin ločhín a-wičha-ya-gli
child the hungry bring.back-3PL.U.ANIM-2SG.A-stem

You brought the children back **hungry**.

(data: RFT)

Using elicitation would possibly yield more data of this kind, although such data would be significantly less reliable.

The data in (203a) shows a complex sentence which involves a SPC (*t’á ĥpáya* ‘lie dead’) constituting the complement clause cross-referenced with the undergoer argument of the matrix verb (*wanbláke* ‘I saw him’). The evidence that *t’á ĥpáya* constitutes a clause rather than a serialized secondary predicate is given in (203b), where *ĥpáya* ‘to lie’ is obligatorily pluralized. If *t’á ĥpáya* ‘lie dead’ were part of a core juncture, then there would be no plural marking on it (it would be **t’á ĥpáya wanwíčhablake*), because the shared argument is signaled by *wičha-*. Arguments cannot be shared across clause boundaries, and therefore the verb in a complement clause must have its own subject marking, as in (203b).

- (203) (a) *Até t'á ěpáya waŋbláke.*
até t'á Ø-ěpáya waŋ-bl-áka
 my.father dead 3SG.A-lie see-1SG.A-STEM

I saw my father **lying dead**.
 (data: EDT Aut-3, sentence 45)

- (b) *T'á ěpáyapi waŋwičhablake.*
t'á Ø-ěpáya-pi waŋ-wičha-bl-aka
 dead 3SG.A-lie-PL see-3PL.U.ANIM-1SG.A-stem

I saw them **lie dead**.
 (data: BBBJ)

The fact that the lexical composition of secondary predicates is determined semantically rather than morphologically makes the distinction between secondary predicate constructions and simultaneous predicate constructions somewhat hazy, especially in cases where both verbs share the subject, as in (204) where V1 is an active verb and V2 is a stative verb.

- (204) *Tĥawičuthuŋ šni nit'ij kte séče uŋ.*
tĥawičuthuŋ šni ni-t'á ktA séčA (k')uŋ
 get.married NEG 2SG.U-die FUT.IRR perhaps assertion

1. You might die unmarried. (depictive interpretation)
 2. You might die without getting married. (SimPC interpretation)
- (data: EDT Inf-7, sentence 38)

One of the defining properties shared between secondary predication and SimPCs is that the V1 expresses a predication (attributive and eventive respectively) pertaining to the participant during the time frame of the event expressed by the V2. But if the difference between attributive and eventive predication is not determined morphologically, then sentences like (204) are vague in terms of their semantics.

The contrasting examples in (205) offer a comparison of a sentence where an active verb functions as SP with one where it is the primary predicate:

- (205) (a) *Ziṭkála kiṅ kinyáy oḥ'áṅkḥopi.*
ziṭkála kiṅ kinyÁṅ o-Ø-ḥ'áṅkḥo-pi
 bird DEF fly to.be.quick-3U-STEM-PL

The birds are **quick-flying** (i.e. they are quick at flying).
 (data: BO-200)

- (b) *Ziṭkála kiṅ oḥ'áṅkḥoya kinyáṅpi.*
ziṭkála kiṅ oḥ'áṅkḥo-ya Ø-kinyáy-pi
 bird DEF quick-DER 3A-fly-PL

The birds fly quickly.
 (data: BBBJ)

In (205a), the active verb *kinyáy* ‘to fly’ functions as a SP and the stative verb *oḥ'áṅkḥo* ‘to be fast’ is the primary predicate. In (205b), the functions are different in that *kinyáy* forms the primary predicate and *oḥ'áṅkḥo* is used with the suffix *-ya* as a derived modifier and provides manner modification to the predicate.

Further evidence that active verbs can function as SPs is shown in (206), where the transitive verb *čhok'iy* ‘to roast smth’ is used intransitively. The primary predicate is *yaṅkápi* ‘they sit’, an intransitive V marked for animate plural actor with the suffix *-pi*. The RP *šiyó* ‘grouse’ is cross-referenced by the actor argument. Consequently, the sentence is intransitive and the presence of the transitive verb *čhok'iy* ‘to roast smth’ is licensed only by its function as a subject oriented secondary predicate.

- (206) *Šiyó tóna mahél čhok'iy yaṅkápi.*
šiyó tóna mahél čhok'iy Ø-yaṅkÁ-pi
 grouse several in roast 3SG-sit-PL

Several grouses sat in it [ashes] roasting.
 (Deloria’s translation: “there were some birds cooking in the ashes.”)
 (data: DT Story 4, sentence 20)

An alternative translation of *čhok'iy yaṅkápi* is ‘They sat roasting IT’, i.e. treating it as a SimPC, but while such interpretation is accepted by native speakers as possible in other sentences, it is rejected in the context of (206).

Conclusion: In Lakota, secondary predication is a syntactic function primarily fulfilled by stative verbs, but some active verbs can also participate as subject oriented secondary predicates, which means that these two functions are not restricted morphologically but semantically. Active verbs can generally function as object oriented SPs before verbs of perception. Before other transitive verbs they appear as object oriented SPs marginally.

7.2. Active verbs as SPs and complement clauses - comparison

The previous section showed that active verbs commonly function as object oriented SPs. This allows us to hypothesize that all active verbs should be able to function as object oriented SPs with a verb of perception as the primary predicate (such as *wan̄yáŋka* ‘to see smth’ *naǰ’úŋ* ‘to hear smth/sb’ and *abléza* ‘to notice smth/sb’).

That this is in fact the case is shown in the contrastive examples in (207) which show three very similar ways of saying “He saw them coming” with subtle differences in meaning expressed via different syntactic constructions.

(207) (a) *Ú wan̄wičhayáŋke.*

ú *wan̄-wičha-yáŋka*
 come see-3PL.U.ANIM-3SG.A-stem
 He saw them coming.
 (data: DT story 5, sentence 24)

(b) *Úpi wan̄wičhayáŋke.*

Ø-ú-pi *wan̄-wičha-yáŋka*
 3A-come-PL see-3PL.U.ANIM-3SG.A-stem
 He saw they were coming.
 (data: RFT)

(c) *Úpi čha wan̄wičhayáŋke / wan̄yáŋke.*

Ø-ú-pi *čha* *wan̄-wičha-Ø-yáŋka* / *wan̄-Ø-Ø-yáŋka*
 3A-come-PL CMPL see-3PL.U.ANIM-3SG.A-stem / see-INAN-3SG.A-stem
 He saw that they were coming.
 (data: BBBJ, p.c.)

In (207a), the semantic argument of the verb *ú* is shared with the 3rd plural undergoer affix *wičha-* on the main verb. This makes the verb *ú* an object oriented secondary predicate. Conversely, the sentence in (207b) is bi-clausal because the actor is coded on the verb *ú* (3PL.A); thus the subject argument of *úpi* is coreferential with the object of *wanwičhayanke*, which means that *úpi* is an unmarked complement clause. In (207c), *úpi* constitutes a complement clause marked with the complementizer *ča* and in this case the matrix verb can be either *wanwičhayanke* or *wanyánke*, where the former cross-references the undergoer argument with the actor of *úpi*, whereas the latter cross-references the entire clause as the object argument. Corpus data shows that this alternation is possible in both unmarked and marked complement clauses.

Secondary predicates and complementizers are clearly distinguishable in sentences like those given in (207a-b), but in a construction with V+V, in which V1 is a non-truncating verb with no overt personal affix, and V2 is a verb of perception with no over object affix, there is a structural ambiguity between these two syntactic constructions, and they can have three interpretations. This is illustrated in (208).

- (208) *Čhéya wanyánke.*
 (*Ø*)-*čhéya* *wan-Ø-Ø-yánkA*
 (3SG.A)-cry see-3SG.U-3SG.A-stem
1. She saw him_i cry_i. (object oriented SP)
 2. She_i saw him cry_i/crying_i. (subject oriented SP / SimPC)
 3. She saw he was crying. (complement clause)
- (data: PM)

The verb *čhéya* in (208) can be interpreted as a subject oriented SP, as object oriented SP or as a complement clause. In the first two interpretations, the verb *čhéya* has no affix since the subject or object argument is shared with the primary predicate through core cosubordination. Since *čhéya* ‘to cry’ is an active verb, the construction

(210) (a) *Ínyan̄ka wanyán̄ke.*

(Ø)-*inyan̄kA* *wan̄-Ø-Ø-yán̄kA*
 (3SG.A)-stem see-3SG.U-3SG.A-stem

1. He saw her_i run_i. (object oriented SP)
 2. He_i saw her running_i. (subject oriented SP)
 3. He saw she was running. (complement clause)
- (data: PM)

(b) *Ínyan̄g wanyán̄ke.*

inyan̄kA *wan̄-Ø-Ø-yán̄kA*
 stem see-3SG.U-3SG.A-stem

1. He saw her_i run_i. (object oriented SP)
 2. He_i saw her running_i. (subject oriented SP)
 3. * He saw she was running. (complement clause)
- (data: PM)

As mentioned in Chapter 5, a small group of truncating SVs do not truncate when they function as SPs (see Table 5.1), so the distinction exemplified in (210b) could not be shown with those verbs. The same context sensitivity of the subject-object orientation exemplified in (210) applies also to stative verbs, as discussed in 4.3 (see (72)). However, the ambiguity of subject-object orientation of stative SPs is perhaps one of the motivations for the diachronic shift to derived modifiers, which are generally interpreted as object oriented (with the exception of complex DMs with body part Ns).

Furthermore, the ambiguity of sentences like those in (208) and (210a) is perhaps one of the reasons why complement clauses are preferably marked with the complementizer *čha*.

The constituent projections comparing SPCs and complement clauses were given in section 4.4 (see Figure 4.5 and Figure 4.6).

An example of an active verb functioning as a subject oriented SP is given in (211).

- (211) *Íňyangyang waŋwičhayanke šni kúnzA yé.*
íňyang-yankA waŋ-wičha-yankA šni kúnzA Ø-yÁ
 run-REDUP see-3PL.ANIM.U-stem NEG pretend 3SG.U-go
 He went running pretending not to see them.
 (data: BO-41)

In (211), the secondary predicate *íňyangyang* ‘running’ does not share the undergoer argument signaled by *wičha-* but rather the actor argument of the primary predicate (which means it is a SimPC).

A study concerned with complementation is Pustet (2000a), titled Echo Pronominalization and Complementation in Lakota and written within a functional-typological framework. Pustet states that “[t]here are three syntactic patterns for rendering Lakota complement plus main clause structures“ (ibid, p. 150), specifically *lower predicate coding*, *higher predicate coding* and *echo pronominalization* (where the subject shared by the two verbs or the notional subject of the first verb agreeing with the object of the second verb are both coded). I am citing Pustet’s data in (212), with my own glossing and translations, and I provide Pustet’s translation in brackets.

- (212) (a) *Íhát’api nawáh’uŋ.*
i-Ø-hát’a-pi na-Ø-wá-h’uŋ
 laugh-3A-stem-PL hear-3SG.U-1SG.A-stem
 I heard laughter of theirs. (Pustet: I heard them laugh.)
- (b) *Íhát’api nawičhawaŋ’uŋ.*
i-Ø-hát’a-pi na-wičha-wa-h’uŋ
 laugh-3A-stem-PL hear-3PL.ANIM.U-1SG.A-stem
 I heard them laugh. (Pustet: I heard them laugh.)
- (c) *Íhát’a nawičhawaŋ’uŋ.*
i-Ø-hát’a na-wičha-wa-h’uŋ
 laugh hear-3PL.ANIM.U-1SG.A-stem
 I heard them laughing. (Pustet: I heard them laugh.)

Pustet uses the data in (212) to illustrate the three ways of coding the notional subject of the complement clause, but her interpretation of the data is problematic in

more than one way. Firstly, in the glossing of (212a) and (212b) she indicates that the V1 is coded for plural but she shows no actor argument. This is problematic because Lakota complement clause constructions are always bi-clausal. Secondly, Pustet's translation does not indicate that there is actually a subtle semantic difference between the first two examples; even though they can both translate into English with "I heard them laugh", a somewhat more literal interpretation of (212a) is as follows: "I heard the laughter of theirs". This is because the undergoer argument of the matrix verb in (212a) cross-references the entire complement clause, whereas in (212b) it cross-references only the actor of the complement clause. The unmarked complement clause given in (212b) is used very commonly, but the one in (212a) is actually infrequent, and the preferred type is one that involves the complementizer *čha* (as in *Ihát'api čha nawáh'unj* 'I heard that they were laughing').

The third problem is the most relevant one for the present study and it has to do with the fact that Pustet's example in (212c) is actually not an instance of complement clause construction but is, in fact, an example of object oriented secondary predicate. In this case the lack of actor coding in the glossing on the first verb is accurate, as this is a mono-clausal construction.

In her introduction, Pustet (ibid 137) gives the following definition of complementation: "the syntactic situation that arises when a notional sentence or predication is an argument of a predicate (Noonan 1985: 42)". The example in (212c) is one of many given by Pustet that violate this definition.¹⁷

¹⁷ Another problem in addition to the issues with the interpretation of the data is the fact that many of the examples given by Pustet appear to conflict with authentic data. For instance, *ú kta khómákiphapi* 'they fear that I am coming' (Pustet, 2000a, p. 150) is ungrammatical, as is *éktuñžapi áyapi* 'they start to forget', (ibid, p. 152) (the correct version of the construction is discussed in 5.16 of the present study). Pustet explicitly states that her data is based primarily in translational elicitation which, in my opinion, explains why the constructions shown in the examples are not commonly found in corpus data.

Conclusion: This section compared the structure of SPCs with that of complement clauses. Under certain circumstances (no overt subject marking on V1 and no overt object marking on V2), there is a three-way structural polysemy: (1) object oriented SPC, (2) subject oriented SPC, and (3) complement clause. This illustrates how identical strings of morphemes can have different semantic interpretations.

Corpus tokens of this type of structure are very low in number, possibly due to the polysemy. The preferred structure for complement clauses is one that involves the complementizer *čha*.

7.3. Derived modifiers based on active verbs

In 7.1 it was mentioned that secondary predicates composed of active verbs can optionally be converted into derived modifiers via suffixing *-ya* (as shown in (197) and (198b,c)) and the suffix *-akhe* (illustrated in (201a)).

Optional modification also involves the V1 in Simultaneous Predicate Constructions (discussed in Chapter 10), which can be modified morphologically with the suffixes *-ya*, *-kel* (vague property) or *-hčij* (emphasis). These suffixes were introduced in section 5.3 and it was shown that they play an essential role in converting stative verbs into derived modifiers.

That the V1 in SimPCs can optionally be turned into a derived modifier is illustrated in the contrasting examples in (213):

(213) (a) *Máni úpi.*
máni *Ø-ú-pi*
 walk 3_A-come-PL
 They are coming **walking**.
 (data: BO:67)

(b) *Mániyaŋ ománi.*
máni-ya *o-má-Ø-ni*
 walk-DER LOC-walk-3_{SG.A}-stem
 He is **walking** about.
 (data: BD: 104, §139)

In (213a), we see a SimPC with *máni* as V1 and the same verb is the base of the DM in (213b). While (213a) is a core juncture (cosubordination), the structure in (213b) has the derived modifier *mániyaŋ* in the core periphery of the predicate.

Another pair of contrastive sentences is in (214):

(214) (a) *Ináhni ibláble.*
ináhni *i-bl-á-bl-e*
 hurry depart-1_{SG.A}-stem-1_{SG.A}-stem
 I took off **hurrying**.
 (data: DTA)

(b) *Ináhniyaŋ ibláble.*
ináhni-yaŋ *i-bl-á-bl-e*
 hurry-DER depart-1_{SG.A}-stem-1_{SG.A}-stem
 I took off **hurrying**.
 (data: RFT)

Negated active verbs can also be replaced with derived modifiers, as shown in the contrasting examples in (215):

(215) (a) *Ih'áj šni yúte.*

i-Ø-h'áj *šni* *Ø-Ø-yúta*
 cook-3SG.U-stem NEG 3SG.U-3SG.A-eat

He ate it **without cooking it**.

(data: NSB 6-2)

(b) *Ločhij čha hé ih'ájšniyaŋkel yúta ké.*

Lo-Ø-čhij *čha hé* *i-Ø-h'áj-šni-ya-kel* *Ø-Ø-yúta* *ké.*
 hungry-3SG.A-stem so that cook-3INAN-NEG-DER-VAG 3SG.A-eat QUOT

He was hungry so he ate that **without cooking it**.

(data: EJ in CULP reader p. 81, line 71)

The motivation for replacing the V1s of SimPCs with derived modifiers is very similar to the reason why stative secondary predicates are preferably used as derived modifiers. Specifically, this is in order to liberate the verb from appearing to function predicatively and thus avoid garden paths, especially in cases where the V1 would be too far from the primary predicate, as in (216):

(216) *Óič'iya okihišniyaŋ khúš ħpáye.*

ó-ič'i-ya *okihi-šni-ya* *khúšA* *Ø-ħpáya*
 help-REFL-stem able-NEG-DER sick 3SG.A-lie

He lay sick **unable to** help himself.

(data: MARC)

In (216), the sequence *óič'iya okihi šni* 'he cannot help himself' could be followed by the main predicate to form an SimPC, but the presence of the DM *khúš* 'sick' puts it too far from the primary predicate *ħpáye* 'he lay.' Converting *óič'iya okihi šni* into a DM makes real time parsing easier as it does not lure the listener into thinking that *óič'iya okihi šni* forms a clause. However, unlike the majority of SVs, for which morphological modification is obligatory when they are not the main predicate, it seems optional for most active verbs although more research is needed (exceptions will be discussed later in this chapter). Thus, sentences like (216) are generally considered grammatical without the suffix *-ya* (or one of the other suffixes).

By definition, modifiers are unable to function predicatively and take an actor argument. However, Lakota clauses with object oriented DMs based on active verbs can include an RP which is the notional subject of the active verb on which the DM is based, as exemplified in (217):

- (217) (a) *Šúnka ešá, tuwéni itháŋkal ú-šni-yaŋ wičhákhuwapi.*
šúnka ešá tuwéni Ø-itháŋkal ú-šni-ya wičha-Ø-khuwá-pi
 dog even nobody 3SG.U-outside.of come-NEG-DER 3PL.U.ANIM-3A-treat-PL
 They allowed no one, **not even dogs**, to come in front of it.
 (data: BO-70)
- (b) *Tuwéni wanyáŋke-šniyaŋ aógiŋwičhaya škhé.*
tuwéni wanyáŋka-šni-ya aógiŋ-wičha-Ø-ya škhÁ
 nobody see-NEG-DER dim-3PL.U.ANIM-3SG.A-CAUS HSY
 He dimmed their vision so that **nobody (no people)** would see him.
 (data: EDT Red Leaf Story, sentence 24)
- (c) *Tuwéni šil'óh'áŋ-šni-yaŋ wičháktepi škhé.*
tuwéni šil-oŋ'áŋ-šni-ya wičha-Ø-kte-pi škhÁ
 nobody bad-behave-NEG-DER 3PL.U.ANIM-3A-kill-PL HSY
 They made sure that **nobody (no people)** behaved badly.
 (data: BO-71)

In (217a), the RP *šúnka ešá tuwéni* ‘nobody even dogs’ is cross-referenced with the undergoer affix *wičha-* on the predicate *khuwá*, and it is the shared semantic argument (i.e. its notional subject) of the verb *ú* ‘to come’, which is the base of the DM *ú-šni-yaŋ*. The same is true about the RP *tuwéni* in (217b) and (217c). This participant orientation of the DM is related to its origin in the subject oriented secondary predicate.

Regardless of the fact that as modifiers they cannot function predicatively, there is evidence that modifiers derived from transitive verbs maintain their transitivity and are able to take an object argument. This is illustrated in (218):

- (218) (a) *Iníyuyǵešniyaŋ iyópteyapi.*
i-Ø-ni-yuyǵA-šni-yaŋ *iyópte-Ø-Ø-ya-pi*
 to.ask.about-INAN-2SG.OBJ-stem-NEG-DER pass-INAN-1.SG-stem-PL

They passed it (i.e. the law) **without asking you about it**.
 (data: EDT Spea-2, sentence 39)

- (b) *Mičho-šniyaŋ ektá mnin̄ kte.*
ma-ki-čho-šni-ya *Ø-ektá* *bl-(y)Á* *ktA*
 1SG.U-DAT1-invite-NEG-DER 3SG.U-to 1SG.A-go FUT.IRR

I will go to him **uninvited**.
 (lit.: I will go to him **without me being invited**.)

(data: RFT)

In (218a), the modifier is derived from the ditransitive verb *iyúŋǵA* ‘to ask sb about smth’ and we see the 2nd singular undergoer affix *ni-* present in the modifier and representing the person to be asked (the “about” object is covert and never cross-referenced on this verb due to the rule of limiting the number of undergoer affixes to one). In (218b), the modifier *mičho-šniyaŋ*, derived from the transitive verb *kičhó* ‘to invite sb’, has the undergoer affix *ma-*.

The object of the transitive derived modifier is often represented by an RP cross-referenced with the undergoer argument of the DM, as in the examples in (219):

- (219) (a) *Tákuni šiča awáčhiyšniyaŋ úŋ po.*
tákuni šičA awáčh-Ø-iŋ-šni-ya *Ø-úŋ* *po*
 nothing bad to.think.about-INAN-stem-NEG-DER 3SG.A-be IMPER-PL

Live **without thinking about anything bad**.
 (data: TT)

- (b) *Išpá kič’úŋyaŋ makháhe-waye ló.*
išpá *Ø-kič’-úŋ-ya* *makháhe-Ø-wa-ya* *ló*
 elbow 3SG.U-POSS-use-DER accomplish-INAN-1SG.A-stem DEC.MSP

I accomplished it **using my elbows** (i.e. by being assertive).
 (data: Bue)

- (c) *Čhaŋté kič'úŋyaŋ lená ečhúŋpi.*
čhaŋté Ø-kič'-úŋ-ya lená ečh-Ø-Ø-úŋ-pi
 heart 3SG.U-POSS-use-DER these do-INAN-3A-stem-PL

They do these things **using their hearts** (i.e. sincerely and determinedly).
 (data: JAH)

Not all DMs based on AVs maintain their transitivity, as can be seen in (220):

- (220) (a) *Oyúškeya úŋpi.*
oyúška-ya Ø-úŋ-pi
 set.free-DER 3A-be-PL

They live **free**. (* They live setting it free.)
 (data: RTC on KILI 2007-03-07 5:00, BBBJ, JYH)

- (b) *Okáħniħya uŋkókiyakapi.*
okáħniħ-ya uŋk-ó-Ø-ki-yakA-pi
 understand-DER 1U-tell-3SG.A-DAT1-stem-PL

He told it to us **in an understandable manner**. (i.e. he explained it to us).
 (* He told it to us understanding it.)
 (data: DTA)

- (c) *Kiksúyešniyaŋ ħpáye.*
kiksúyA-šni-ya Ø-ħpáyA
 remember-NEG-DER 3SG.A-lie

He lay **unconscious**. (* He lay without remembering it.)
 (data: DT Story 8, sentence 16)

In (220a), the DM is derived from the transitive verb *oyúška* ‘to turn sb/smth lose, to set sb free’ but the DM is not transitive. The same is true for the derived modifiers in (220b) and (220c).

There are instances where DMs based on active verbs form a constituent with the word (or words) they follow. This is illustrated in (221a) with a sentence which expresses an attitude of a warrior that lost his purpose in life:

- (221) (a) *Lé ktépi čhinyáŋkel omáwani k'uy!*
lé kté-pi čhín-ya-kel omá-wa-ni k'uy
 just kill-PASS want-DER-VAG travel-1SG.A-stem ASSERT

I am just wandering about **wanting to be killed**.
 (data: EDT Leg-8, sentence 15)

- (b) *Lé maktépi wačhín čha omáwani k'uy!*
lé ma-kté-pi wa-čhín čha omá-wa-ni k'uy
 just 1SG.U-kill-PASS 1SG.A-want so travel-1SG.A-stem ASSERT

I just **want to be killed** so I am wandering about.
 (data: BBBJ)

In (221a), the passive verb *ktépi* ‘to be killed’ is part of the DM constituent. The evidence for this claim lies in the fact that the passive verb *ktépi* has no subject marking (i.e. it is not *maktépi* ‘I am killed’) and thus it meets the defining property of a modifier. Note that the sentence cannot be translated with “I am just wandering about wanting for him to be killed” which is evidence that the passive does not have a zero affix (which would signal 3rd singular undergoer) and it is also evidence in support of analyzing such *-pi* structures as passive voice (cf. Chapter 9). The lack of subject marking on *ktépi* is licensed only by the fact that the suffix *-ya* (in *čhinyáŋkel*) has scope over both words in the constituent. The example in (221b) shows that *ktépi* requires subject marking when *čhín* is the predicate. Constructions like that in (221a) are commonly used as alternatives for purpose clauses, as shown in the contrast between (221a) and (221b).

Derived modifiers based on transitive verbs can also form a complex derived modifier constituent with the object of a transitive verb, as illustrated in (222):

- (222) (a) *Wičháša kaňyá wašpápi.*
wičháša káġA-ya wa-Ø-Ø-špá-pi
 man make-DER cut.out-INAN-3A-stem-PL

They cut a piece out of it **making (the shape of) a man**.
 (data: BD p. 164)

- (b) *Čhaŋglěška kaňyá omimeya waŋ lila thánka káǵapi.*
čhaŋglěška káǵA-ya omimeya waŋ lila thánka Ø-Ø-káǵA-pi
 ring make-DER circle INDEF very large INAN-3A-make-PL

Making a ring-shape they form a very large circle.
 (data: EDT Aut-8, sentence 29)

In (222a), *wičháša kaňyá* ‘making (the shape of) a man’ is as a complex DM because the N *wičháša* cannot be cross-referenced with either of the two arguments of the transitive predicate *wašpápi*, and it is, therefore, licensed only by it being cross-referenced with the object argument of the DM *kaňyá* which is based on the V *káǵA* ‘to make smth/sb’.

The same holds true for *čhaŋglěška kaňyá* ‘making a hoop’ in (222b), which is a participant oriented complex DM. (The stative verb *thánka* ‘big’ functions as a genuine SP here, resultative in this case.) Note also that the DM is derived from the verb *káǵA* ‘to make smth/sb’ which is the same verb used for the predicate.

The suffix *-kel* (introduced in 5.3.) which is used frequently in concert with the modificizer *-ya* on stative verbs, can be suffixed independently to active verbs, converting them into modifiers. Examples are in (223):

- (223) (a) *Asnikiyakel yaŋká-he.*
asnikiya-kel Ø-yaŋká-hAŋ
 rest-VAG 3A-sit-CONT

She was sitting **resting somewhat**.
 (data: RTC)

- (b) *Kpasikel waúŋ.*
kpasí-kel wa-úŋ
 research-VAG 1SG.A-exist

I have been **researching it somewhat**.
 (data: IS-LE p. 17)

(c) *Ókičhiyakel úŋpi.*

ó-kičhi-ya-kel Ø-úŋ-pi
 help-RECIP-stem-VAG 3A-exist-PL

They are always **kind of helping each other**.
 (data: NBC)

(d) *Wáŋ, haŋbléblekel léčhiya waŋčhiyaŋke ló.*

wáŋ haŋblé-ble-kel léčhiya waŋ-čhi-yaŋkA ló
 wow dream-REDUP-VAG here see-1SG.A.2SG.U-stem DEC.MSP

Wow, it is **unexpected** to see you here. (I see you here **unexpectedly**.)
 (data: RTC-23 10:10)

All of the sentences in (223) are grammatical without the suffix *-kel*, as well.

Another strategy for converting active verbs into modifiers involves the clitic *s'e*.

This clitic is interesting in that it can conjoin clauses, as in (224a), and it can also convert active verbs into modifiers, as in (224b).

(224) (a) *Kiŋyáŋpi s'e iŋyaŋkapi.*

Ø-kiŋyÁŋ-pi s'e Ø-iŋyaŋkA-pi
 3a-fly-PL as.if 3A-run-PL

They ran **as if they were flying**.
 (data: RFT)

(b) *Kiŋyé s'e iŋyaŋkapi.*

kiŋyÁŋ s'e Ø-iŋyaŋkA-pi
 fly as.if 3A-run-PL

They ran **as if flying**.
 (data: BBBJ)

In (224a), the clitic *s'e* subordinates the clause *kiŋyáŋpi* 'they are flying' to the clause *iŋyaŋkapi* 'they are running'. The subject of the clauses is coreferential. In (224b), the verb *kiŋyáŋ* before the clitic *s'e* has no subject marking so it must be concluded that *kiŋyé s'e* is ad-core modifier (manner modifier).

As a side note it should be added that *s'e* can function in the same two ways with stative verbs, as shown in the data in (225):

- (225) (a) *T'ápi s'e ħpáyapi.*
 Ø-t'Á-pi s'e Ø-ħpáyA-pi
 3a-to.be.dead-PL as.if 3A-lie-PL

They lay **as if they were dead**.
 (data: RTC)

- (b) *T'é s'e ħpáyapi.*
 t'Á s'e Ø-ħpáyA-pi
 dead as.if 3A-lie-PL

They lay **as if dead**.
 (data: EDT-Col-3, sentence 98)

As mentioned earlier the conversion of active verbs in non-main predicate positions into DMs is optional for the majority of AVs. An example of active verbs that obligatorily change into derived modifiers is the verb *wíyuškiŋ* (1s: *wíbluškiŋ*) 'to be happy, to rejoice'. This is shown in the contrasting examples in (226) where (226b) is ungrammatical because of the lack of the suffix *-ya*:

- (226) (a) *Wíyuškiŋyaŋ waŋkičhiyaŋkapi.*
 wíyuškiŋ-yaŋ waŋ-Ø-kíčhi-yaŋkA-pi
 happy-DER see-3A-RECIP-stem-PL

They were happy to see each other.
 (data: DT story 47, sentence 24)

- (b) * *Wíyuškiŋ waŋkičhiyaŋkapi.*
 wíyuškiŋ waŋ-Ø-kíčhi-yaŋkA-pi
 happy see-3A-RECIP-stem-PL

They were happy to see each other.
 (data: GJ: BBBJ)

Active verbs like *wíyuškiŋ* are syntactically more similar to stative verbs in that they are obligatorily converted into modifiers whenever they are not predicative.

Some active DMs based on AVs show only truncation as their morphological derivation. An example is provided in (227) where (a) shows the AV *yublěčA* used as a transitive predicate, while (b) shows its truncated form *yublěl* used as a DM:

- (227) (a) *Wizípħaŋ kiŋ yublěčapi.*
wizípħaŋ kiŋ Ø-Ø-yublěčA-pi
 suitcase DEF INAN-3SG.A-open-PL
 They **opened** the suitcase.
 (data: BT p. 83, line 57)
- (b) *Wókapħe waŋ yublél wakáphapi ožúla yaŋká ...*
wókapħe waŋ yublél wakáphapi ožúla Ø-yaŋká
 rawhide.container INDEF open dry.meat full.off INAN-sit
 There was an **open** rawhide container full of dried meat ...
 (data: DT story 38, sentence 7)

In (227), the word *yublél* is a truncated form of the transitive verb *yublěčA* ‘to open/untie/unwrap smth’ and it functions as an RP-external modifier of *wókapħe waŋ* ‘a rawhide container’. The latter is cross-referenced by the subject of the predicate *yaŋká* and as a consequence *yublél* cannot be analyzed as a simultaneous predicate sharing the same subject, but instead it is a modifier.

The data in (227) shows that verbs like *yublěčA* can be used as transitive predicates, on the one hand, and when truncated they can function as derived modifiers. There are, however, many truncated DMs that are no longer used in their non-truncated form and thus cannot function predicatively. Such modifiers form a category of their own and are discussed in Chapter 12.

Some Lakota clauses are deceptive in that their morpho-syntactic appearance is similar to DM constructions (suffix *-ya*) and their translation makes them appear to be purposive constructions, while in reality they are neither. Examples are in (228):

- (228) (a) *Čhéga waŋ kħalyá égle.*
čhéga waŋ kħátA-yÁ é-Ø-Ø-gle
 kettle INDEF hot-CAUS set-INAN-3SG.A-stem
 She sat the kettle to boil. (literal: She set the kettle **heating**.)
 (data: DT Story 33, sentence 8)

- (b) *Pusyá otkéye.*
púzA-ya otké-Ø-Ø-ya
 dry-CAUS hang-INAN-3SG.A-CAUS
 She hung it up to dry. (literal: She hung it up **drying**.)
 (data: EDT Col-4, sentence 192)
- (c) *Sniyán glépi.*
sni-ya Ø-Ø-glé-pi
 cold-CAUS INAN-3A-set-PL
 They set it too cool. (literally: They set it **cooling**.)
 (data: RFT)
- (d) *Taságya gnáke.*
tasáka-ya Ø-Ø-gnáka
 frozen-CAUS INAN-3SG.A-set
 He set it to freeze. (literally: He set it **freezing**.)
 (data: Bue)

In (228), the morpho-syntactic properties of words ending in *ya/yan* make them look like derived modifiers, but these words cannot be modified with any of the suffixes commonly used for intensifying derived modifiers, such as *-la*, *-kel* and *-hčij*, which means that the words are not DMs. In reality, they are causative verbs derived from SVs by affixing the causative suffix *-yA* (notice the ablaut). The fact that these causatives end in a-grade ablaut is evidence that the sentences in (228) are instances of Simultaneous Predicate Constructions rather than Purpose Constructions (this distinction is discussed in 10.2.1).

Conclusion: This section discussed modifiers derived from active verbs. It showed that whenever AVs function as the V1 in SimPCs or as secondary predicates they are optionally derived morphologically into modifiers via the suffixation of *-ya* or *-kel*. Such DMs based on active verbs generally allow participant oriented reading, and DMs derived from transitive verbs often maintain their object arguments and can cross-reference RPs. A small number of DMs based on active verbs undergo obligatory morphological modification whenever they occur before the main predicate.

8. Pre-modification

As a Siouan language, Lakota is characterized by ad-nominal post-modification. This was shown in section 3.4. for SVs as ad-nominal modifiers, and in section 5.11. for DMs as ad-nominal modifiers. In addition, Lakota makes use of pre-modification, which is employed quite frequently but has not received much attention in the research literature. The present study has identified seven types of pre-modification given in Table 8.1:

Table 8.1 *Types of pre-modifiers*

<u>pre-modifier</u>	<u>modified</u>
N	N
SV	N
SV	SV
AV	N
N	AV
NUM	AV
ADV	N

All of the pre-modified structures are characterized by the same prosodic properties; the premodifier and the modified word form a compound, in which the main stress always remains on the pre-modifier. The stress on the modified is sometimes reduced and sometimes deleted due to tonal crowding. The latter happens when the pre-modifier is monosyllabic and the modified word has initial vowel stress. Note that these prosodic properties are different from those exhibited by the lexical compounds discussed in 3.3. (e.g. *heháka* ‘elk’).

This chapter provides the description and analysis of the five pre-modifier constructions and of some superficially similar structures.

8.1. Nouns as ad-nominal pre-modifiers

This section discusses constructions in which Ns function as ad-nominal pre-modifiers and addresses several constructions which can be difficult to distinguish from ad-nominal pre-modification due to structural similarities.

When a N functions as an ad-nominal pre-modifier, the two Ns are compounded and the stress on the modified N is reduced, whereas the pre-modifier maintains its stress. Like simple Lakota Ns, such N+N compounds can function predicatively, as illustrated in (229a-b), or as RPs, as shown in (229c).

- (229) (a) *Lakǎ́óta-wìnyañ.*
Lakǎ́óta-wìŋ-Ø-yaŋ
 Lakota-woman-3SG.U-stem
 She is a Lakota woman.
 (data: NSB)
- (b) *Lakǎ́óta-wìŋmàyaŋ.*
Lakǎ́óta-wìŋ-mà-yaŋ
 Lakota-woman-1SG.U-stem
 I am a Lakota woman.
 (data: IEC)
- (c) *Lakǎ́óta-wìnyañ waŋ yúze.*
Lakǎ́óta-wìnyañ waŋ Ø-Ø-yúza
 Lakota-woman INDEF 3SG.U-3SG.A-take
 He married a **Lakota woman**.
 (data: DT story 21, sentence 1)

More examples of Noun-Noun compounds are in (230):

- (230) (a) *Wašiču-akičhita.*
wašiču-a-Ø-kìčhita
 white.man-soldier-3SG.U-stem
He is a white soldier.
 (data: EDT-Aut-6, sentence 1)
- (b) *Wétu-čhaŋwàpe nabléče.*
wétu-čhaŋwàpe Ø-nabléča
 spring-leaves INAN-burst.open
Spring leaves burst open.
 (data: BO-64)

- (c) *Blokétu-maštè thánka.*
blokétu-maštè Ø-thánka
 summer-heat INAN-large
 It was a great **summer heat**.
 (data: DT story 56, sentence 1)

- (d) *Pěžúta-wičhàša.*
pěžúta-wi-Ø-čhàša
 herb-man-3SG.U-stem
 He is an herbalist. (He is a medicine man who uses herbs and roots.)
 (data: DTA, NSB)

In (230b), the compounded noun is the RP cross-referenced with the argument of the intransitive predicate. In (230c), the N+N compound forms a complex predicate with the SV *thánka* ‘large’ (this type of complex predicate was discussed in 3.2.).

The data in (231) illustrates that a monosyllabic pre-modifier maintains its stress.

- (231) (a) *Čhán-hanpa.*
čhán-Ø-hanpa
 wood-INAN-shoe
 They are wooden shoes.
 (data: BBBJ)
- (b) *Čhán-čheğa.*
čhán-Ø-čheğa
 wood-INAN-bucket
 It is a drum.
 (data: KLT)
- (c) *Pté-makhòche.*
pté-Ø-makhòche
 buffalo-inan-country
 It is a buffalo country.
 (data: CWE)

When the modified N is originally stressed on the first syllable, this stress is lost due to tonal crowding, as shown in (231a) and (231b). If the stress is on a latter syllable of the modified N, then it is reduced, as in (231c). Thus, the prosodic properties of pre-modification explain yet another type of word initial compounds unaccounted for by the Dakota Stress Rule. It is also useful to compare the stress

position of the ad-nominal pre-modification shown in (231a) with that of complex predicates (e.g. *čhán wakhán* ‘it is a holy tree’) and lexical compounds (e.g. *čhaŋwákħaŋ* ‘it is a holy-tree’), which were discussed in 3.3.

The modifying N can sometimes be truncated, as shown in (232):

- (232) (a) *Lakhól-wòčhekiye.*
Lakhóta-Ø-wòčhekiye
 Lakota-INAN-prayer
 It is a Lakota prayer/religion.
 (data: JAH)
- (b) *Lakhól-wòkhoyake úŋ.*
Lakhóta-wòkhoyake Ø-Ø-úŋ
 Lakota-clothes INAN-3SG.A-wear
 He was wearing Lakota clothes (costume).
 (DATA BBBJ)

The reduction of the modifying N is usually optional, as is the case with *Lakhóta* in (232). In some N+N compounds the truncation is not possible, as in (229).

Among the constructions that involve two juxtaposed Ns and somewhat structurally resemble the ad-nominal premodifier under discussion, is complex predication involving two Ns, which is frequently used in traditional personal names. Contrastive examples are offered in (233):

- | | |
|---|--|
| <p>(233) (a) <i>Máza-Čhaŋtè</i>
 <i>máza-Ø-čhaŋtè</i>
 iron-3SG.U-his.heart
 He is of an Iron Heart.
 (free translation: He Has an Iron Heart.)</p> | <p>(b) <i>Čhaŋté Máza.</i>
 <i>čhaŋté Ø-máza</i>
 heart 3SG.U.PSR-iron
 His Heart Is Iron.</p> |
|---|--|

In (233a), the modifying N1 is compounded with the modified N2. In (233b), the same two nouns are used but in reversed order and pronounced independently, thus, in fact, this is a complex predicate where N2 functions as a stative co-predicate (i.e. the

same construction as that introduced in 3.2). The constituent projections of (233a,b) are given Figure 8.1 (a,b).

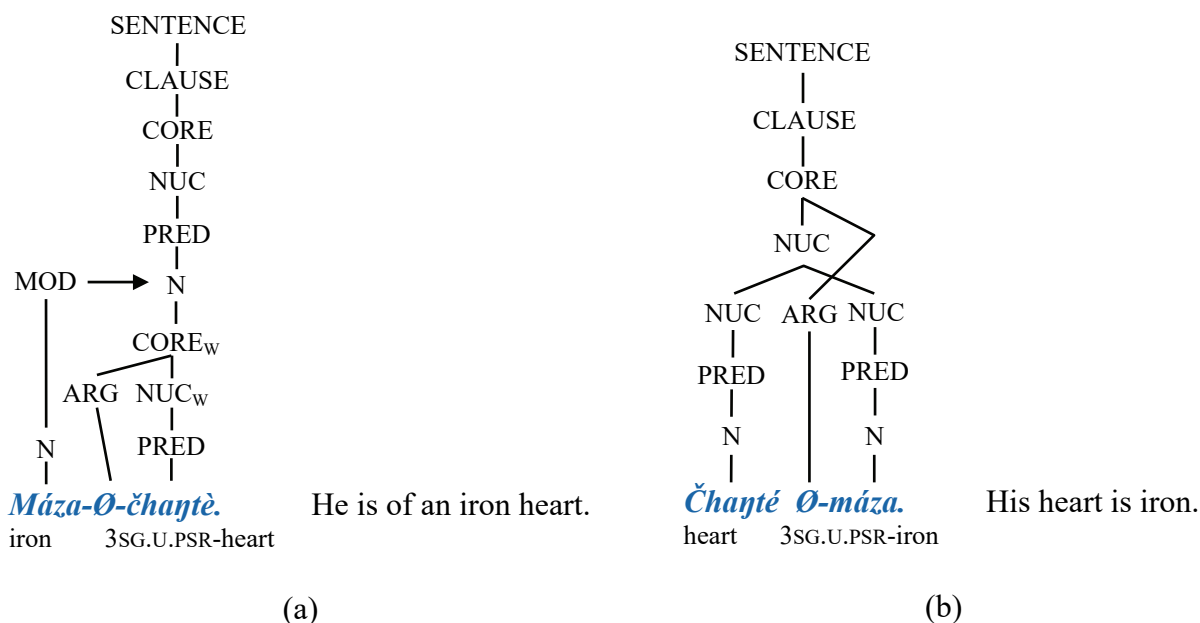


Figure 8.1 Comparison: Nominal N-modifier and N+N complex predicate

Figure 8.1 in (a) shows the optional N-modifier which modifies the head noun at the NUC level, whereas (b) is an instance of a N+N co-predicate (nuclear cosubordination). Additional examples of the N+N co-predicate are in (234):

- (234) (a) *Čhaŋté Pěta*
čhaŋté Ø-pěta
 his.heart 3SG.U-fire
 His Heart Is Fire.
- (b) *Tšašŋke Wakŋnyŋ*
tša-šŋkA Ø-wakŋnyŋ
 his.dog 3SG.U-thunder
 His Horse Is Thunder
- (c) *Wakŋnyŋ Pěta*
wakŋnyŋ Ø-pěta
 thunder 3SG.U-fire
 Thunder Is Fire. (Fire Thunder).

Lakota verbs in the 3rd plural collective can function as predicates as well as Ns, and they are a common source of lexicalized Ns. This is shown by the contrastive data in (235):

- (235) (a) *Othéǰiya wičhóuŋ.*
othéǰi-ya wičhá-óuŋ
 difficult-DER COLL.PL-exist
 They live a difficult way of life.
 (data: JHR.01 32:10)
- (b) *Lakǰól-wičhòuŋ.*
Ø-Lakǰóta-wičhóuŋ
 INAN-Lakota-way.of.life
 It is a Lakota way of life.
 (data: NSB 2.1, 2:53)
- (c) *Lakǰól wičhóuŋ.* (also: *Lakǰóta wičhóuŋ.*)
Lakǰóta wičhá-óuŋ
 Lakota COLL.PL-exist
 They live Lakota. (Free translation: They live the Lakota way of life)
 (data: RTC)

In (235a), *wičhóuŋ* functions as a predicate in collective plural. In (235b), *wičhóuŋ* is a N modified by the preceding N *Lakǰóta*, which is apparent from the compounding. The compound is used predicatively with zero marking for the inanimate subject. In (235c), the same two words are pronounced independently, which means that second word is a V and functions as the primary predicate, and the N *Lakǰóta* is the SP (depictive). The subject of this sentence is the 3rd plural collective. Note that in both (235b) and (235c) *Lakǰóta* can be pronounced without truncation, although the non-reduced version is more common in the depictive construction. The semantic differences are reflected in the English translations. Another example of the structure illustrated in (235b) is *Lakǰól-Wičhòǰ'anŋ* 'It is Lakota culture'.

The construction introduced in (235b) is commonly nominalized with determiners, as illustrated in the data in (236):

- (236) *Lakǰóta-Wičhòthi way él í.*
Lakǰóta wičhóthí way Ø-él Ø-í
 Lakota village INDEF INAN-to 3SG.A-arrive.there
 He arrived at a Lakota village.
 (data: RFT)

Based on impression, the prosodic difference illustrated in the minimal pair (235) is often neglected when such constructions are nominalized via determiners.

The construction introduced in (235b) is not restricted to verbs in collective plural but verbs in 3rd plural (animate, distributive) can also participate in it, as shown in (237), where the word *thípi* is used twice, once as a lexicalized N meaning ‘house’ and once as the predicate:

- (237) *Wašiču-thípi ogná owánžigžila thípi.*
wašiču thípi Ø-ogná owánži-gži-la Ø-thí-pi
 white.man house INAN-in permanently-REDUP-stem 3A-live-PL
They live permanently in white man (type of) **houses**.
 (data: EDT-Aut-4, sentence 32)

8.2. Stative Verbs as a classificatory ad-nominal pre-modifiers

An example of SV functioning as an ad-nominal pre-modifier is given in (238a) and contrasted with the adnominal postmodifier function of SVs in (238b):

- (238) (a) *Wakǰán-wičhàša kiŋ henála áyapi.*
wakǰán-Ø-wičhàša kiŋ henála á-Ø-ya-pi
 holy-3U-man DEF extinct become-3U-stem-PL
 The **holy (type of)** men are becoming extinct.
 (data: NSB 1994: 2-5:33, “wakǰán-wičhàša” also in EFT 1937)
- (b) *Wičhàša wakǰán kiŋ thí él inážiŋpi.*
wičhàša wakǰán kiŋ thí Ø-él iná-Ø-žiŋ-pi
 man holy DEF lodge INAN-at come.to.a.stop-3A-stem-PL
 The **holy** men stopped at the lodge.
 (data: GS: 9/69)

Notice that the SV+N in (238a) are compounded whereas the N+SV in (238b) are pronounced independently (as shown in 3.2.2). Like N+SV, the N with an attributive premodifier can constitute a complete clause, as shown in (239a):

- (239) (a) *Wakħáŋ-wičháša.*
wakħáŋ-Ø-wičháša
 holy-3SG.U-man
 He is a holy (type of) man.
- (b) *Wičháša wakħáŋ.*
wičháša Ø-wakħáŋ
 man 3SG.U-holy
 He is a holy man.

The difference between the semantics of (239a) and (239b) is very subtle, if any, and native speakers generally struggle when attempting to articulate different translations. It can be hypothesized, however, that each of the two structures answers a different type of question, specifically the questions shown in (240):

- (240) (a) *Táku-wičháša he?*
Táku-Ø-wičháša he
 what-3SG.U-man question
 What type of a man is he?
 (data: RFT 1992)
- (b) *Wičháša tókheča he?*
wičháša Ø-tókheča he
 man 3SG.U-to.be.like question
 What sort of a man is he?
 (data: RFT 1992)

The translations given in (240) do not accurately portray the difference between the semantics of the two questions because English lacks an expression to provide a felicitous translation of (240b). But the difference can be described as one between classificatory modification in (240a) and attributive modification in (240b).

Although the adnominal premodifier is compounded with the modified N, this is not lexical compounding (as that illustrated in Figure 3.6), because both the word

category and affixation position are maintained. Thus, this is an optional N-modifier and it modifies the N at the NUC level as shown in Figure 8.2.

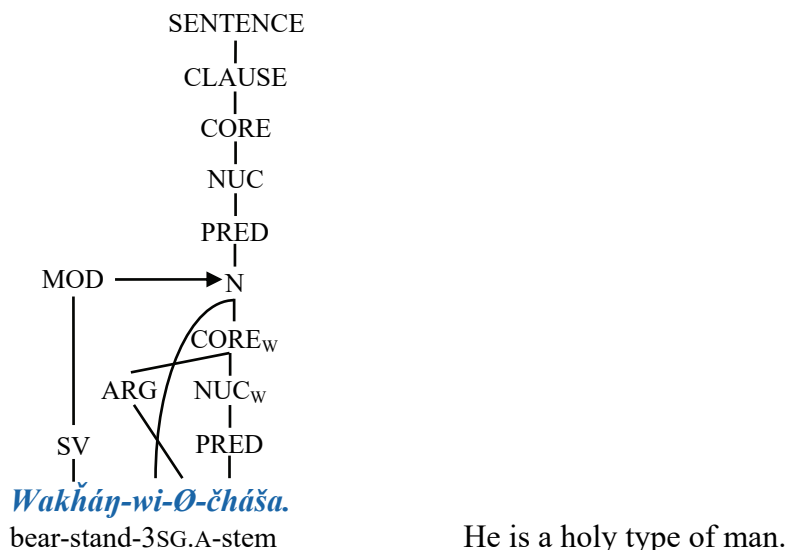


Figure 8.2 *SV as a classificatory N-modifier*

The classificatory modification function of SV is extremely rare in Lakota, both in the number of corpus tokens and the individual stative verbs found in this construction. A few other examples follow: *ská-wičhàša* ‘he is a white (type of) man’ (as opposed to *wičhàša ská* ‘he is a white man’) and *wathógla-oyàte* ‘they are a wild tribe/people’ (as opposed *oyàte wathógla* ‘they are a wild tribe/people’).

8.3. Stative Verbs as pre-modifiers of Stative Verbs

SVs functioning as pre-modifiers of SVs are found primarily in descriptions of visual attributes. Examples are given in (241).

- (241) (a) *Átayakel ĥóta-gleškàška.*
átaya-kel ĥóta-Ø-glešká-ška
 entirely-VAG gray-3SG.U-spotted-RED

It was entirely gray-spotted. (i.e. ‘It had gray spots all over.’)
 (data: BO)

- (b) *Ištá čikčik'ala k'éyaš sapsápa-wiyàkpakpa.*
ištá Ø-čik-čik'ala k'éyaš sap-sápA-Ø-wiyàkpa-kpa
 eye 3SG.U- small-RED but black-RED-3SG.U-shiny-RED

His eyes were small but they were black-shiny.
 (data: EDT-Col-1, sentence 12)

- (c) *Šázi pi.*
šá-Ø-zi-pi
 red-3SG.U-yellow-PL

They were orange. (literally: “They were red-yellow”; describing birds)
 (data: BO)

The data in (241a,b) shows that one or both of the SVs can be reduplicated.

Corpus searches have not identified instances of SV+SV premodification compounds with overt personal affixes, but the affixation position most certainly occurs on the modified word (i.e. on the head SV), as is the case with other premodification compounds and as was shown in (242e). This is also confirmed by native speakers I consulted.

Premodification is very productive in forming complex color terms from simple ones, as illustrated in (241c). The color term combined of *šá* ‘red’ and *zi* ‘yellow’ can be *šázi* or *ziša* both of which mean ‘orange’. Examples of other complex color terms are, *thózi* ‘green’, *thósanj* ‘light blue’, *thóska* ‘very light blue’, *thóša* ‘violet’, *thósapa* ‘dark blue, almost black (grape colored)’, *šásanj* ‘pink’, *šátšo* ‘purple’, *gíša* ‘maroon’, *gísanj* ‘light brown’, etc. Premodification is also underlying words like *nisko-thàŋka* ‘huge’ (literally ‘this big-large’). Many premodification compounds of this type are lexicalized, which can affect the affixation position (i.e. the affix can occur on a position other than on the original head SV). SV+SV premodification compounds whose head member can function as a SP can also function as SPs (e.g. *Nisko-thàŋka pó* ‘It was swollen huge.’), whereas other SV+SV compounds are obligatorily modified with the suffix *-ya* (e.g. *Zišayela wiyunj* ‘He painted it orange’).

8.4. Active verbs as ad-nominal pre-modifiers

In addition to Ns and SVs, pre-modification also makes use of Active Verbs (AV), which express human occupations, roles or functions. Examples are in (242).

- (242) (a) *Wačhékiya-wičhàša.*
wáčhékiyA-wi-Ø-čháša
 pray-man-3SG.U-stem
 He is a priest. (literally: “He is a praying-man.”)
 (data: NSB)
- (b) *Wawóyuspa-wičhàša.*
wawóyuspA-wi-Ø-čháša
 catch.people-man-3SG.U-stem
 He is a policeman.
 (data: NSB)
- (c) *Wayásu-wičhàša.*
wayásu-wi-Ø-čháša
 judge.people-man-3SG.U-stem
 He is a judge.
 (data: BCC, RTC)
- (d) *Pteóle-wičhàša waŋ hí.*
pté-olé-wičháša waŋ Ø-hí
 cattle-look.for-man INDEF 3SG.U-come
 A cowboy came here.
 (data: CWE)
- (e) *Pteáwaŋyaŋka-wimàčhaša.*
pté-awáŋyaŋkA-wi-má-čháša
 cattle-look.after-man-1SG.U-stem
 I am a cowboy.
 (data: EDT: Inf-5:41)
- (f) *Tuŋwéya-wičhàša.*
tuŋwéya-wi-Ø-čháša
 go-scouting-man-3SG.U-stem
 He is a scout.
 (data: CWE)

As the examples in (242) show, the AV premodifiers are generally intransitive verbs, whether they are made intransitive via the indefinite object marker prefix *wa-*

(see 2.6.7), as in (242a-c), or by noun incorporation, as in (242d-e) or are intransitive inherently as in (242f). The example in (242e) shows that personal affixes occur on the head of the pre-modification structure, i.e. on the modified word.

8.5. Nouns as pre-modifiers of Active Verbs

Ns can function as pre-modifiers of Active Verbs (AVs). Instances of N pre-modifiers can be difficult to distinguish from Ns functioning as secondary predicates before active verbs, since both constructions involve juxtaposed N+AV and are differentiated only by prosody.

Corpus tokens of N+AV (with N as a pre-modifier or SP) are much less frequent than those with N+SV (covered in 3.2 and 3.3), although they are very common in traditional personal names. The data in (243) shows a minimal pair with two personal names. In (244a), the N *mathó* “bear” functions as a SP and the AV *nážiŋ* “he/she stands” as the primary predicate. This type of secondary predication was discussed in Section 4.13. In (244b), the same N+AV are a pre-modification structure.

(244) (a) *Mathó Nážiŋ.*
mathó nà-Ø-žiŋ
 bear stand-3_{SG.A}-stem
 Standing Bear (literally: A bear he stands.)
 (data: BD, p. 70)

(b) *Mathó-Nážiŋ.*
mathó-ná-Ø-žiŋ
 bear-stand-3_{SG.A}-stem
 He stands like a bear. / He stands bear-style. (“He bear-stands.”)
 (data: BD, p. 70)

Boas&Deloria (1941: 70) provide additional examples of this contrast but give no discussion of the difference. The prosodic properties of the two structures and their

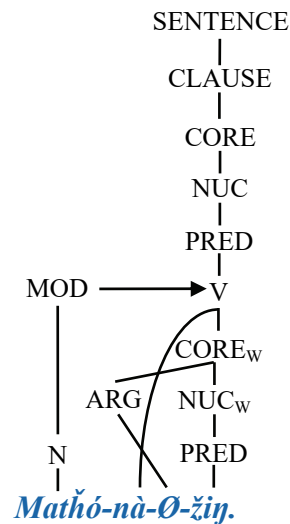
semantic interpretation was confirmed by contemporary speakers that I consulted (BBBJ, IEC, SHE).

With respect to the analysis of the structure in (244b) it is important to note that it differs from instances of compounded N+SV in terms of the affixation position. Compare (245a), where the compound receives 1st singular affix on the verb member of the compound, with (245b) where the 1st singular affix is prefixed and thus it precedes the N member of the compound.

(245) (a) *Akičhita-Nawāžij.*
akičhita na-wá-žij
 soldier stand-1.SG.A-stem
 I stood like a soldier.
 (data: BBBJ)

(b) *Mahijšme.*
ma-hij-šmA
 1.SG.U-hair-it.is.dense
 I am hairy.
 (data: BT p. 77, line 17)

The difference in affixation suggests that the N+AV compounds are structurally different from N+SV compounds. In 3.3. I provided arguments against analyzing instances like (245b) as noun incorporation, but compounds of N+AV, like that in (245a), are instances of noun-incorporation because they maintain their verbal function. The term ‘incorporation’ here is used broadly, covering not only the prototypical incorporation of an object N, but also cases where the modifier does not appear in a periphery and instead forms a word-like unit with the verb it modifies. This is shown in the analysis of (244b) is given in Figure 8.3.



bear-stand-3SG.A-stem

He is standing like a bear. (He is standing bear-style.)

Figure 8.3 *N as an incorporated V-modifier*

Thus the Ns in (244b) and (245a) are not cross-referenced to the actor argument of their respective predicates, but instead they modify the verb. This is characteristic of all the pre-modifiers discussed in the current chapter.

Examples of some commonly occurring instances of the N+AV premodification structure are in (246):

(246) (a) *Akičhita-iglùze.*

akičhita-Ø-iglúzA
soldier-3SG.A-dress

He was dressed like a soldier.
(data: DW)

(b) *Wašiču-iyàpi.*

wašiču-i-Ø-yá-pi
white.person-speak-3SG.U-stem-PL

They spoke white-man style. (i.e. They spoke English.)
(data: ORA)

(c) *Lakhól-iglùze.*

Lakhól-Ø-iglúzA
Lakota-3SG.A-to.dress

He dressed Lakota style.
(data: RTC)

In (246c), the N *Lakhóta* can be pronounced as truncated or unreduced.

Some frequently used premodification structures become lexicalized which results in a complete loss of the stress on the V member. This is illustrated in (247):

- (247) (a) *Lakhóta-iyàpi.* (premodification)
Lakhóta-i-Ø-yÁ-pi
 Lakota-speak-3A-stem-PL
 They spoke Lakhota.
- (b) *Lakhól-iyàpi.* (premodification with truncation)
Lakhól-i-Ø-yÁ-pi
 Lakota-speak-3A-stem-PL
 They spoke Lakhota.
- (c) *Lakhótiyapi.* (lexicalization, secondary stress lost)
Lakhóta-i-Ø-yÁ-pi
 Lakota-speak-3A-stem-PL
 They spoke Lakhota.
- (d) *Lakhólyapi.* (additional vowel reduction in fast sp.)
Lakhóta-(i)-Ø-yÁ-pi
 Lakota-speak-3A-stem-PL
 They spoke Lakhota.

The data in (247) shows the gradual progression of lexicalization of the premodification structure with non-truncated N in (247a), to one with truncated N in (247b), and to the lexicalized form in (247c) where the secondary stress is lost and obstruent switches back from *l* to *t*. The version in (247e) shows the loss of the vowel *i* from the predicate *iyÁ* in fast speech. This loss is reflected in the 1st plural form, which is *Lakhól'unjkiyapi* for (247b), but *Lakhól'unjyanpi* for (247d). All versions given in (247) have been documented in contemporary Lakota, although the version in (247a) is less frequent now than it is in older parts of the corpus. The expression in (247), in all its variants, is also used as a noun for “Lakota language”, as in *Lakhól'iyapi kinj lé unglúkinipi kte.* ‘We will revitalize our Lakota language’. The

same development is seen in *wašiču iyàpi* ‘English’ changing into *wašiču-iyàpi* and *wašičuyapi* in fast speech.

The fast speech version drops *i* from *Lakǰól’iya* resulting *Lakǰólya* and the same phenomenon happens with *wašičuiya* changing to *wašičuya* in fast speech. These forms are analyzed by some researchers as adverbs, for instance Rood&Taylor (1996: 7.2.3) list *wašičuya* among adverbs formed with the suffix *-ya*. In reality, the syllable *-ya* is a residue of the verb *iyá* ‘to speak’, but the process of lexicalization makes this opaque.

In the uncompounded N + AV (shown in (244a)), which constitutes a SPC, the N cannot be cross-referenced with the actor of the AV. This brings out the question about how Lakota expresses statements with a generic (non-referential) noun as the actor, such as “owls hoot”. Rood&Taylor (1976: 12G1.2) provide the following example of a generic statement:

- (248) *Wakǰányeža škátapi.*
wakǰányeža *Ø-škáta-pi*
 child 3_A-play-PL
 Children play. (Rood&Taylor, *ibid*)

Rood&Taylor (*ibid*) state that “when the comment is a stative verb alone, the generic noun must be followed by *kiŋ*. ... With active verbs, generic nouns have no topic marker.” This statement is contradicted by generic sentences found in texts, where *kiŋ* or other separators follow agentive generic Ns whenever the predicate is plural. As shown in (244a), the N in this construction cannot be the actor because it is a secondary predicate. Thus the correct interpretation of (248) would be something

like “Children they are playing” or “They are playing children”, provided that such a sentence would be used at all.

The assumption that generic nouns with active verbs do not need the article *kiŋ* possibly came from the fact that when the N is cross-referenced with the actor argument of a transitive predicate, it is usually separated from the predicate by the N cross-referenced with the object, as in (249):

- (249) (a) *Igmú ithúnkala wičháyutapi.*
igmú ithúnkala wičhá-Ø-yutA-pi
 cat mouse 3.PL.ANIM.U-3A-eat-PL

Cats eat mice.

(data: IEC)

- (b) *Thathánka pheží yašlápi.*
thathánka pheží Ø-Ø-yašlá-pi
 buffalo grass INAN-3A-graze-PL

Buffalo graze on grass.

(data: BBBJ)

In (249a), the subject cross-referenced RP *igmú* ‘cat’ is separated from the transitive predicate by the object RP *ithúnkala* ‘mouse’ and in consequence, *igmú* cannot be interpreted as a SP (unlike the N in (244a)). Additionally, the animate object *ithúnkala* ‘mouse’ is cross-referenced on the V with the affix *wičha-*. But the same interpretation of the separation holds true for sentences with zero coded inanimate objects, as in (249b).

Ns adjacent to intransitive verbs cannot be interpreted as generic actors, whether they are compounded or uncompounded with the verb, as shown in (250).

- (250) (a) *Hiháj hothúŋpi.*
hiháj ho-Ø-thúŋ-pi
 owl voice-3A-produce-PL
 Owls were hooting. (They are hooting owls. / Owls they are hooting.)
 (data: BBBJ, IEC)
- (b) *Hiháj-hotúŋ.*
hiháj-ho-Ø-thúŋ
 owl-voice-3SG.A-produce
 He owl-hooted. (i.e. “He hooted like an owl” or “He hooted owl-style.”)
 * An owl hooted.
 (data: BBBJ, IEC, BT p. 167, line 55)
- (c) *Hiháj-hotúŋpi.*
hiháj-ho-Ø-thúŋ-pi
 owl-voice-3A-produce-PL
 1. They owl-hooted. (i.e. “They hooted owl-style”).
 2. There was owl-hooting.
 3. * Owls hooted. / Owls hoot.
 (data: BBBJ, IEC)

In (250a), the N *hiháj* ‘own’ functions as a depictive, and in (250b) and (250c) it is an incorporated pre-modifier of V. None of the structures (250a) in can be interpreted as the generic statement “Owls hoot”.

Similar to what was shown with respect to nouns before SVs (3.5), the only way to make a N before an intransitive V to be cross-referenced with the argument of the V is to separate the two with another word. The most common separators are determiners, quantifiers, partitive and additive particles, but other categories of words, such as manner modifiers, can also be used.

The commonly found construction for expressing generic statements like “Children play” is given in (251).

- (251) *Wakháŋyeža kiŋ škátapi.*
wakháŋyeža kiŋ Ø-škáta-pi
 child kiŋ 3A-play-PL
 The children play.
 (data: BBBJ)

The structure in (251) can be interpreted as both having a referential and non-referential actor and it is commonly found in contexts where it is clearly used as a generic statement. But due to this ambiguity, generic statements with non-referential actors are expressed in two alternative ways shown in (252):

- (252) (a) *Wakhǎnyežapi kiŋ škátapi.*
wa-Ø-khǎnyeža-pi kiŋ Ø-škátA-pi
 child-3U-stem-PL the 3A-play-PL
 Those who are children play.
 (data: MARC)
- (b) *Šúnkawakhǎŋpi čhǎŋ lúzahanpi.*
šúnka-Ø-wakhǎŋ-pi čhǎŋ Ø-lúzahAŋ-pi
 horse-3U-stem-PL HAB 3A-fleet-PL
 When they are horses, they are fleet.
 (data: BD p. 135)

In (252a), the noun *wakhǎnyeža* is pluralized and functions as a predicate forming a relative clause (‘those who are children’) marked with the definite article *kiŋ*. In (252a), the noun *šúnkawakhǎŋ* ‘horse’ is also pluralized and constitutes a clause but this time it is conjoined with the clause *lúzahanpi* ‘they are fleet’ via the habitual conjunction *čhǎŋ*.

Neither of the two structures in (252) is used with inanimate subjects.

Since the construction with adjacent N and active verb, like that exemplified in (244a) and repeated below, is rare outside the realm of personal names, there is still some uncertainty about its analysis. The subject of (253) is the zero coded argument of the SPC and whereas the N is non-referential, the subject is referential, i.e. the sentence means ‘A bear he stands.’

- (253) *Mathó Nážiŋ.*
mathó Ø-nážiŋ
 bear 3_{SG.A}-stand
 Standing Bear (literally: ‘A bear he stands.’)

However, there is some rare corpus data suggesting that this construction can be used with a non-referential subject. Consider the sentence in (254):

- (254) *Tókša wí kiŋ hé mahél iyáya čháŋ nakěš heháŋl wičháša ištíŋme ló.*
tókša wí kiŋ hé mahél iyáya čháŋ
 eventually sun def that in INAN-go HAB
nakěš heháŋl wičháša Ø-ištíŋmA ló
 at.last then man 3_{SG.A}-sleep DECL.MSP
 When eventually that sun goes down then at last **man sleeps**.
 (data: EDT-Aut-1, sentence 10)

Deloria’s translation of (254), as well as the broader context surrounding the sentence, suggest that the N *wičháša* ‘man’ is treated as being cross-referenced to the subject argument of the V *ištíŋme* ‘he sleeps’ and that the N is not referential. If we treat *wičháša ištíŋme* as a SPC, it would translate as “a man **he** sleeps”, which would not fit the context as there was not referential “he” in it. More research is needed to determine whether it is context or prosody that determines the difference between “a man he sleeps” and “a man sleeps”. Another option is that the SPC “a man he sleeps” is used for expressing generic statements with non-referential meaning, but this is less likely.

8.6. Numerals as pre-modifiers of active verbs

It was shown in 4.9 that quantifiers and numerals occurring RP-externally function as SPs. An example is shown in (255a), where *óta* ‘many’ is a SP, and it is contrasted with (255b), where the same numeral is used as a pre-modifier of the active verb.

(255) (a) *Óta waṅblàke.*
óta waṅ-Ø-blá-ka
 many see-INAN-1SG.A-stem
 I saw **many** of them (inanimate).
 (data: BO; story 229, p. 5b, sentence 3)

(b) *Óta-waṅblàke.*
óta-waṅ-Ø-blá-ka
 many-see-INAN-1SG.A-stem
 I saw it **many times**.
 (data: BO; story 242, p. 6b, sentence 4)

This function of numerals is mentioned in Boas&Deloria (1941:114) who exemplified it with the sentence repeated here in (256a). Additional examples are offered below it.

(256) (a) *Óta-hì.*
óta-Ø-hí
 many-3.SG.A-come
 He came many times.
 (data: BD; p. 114)

(b) *Tópa-hèčhuṅ.*
tópa-héčh(a)-Ø-uṅ
 four-do.that-3sg.A-stem
 He did that **four times**.
 (data: EDT; Col-3, sentence 219)

(c) *Núṅpa-hèčhuṅpi.*
núṅpa-héčh(a)-Ø-uṅ-pi
 two-do.that-3sg.A-stem-PL
 They did that **twice**.
 (data: BO)

(d) *Yámni-wapàṅ kte ló.*
yámni-wa-páṅ ktA ló
 three-1sg.A-shout fut.irr DEC.MPS
 I will shout **three times**.
 (data: EDT: Leg-11, sentence 8)

It should be added that uncompounded numerals are also commonly found in the corpus to indicate the number of repetitions of an activity. An example is in (257).

- (257) *Yámni ečé mniyáta awičhaipi*
yámni ečé mni-yáta a-wičha-Ø-i-pi
 three always water-to transport-3P.U.ANIM-3.SG.A-stem-PL
 They always took them to water three times.
 (data: BO)

8.7. Adverbs as pre-modifiers of Ns

The present study identified a small number of adverbs of time that can also function as pre-modifiers, as shown in (258).

- (258) (a) *Eháñni-wičhòoyake.*
eháñni-Ø-wičhòoyake
 old-time-INAN-tale
 It is an old-time tale.
 (data: NSB)
- (b) *K'éyaš nakúñš eháñni-wičhàša kiñ henápila.*
k'éyaš nakúñ-š eháñni-wi-Ø-čhàša kiñ hená-Ø-pi-la
 but also-F old-time-man-3SG.U-stem the gone-3.U-PL-stem
 But also the old-timers are all gone.
 (data: EDT: Aut-1, sentence 32)
- (c) *Leháñl-wiñyañ héčha.*
leháñl-wiñyañ hé-Ø-čha
 nowadays-woman is.that.kind-3SG.U-stem
 She is a modern woman.
 (data: RFT)
- (c) *Hé lečhála-wóečhuñ.*
hé lečhála-Ø-wóečhuñ
 that recently-INAN-procedure
 It is the modern way of doing it.
 (data: NSB: 7.1)

The examples in (259) illustrate that the semantic difference between such incorporated and independent use of the adverbs.

- (259) (a) *Hená eháñni oyáte kiñ wóyute-yapi.*
hená eháñni oyáte kiñ wóyute-Ø-Ø-ya-pi
 those old-time people the food-INAN-3SG.U-CAUS-PL
 Long ago people utilized those things as food.
 (data: FREH)

- (b) *Eháñni-oyáte kiñ tanyáñ úñpi.*
eháñni-oyáte kiñ tanyáñ Ø-úñ-pi
 old-time-people the well 3SG.U-exist-PL
 The old-time people lived well.
 (data: BBBJ)

Conclusions for Chapter 8: This chapter identified the following seven structures which involve pre-modification (arrow indicates the modifier \rightarrow modified relationship); (i) $N \rightarrow N$, (ii) $SV \rightarrow N$, (iii) $SV \rightarrow SV$, (iv) $AV \rightarrow N$, (v) $N \rightarrow AV$, and (vi) $NUM \rightarrow AV$, (vii) $ADV \rightarrow AV$. It was shown that the pre-modifiers are compounded with the word they modify and that they always maintain their stress even when they are monosyllabic words. The stress on the modified word is reduced or, if occurring on the first syllable of the second member after a monosyllabic first member, lost due to tonal crowding.

Compounded $N+AV$ involving pre-modification can be difficult to distinguish from instances of uncompounded $N + AV$, which constitute a SPC, since the two constructions contrast only in their prosody.

Instances of compounded $N+AV$ are structurally different from $N+SV$ compounds in that the former involve incorporation of the pre-modifier whereas the latter are primarily lexical compounds (with stress on the second syllable, or lexicalized syntactic constructions with stress on the initial syllable).

SVs can function as classificatory ad-nominal pre-modifiers, but this function is very infrequent in the corpus.

It is not unlikely that the list of pre-modification structures offered here is not comprehensive and that future research will identify other word-categories functioning in pre-modification.

9. The passive voice and modification

There are three different types of modification involving the passive voice in Lakota; one in which the passive voice is modified by a noun which is semantically the agent of the passive voice, one in which the passive voice is an RP-internal ad-nominal modifier and one in which the passive voice functions as an RP-external derived modifier. These three types of modification are discussed in the three sections of this chapter.¹⁸

9.1. The status of the passive agent in the Lakota passive

Lakota (as a language with semantic alignment) was for a long time considered to be a language without the passive voice, for instance Van Valin (1977, 1985) argues explicitly that Lakota has no passive voice (similarly in Buechel, 1939, and Dahlstrom 1984: 74). Rood&Taylor suggest that a true passive might exist in Lakota, and Pustet&Rood (2008) argue that Lakota has a type of passive. They provide a convincing analysis showing that in sentences like (260) the suffix *-pi* cannot be interpreted as a 3pl actor, and must be considered a passive voice marker.

- (260) *Wičháša kiŋ mathó – ktépi.*
wičháša kiŋ mathó Ø-kté-pi
 man the bear 3SG.U-kill-PASS
 The man was killed by a bear/bears.
 (data: BBBJ)

However, Pustet&Rood do not satisfactorily explain the syntactic function of the actor in the passive construction. They correctly reject the working hypothesis that it is an incorporated noun but they do not offer another hypothesis and refer to the actor

¹⁸ Some of the text and conclusions in this chapter are based on my research for the pedagogically oriented Lakota Grammar Handbook (2016), which was at large descriptive. This chapter brings new analytical insights and focuses specifically on modification involved with the Lakota passive, and offers analysis of its constituent projection.

as a noun phrase. I posit that the actor in such passive constructions cannot be a noun phrase for a number of reasons. Firstly, a Lakota noun phrase in the actor role requires a determiner (as also stated by Pustet&Rood), unless it is a proper name or a kinship term, or unless it is followed by a quantifier. Secondly, if the actor were a noun phrase, it should be possible to replace it with an independent pronoun (such as *iyé*) or with a referential noun, such as a personal name. Neither of these things is possible and they yield ungrammatical structures, as in (261):

- (261) * *Olówaŋ kiŋ lé Tǎthǎŋka Íyotake – ahiyayapi tkhá.*
olówaŋ kiŋ lé Tǎthǎŋka Íyotake a-Ø-hiyaya-pi tkhá
 song the this bull sit.down sing-INAN-stem-PASS used.to
 This song used to be sung by Sitting Bull.
 (data: BBBJ)

The only way to foreground the patient in such sentences is by fronting it, as in (262) where the translation does not reflect the fact that the Lakota original is not a passive voice construction:

- (262) *Olówaŋ kiŋ lé Tǎthǎŋka Íyotake ahiyaya tkhá.*
olówaŋ kiŋ lé Tǎthǎŋka Íyotake a-Ø-Ø-hiyaya tkhá
 song the this bull sit.down sing-INAN-3SG.A-stem used.to
 This song used to be sung by Sitting Bull.
 (data: RFT)

Note the lack of *-pi* on the verb in (262). In this sentence the personal name is clearly the **subject** (and the actor). Pustet&Rood speculate that the inability of the actor NP to be marked for specificity is perhaps due to the fact that it is a generic noun. But generic nouns can be used without determiners only when they function as an object (see section 8.5, discussion about data in (249)).

Thirdly, when we examine passive sentences in which a contextually singular actor is not overtly expressed, it becomes evident that the patient is the only argument of the passive verb, as in (263):

- (263) *Wičháša kiŋ ktépi.*
wičháša kiŋ Ø-kté-pi
 man the 3SG.U-kill-PASS
 The man was killed. (* The man was killed by him.)
 (data: BO-99)

This sentence cannot be translated as “The man was killed by him”. Thus, the passive verb unequivocally has a single argument, and it is the undergoer argument. The argument slot normally given to the actor of the verb in an active sentence is occupied by the suffix *-pi*. For the same reason it is not possible for the actor to be an incorporated noun, i.e. the verb cannot incorporate a noun unless it has a vacant argument slot for it.

Based on this evidence, I posit that in a passive sentence, like (260), the noun that represents the semantic actor is not cross-referenced with the core argument and instead it is an adjunct whose syntactic function is to modify the passive verb. This is in fact hinted indirectly by Boas&Deloria (1941: 155) when they say that the “quasi-passive construction *mathó ktépi*” translates as “**they bear-killed.**”¹⁹ Pustet&Rood (2008) were probably unaware of Boas&Deloria’s comment about Lakota passive, as they state that “in the extant documentations of Lakota, either no mention is made of passive (Boas and Deloria 1941, Buechel 1939), or else Lakota is explicitly said to lack a passive or similar constructions”²⁰

¹⁹ The gloss that Boas&Deloria provide is probably their attempt at a very literate translation; although it does not reflect the passive function of the construction, their comment makes it clear that they are discussing the passive voice.

²⁰ Buechel actually states explicitly that there is no passive in Lakota (1939: 30 #29), although on page 299 he gives a passive sentence and correctly translates it using the passive voice: *Iháhapi kiŋ hé wahtélašni*. “He hates to be laughed at. (passive infinitive).”

Another piece of evidence that the bare noun occurring before the passive verb is not its argument but rather its modifier lies in the fact that this N cannot always be interpreted as the actor. Consider these examples:

- (264) (a) *Wakhájheža kiy até – thúppi kte čij héčetu.*
wakhájheža kiy até Ø-thúpi-pte kte
 child the father 3SG.U-give.birth-PASS FUT.IRR
čij hé-Ø-četu
 the right-3SG.U-stem

It is the right thing that the child should be born having a father.
 (literally: “father-born”)
 (data: EDT-Aut-3A sentence 66)

- (b) *Ptehíčala wétu – wičhátunpi k’uŋ héčha.*
ptehíčala wétu wičhá-thunpi k’uŋ hé-Ø-čha
 buffalo.calf spring 3PL.U.ANIM-give.birth-PASS the to.be.such-3SG.U-stem

It was the kind of calf that is born in spring.
 (data: DT story 40, sentence 7)

In (264a), *até* “father” cannot be an actor because we cannot interpret the sentence as “The child is born by a father,” but rather as “the child is **father-born**,” meaning “the child is born with the presence of a father (in the family).” In (264b), *wétu* “spring” is not an actor giving birth to the calf, but it is a temporal frame of the calf’s birth. So again, the literal translation is “It was the kind of calf that is **spring-born**.”

In the light of the evidence and in line with the hint given in Boas&Deloria’s translation of the actor (“bear-killed”), I conclude that the non-subject noun in passive structures is an adjunct that modifies the passive verb. This adjunct can be interpreted as the semantic actor only when the semantics of the noun allow such interpretation.

It is important to note that this type of modification does not involve compounding, i.e. both the noun and the verb have independent stress.

Pustet&Rood state that the passive voice can be used with inanimate actors which they illustrate with the sentence in (265):

- (265) *Thípi kiŋ tháté thánka – iháŋgyapi.*
thípi kiŋ tháté thánka iháŋg-Ø-ya-pi
 house the wind big end-3U-CAUS-PASS FUT.IRR
 The house was destroyed by a hurricane.
 (data: Pustet&Rood, 2008)

The sentence in (265) was accepted by some native speakers I consulted but rejected by others. As shown earlier, the adjunct that modifies the passive verb can be an inanimate noun as well as a noun that cannot be interpreted as the actor (as in *wétu – wičháthunpi* ‘spring-born’ and *até – thúnpi* ‘father-born’). For those speakers that intuitively interpret *tháté thánka* ‘hurricane’ as a mere modifier of the passive verb (as is *wétu* in *wétu – wičháthunpi*), it is probably acceptable to use *tháté thánka* “hurricane” in this way. But those speakers who interpret “hurricane” semantically as the actor, probably reject it because Lakota normally avoids inanimate actors with transitive verbs or because actions of natural forces are commonly described with instrumental prefixes.

In their conclusion, Pustet&Rood (2008) state the following:

“The *pi*-passive can be viewed as an innovative construction that has been formed in response to the influence of English syntax on Lakota. At least, the existing descriptions of the language do not include any data on passive-like constructions in which the agent can be overtly expressed, as is the case in the examples given above.”

Further on, they hypothesize that the *pi*-passive could be an ancient construction dating perhaps back to Proto-Siouan, but that this would have to be confirmed by comparative analyses with other Siouan languages.

The hypothesis that Lakota *pi*-passive is formed in response to English influence is not tenable as it is disconfirmed not only by Boas&Deloria's (1941: 155) brief description of Lakota passive, but mainly by the existence of numerous occurrences of passive constructions with overtly expressed actors in authentic texts recorded by Lakota speakers who were decidedly monolingual. Several examples of passive structures from authentic texts are provided in the following discussion.

The first example, given in (266), comes from Deloria's text (1932: 246-247) and consists of two sentences and requires setting the context: A woman's husband stabs a man upon returning home and catching the man in the act of courting his wife (my translation):

- (266) (a) *Ópta iyáye-wačhìŋ tkháš yús-injyaŋkiŋ*
Ø-ópta iyáye-wačh-Ø-iŋ tkhá-š Ø-yús-Ø-injyaŋka
 3SG.U.by go-attempt-3SG.A-stem but-indeed 3SG.U-catch-3SG.A-run
na míla k'uŋ uŋ thezí čhapǎiŋ
na míla k'uŋ uŋ thezí čhapǎiŋ
 and knife the.aforementioned with belly stab-3SG.U-3SG.A-stem
na glakiŋyaŋ yublás ahiyu.
na glakiŋyaŋ yublás a-Ø-Ø-hiyu
 and across rip.open bring.forward-3SG.U-3SG.A-stem
 He tried to pass by him but indeed the husband caught hold of him and stabbed him in his belly with the knife, tearing a great gash across it.

- (b) *Wáŋčag šupé kiŋ átaya hiŋǰpáyìŋ na*
wáŋčag šupé kiŋ átaya Ø-hiŋǰpáyìŋ na
 at.once intestine the entire 3SG.U-fall and
wičháša waŋ čhapǎpi k'uŋ.
wičháša waŋ čha-Ø-phá-pi k'uŋ
 man INDEF stab-3SG.U-stem-PASS the
héna t'á iyáye.
héna t'á iyáye
 right.there die go-3SG.A-stem

At once the intestines dropped out and the man who had been stabbed died instantly.

In (266a), we see the verb *čhapǎÁ* ‘to stab sb’ (used with *ij*-ablaut) in 3rd singular agreeing with the subject (contextually the husband) and in (266b), the same verb appears with the suffix *-pi*. Since the actor of the stabbing was clearly established in (266a) as singular it is obvious that *-pi* in (266a) does not have the plural marking function, and instead codes the passive.

More examples of passive sentences are given in (267). In each of the sentences, the noun preceding the *pi*-verb is an adjunct that modifies the passive verb and it is not a core argument of the verb.

- (267) (a) *Ečhél ečhámuŋ šni kiháhŋ wakíŋyaŋ – maktépi kte ló.*
ečhél ečhá-Ø-m-uŋ šni kiháhŋ wakíŋyaŋ
 as do-INAN-1SG.A-stem NEG FUT thunder.being
ma-kté-pi kte ló.
 1SG.U-kill-PASS FUT.IRR DECL.MSP

If I do not do so, I shall be killed by thunder beings (i.e. by lightning).
 (data: EDT-Aut-1 sentence 16)

- (b) *Wíŋyaŋ nawízi – wičháktepi.*
wíŋyaŋ nawízi wičhá-kté-pi
 woman jealous 3PL.U.ANIM-kill-PASS
 They were struck harshly by jealous women.²¹
 (data: BO-234)

- (c) *Wíŋyaŋ waŋ čhapǎúŋka – ktépi.*
wíŋyaŋ waŋ čhapǎúŋka Ø-kté-pi
 woman a mosquitoes 3SG.U-kill-PASS
 A woman was killed by mosquitoes.
 (data: BO-214)

- (d) *Ečháŋna wíŋyaŋ – hiŋgnáwičhayapi.*
ečháŋna wíŋyaŋ hiŋgná-wičha-ya-pi
 early woman husband-3PL.U.ANIM-CAUSS-PASS
 They were married by women early on.
 (data: BO-234)

²¹ The stative verb *nawízi* ‘to be jealous’ in (267b) is an RP-internal modifier of the N, rather than its copredicate. This is because it is an unmarked plural RP (discussed in 3.4.2 on p. 98).

- (e) *Hená Kħanǵí-Wičhàša – ahiwičhaktepi.*
hená kħanǵí-wičhàša ahi-wičha-kte-pi
 those crow-man come-3PL.U.ANIM-kill-PASS
 They were killed by Crow Indians (during an attack).
 (data: GS)
- (f) *Hála – míktepi tkhá yé.*
hála ma-ki-kte-pi tkhá yé
 flea 1SG.U-DAT1-kill-PASS almost QUOT.FSP
 Mine was almost killed by fleas.
 (data: EDT-Eth-1 sentence 42)
- (g) *Šúnka – niyásmipi kte ló.*
šúnka ni-ya-smi-pi kte ló
 dog 2SG.U-INSTR(mouth)-clean-PASS FUT.IRR DECL.MSP
 Your bones will be cleaned by dogs.
 (data: PBT)
- (h) *Wičhášta wakhánj – niúnjyaŋpi kte.*
wičhášta wakhánj ni-únj-ya-pi kte
 man holy live-1PL.U-CAUS-PASS FUT.IRR
 We will be saved by holy men.
 (data: PBT, Santee-Dakota dialect)
- (i) *Até wašiču – ktépi.*
até wašiču Ø-kté-pi
 my.father white.man 3SG.U-kill-PASS
 My father was killed by white people.
 (data: BO-101)

These and many other examples in the text corpus are evidence that the *pi*-passive existed in Lakota (and in Dakota) prior to contact with English, as the majority of these texts come from monolingual Lakota or Dakota speakers.

There are, indeed, contexts in which it is not possible to distinguish whether the *-pi* form represents an empty subject “they” or passive voice. But there are instances in which the assumed semantic actor is indisputably singular, as in *mathúnpi* “I was born”, where only a single person was the actor giving birth because a plural actor

mathó is an optional V-modifier, and it modifies the predicate at the NUC level which accounts for the non-referentiality of the N. Nominals occurring within the nucleus are necessarily non-specific (and often non-referential), and accordingly the non-specific ‘actor’ modifier must be within the nucleus. It modifies the verbal predicate, and nothing can occur between it and the verb. This is why I propose using an en dash (as opposed to hyphen) between the N and the passive verb, to show that nothing can come between the two words and at the same time they are not compounded.

Nuclear adverbs occur in the nuclear periphery and cannot occur between the actor modifier and the passive verb, as in (269).

- (269) (a) *Aǵúyapi kiŋ k’oyéla hokšíla – yútapi.*
aǵúyapi kiŋ k’oyéla hokšíla Ø-yútA-pi
 bread the completely boy 3SG.U-eat-PASS

The bread was completely eaten by boys/a boy.

- (b) * *Aǵúyapi kiŋ hokšíla k’oyéla yútapi.*
aǵúyapi kiŋ hokšíla k’oyéla Ø-yútA-pi
 bread the boy completely 3SG.U-eat-PASS

Intended: The bread was completely eaten by boys/a boy.
 (data: GJ: BBBJ)

If *k’oyéla* ‘completely’ is in the nuclear periphery, then *hokšíla* ‘boy’ must be in a modifier position inside of the nucleus. This is congruent with the point made earlier that the non-referential status of the nominal follows if it is analyzed as occurring inside the nucleus.

Constructions in which the passive voice is inside of a derived modifier show some evidence that Lakota passive can be PSA modulation. This is illustrated in (270):

- (270) (a) *Wanyáŋkapi čhíyáŋkel phiphíya inážiŋ.*
Wanyáŋka-pi čhíy-ya-kel phi-phíya iná-Ø-žiŋ.
 see-PASS want-DER-VAG REDUP-again stand.up-3SG.A-stem
 He stood up repeatedly **wanting to be seen.**
 (data: EDT Col-4, sentence 225)
- (b) *Wanyáŋkapi čhíy čha phiphíya inážiŋ.*
Wan-Ø-yáŋka-pi Ø-čhíy čha phi-phíya iná-Ø-žiŋ.
 see-3SG.U-stem-PASS 3SG.A-want so REDUP-again stand.up-3SG.A-stem
He wanted to be seen so he stood up repeatedly.
 (data: GJ: BBBJ)

In (270a), the DM *wanyáŋkapi čhíyáŋkel* “wanting to be seen” involves a (non-obligatory) ‘control construction’ where the omitted argument (‘pivot’) is an undergoer of the passive verb, and this argument is obligatorily shared by the verb *čhíy* ‘to want smth’. The sharing of the omitted argument suggests that the DM is based on a core juncture and it gives some evidence that Lakota passive can be PSA modulation (i.e. that the passive undergoer acquires PSA properties). This evidence is weakened by the data in (270b), where the passive undergoer and is not obligatorily shared with the argument of *čhíy*.

In conclusion, the Lakota passive voice construction presents yet another category of Lakota modification, one in which the noun representing the semantic actor or the circumstances of the passive event, modifies the passive verb. The Lakota passive clearly involves Argument Modulation, as the actor can only be overtly realized as a non-specific modifier of the passive verb; otherwise it is omitted. There is some evidence, albeit not very strong, for PSA Modulation. For example, the passive undergoer can be the pivot in a non-obligatory control construction. RRG proposes that voice constructions involve Argument Modulation, PSA Modulation, or both together, as in English, German and many other languages.

The passive voice construction is formally very similar to noun incorporation.

A minimal pair is given in (271):

- (271) (a) *Wičháša kiŋ pté – ktépi.* (passive voice, *pté* modifies *ktépi*)
wičháša kiŋ pté Ø-kté-pi
 man the buffalo 3SG.U-kill-PASS

The man was killed by buffalo.

(data: BBBJ)

- (b) *Wičháša kiŋ ptektépi.* (noun incorporation, *pté* is incorporated into *ktépi*)
wičháša kiŋ pté-Ø-kté-pi
 man the buffalo-3A-kill-PL

The men were butchering buffalo.

(data: BBBJ)

In (271a), *pté* modifies the passive verb *ktépi*, in (271b), *pté* is an object incorporated into the verb *kté*. In both constructions nothing can intervene between *pté* ‘buffalo’ and *kté* ‘kill’, but there is a crucial difference: in the passive they are two independent words and are stressed as such, whereas in the noun incorporation construction they are merged into a single phonological word with a single primary stress. The role of the suffix *-pi* is very different in the two constructions. In (271a), it serves to signal passive voice, whereas in the noun incorporation construction in (271b) it signals the plurality of the actor.

The two structures look almost identical when a multisyllabic noun is present, because the incorporation of multisyllabic nouns is usually indicated with a hyphen.

Compare the minimal pair in (272).

- (272) (a) *Wičháša kiŋ šuŋgmániu – ktèpi.*
wičháša kiŋ šuŋgmániu Ø-kté-pi
 man the wolf 3SG.U-kill-PASS

The man was killed by wolves.
 (data: IEC)

- (b) *Wičháša kiŋ šuŋgmániu-ktèpi.*
wičháša kiŋ šuŋgmániu-Ø-kté-pi
 man the wolf-3A-kill-PL

The men were killing/butchering wolves.
 (data: IEC)

In (272a), the passive *ktèpi* carries an independent stress, whereas in (272b) the stress on predicate *ktèpi* is reduced because the verb is compounded with the noun it incorporated.

9.2. Passive participle as an RP-internal modifier

In the previous section I showed that Lakota has a genuine passive voice. In this section I will discuss how the passive voice is used as another type of RP-internal modifier.

The data in (273a) shows an example of the passive voice used as the main predicate, whereas (273b) is an example of the passive voice functioning as the predicate of a relative clause.

- (273) (a) *Iphiyaka kiŋ kšúpi.*
iphiyaka kiŋ Ø-kšú-pi
 belt the INAN-to.bead-PASS

The belt **is beaded**.
 (data: RFT)

- (b) *Iphiyaka waŋ kšúpi čha múŋ.*
iphiyaka waŋ Ø-kšú-pi čha Ø-m-úŋ
 belt a INAN-to.bead-PASS DET INAN-1SG.A-wear

I was wearing a belt **that was beaded**.
 (data: DW)

The Lakota passive voice takes the undergoer affixes for its subject marking. As such we can predict that it can function like other stative verbs in that it can form a complex predicate with a noun (as discussed in 3.2). That this is so is shown in (274a) and it is contrasted with (274b) where the passive voice is an RP-internal modifier.

(274) (a) *Iphiyaka kšúpi.*

iphiyaka Ø-*kšú-pi*
 belt INAN-to.bead-PASS

It is a **beaded** belt.
 (data: DTA)

(b) *Iphiyaka kšúpi way mún.*

iphiyaka Ø-*kšú-pi* *way* *m-ún*
 belt INAN-to.bead-PASS INDEF 1SG.A-wear

I was wearing a **beaded** belt.
 (data: JAH)

This section showed that Lakota passive can function as a stative copredicate in complex predication with nouns and as RP-internal modifier. These two functions are in accord with the fact that the passive takes the undergoer subject coding like stative verbs.

9.3. Passive as ad-core modifier

In addition to their RP-internal modification and co-predication function, passive participles can function as ad-core modifiers. This function of the passive voice is licensed via the clitic *s'e* which can be translated with “as though”. When *s'e* occurs after a passive voice expression, the latter can function as a kind of a derived modifier and like many DMs, it is vague in terms of its participant versus event orientation (i.e. it can function as ad-ARG or ad-CORE modifier). Ample examples are given in (275). Note that like other DMs, passive ad-core modifiers can be negated, as in

(275d), they can be modified by the habituality clitic *šna*, as in (275e), and serialized with other DMs, as in (275a) and (275g).

(275) (a) *Pěhíñ kiñ sabyéla šúñka – slípapi s'e wiyákpakpa.*

pěhíñ kiñ sab-yá-la šúñka Ø-slípA-pi s'e
 hair the black-DER-REST dog 3SG.U-lick-PASS as.though
Ø-wiyákpA-kpa
 3SG.U-to.shine-REDUP

Her hair shone black **as though it was dog-licked.**

(data: RFT)

(b) *Yaglápi s'e Lakhól'iya wóglake.*

Ø-ya-glá-pi s'e Lakhól'iya wó-Ø-glakA
 3SG.U-INSTR(mouth)-unravel-PASS as.though speak.Lakota
wó-Ø-glakA
 tell.things-3SG.A-stem

He spoke Lakota **as though it is unraveled with the mouth.**

(idiomatic for: He spoke Lakota fluently.)

(data: JHR)

(c) *Mahél oyúšnapi s'e iyáya škhé.*

mahél o-Ø-yúšna-pi s'e i-Ø-yáyA škhÁ
 inside loc-3SG.U-drop-PASS as.though go-3SG.A-stem HSY

It went inside **as though it were dropped in**, it is said.

(data: DT story 32, sentence 20)

(d) *Iyé khápi šni s'e hiyáya ké.*

iyé Ø-khá-pi šni s'e hi-Ø-yáyA ké
 he 3SG.U-refer-PASS NEG as.though pass.by-3SG.A-stem HSY

He went by **as though he wasn't being talked about.**

(data: DT story 26, sentence 23)

(e) *Kah'ól iyéyapi s'e šna iyáya ké.*

kah'ól iyé-Ø-ya-pi s'e šna iyá-Ø-ya ké
 toss aux-3SG.U-stem-PASS as.though HAB go-3SG.A-stem HSY

He would usually take off **as though he was tossed.**

(data: EDT-Col-2, sentence 39)

(f) *Ité kiñ sanýáñpi s'e waúñ.*

ité kiñ san-Ø-yá-pi s'e wa-úñ
 face the off.white-3SG.U-CAUS-PASS as.though 1SG.A-exist

I live with a face (white) **as though it is painted white.**

(data: BO-227)

- (g) *Tħawíyaka kiŋ šayéla wé opútkanpi s'e yuáthañiŋpi ké.*
tħa-wíyaka kiŋ šá-ya-la wé o-Ø-pútkan-pi
 its feather DET red-DER-REST blood dip.into-3SG.U-stem-PASS
s'e yuáthañiŋ-pi ké
 as.though 3SG.U-bring.to.light-PASS HSY

They brought its feather into light red **as if it were dipped into blood.**
 (data: EDT-Col3, sentence 208)

Note that in (275a) the derived modifier composed of the passive voice construction includes the noun representing the notional actor *šúŋka* ‘dog(s)’.

The suffix *-pi* is commonly reduced to *-p* in passive ad-core modifiers, so for instance, *yaglápi s'e Lakhól'íye* ‘he speaks Lakota fluently’ from (275b) is pronounced *yagláps'e Lakhól'íye*.

The combination of clitics *s'e šna*, seen in (275e), is commonly pronounced *séšna*.

Passive ad-core modifiers are used very productively and participate in forming frequently used similes and idioms.

Conclusion: The inclusion of this chapter in the present thesis is motivated by the fact there are three types of modification associated with the passive voice, specifically (1) modification of passive predicate by a noun where the latter is usually (but not exclusively) the notional actor of the passive voice, (2) passive participle used as an RP-internal modifier, and (3) passive constructions used as derived modifiers that function as ad-CORE or ad-ARG modifiers.

Additionally, Lakota passive can function as the SV co-predicate in N+SV complex predicate constructions.

10. Multi-verb constructions with active verbs

10.1. Introduction

In the chapters discussing secondary predication and derived modifications there were repeated mentions of various morpho-syntactic and semantic similarities that those constructions share with the Simultaneous Predicate Construction (SimPC). Thus it is clear that a study of secondary predication can be complete only if it is complemented with a chapter on the Simultaneous Predicate Construction, one of the several types of multi-verb constructions in Lakota.

Multive-Verb Constructions are addressed in Boas&Deloria (1941), Scott (1976), de Reuse (2006) and marginally in Buechel (1939: 86) who seems to be concerned only with directional compounds (discussed here in 10.3) which he terms “double verbs”. Boas&Deloria (1941) state that the V1 in any verb+verb construction is subordinate and V2 is subordinating.

Scott (*ibid*) provides much data and a complicated description without clear categorization and defining properties for individual types of multi-verb constructions.

De Reuse (2006) is the first to talk about verb serialization in Lakota and to establish some defining properties although some of them problematic, as will be discussed in this chapter. One of the problems of his study is represented by the inconsistencies in transcription of data originating from Boas&Deloria (1941). Among the things that I show in this chapter is that the data in the extant research literature and traditional grammars violate the form and meaning correlations, and that this is caused primarily by the fact that Boas&Deloria (1941) treated V1 truncation as signaling subordination and compounding, whereas truncated V1s occur in both

compounded and un-compounded constructions. Their data was then circulated in the consecutive research resulting in inaccurate analysis and description.

I will discuss the role of phonological tightness in differentiating Purpose Constructions from Simultaneous Predicate Constructions. Furthermore, I will show that there are cases of syncretism where the formal distinction between these two types of constructions is weakened or even lost. I will also discuss the role of various phenomena in the multi-verb constructions, such as reduplication of V1, lexical aspect of V2, transitivity of V1, etc.

I am using ‘multi-verb construction’ as a very broad term for all constructions with two or more adjacent verbs. I avoid the term ‘Serial Verb’ because its definition in the extant studies of Lakota has been problematic and also because serial verbs in Lakota are defined as monoclausal, whereas this study is concerned with both monoclausal and biclausal multi-verb constructions. Lakota multive-verb constructions were first termed Serial Verbs in de Reuse (2006:303) who recognizes three types of Serial Verb Constructions. His three classes and their definition are quoted in Table 10.1:

Table 10.1 *de Reuse’s classification of serial verb constructions*

SVC	definitions by de Reuse (2006)
(i) lexical compounds	“one stress is assigned as though the compound were one word, that is, generally on the second syllable of the whole construction”
(ii) syntactic compounds	“both members of the compound keep their stresses, but the stress on the second member is reduced”
(iii) stripped verbs	“both elements are stressed as independent words”

The classification shown in Table 10.1 is made unclear in de Reuse’s defining properties, where he states that SVCs “are phonologically and prosodically one word

(i.e. they are phonologically compounds)” (ibid) contradicting the third type, described as uncompounded.

In his paper on Noun Incorporation, de Reuse (1994) explains that the “[t]he term Lexical Compound and Syntactic Compound are simply convenient labels, accepted by Siouanist phonologists for two phonological types of compounding in Lakota. This terminology does not imply that Lexical Compounding occurs in the lexicon, whereas Syntactic Compounding would be postlexical.”

Despite this assurance I consider the terminology misleading, both for classifying the types of compounding and especially for the classification of Multi-Verb Constructions, where it is confusing in more than one way. Firstly, there is a group of verbal compounds with a single stress which are genuinely lexicalized words, whereas other compounds with a single stress are not lexicalized and instead originate from syntactic constructions. Secondly, syntactic V+V constructions found in Lakota vary both in terms of the number of stresses and the position of the single stress, because these properties depend on the number of syllables in V1 as well as on the juncture type. Lastly, the term Verb Stripping is used by analogy to Noun Stripping, whereas the Chapter 3 of the present study offered evidence against the existence of Noun Stripping in Lakota. Thus the three-way classification does not satisfactorily account for either the phonological types or for syntactic types. And it does not take semantics into account.

I propose that a classification of MVCs based on semantic properties offers a more detailed but at the same time clearer division system. Multi-Verb Constructions in Lakota can be ordered hierarchically based on the strength of their syntactic juncture. Table 10.2 shows the MVCs ordered from loosest to tightest.

Table 10.2 *Classification of Lakota Multi-Verb Constructions*

	Multi-verb construction type	Juncture type	Compounding
1.	Complement Clause Constructions (bi-clausal)	Clausal subordination	-
2.	Secondary Predicate Constructions (SPC)	Core cosubordination	-
3.	Simultaneous Predicate Constructions (SimPC)	Core cosubordination	-
4.	Auxiliary verb constructions (1)	Core cosubordination	+
5.	Auxiliary verb constructions (2)	Core coordination	+
6.	Purposive constructions (PC)	Nuclear coordination	+
(7.)	Directional Compound Verbs	morphological constructions	+
	a. lexicalized (closed class, only 13 verbs)		
	b. open class (productive)		

Type 1 (Complement Clauses Construction) is a bi-clausal construction and thus falls outside of de Reus' classification of Serial Verbs (which are monoclausal). Type 2 (SPC) and 3 (SimPC) share most of their morphosyntactic properties and differ mainly semantically.

Note that types 1 - 3 are uncompounded whereas types 4 - 7 are compounded. Both phonological types of compounding can occur in most construction, i.e. single-stress compounds (traditionally 'lexical compounds') and two-stress compounds (traditionally 'syntactic compounds'). The specific properties of the compounding are predictable and generally depend on the MV construction type and the number of syllables and stress position of the V1. Directional Compound Verbs are morphological constructions so they are not instances of verb serialization.

This classification accounts for all MVCs in Lakota. A small exception is represented by constructions with the verbs *čhín* 'to want to', *okíhi* 'can' and *unspé* 'to know how to', which are beyond the scope of the present study and which probably form a category of their own each. Lakota auxiliary verbs probably form a

number of other juncture types, which is beyond the scope of the present investigation.

Secondary Predicate Constructions (type 2) were addressed in Chapter 4. Complement clauses (type 1) were discussed in Chapter 4 and section 7.2. although their discussion is included mainly for the purposes of comparison.

The current chapter provides a discussion of the Simultaneous Predicate Construction (SimPC) – (type 3), the Purposive Construction (PC) – (type 6) and Directional Compound Verbs (type 7).

10.2. Simultaneous Predicate Constructions and Purpose Constructions

Simultaneous Predicate Constructions and Purpose Constructions in Lakota have often been confused with one another in the extant literature and this is primarily due the fact that they share a number of defining properties which often makes them difficult to differentiate. Moreover, under certain conditions they are subject to structural ambiguity.

In the following sections I will discuss defining properties that allow us to differentiate Simultaneous Predicate Constructions from Purpose Constructions.

10.2.1. The role of ablaut in SimPCs and PCs

There are numerous formal and functional differences between the Simultaneous Predicate Constructions (SimPCs) and Purpose Constructions (PCs). Two of the morphosyntactic characteristics that are most reliable in distinguishing the two constructions are ablaut and compounding. This is illustrated in the contrasting

examples in (276), where (276a) is an example of a SimPC and (276b) is an instance of a PC:

- (276) (a) *Wawópta yápi.*
Wawópta *Ø-yÁ-pi*
 to.dig.things(turnips) 3A-go-PL
 They went digging turnips. / They dug turnips as they went.
 (data: SBB)
- (b) *Wawópte-yàpi.*
Wawópte-Ø-yÁ-pi
 to.dig.things(turnips)-3A-go-PL
 They went to dig turnips.
 (data: DTA)

The two verbs in (276a) are each pronounced with an independent stress and the first verb (V1) ends with a-grade ablaut. These are properties characteristic of the **Simultaneous Predication Construction**. The first verb, *wawópta* ‘to dig turnips’ is codependent with the main verb, *yápi* ‘they go’, and the two verbs share the subject. V1 expresses the eventuality pertaining to the subject during the temporal frame expressed by V2.

In (276b), on the other hand, the two verbs are compounded and pronounced as a single phonological word with stress on the second member reduced (*-yàpi*). The first verb takes e-grade ablaut. These are properties characteristic of the **Purposive Construction**, in that they can be represented as <V2 (in order) to V1>, as in “they went (in order) to dig turnips”. The Purposive Construction is interpreted as a single event, expressed by the actions of V2 whereas V1 describes merely the purpose of the event. This is because realization of the action expressed by V1 depends on the wider discourse context. For instance it can be canceled by an adversative clause, such as ‘They went to dig turnips but they didn’t find any’. Thus PCs do not code the

execution of the V1 action and it is solely contextual. The single event interpretation of PCs is well in accord with the fact that PCs are nuclear junctures.

The difference in phonological tightness of the two constructions is reflected in their respective constituent projections given in Figure 10.1 and Figure 10.2.

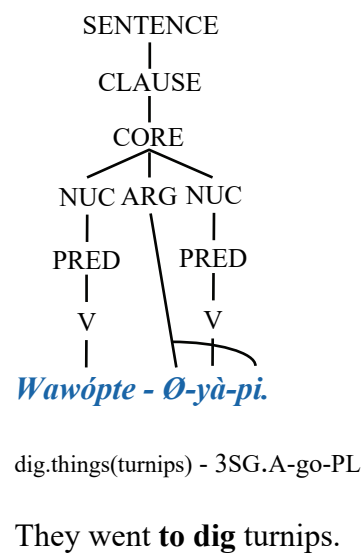
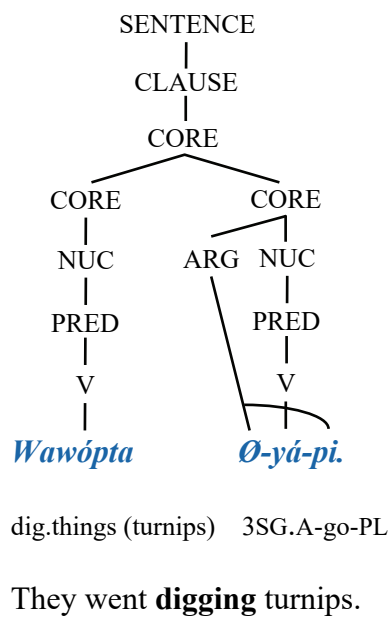


Figure 10.1 *Simultaneous Predicate Construction (Core cosubordination)*

Figure 10.2 *Purposive Construction (Nuclear coordination)*

The syntactic relationship between the two verbs in a SimPC is one of core cosubordination. The relationship between the two verbs in a PC is characterized as nuclear coordination.

The two verbs in a SimPC are treated as describing simultaneous actions, although in some combinations of verbs express simultaneity more genuinely than other combinations. For instance, the going in (276a) is necessarily interrupted in order to do the digging. On the other hand, the digging continues during the time frame of the

trip. Thus the two events are packaged by the construction as if they are facets of the same complex event. An example which shows a more literary simultaneous execution of the two events is given in (277).

In both (276a) and (276b) the subject is marked on the main verb, which is a defining property of both SimPCs and PCs. The object marking, on the other hand, can occur on either V1 or V2, as illustrated in (277) and (278):

(277) (a) *Awíčhayuta nawážiŋ.*

a-wičha-yuta na-wá-žiŋ
 look.at-3PL.U.ANIM-stem stand-1SG.A-stem
 I stood looking at **them**.
 (data: DT story 51, sentence 9, BO-4)

(b) *Ayúta nawíčhawaziŋ.*

ayúta na-wičha-wa-žiŋ
 look.at stand-3PL.U.ANIM-1SG.A-stem
 I stood looking at **them**.
 (data: BBBJ, see also DT: story 41, sentence 3)

(278) (a) *Awíčhayuta-inàwaziŋ.*

a-wičha-yuta-i-ná-wa-žiŋ
 look.at-3PL.U.ANIM-look.at-arrive-stand-1SG.A-stand
 I made a stop to look at **them**.
 (data: JAH)

(b) *Ayúta-inàwíčhawaziŋ.*

ayúta-i-na-wičha-wa-žiŋ
 look.at-arrive-stand-3PL.U.ANIM-1SG.A-stand
 I made a stop to look at **them**.
 (data: DTA)

(277) shows that in SimPCs object marking can take place on either V1 or V2. The same is true about PCs, as shown in (278). Pustet (2000a) provides many examples of V+V constructions in which the object is coded on both verbs, as in *nawíčhaḥ'uy-wičhawakuŋze* (intended meaning: 'I pretended to hear them'). Such double coding of the undergoer has no counterpart in corpus data. Pustet terms this 'echo

pronominalization’ and de Reuse, citing Pustet’s example, describes it as ‘concordant marking of the object’.

In SimPCs, the tendency to place object affixes on the intransitive main verb is very strong even in cases where the two verbs are separated by another constituent, as shown in (279).

- (279) *K’iŋ kaišuthat̃ha maĩnyan̄ke.*
k’iŋ kaišutha-t̃ha ma-Ø-iŋyan̄ka
 carry stumble-REDUP 1SG.U-3SG.U-run
 Stumbling he (the horse) ran carrying me.
 (data: ACC)

In (279), the object is coded with the affix *ma-* on the intransitive main verb resulting in a construction where the object coding is at quite a distance from the transitive verb which would take the affix in a monoverbal clause.

Now that some of the contrastive properties of SimPCs and PC have been discussed, it is possible to show a preliminary list of defining properties of the two constructions. This is provided in Table 10.3:

Table 10.3 Preliminary defining properties of SimPCs and PCs

	SimPCs	PCs
both Vs can be predicates in a mono-verbal clause	+	+
share the subject	+	+
subject marking on V2	+	+
object marking on V1 or V2	+	+
mono-clausal	+	+
ablaut on V1	<i>a</i>	<i>e</i>
compounding	-	+
independent stress	+	-
describe a complex event (composed of simple events)	+	-
purpose (V2 in order to V1)	-	+
no prosodic separation of V1 and V2	-	-
No overt subordination, co-ordination or cosubordination marking	+	+
Both verbs look formally identical with the forms they have in a mono-verbal clause except for differences predictable from established morpho-phonological rules.	+	+

These preliminary defining properties are straightforward and make it look like the two constructions are easily distinguishable. There are, however, two morphosyntactic properties that frequently cause structural ambiguity in which a multi-verb construction can be interpreted as either Simultaneous Predicate Construction or Purpose Construction.

Firstly, not all Lakota verbs are subject to word-final vowel ablaut. This is illustrated in (280).

- (280) *Lowáŋ máni.*
lowáŋ má-Ø-ni
 to.sing walk-3SG.A-stem
 He walked singing.
 (data: BO-71)

As the V1 in (280) is a non-ablauting verb, we cannot use ablaut to determine whether this is a SimPC or PC, although we can still rely on the independent stress on each verb. However, the phonological tightness and V2 stress reduction are less reliable indicators of the difference between SimPCs and PCs when V2 is a monosyllabic word or a disyllabic word with first syllable stress. This is especially the case in fast, connected speech. Consider (281):

- (281) (a) *Lowáŋ hí.*
Lowáŋ Ø-hí
 to.sing 3SG.A-come
 (a') He came singing.
 (b') * He came to sing.
 (data: RTC)
- (b) *Lowáŋ-hì.*
Lowáŋ-Ø-hì
 to.sing-3SG.A-come
 (a') He came to sing.
 (b') He came singing.
 (data: DTA, IEC, BBBJ)

The examples in (281) show a contrast opposition marked by phonological tightness. The uncompounded construction in (281a) can be interpreted only as a SimPC, whereas the sentence in (281b), where the two verbs are compounded, can be interpreted with both the purposive reading ('He came to sing') and the simultaneous meaning ('He came singing'). This is due to the fact that in fast, connected speech the stress on monosyllabic verbs or disyllabic verbs with first syllable stress is reduced. This prosodic feature causes a syncretism between the Simultaneous Predication Constructions and Purpose Constructions. The resulting ambiguity is generally resolved contextually.

This ambiguity concerns primarily those multi-verb constructions in which the V2 is one of the travel verbs, such as *hí* 'to com', *glí* 'to come back', *ú* 'to be coming', *kú* 'to be coming back', *khi* 'to arrive back there', *i* 'to arrive there', *yÁ* 'to be going there', *glÁ* 'to be going back there', *áyA* 'they are going there as a group', etc.

10.2.2. The role of truncation

The second morphophonemic feature that causes structural ambiguity between SimPCs and PCs is word-final syllable truncation (introduced in 2.5.3). Verbs that are subject to truncation generally truncate in the V1 position of PCs, as shown in (282) where V1 is the truncating verb *wóglakA* 'to speak':

- (282) *Wóglag-wahì.* (**Wóglaka-wahì.*)
Wóglaka-wa-híi
 to.speak-1sg.A-come
 I came to speak.
 (data: EDT-Aut-9, sentence 18)

Note that the version with non-truncated V1 is considered ungrammatical by native speakers and cannot be found in corpus data.

The role of truncation is less clear-cut in Simultaneous Predicate Constructions. Consider the data in (283), which suggest that at least some truncating verbs can be unreduced when they are the V1 in SimPCs.

- (283) (a) *Igláka ománipi.*
igláka omá-Ø-ni-pi
to.migrate travel-3A-travel-PL
They travelled moving camp/migrating.
(data: FREH, BT p. 237, BO-101)
- (b) *Iglág ománipi.*
igláka omá-Ø-ni-pi
to.migrate travel-3A-travel-PL
They travelled moving camp/migrating.
(data: BT p. 113)

The data in (283) gives two variants of the same sentence where (283a) shows V1 non-truncated (*igláka*) while (283b) gives the same verb as V1 truncated (*iglág*). Both versions are frequent in corpus data and considered grammatical by contemporary native speakers.

The verb *igláka* ‘to move camp, to migrate’ is actually one of a small number of verbs that allow both the non-truncated and truncated form in the SimPCs. The vast majority of other truncating verbs are always reduced when they are the V1 in a Simultaneous Predication Construction. However, investigation of diachronic data reveals that older texts have a higher proportion of such unreduced V1s and that verbs which consistently truncate in modern texts are commonly unreduced in old texts. This is illustrated with the data in (284):

- (284) (a) *Wawáŋyaŋg naúŋžihpi.*
wa-wáŋyaŋka ná-úŋ-žih-pi
 DTR-to.see stand-1A-stand-PL
 We stood watching.
 (data: EDT-Aut-3, sentence 118)
- (b) *Wawáŋyaŋka naúŋžihpi.*
wa-wáŋyaŋka ná-úŋ-žih-pi
 DTR-to.see stand-1A-stand-PL
 We stood watching.
 (data: EDT-Col-5, sentence 61; BT: pp. 247, line 33)

The variant with truncated V1 in (284a) is the only variant found in modern texts (i.e. beginning with the 1950s) and the only option judged as grammatical by contemporary native speakers. However, both variants can be found in texts recorded before 1937 (for the version in (284b) see for example Deloria’s Archival Texts in Colloquial Style, Text 5, sentence 61).

These findings suggest a couple of things: (a) the V1’s in SimPCs were originally non-truncated; (b) the development of truncation was most likely very gradual and different verbs became subject to truncation in the V1 position independently at different times. It is very likely that highly frequent verbs, such as *wáŋyaŋka* ‘to see smth/sb’ began to be subject to truncating earlier when compared to less commonly used verbs, such as *igláka* ‘to move camp’. As was mentioned in Chapter 5.1., truncation had the same development with respect to stative verbs and their use in Secondary Predicate Constructions and constructions with truncated derived modifiers.

In the extant research literature on Lakota and in traditional Lakota grammars, truncation has been associated with subordination (e.g. Boas and Deloria 1941: p. 34 and p. 84 §95, de Reuse 2006: 305). De Reuse (ibid) states that “The final vowel of a word can be deleted, if the preceding consonant is an obstruent. This happens

typically when the word is in some way subordinate to the following word.” Following Role and Reference Grammar I analyze the relationship between the V1 and V2 in Lakota multi-verb constructions as one of dependency rather than subordination (e.g. Matić, van Gihn & Van Valin, 2014: 18-19). According to Matić, van Gihn & Van Valin (ibid) serial verb constructions across languages “are syntactically flat and semantically integrated into a single proposition and are consequently more similar to simple than to complex clauses.” Additionally, as was shown in the discussion about (283) and (284), truncation is not a reliable and consistent indicator of dependency because non-truncated forms can also be dependent.

Boas and Deloria (1941: 74) associated truncation primarily with Purpose Constructions, as they state that “When the subordinate verb expresses an action that follows in time the finite verb as a purpose or intention (like our infinitives) the verbs are compounded. CVC verbs insofar as they can be contracted are contracted.” But further down in their discussion of subordinating verbs (ibid: p. 84, §95) they contradict their statement when they give the following minimal pair which contrasts SimPCs with PCs and in which both V1s are truncated (glossing and bracketed translation mine):

(285) (a) *Škál omáwani.*

škátA omá-wa-ni
 play travel-1SG.A-travel
 I travel playing.

(b) *Škal-ómawani.*

škátA-omá-wa-ni
 play-travel-1SG.A-travel
 I go about to play. (i.e. ‘I travel in order to play’)

Whereas by giving this data, Boas and Deloria contradict their statement (cited above), they provide the accurate translations and thus implicitly establish the correct form and meaning correlation, where non-compounded verb constructions, as in (285a), express simultaneous actions, and compounded constructions, as in (285b), are interpreted with purpose reading. However, this correlation is violated in numerous examples that Boas and Deloria give throughout their grammar, as well as in Deloria's text collections.

For instance on page 22 (*ibid*) they give the following example:

- (286) *Škal-éthi.* (Boas and Deloria, 1941: 74)
škátA-é-Ø-thi
 to.play-LOC-3SG.A-camp
 To play camping.

Boas and Deloria's translation of (286) is somewhat unclear at first glance because it involves an infinitive which makes it look like it is a purposive construction. Since Lakota does not have an infinitive, it is likely that the intended translation was "He plays camping". This represents an inverted order of the verbs, because the verb *éthi* "to camp" is the main verb and so the simultaneous translation should read "He camped playing". In either case, Boas and Deloria's translation seems to indicate simultaneous reading, while their transcription is one that suggests it is a Purposive Construction. To express simultaneous actions, the V+V in (286) would have to be transcribed as un-compounded, with a space between the two verbs and with an independent stress on each verb (i.e. *škál éthi*). Such violations of the form and meaning correlation are very frequent in Deloria's text. Below are some more examples from Deloria's archival text collections:

- (287) (a) *Wákhil yaŋká kéye.*
wákhita Ø-yaŋká kéye
 look.around 3SG.A-sit it.is.said.
 He sat looking around, it is said.
 (data: EDT-Col-3, sentence 21)
- (b) *Wákhil-yaŋká-haŋ yuŋkháŋ ...* (expected: *Wákhil yaŋká-haŋ yuŋkháŋ ...*)
wákhita-Ø-yaŋká-haŋ yuŋkháŋ
 look.around-3SG.A-sit-CONT and.here
 He sat looking around, and here ...
 (data: DT story 52, sentence 2)
- (c) *Čhaŋkážib-yaŋká-haŋ ...* (expected: *Čhaŋkážib yaŋká-haŋ ...*)
čaŋ-kážipA-Ø-yaŋká-haŋ
 wood-whittle-3SG.A-sit-CONT
 He sat whittling on wood ...
 (data: EDT-Col-4, sentence 21)

Example (287a) shows the correct correlation between form and meaning, since the non-compounded construction is translated as simultaneous action. In (287b) the same verbs are connected with a hyphen and the stress on the second verb is spelled with grave accent to show it is reduced. This contradicts Deloria's English translation involving simultaneous actions. The same problem recurs in (287c). The spelling and interpretations that correspond to the established form-meaning correlation are provided in brackets.

Boas and Deloria drew data for their grammar (1941) extensively from the texts collected and transcribed by Deloria during the 1930s. Unfortunately, the inconsistencies in the transcription and interpretation of multi-verb constructions illustrated in (287) affected the analyses in their grammar. And the same inconsistencies have continued to be circulated in the more recent research literature.

The conclusions of this section are as follows:

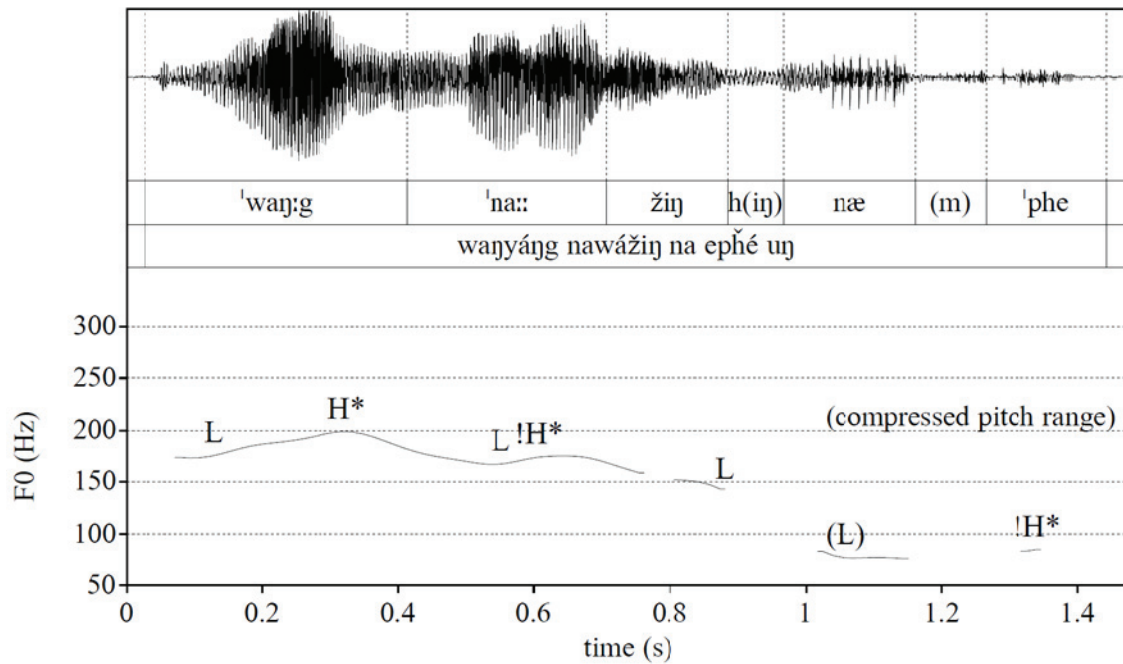


Figure 10.3 *Pitch contour analysis of a SimPC*

The pitch contour of a SimPC given in Figure 10.3 shows the pitch accent peak on V1 labeled with H* and the downstepped pitch accent peak on the V2 marked with !H*. This H* peak downstep is an intonational feature characteristically occurring on the second member of an intermediate intonational phrase, but it does not signal stress reduction.

On the other hand, the pitch contour of the compounded words in a PC generally looks different. An example is presented in Figure 10.4 with data from (288), where the two verbs are compounded and the stress on the second member is reduced.

- (289) *Wóyag-waù uŋ.*
wóyag-wa-ù uŋ
 tell.thing-1SG.A-come EMPH
 I am coming to tell things.
 (data: NSB)

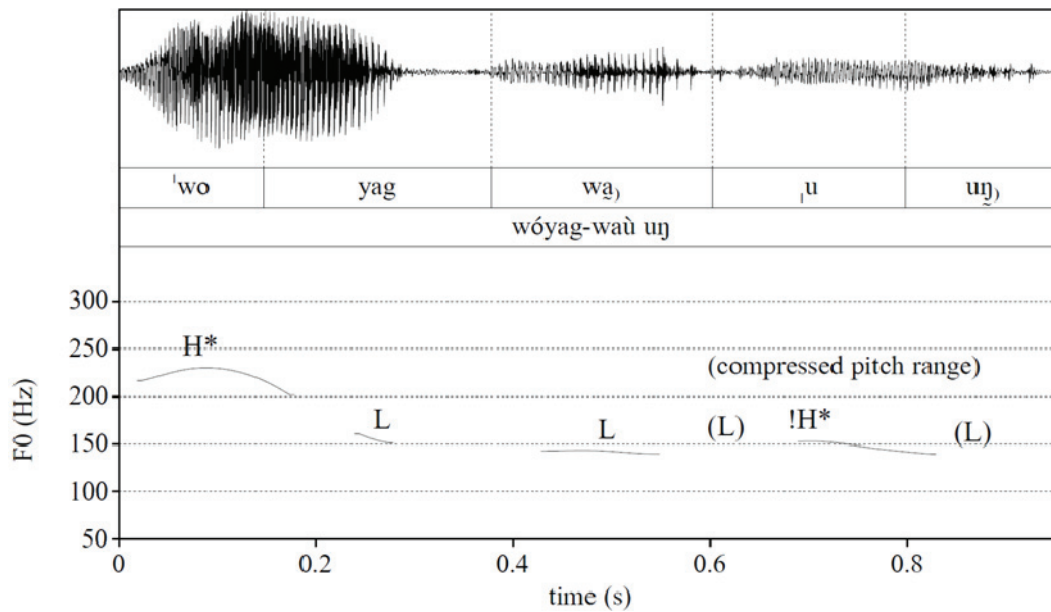


Figure 10.4 *Pitch contour of a Purposive Construction (1)*

The pitch curve shows a H* on the stressed syllable of V1 and a L stretching across the boundary of V1. Additionally, there is a combination of a dip and minor increase both within the second syllable of V2 (*wau*), i.e. the syllable with reduced stress. The entire second member of the construction exhibits a compressed pitch range. These intonational features are generally seen in compounded construction with two compounded verb, although they are not always consistent, as will be shown further in this discussion.

Another example of a PC given is in (290) with a pitch contour visualization given in Figure 10.5.

- (290) *Ho čha wayáwa-wahiyu hánj ...*
ho čha wayáwa-wa-hiyu hánj
 well so study-1SG.A-step.forth when
 So when I first started school ...
 (literally “So when I stepped forth to study...”)
 (data: JHR, 2005)

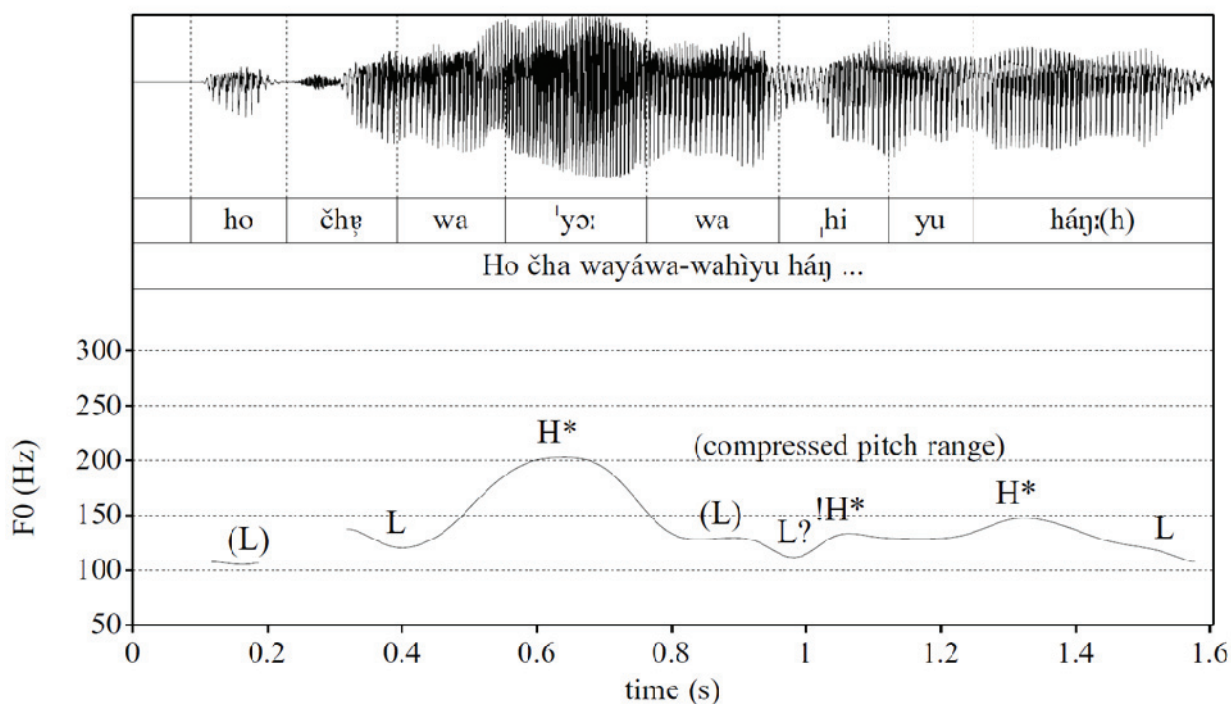


Figure 10.5 *Pitch contour of a PC (2)*

The pitch contour in Figure 10.5 shows that the H* peak associated with the reduced stress on the main verb (*wahìyu*) is not only much lower than that on V1 (*wayáwa*), but also that it does not form a significant new peak within the two-word construction because the pitch range of V2 is reduced. Additionally, the syllable with the reduced stress (*-hi-*) exhibits a noticeable dip in pitch followed by a sudden, but small rise, both within that syllable, which is similar to that in the PC in Figure 10.4. This dip was observed on numerous other examples of PCs. On the other hand, PCs exhibit variations in the pitch contour, especially in terms of the level of the !H* on V2. This is illustrated in Figure 10.6 which shows the pitch contour of (291).

- (291) *Čha wačhékiye-mniŋ kta waškáŋ-he*
čha wačhékiyA-mn-(y)Á ktA wa-škáŋ-hÁŋ
 so pray-1SG.A-go FUT.IRR 1SG.A-act-CONT
 So I was getting ready to go to pray. (i.e. to go to church)
 (data: NSB)

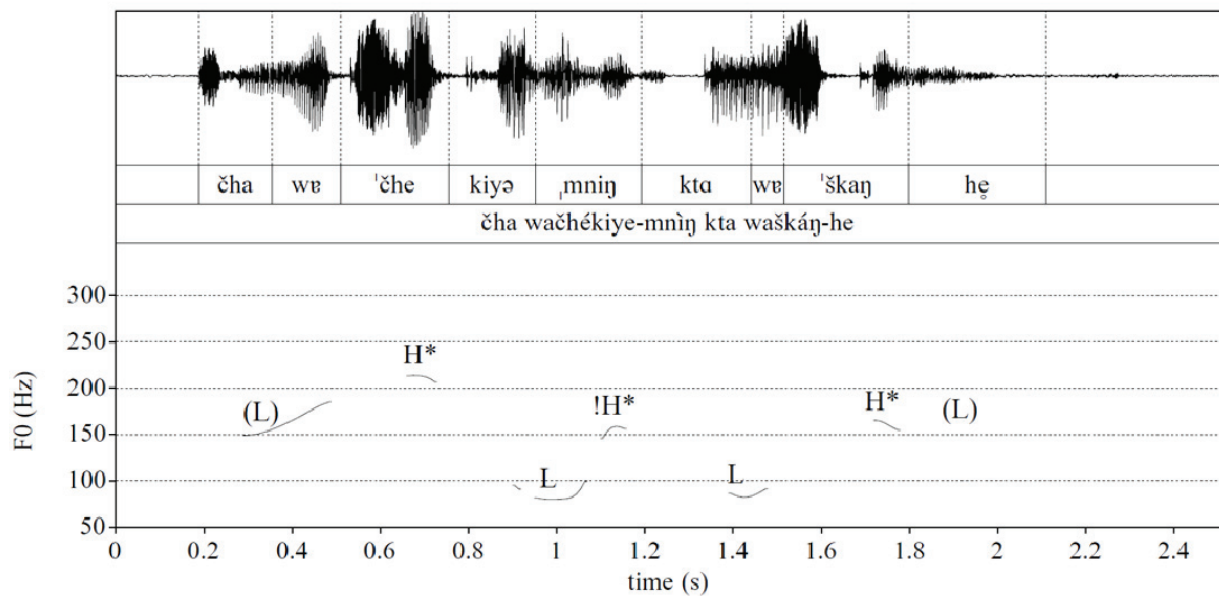


Figure 10.6 *Pitch contour of a PC (3)*

The pitch contour in Figure 10.6 differs from the pitch lines of the previous two examples in that over the second member of the compound (i) the pitch range is not significantly compressed, and (ii) the rise from L to !H* is not minimal. Instead, the pitch contours exhibits a H* downstep similar to that observed in uncompounded constructions, such as in the SimPCs. However, Figure 10.6 also shows a very significant dip on the boundary between V1 and V2, which stretches partly onto the single syllable of the V2, whose stress should be reduced in accord with the construction type. Thus it is possible that this dip in F0 might play a role in

determining reduced stress in compounds, although this observation is highly tentative.

It is beyond doubt that the prosodic properties of SimPCs and PCs are different, because native speakers distinguish minimal pairs, such as *lowáy unyáyipi* ‘we went there singing’ (SimPC) and *lowáy-unyáyipi* ‘we went there to sing’ (PC). It is also clear, that the two verbs in a SimPC are not compounded but rather characterized by H* downstep. However, the current observations concerning the prosodic and intonational properties of compounding in PCs are preliminary since it is beyond the scope of the present study to determine whether stress reduction is characterized by pitch range compression, by a L-H* within the syllable with reduced stress or by some other features. It is likely that reduced stress is not determined solely by pitch levels, but rather by a combination of phonological and prosodic properties, as well as affected by segmental phonetic effects or impact of consonant sounds. The investigation of intonational and prosodic properties of reduced stress merits a separate study.

10.2.4. The role of lexical aspect of V2

The role of lexical aspect of V2 in Simultaneous Predicate Constructions and Purpose Constructions is complex and, as was the case of truncation, its analysis and description in the existing literature is not without problems.

The following minimal pair from Boas and Deloria (1941: 84), and cited also by de Reuse (2006: 314), illustrates one of the issues:

- (292) (a) *Wóglag nawážiŋ.*
wóglakA na-wá-žiŋ
 speak stand-1.SG-stand
 I stood talking.
 [translation by Boas and Deloria (1941: 84)]
- (b) *Wóglag-nawážiŋ.*
wóglakA-na-wá-žiŋ
 speak-stand-1SG.A-stand
 I stood for the purpose of talking.
 [translation by Boas and Deloria: *ibid*]

The form-meaning correlation in (292) is in line with the established defining properties of SimPCs, as in (292a), and PCs, as in (292b). However, the problem with the minimal pair in (292) lies in the fact that the purpose interpretation given by Boas and Deloria for constructions like (292b) is exclusive to Deloria's text collection and has no counterpart in other parts of the corpus. Additionally, contemporary speakers reject the interpretation given in (292b) regardless of the compound-like pronunciation.

Corpus data (with the exception of Deloria's texts) shows that when the main verb (V2) of a multi-verb construction is a durative verb and the V1 is a truncating active verb, the interpretation is invariably one of simultaneous actions. Examples of durative verbs that are typically used as the main verb in Simultaneous Predicate Constructions are *nážiŋ* 'to stand', *yaŋkÁ* 'to sit', *ħpáya* 'to lie', *máni* 'to walk', *ománi* 'to walk about, to travel', *inyanġkA* 'to run', *úŋ* 'to be', *čhéya* 'to cry', *škáj* 'to move about, be engaged in an activity', *khuwá* 'to treat or pursue smth/sb (as a task)' and numerous other verbs.

Exceptions to the rule established in the previous paragraph are relatively rare cases where V1 is a monosyllabic verb (inherently or as a result of truncation) or where it is an ablauting verb. These allow both constructions, as was shown in the

minimal pair in (285). This is another piece of evidence in support of the claim that that stress reduction on V2 alone does not provide enough contrast to differentiate between the two constructions. However, when stress on V2 is moved as a result of compounding, then the distinction can be made, as in (285b). Similarly, e-grade ablaut on V1 is another property that clearly distinguishes SimPCs from PCs. An example is in (293):

- (293) *Haŋblé-čhèye.*
haŋblÁ-Ø-čhéyA
 to.dream-3SG.A-cry
 He cried in order to dream. (i.e. he cried in order to receive a vision)

PCs like the one in (293) are extremely rare in corpus data, probably because there is a small pool of non-truncating ablaut verbs that allow for logical combinations with durative verbs in V2 position. Even the sentence in (293) is actually a lexicalized item and the verb *haŋblÁ* is no longer used synchronically with a-grade ablaut as an independent verb, even though its derivatives are (e.g. *iháŋbla*, *aihaŋbla*).

In all other cases, multi-verb constructions with durative V2s are interpreted as simultaneous actions. And in fact, constructions with stance verbs and verbs of existence as the V2 can be considered as aspect, rather than simultaneity. Evidence in support of this claim lies in the fact that one of the stance verbs, the verb *hÁŋ*, has been reanalyzed as a clitic. The verb *hÁŋ* is still used predicatively, but only with inanimate actors (whereas old texts show that it was used with animate actors in the past). The reason why we know with a high level of certainty that the clitic *-hAŋ* originates in the verb *hÁŋ* is the fact that the closely related Dakota dialect uses the verb *yaŋkÁ* ‘to sit’ as a aspect operator clitic in places where Lakota uses *-hAŋ*. This is illustrated in (294).

The non-durative verb *iyotakA* ‘to sit down’ seems to always participate in PCs, as illustrated in (295a). The non-durative verb *ičú* ‘to take smth’ is used in SimPCs, as shown in (295b).

Conclusion: The role of lexical aspect in multi-verb constructions is not addressed adequately in traditional research literature and some data from Boas and Deloria (1941) contradict the findings based on corpus data (excluding texts transcribed by Deloria). Lexical aspect plays a role in distinguishing between SimPCs and PCs in that durative V2s participate primarily in SimPCs and very rarely in PCs (with the exception of verbs of coming and going, discussed in the next section). Non-durative V2s can participate in both construction types although some verbs are restricted to participating only in one of the two. A group of verbs including stance verbs, verbs of existence and action, seem to code grammatical aspect when they appear as V2s.

10.2.5. Lexical aspect and travel verbs as V2

Travel verbs have to be treated separately when it comes to the role of V2 lexical aspect in multi-verb constructions, because both durative and punctual travel verbs can participate as the main verb in both SimPCs and PCs. This is illustrated via two minimal pairs in (296):

(296) (a) *Nuḡwáj waglè.*
nuḡwáj wa-glÁ
 swim 1SG.A-go.back
 Swimming, I went back.
 (data: EDT-Col-3, sentence 254)

(b) *Nuḡwé-waglè.*
nuḡwé-wa-glè
 swim-1SG.A-go.back
 I went back to swim.
 (data: BBBJ)

- (c) *Nuḡwáj wakhí.*
nuḡwáj *wa-khí*
 swim 1SG.A-arrive.back.there
 Swimming, I arrived back there.
 (data: SBB)
- (d) *Nuḡwé-wakhì.*
nuḡwé-wa-khì
 swim-1SG.A-arrive.back.there
 I arrived back there in order to swim.
 (data: SBB)

The verb *nuḡwáj* ‘to swim’ is used in all four sentences and the fact that this is an ablaut verb allows us to reliably distinguish between SimPCs and PCs. This would not be the case with non-ablaut verbs because phonological tightness alone is often not reliable, as discussed previously. The a-ablaut form in (296a) and (296c) reveals that these are SimPCs, whereas the e-grade ablaut form of *nuḡwáj* in (296b) and (296d) indicates that these are PCs. Note that the main verb in the first two sentences is a durative travel verb (*glÁ* ‘to go back’) while the main verb in the last two sentences is a punctual travel verb (*khí* ‘to have arrived back’). This is evidence that both durative and punctual travel verbs can participate as the main verb in both SimPCs and PCs. It is important to note that this is only possible with **intransitive** verbs in the V1 position, as will be shown in the following section. Verbs of perception as V1, such as *wanyáŋka* ‘to see smth/sb’, *naḥ’úŋ* ‘to hear smth/sb’ and *ayúta* ‘to look at smth/sb’ are a separate category because when they are followed by a travel verb the resulting construction always has purposive reading.

When the V2 is a travel verb and the V1 is a non-ablaut verb, then it is often more difficult to distinguish between the two constructions due to the effect of prosody where the stress on the second verb often becomes reduced in fast, connected speech.

Additionally, the phonological tightness distinction is often lost due to tonal crowding (discussed in 3.2.2), which occurs when the stress of V1 is adjacent to the stress of V2. For instance, when the verb *wačhí* ‘to dance’ occurs before the verb *kú* ‘to come back’, the stressed syllables of the two verbs are adjacent resulting in tonal crowding a consequence of which is the deletion of the stress on *kú* and the loss of distinction between SimPCs and PCs. Thus, constructions like *wačhí kú*, *wačhí ú* and *wačhí yé* are generally polysemous and can be interpreted as both expressing both a *SimPC* and PC. Their interpretation of is then contextual. This was also shown in (281).

In conclusion, and as mentioned earlier, phonological tightness alone (without ablaut or stress movement) is often not a reliable indicator of the difference between SimPCs and PCs, especially, but not exclusively, when the main verb is a monosyllabic verb or a multisyllabic verb with initial vowel stress. In the majority of cases, this involves travel verbs.

10.2.6. Transportation verbs in multi-verb constructions

The ability of travel verbs to participate as V2s in both SimPCs and PCs regardless of the lexical aspect of V1 (described in the previous section) is valid only when V1 is an intransitive verb.

When V1 is a transitive verb then SimPC usually require a transportation verb (e.g. *áyA*) as V2, rather than a travel verb (e.g. *yÁ*). This is illustrated in the data below where V2 in (297a) is the travel verb *iyáyA* ‘to leave’ and V2 in (297b) is the transportation verb *éyayA* ‘to leave transporting smth/sb’ (formed by prefixing *a-* to *iyáyA*).

- (297) (a) *Šúnkawkáħáj kiŋ manúnj-iyàye.*
šúnkawkáħáj kiŋ manúnj-i-Ø-yàya
 horse the to.steal-leave-3SG.A-stem
 (a') He left **to steal** the horse.
 (b') * He left stealing the horse.
 (data: BBBJ)
- (b) *Šúnkawkáħáj kiŋ manúnj éyaye.*
šúnkawkáħáj kiŋ manúnj é-Ø-Ø-yàya
 horse the to.steal left-3SG.U-3SG.A-stem
 (a') He **left stealing** the horse.
 (b') * He left to steal the horse.
 (data: RFT, see also: DT story 15, sentence 2)

As the translations show, the choice of travel verb and transportation verb impacts the meaning and the two options are not interchangeable.

The two constructions shown in (297) differ also in the treatment of object marking. The construction in (297a) is a typical PC in that it allows object affixes on either V1 or V2 (as discussed in (277)), but the construction in (297b) takes object affixes only on V2. This is a property exclusive to SimPCs with transportation verbs in V2 position and it is illustrated in (298).

- (298) (a) *Alóksohanj awičhaipi.*
alóksohanj a-wičha-Ø-i-pi
 carry.in.the.arms take.there-3PL.ANIM.U-3A-stem-PL
 They took them there carrying them in their arms.
 (data: EDT-Aut-6, sentence 11)
- (b) * *Alówičhaksohanj aipi.*
aló-wičha-ksohanj a-Ø-i-pi
 carry.in.the.arms-3PL..ANIM.U-stem take.there-3A-stem-PL
 They took them there carrying them in their arms.
 (data: GJ: IEC, BBBJ, KLT, BLT, DTA)

The sentence in (298a) shows that the undergoer is coded on the transportation verb which functions as the main verb, whereas when the undergoer is coded on V1, the sentence was considered ungrammatical by the native speakers I consulted. It

should be added that there are some very rare examples where the object actually is coded on the V1, as in (299).

- (299) *Wičhakat'a áyapi.*
wičhá-kat'Á *á-Ø-yA-pi*
 3PL.ANIM.U-knock.dead take.there-3A-stem-PL
 They carried on knocking them dead.
 (data: DT story 19, sentence 22)

However, the native speakers I consulted preferred placing the affix *wičhá-* on the transportation verb in (299).

One complication in identifying and interpreting these constructions lies in the fact that transportation verbs are homonymous with the collective plural form of travel verbs. For example, the collective plural of *iyáyA* ‘to leave’ is *éyayA* ‘they left’ and the transportation verb is also *éyayA* ‘to leave taking smth/sb’. Moreover, transportation verbs in the collective plural frequently participate as the V2s, as in (300a):

- (300) (a) *Šuŋgmánuŋ-éyaye.*
šúŋka-manúŋ-a-iyáyA
 horse-to.steal-3COL-to.leave
 The group left to steal horses.
 (data: BBBJ, IEC, see also BO-201: wanáse-éyaye)
- (b) * *Šuŋgmánuŋ-éyayapi.*
šúŋka-manúŋ-a-i-Ø-yayA-pi
 horse-to.steal-LOC-to.leave-3A-stem-PL
Intended: The group left to go horse-stealing.
 (data: BBBJ, IEC, MCE)

The reason why *éyaye* is interpreted as a collective plural of *iyáyA* rather than as a transportation verb lies in the fact that *šuŋgmánuŋ* ‘to horse-steal’ is not a transitive verb (because it is an instance of noun incorporation involving the noun *šúŋka* ‘dog,

horse’ and the transitive verb *manúŋ* ‘to steal smth/sb’; *šúŋka* + *manúŋ* -> *šunǵmánun*). The validity of this analyses can be tested by adding the plural suffix –*pi*, as in (300b), resulting in an ungrammatical construction because *éyayapi* can be interpreted only as the 3rd plural of the transportation verb *iyáya* (since collective plural cannot take the pluralizing suffix –*pi*). As a transportation verb, *éyayapi* would have to take an object which is not possible as the object *šúŋka* is incorporated in V1.

Multi-verb constructions with transportation verbs are commonly used to express not only the simultaneous movement through space while doing the V1 activity, but also the progression of the V1 activity in time. This is illustrated in (301):

(301) (a) *Wičhóoyake kiŋ okičhiyag aúpi.*

wičhóoyake *kiŋ* *o-kičhi-yakA* *a-Ø-Ø-ú-pi*
 story the tell-RECIP-stem bring-INAN-3A-stem-PL

They have been telling the story to each other.

(Literally: They tell the story to each other as they come bringing it.)

(data: FREH)

(b) *Okáħniħ áble.*

okáħniħA *á-Ø-bl-A*
 to.understand take-INAN-1SG.A-stem

I have been making progress in understanding it. / I am beginning to understand it.

(data: DLH)

Contexts like those in (301) suggests that the transportation verb as V2 codes grammatical aspect. This is supported by the fact that veritive verbs cannot be used in sentences like those in (301).

In corpus data, there are some tokens that seem to be exceptions to the rule that transitive verbs form SimPCs with transportation verbs and not travel verbs. An example is given in (302a):

(302) (a) *Kašká yús yá škhé.*

kaškÁ yúzA Ø-yÁ škhé
to.tie.up to.hold 3SG.A-go it.is.said.

It is said he was leading it (the horse) by a rope.
(data: EDT-Leg-3, sentence 9)

(b) *Kašká yús áya škhé.*

kaškÁ yúzA á-Ø-Ø-ya škhé
to.tie.up to.hold transport.there-3SG.U-3SG.A-stem it.is.said.

It is said he was leading it (the horse) by a rope.
(data: EDT-Aut-3, sentence 49)

The transitive verb *yúzA* ‘to hold’ is followed by the travel verb *yÁ* in (302a) while in (302b) it is followed by a transportation verb *áya*. Constructions like that in (302a) represent less than 0.5% of corpus tokens for transitive V1 with travel/transportation V2. Consulting native speakers regarding the difference between (302a) and (302b) has been inconclusive so it is unclear at this point whether the different choice of V2 impacts the interpretation of the construction or whether the two versions are free variants or represent different stages in the development of the construction. However, I also consulted native speakers about alternative versions of (301a) in which I used a travel verb in place of a transportation verb. In case of (301a) the meaning changed from “they have been telling it to each other” into “they are coming telling it to each other”. Examples with transportation verbs, as those in (301) and (302a) and elsewhere in this section, suggest that transportation verbs may in fact code grammatical aspect, rather than carry their own lexical content, when they occur as V2 after transitive V1s.

However, it seems that the main motivation for using transportation verbs as the V2s after transitive V1s is the fact that transportation verbs, unlike motion verbs, are transitive and thus provide a preferred ‘docking site’ for object affixes.

The following conclusions summarize the findings from this and the previous section:

- intransitive V1s can form both PCs and SimPCs with travel verbs
- transitive V1s form PCs with **travel** verbs
- transitive V1s form SimPCs with **transportation** verbs (and rarely also with travel verbs). It can be hypothesized that transportation verbs as V2 code aspect even though in some contexts they maintain their own semantic content, especially the direction of movement.

10.2.7. Role of reduplication in multi-verb constructions

The fact that phonological tightness does not reliably distinguish PCs and SimPCs can partially explain why some contemporary speakers have a tendency to reduplicate the first verb whenever they intend to express simultaneous meaning as opposed to purpose. Consider these examples:

(303) (a) *Wačhíčhi ú.*

wačhí~čhi *Ø-ú*
 dance~dance 3SG.A-come
 (a') She is coming, dancing. (simultaneous)
 (b') * She is coming to dance. (purpose)
 (data: BBBJ, IEC, MARC)

(b) *Wóglaglag yápi.*

wóglakA~glakA *Ø-yÁ-pi*
 speak~REDUP 3A-go-PL
 (c') They went talking / chatting. (simultaneous)
 (d') * They went to talk. (purpose)
 (data: BBBJ, IEC, MARC)

The data in (303) shows two examples of multi-verb constructions where the V1 is reduplicated to indicate that the action is repeated over space or time. Reduplication is

used by some speakers as a type of disambiguation function to differentiate SimPCs from PCs in cases where these two are less easily distinguishable, e.g. due to tonal crowding. The use of reduplication makes the distinction possible. Note that the purpose interpretation is not possible in either of the two sentences. Other speakers continue to use non-reduplicated forms and resort to reduplication only to emphasize that the activity is repetitive. Moreover, reduplication sometimes changes the connotation, so for instance the reduplication of *wóglakA* ‘to speak’ can suggest chatting or chit-chatting. Cross-linguistically, the use of reduplication to signal continuing or on-going action is very common.

In conclusion, the tendency of some speakers to reduplicate the first verb may suggest that they have a need to formally distinguish between the two constructions.

10.2.8. Vertitive travel verbs as V2

Lakota distinguishes between vertitive and non-vertitive travel verbs (as well as transportation verbs). Vertitive verbs are those that indicate travelling, arriving at or departing towards a place that is contextually treated as the base from which the traveler came, whether it is permanent or temporary.²³

When the main verb of a multi-verb construction is a vertitive travel verb, the SimPC has an additional possible interpretation. This is illustrated in (304):

²³ Taylor (1976: 288) states that the term ‘vertitive’ was coined by Terrence Kaufman but was first published in print with this sense by Hollow (1965). Some authors use ‘vertative’ rather than ‘vertitive’.

- (304) (a) *Wačhékiya gli.*
wačhékiya Ø-gli
 pray 3SG.A-come.back
 (a') He came back praying.
 (b') He came back from praying. (idiom for: He came back from church.)
 (data: BBBJ, IEC, also: NSB)
- (b) *Wačhékiye-gli.*
wačhékiye-Ø-gli
 pray-3SG.A-come.back
 He came back to pray/in order to pray.
 (data: BBBJ, IEC)

The SimPC in (304a) can be interpreted as expressing the returning back doing an activity or coming back **from** an activity (i.e. after having finished the activity). PCs with vertitive V2s have only one interpretation, as shown in (304b).

In (304) we see a clear distinction between SimPC in (304a) and PC in (304b) indicated by the ablaut on V1.

In constructions with a non-ablauting and non-truncating V1 and a vertitive as V2 the distinction between SimPCs and PCs is usually neutralized which means that constructions of this type commonly have three possible interpretations, as shown in (305):

- (305) *Wayáwa (-) gli.*
wayáwa (-) Ø-gli
 study 3SG.A-come.back
 (a') She came back learning.
 (b') She came back from learning. (idiom for: She came back from school.)
 (c') She came back to learn.
 (data: PL, BBBJ, IEC)

The distinction among the three meanings in (305) is context dependent.

De Reuse (2006: 311) states that vertitive verbs always trigger e-ablaut in the verb they follow. This statement is in conflict with corpus data where vertitive verbs

behave like all other verbs in V2 position in that they follow a-ablaut in SimPCs and e-ablaut in PCs, as was shown in (304).

10.2.9. Lexical aspect and vertitives in traditional research literature

Boas&Deloria (1941: 75) attempted to analyze the role of V2's lexical aspect on the interpretation of multi-verb constructions. Their statements, however, contradicted each other as well as their data. They state that:

A) "The verbs expressing **going** and **coming back** to where one belongs do not express purpose but the return **from** an accomplished action."

B) "Verbs expressing arrival ²*i*, *hí*, *khí*, *glí* may be combined in the usual way with other verbs, when a **purpose** is to be expressed."

(Emphasis mine in both paragraphs.)

What may not be clear from statement (A) unless one reads the examples below it, is that it is concerned only with the vertitive verbs *kú* 'to be coming back' and *glÁ* 'to be going back'. The lexical aspect of these two verbs is durative. Statement (B) clearly lists all four of the arrival verbs (*i* 'to arrive there', *hí* 'to come', *khí* 'to arrive back there', *glí* 'to come back here'), all of which have punctual (non-durative) lexical aspect. This means that Boas&Deloria implicitly correlate the "**purpose**" interpretation with punctual travel verbs and the "**from**" interpretation with durative travel verbs. De Reuse, on the other hand, states that vertitive verbs form serial verbs with the meaning "**from**" and he does not mention lexical aspect as playing a role. Since vertitive verbs include *kú* and *glÁ* (durative), as well as *khí* and *glí* (punctual), de Reuse's statement contradicts Boas&Deloria's description.

In reality, neither of the two descriptions reflects corpus data. All travel verbs can participate as the V2 in both SimPCs and PCs, and SimPCs with veritive V2 can have two semantic readings, as shown in section 10.2.8.

The assertion in de Reuse may originate in misinterpreting statement (A) in Boas&Deloria which makes it look like it concerns all veritive verbs, when in fact it talks only about *kú* and *glÁ*.

10.2.10. Intervention with PP and DM

Another property in which SimPCs differ from PCs is the position of derived modifiers and postpositional phrases that these constructions allow.

Various syntactic elements can intervene between the V1 and V2 of SimPCs, whereas purpose constructions are tightly compounded and the two members of the compound cannot be separated. This is illustrated in (306):

(306) (a) *Kaíyuzeya wawópta yápi.*

<i>kaíyuzeya</i>	<i>wawópta</i>	<i>Ø-yÁ-pi</i>
at a long distance	dig.things(turnips)	3A-go-PL
They went a long distance digging turnips.		
(data: MARC)		

(b) *Wawópta kaíyuzeya yápi.*

<i>wawópta</i>	<i>kaíyuzeya</i>	<i>Ø-yÁ-pi</i>
dig.things(turnips)	at a long distance	3A-go-PL
They went a long distance digging turnips.		
(data: GJ: SHE)		

(c) *Kaíyuzeya wawópte-yápi.*

<i>kaíyuzeya</i>	<i>wawópte-Ø-yÁ-pi</i>
at a long distance	dig.things(turnips)-3A-go-PL
They went to dig turnips at a long distance.	
(data: GJ: BBBJ)	

- (c) * *Wawópte kaíyuzeya yápi.*
wawópte *kaíyuzeya* *Ø-yÁ-pi*
 dig.things(turnips) at a long distance 3A-go-PL

Intended meaning: They went to dig turnips at a long distance.
 (data: GJ: BBBJ)

Since the V1 in each of the sentences in (306) is an ablauting verb, we can reliably determine the construction type. Whereas the a-grade ablaut in (306a) is signaling a SimPC, the V1 in (306c) has e-grade ablaut indicating a PC. Inserting the adverb *kaíyuzeya* ‘at a long distance’ between the two verbs is possible only in the SimPC, as shown in (306b), whereas the same intervention renders the PC ungrammatical, as indicated in (306d), and the only option is to place the adverb before the serial verb, as shown in (306b).

Not only modifiers but also postpositional phrases of significant length can be placed between the V1 and V2 of SimPCs, as shown in (307).

- (307) *Šunġ’ákanyanġ oyáte wiċhóthi kiġ ektá uġkípi.*
šunġ’ákanyanġA oyáte wiċhóthi kiġ ektá uġk-i-pi
 ride.horseback tribe village the at 1A-arrive.there-PL

We arrived at the tribal village riding horseback.
 (data: EDT-Aut-7, sentence 2)

The adverbial phrase of place is inserted between the V1 (*šunġ’ákanyanġ*) and the V2 (*uġkípi*). In conclusion, various syntactic constituents intervening between the V1 and V2 are indicators of Simultaneous Predicate Constructions and can serve as a reliable test in cases of SimPC and PC syncretism.

10.2.11. Position of the RP cross-referenced with subject

In both SimPCs and PCs the position of the RP cross-referenced with the actor argument is typically directly to the left of V1, as shown in (308):

- (308) *Oyáte kin wanyáng nážinpi.*
oyáte kin wan-Ø-yáng Ø-nážin-pi
 people the see-3U-stem 3A-stand-PL
 The people stood watching him.
 (data: FFC)

There are, however, instances in corpus data where the subject RP is placed between the two verbs, as shown in (309).

- (309) *Wiyutha wanží-ħčij wíunyuŋğapi kte ló.*
wiyuthA wanží-ħčij wí-un-Ø-yuŋğa-pi kte ló
 talk.in.signs one-really ask.questions-1A-3SG.U-stem-PL FUT.IRRDECL.MSP
 At least one of us will ask him questions talking in sign language.
 (data: EDT-Leg-4, sentence 25)

In (309), the participant is represented by *wanží ħčij* ‘one-really’ (which is idiomatic for ‘at least one’) and it is positioned between V1 and V2.

The example in (310) shows an instance where the two verbs are separated by both the participant and a postposition:

- (310) *Aówičhakas’ij pahá-ektà wičháša wan ħpáya ké.*
aó-wičha-kas’ij pahá-ektà wičháša wan Ø-ħpáya ké
 peek.at-3.PL.PAT-stem hill-at man a 3SG.A-lie it is said
Peeking at them, a man lay on a hill.
 (data: EDT-Leg-4, sentence 62)

In (310), *pahá-ektà* is a postposition with an incorporated noun. Both the postposition and the RP cross-referenced by the subject of the SimPC occur between the two verbs of the construction. The constituent projection of (310) is offered in Figure 10.7.

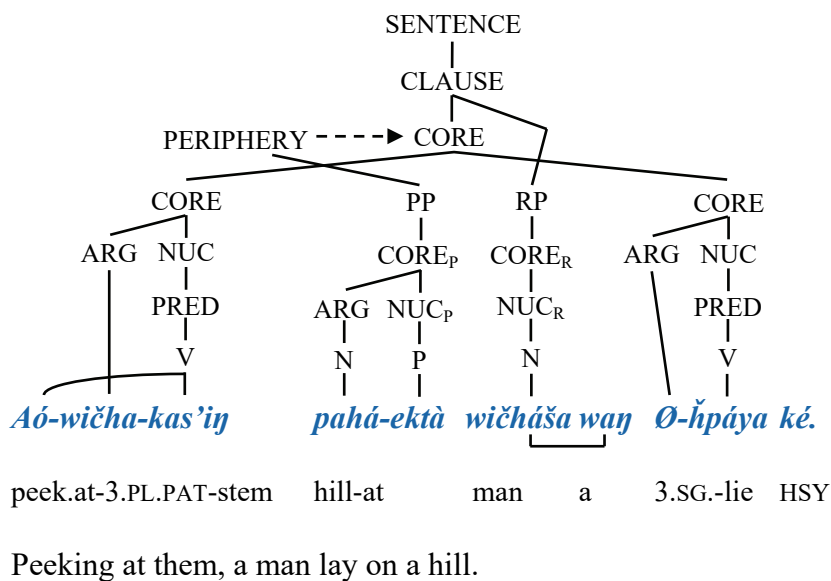


Figure 10.7 *SimPC with a PP and subject RP intervening between V1 and V2*

The constituent projection in Figure 10.7. shows that the shared subject argument occurs on V2, as expected, and the shared object argument is on V1. The PP is an ad-core modifier and the RP cross-referenced with the subject argument is linked at the clause level.

In Purpose Constructions, on the other hand, the two verbs are always tightly compounded and they do not allow the subject to intervene between them.

10.2.12. V1 serialization in SimPC

Another property that makes SimPCs different from PCs is the ability of the former to involve more than one verb before the main verb. Examples are given in (311):

- (311) (a) *Ačhánkšij-kšij olé ománi-he.*
ačhánkšij-kšij o-Ø-lé omá-Ø-ni-hAŋ
 step.over-REDUP look.for-INAN-stem walk.about-3SG.A-stem-CONT

He walked about searching for it, often stepping right over it.
 (data: BO-64)

- (b) *Yupémni yuksá ičú.*
yupémni yuksÁ i-Ø-Ø-čú
 twist break.off take-INAN-3SG.A-stem

Twisting it, breaking it off, he took it.
 (data: DT story 33, sentence 5)

In both of the examples in (311) there are two verbs before the main verb, which reflects a phenomenon that occurs very frequently in corpus data. Another example was shown in (302). It is not uncommon to find sentences with three or four verbs before the main verb. In both (312a) and (312b) there are three verbs before the main verb (highlighted by bolding):

- (312) (a) *Napé okičhiyuspa okáwiŋh wačhí uŋhíyayapi.*
napé o-kičhi-yuspa okáwiŋġA wačhí uŋ-híyayA-pi
 hand hold-RECIP-stem turn dance 1A-pass.by-PL

We passed around holding each other's hands, turning and dancing.
 (data: EDT-Aut-3, sentence 91)

- (b) *Žiži kilóway kaištiŋme-wačhìŋ kahúŋhuŋs yúze.*
žiži Ø-ki-loway kaištiŋme-wačhìŋ kaúŋhuŋs Ø-Ø-yúza
 whisper 3SG.U-DAT1-sing sooth.to.sleep-try rock 3SG.U-3SG.A-hold

She held him, singing whisperingly to him, trying to soothe him to sleep, rocking him.

(data: EDT-Leg-3, sentence 12)

In (312b), there are actually five verbs before the main verb but the verb *wačhìŋ* is an auxiliary compounded with the previous verb, so *kaištiŋme-wačhìŋ* 'trying to soothe him into sleep' forms one of the three verbs grouped before the main verb.

When there are two (or more) simultaneous predicates before the main predicate and they are both (or all) transitive, then the object affix is generally placed on the main predicate, even if the latter is intransitive. An example is in (313):

(313) (a) *Ayúta anáǵoptaŋ yaŋkápi.*

ayúta anáǵoptaŋ Ø-Ø-yaŋká-pi
look.at listen.to 3SG.U-3A-sit-PL

They sat looking at him (and) listening to him.
(data: BO-61)

(b) *Ayúta anáǵoptaŋ wičháyaŋkapi.*

ayúta anáǵoptaŋ wičhá-Ø-yaŋká-pi
look.at listen.to 3PL.U.ANIM-3A-sit-PL

They sat looking at (and) listening to **them**.
(data: BBBJ)

The position of the affix *wičhá-* in (313b) shows that the coding of the object is done on the main verb. The constituent projection of (313b) is given in Figure 10.8.

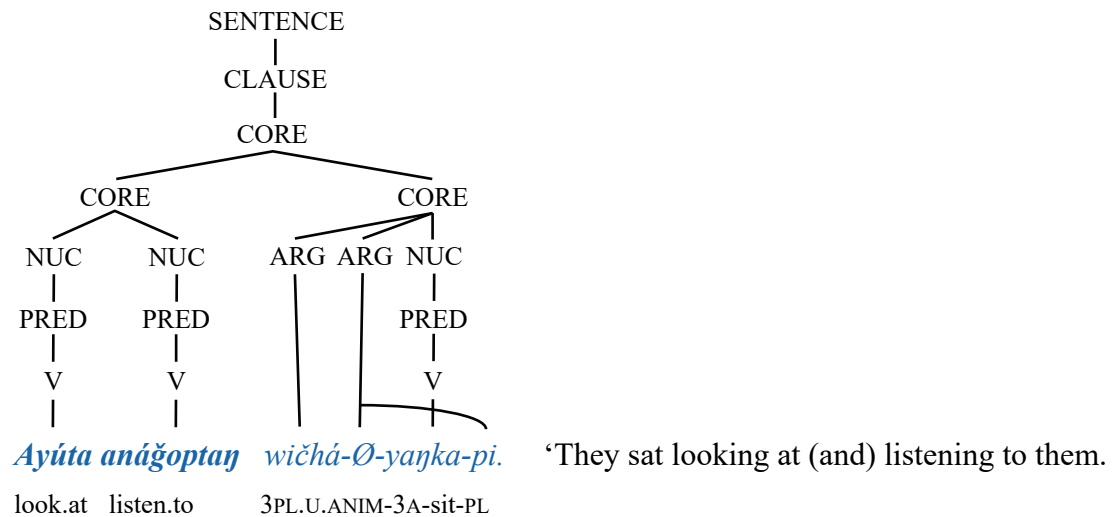


Figure 10.8 *V1 serialization in a SimPC*

The constituent projection in Figure 10.8. shows that the serialized V1s are connected via nuclear coordination and that the shared arguments occur on the main verb. In conclusion, the ability of SimPCs to involve more than one verb before the

main verb is a property which clearly distinguishes it from PCs, as the latter allow only one verb before V2.

10.2.13. Negation of V1

Since the verbs in SimPCs form core cosubordination, they can be negated independently as illustrated by the data in (314).

(314) (a) *Ayúta maŋké.*

a-Ø-yúta *m-(y)aŋká*
to.look.at-3SG.U-stem 1SG.A-sit

I sat looking at him.
(data: EDT-Inf-6, sentence 6)

(b) *Ayúta šni maŋké.*

a-Ø-yúta *šni* *m-(y)aŋká*
to.look.at-3SG.U-stem NEG 1SG.A-sit

I sat **not** looking at him. / I sat without looking at him.
(data: EDT-Col-4, sentence 166)

(c) *Ayúta maŋké šni.*

a-Ø-yúta *m-(y)aŋká* *šni*
to.look.at-3SG.U-stem 1SG.A-sit NEG

I did **not** sit looking at him.
(data: GJ: BBBJ, IEC)

The sentence in (314a) is contrasted in (314b) where the V1 *ayúta* is negated by *šni* ‘not’ independently of the main verb. The data in (314c) shows a situation where the negation particle functions as a core operator. The ability for the V1 to be negated is a property that SimPC share with the secondary predicate construction (see 4.6).

In Purpose Constructions, on the other hand, negation can take place only after the main verb, because the two verbs in PCs are connected via a nuclear coordination. This is illustrated in (315):

- (315) (a) *Wóglag-wahí.*
wóglaka-wa-hí
 to.speak-1SG.A-come
 I came to speak.
 (data: MARC, JAH)
- (b) *Wóglag-wahí šni.*
wóglaka-wa-hí *šni*
 to.speak-1SG.A-come NEG
 I didn't come to speak.
 (data: BBBJ)

The well documented and established property of Purpose Constructions is that the two verbs share one polarity value, as illustrated in (315b).

In some cases it is actually possible to use the negating enclitic *šni* between two verbs that normally form a Purpose Construction. This, however, results in transforming the PC into a SimPC. Consider (316):

- (316) (a) *Wanyáŋg-wagli.*
wan-Ø-yáŋka-wa-glí
 to.see-3SG.U-stem-1SG.A-come.back
 I came back to see him.
 (data: DTA, KLT)
- (b) *Wanyáŋke šni waglí.*
wan-Ø-yáŋka *šni* *wa-glí*
 to.see-3SG.U-stem NEG 1SG.A-come.back
 I came back not having seen him. / I came back without seeing him.
 (data: BBBJ)

The sentence in (316a) is attested only as Purpose Construction, whereas in (316b) we see the same two verbs except that *šni* 'not' follows V1, resulting in a construction of the same type as (314b), i.e. Simultaneous Predicate Construction.

10.2.14. Habituality marking (*šna*, *s'a*)

Another property that SimPCs share with SPCs is habituality marking. As discussed in 4.7, the habituality operator *šna* is used after SPs and *s'a* can occur only after primary predicates. Similarly, *šna* can modify the V1 in SimPC while *s'a* is used only after the V2. Both operators can co-occur and frequently do so.

(317) (a) *Nakúŋ alókičhiksohaŋ šna wačhípi s'a.*

nakúŋ aló-kičhi-ksohaŋ šna wa-Ø-čhi-pi s'a
also hold.under.arm-RECIP-stem HAB dance-3A-stem-pl HAB

They also dance holding each other in their arms.

(data: BO-250)

(b) *Íyakičhiš'aš'a šna škáŋpi s'a.*

íya-kičhi-š'a-š'a šna Ø-škáŋ-pi s'a
shout-RECIP-stem-REDUP HAB 3A-act-PL HAB

They were always busy shouting at each other.

(data: BO-123, sentence 2)

(c) *Lowáŋwaŋ šna hiyáye s'a škhé.*

lowáŋ-waŋ šna hi-Ø-yáyA s'a škhé
sing-REDUP HAB go.by-3SG.A-stem HAB HSY

He would always go by singing, it is said.

(data: BO-246)

(d) *Čhéya šna hoáglagla hiyáye s'a.*

čhéya šna hoáglagla hi-Ø-yáyA s'a
cry HAB along.the.camp.circle go.by-3SG.A-stem HAB

He would always go along the camp circle wailing.

(data: BO-231)

(e) *Yuhá šna yaŋkápi ké.*

Ø-yuhá šna Ø-yaŋká-pi ké
INAN-have HAB 3SG.A-sit-PL HSY

They would usually sit having it, it is said.

(data: BT: p. 74)

The fact that *šna* can follow both secondary predicates and the V1 in SimPCs makes these two types of predicative elements very similar because there are no other verbal constituents that can be followed by *šna*.

10.2.15. Continuative suffix *-hAŋ*

The continuative suffix *-hAŋ* (a nuclear operator) can be used on the main verb of a SimPC, but it can also be used on the V1, as exemplified in (318).

- (318) (a) *Lakǰól'iyá-hAŋ wačhékiyapi.*
Lakǰól'iyá-hAŋ *wačhé-Ø-kiyA-pi*
 speak.Lakota-CONT pray-3A-stem-PL
 They prayed speaking Lakota.
 (data: NSB)
- (b) *Kiktá-hAŋ úŋ po.*
kiktá-hAŋ *Ø-úŋ* *po*
 get.up-CONT 3A-exist IMP.PL
 Stay awake.
 (data: EDT-Aut-1, sentence 10)

Both sentences given in (318) are grammatical without the continuative suffix *-hAŋ* and the specific semantics coded by the suffix are not clear at this point.

The number of corpus tokens of this feature is very low suggesting that it is not very productive. However, this is yet another property that makes SimPCs close to the morphophonemics and the semantic space expressed by secondary predication and derived modification, because the continuative suffix is also used with derived modifiers, as discussed in 5.3.3.

10.2.16. Defining properties finalized

Based on the analysis and discussion in this chapter, it is now possible to refine the defining properties of SPCs and PCs in Lakota. They are summarized in Table 10.4:

Table 10.4 *Finalized defining properties of multi-verb constructions in Lakota*

	Simultaneous Predicate Constructions	Purpose Constructions
describe a complex event (composed of simple events)	+	-
purpose (V2 in order to V1)	-	+
both Vs can function as main V in a mono-verbal clause	+	+
share the subject	+	+
subject marking on V2	+	+
object marking on either V1 or V2 ²⁴	+	+
no prosodic separation	-	+
mono-clausal	+	+
ablaut on V1	a	e
V1 truncation	+ (sometimes -)	+
Compounding	-	+
stress on V2 reduced	-	+
stress reduction on monosyllabic V2	+ (in fact speech)	+
no unpredictable morphophonemics	+	+
no overt subordination or coordination	+	+
peripheral constituents between V1 and V2	+	-
Subject noun phrase between V1 and V2	+	-
multiple verbs before V2	+	-
durative V2	+	-
punctual V2	+ / -	+
V1 negation	+	-
transportation verb as V2	+	-
V1 intransitive	+	+
V1 transitive	+	+
V2 intransitive	+	+
V2 transitive	+	-

As mentioned earlier, the distinction between these two constructions has not been analyzed in detail in the extant literature. Although Boas and Deloria (1941) implicitly establish a form-meaning correlation in the two types of constructions, their

²⁴ With the exception of SimPCs with transportation verbs as V2, where the object is always marked on V2.

transcription and analysis is inconsistent primarily because they did not fully understand the role of ablaut, truncation, compounding, lexical aspect and some of the other defining properties. Furthermore, they did not investigate the numerous complexities involved with travel verbs and transportation verbs in the V2 position or the rules about interventions between the V1 and V2 in these constructions.

Most of the inaccuracies in transcription and analyses were adopted by de Reuse (2006) who also associated truncation with subordination.

In corpus data, SimPCs with active verbs are, in fact, much more frequent when compared to PCs. Their frequency is higher not only in the number of tokens but also in the number of verbs which can participate in forming the construction. The V2s in PCs are primarily travel verbs, and much less commonly other verbs, such as *ománi* ‘to travel’ and *ináhni* ‘to hurry’, and *čhéyA* ‘to cry’. SimPCs, on the other hand, can involve a large variety of verbs and verb types as their V2 (including travel verbs). This means that SimPCs are symmetrical while PCs have a tendency for asymmetry in that their V2s come from closed class lexical categories, or if not, from a very small pool of verbs.

One property that has not been addressed so far, is the role of V2 transitivity. In his defining properties, de Reuse (2006: 303) states that “V2 is always intransitive, V1 can be transitive, and thus have its own subject”. De Reuse applies this defining property to both constructions but this is contradicted by the data he provides, e.g. *wičháo bluštáj* ‘I finished shooting them’ (page 313:30 (ibid), cited from Deloria 1934: 114-16), where *bluštáj* is the 1st person form of the transitive verb *yuštáj* ‘to leave smth’.

SimPCs can have both intransitive and transitive verbs as their V2 (for example with a transitive see e.g. (295b), (309), (311b) and (312b)) and in some cases a transitive verb in the V2 position is required, as discussed in 10.2.6.

PCs, on the other hand, appear to be formed only with intransitive verbs as the second member of the compound.

10.3. Directional compound verbs

Lakota has a few other types of multi-verb constructions, such as constructions with various auxiliary verbs and structures with the verbs *okíhi* ‘can, to be able to’, *un̄spé* ‘know how to’, and *čhíj* ‘to want smth/sb’, and these constructions fall beyond the scope of the present investigation. On the other hand, a construction that I term ‘**directional compound verbs**’ should be discussed here, since it has been included in some of the studies on serial verbs in Lakota (e.g. Boas&Deloria (1941), Scott (1976), de Reuse (2006) and marginally in Buechel (1939: 86)).

Directional compound verbs do not meet the defining properties of either SimPCs or PCs. Instead, they are lexicalized compound verbs of two types differentiated by the first member of the compound, where type (a) involves one of the four arrival verbs (i.e. *i*, *hí*, *khi* and *gli*) and type (b) has bringing verbs as the first member (i.e. *ai*, *ahí*, *akhi* and *agli*).

I term this category “directional compound verbs” because the function of the first member of the compound is to add deictic information to the second verb. The deictic information is based on the inherent semantics of the four arrival verbs summarized in Table 10.5:

Table 10.5 *Lakota arrival verbs*

	non-vertitive	vertitive
arriving away from deictic center	<i>i</i>	<i>khi</i>
arriving at the deictic center	<i>hi</i>	<i>gli</i>

The deictic properties encoded in the bringing verbs are the same as the ones shown in the table for the arrival verbs.

The two sub-types of directional compound verbs differ in a number of ways but the most significant difference is one of productivity. Type (a) compounding applies to only thirteen intransitive verbs and it is not productive.²⁵ Type (b) compounding, on the other hand, is highly productive and applies to almost any active verb (transitive or intransitive) as long as it is logical to express deictic information on that verb.

Directional Compound Verbs of type (a) are fully lexicalized and are felt and treated as lexical items by native speakers. The same is true about many, but not all verbs of type (b). The two types are described below.

Type (a):

All Directional Compound Verbs of type (a) are formed with one of the four arrival verbs as their first member. They are listed below:

<i>i</i>	‘to arrive there’
<i>hi</i>	‘to come here’
<i>khi</i>	‘to arrive back there’
<i>gli</i>	‘to come back here’

Some of the compounds are idiomatic in that their meaning cannot be guessed from the original meaning of the second member. In some cases, the second member

²⁵ During the course of my research I have identified 13 verbs that participate in this type of verb compounding and although it is not impossible that some remain undiscovered, it is not likely that there are many more of them.

of the compound is no longer used as a verb by itself. The following are examples of lexicalized compound verbs formed from the verb *nážiŋ* ‘to stand’:

- í* + *nážiŋ* → *inážiŋ* ‘to go and stand, to arrive there and stand, to make a stop on the way there’
hí + *nážiŋ* → *hinážiŋ* ‘to come and stand, come to a standing position, to make a stop on the way here’
khi + *nážiŋ* → *khinážiŋ* ‘to arrive back and stand, to make a stop on the way back there’
gli + *nážiŋ* → *glinážiŋ* ‘to arrive back here and stand, to make a stop on the way back here’

The full list of lexicalized compounds is provided in Table 10.6. Note that the original lexeme for the “sit down” series has been lost. The verb *yuwéǵA* means “to break smth using the hands” so it is not clear whether it is in fact the verb that formed the compounds for crossing a body of water. Notice, that the type (a) compounds have only intransitive verbs as their second member.

Note that all lexicalized compound verbs maintain the deictic information expressed in the original arrival verbs which constitute their first member.

Compound verbs of type (a) are generally able to form the collective plural and they do so with the prefix *a-*, so for instance the collective plural of *hinážiŋ* ‘to come and stand here’ is *ahinážiŋ* ‘they came and stood’. When the affix *a-* is prefixed to a verb whose first member is the verb *í* ‘to arrive there’, then these two elements are merged into a stressed *é*. Thus *iyúnǵA* ‘to lie down, go to bed’ becomes *éyúnǵA* ‘they lay down, they went to bed’. Note that the morphological markup of these collective plural forms makes them look identical with the group (b) verbs, but the latter do not allow the collective plural form.

Table 10.6 Lexicalized Compound Verbs (comprehensive list)

verb	original meaning	<i>i</i>	<i>hi</i>	<i>khi</i>	<i>gli</i>	new meaning
<i>náziŋ</i>	to stand	<i>ináziŋ</i>	<i>hináziŋ</i>	<i>khináziŋ</i>	<i>glináziŋ</i>	to arrive and stand, to reach a place
(?)	to sit down	<i>tyotakA</i>	<i>hiyotakA</i>	<i>khiyotakA</i>	<i>gliyotakA</i>	to sit down
<i>yunká</i>	to be lying down	<i>tyúnkA</i>	<i>hiyúnkA</i>	<i>khiyúnkA</i>	<i>gliyúnkA</i>	to lie down
<i>naphÁ</i>	to flee	<i>inápĥA</i>	<i>hinápĥA</i>	<i>khinápĥA</i>	<i>glinápĥA</i>	to come/go out, to emerge
(<i>yuwéĝA</i>) (?)	(?)	<i>iyúwéĝA</i>	<i>hiyúwéĝA</i>	<i>khiyúwéĝA</i>	<i>gliyúwéĝA</i>	to cross (e.g. a river, sea)
<i>ali</i>	to step on	<i>tyáli</i>	<i>hiyáli</i>	<i>khiyáli</i>	<i>gliyáli</i>	to climb on top (e.g. a hill)
<i>úŋ</i>	to stay	<i>i-úŋ</i>	<i>hi-úŋ</i>	<i>khi-úŋ</i>	<i>gli-úŋ</i>	to come/go and stay, to settle
<i>o- ĥpáyA</i>	to lie inside of	<i>iyóĥpayaA</i>	<i>hiyóĥpayaA</i>	<i>khiyóĥpayaA</i>	<i>gliyóĥpayaA</i>	to reach the bottom of a valley
<i>nuŋwÁŋ</i>	to swim	<i>inúŋwAŋ</i>	<i>hinúŋwAŋ</i>	<i>khinúŋwAŋ</i>	<i>glinúŋwAŋ</i>	to reach swimming
<i>opsiĉA</i>	to jump into	<i>tyópsiĉA</i>	<i>hiyópsiĉA</i>	<i>khiyópsiĉA</i>	<i>gliyópsiĉA</i>	to jump here/there/back
<i>ĥpáyA</i>	to be lying down	<i>iĥpáyA</i>	<i>hiĥpáyA</i>	<i>khiĥpáyA</i>	<i>gliĥpáyA</i>	to fall down
<i>wítaya</i>	gathered together	--	<i>hiwítaya</i>	<i>khiwítaya</i>	<i>glhwítaya</i>	to assemble (as a group of people)
<i>ahÁŋ</i>	to stand on (obsolete)	<i>iyáhAŋ</i>	<i>hiyáhAŋ</i>	<i>khiyáhAŋ</i>	<i>gliyáhAŋ</i>	to reach a hilltop

Type (b)

Verbs other than the thirteen listed in Table 10.6 do not compound with the four arrival verbs but instead take one of the four bringing verbs *ai*, *ahi*, *akhi* and *agli* as their first member. When the verb *ai* is the first member of a compound, its two vowels become contracted into a stressed *é*. The examples below show the forms of the verb *thi* ‘to live (somewhere)’:

ai + *thi* → *éthi* ‘to go and live there, to make a camp there’
ahi + *thi* → *ahithi* ‘to come and live here, to come and make a camp’
akhi + *thi* → *akhithi* ‘to go back there and live there, return there making a camp’
agli + *thi* → *aglithi* ‘to come back and live here, to return here and make a camp’

The function of this type of lexicalized compound verbs is identical with the function of those compounding with *i*, *hi*, *khi* and *gli*, in that the first member codes the deictic information. However, as mentioned already, compounds of type (b) cannot form the collective plural. Unlike type (a) compound verbs, type (b) can have transitive verbs as their second member, e.g. *wanyan̄ka* ‘to see smth/sb’ which can become *ahiwanyan̄ka*, *agliwanyan̄ka*, *éwanyan̄ka* and *akhiwanyan̄ka*. This is very productive with transitive verbs.

Table 10.7 summarizes the properties of the two types of lexicalized compound verbs:

Table 10.7 *Properties of lexicalized compound verbs*

	<i>i, hi, khi, gli</i>	<i>ai, ahi, akhi, agli</i>
with intransitive verbs	+	+
with transitive verbs	-	+
subject marking on both Vs	+ (optional)	-
forms collective plural	+	-
productive	-	+

The motivation for the two different strategies of compounding and their differences is not entirely clear, but the fact that the first type of compounding is no longer productive suggests that it represents an older morphological strategy.

I propose that Directional Compound Verbs form a category of their own because they do not meet the defining properties of either SimPCs or PCs. They cannot be PCs because they do not express purpose. It is sometimes possible to translate them with what seem like simultaneous actions but at the same time they are tightly compounded, hence they violate the form and function correlation of SimPCs. Additionally, compounds of subtype (a) do not meet the property of subject marking, as they can be marked for subject on both members of the compound. For example, the 1st singular of *hinážiŋ* “to make a stop on the way here” is *wahínažiŋ* or *wahinawažiŋ* (the 1st singular subject affix is highlighted). The first singular of *khíyotakA* is *wakhíyotake* as well as *wakhíblotake*. The choice between these two options is individual and some speakers have a stronger tendency for one or the other, while other speakers use both. In general, it is possible to say that younger speakers prefer marking the subject with a single affix. For those speakers that conjugate these verbs with a single affix, the affix is placed on the first member of the compound in the majority of cases (exceptions are the verbs *ináphA* and *inážiŋ* which can be conjugated for 1st plural on either of the two members; *uŋkínaphápi* / *ináuŋphápi*, *uŋkínažiŋpi* / *ináuŋžiŋpi*).

One of the Directional Compound Verbs conjugates as a stative verb; it is the verb *hiŋhápáA* (1s: *mahíŋhápáye*). This is probably because falling is perceived as an involuntary activity (interestingly, speakers oscillate between active and stative subject marking on the other three verbs in the series, e.g. *glihápáA* is conjugated as *maglíhápáye* by some speakers and as *waglihápáye* by others).

De Reuse (2006) discusses type (a) on page 308 and type (b) on page 309, and states the first type is formed by “one of the verbs of body stance” as the second member and in addition to the stance verbs listed in Table 10.6 he also lists *hÁŋ* ‘to stand, remain’ (inanimate objects) and *yaŋkÁ* ‘to be sitting’. The verb *hÁŋ* has been documented as possibly forming a compound with *i* (*ihÁŋ* ‘to step into’), but not with the remaining three verbs (i.e. *hí*, *khi* and *gli*), although *ahÁŋ* (listed in Table 10.6) is a form of *hÁŋ* with the locative prefix *a-*. The verb *yaŋkÁ* ‘to sit’ has been documented as forming a compound only with *gli*, resulting in *gliyaŋkA* ‘to come back and sit’ but not with the remaining three arriving verbs.

De Reuse (ibid) continues to say that “these forms mark the immediate change from movement to a position at rest, and I will call them *aktionsart* marking”. I agree that in addition to coding deictic information the first member of the compound expresses aspectual information, although the aspect changes only for some of the compounds, while for others the aspect of the originally independent second member remains unchanged. For instance *ali* ‘to step on smth’ (which is punctual) becomes *hiyáli* ‘to come and step/climb on smth’ (which is also punctual); whereas *úŋ* ‘to be/stay’ (durative) becomes *hiúŋ* ‘to come and stay, to come and take up residence here’ (which is punctual).

Directional compound verbs are morphological constructions, not complex sentences and as such they cannot be analyzed in terms of juncture-nexus types. Therefore, they should be considered to be lexical compounds, rather than syntactically multi-verb expressions.

11. Comparison of SPC and SimPC

The investigation of the Secondary Predicate Construction (chapters 4 and 7) and the Simultaneous Predicate Construction (chapter 10) have shown that these two types of syntactic constructions share numerous properties, and that, in fact, they overlap to such a degree that in some instances it is difficult to differentiate them.

Syntactically, both SPCs and SimPCs are core cosubordinations and they share the same morpho-syntactic properties. They are also very similar semantically because the V1 in both constructions express an eventuality pertaining to the participant during the time frame of the event expressed by the V2. The eventuality of SPs is usually a state (or state-like), whereas the eventuality of simultaneous predicates (SimPCs) is an activity, but as shown in Chapter 7, this difference is not determined morphologically, and as a consequence the difference in the semantics is not so clear-cut. (see discussion surrounding example (204) in chapter 7). This chapter aims to compare the two constructions and provide a summary of the properties they share.

Data in (319) offers a comparison of the SPC, in (319a), and the SimPC, in (319b).

- (319) (a) *Wičháša kiŋ khúža ħpáye.*
wičháša kiŋ khúža Ø-ħpáyA
 man the to.be.sick 3SG.A-lie
 The man lay **sick**.
 (data: EDT)

- (b) *Wičháša kiŋ čhéya ħpáye.*
wičháša kiŋ čhéya Ø-ħpáyA
 man the cry 3SG.A-lie
 The man lay **crying**.
 (data: GS)

Note that the stative verb *khúža* in (319b) is an ablauting verb and that it maintains a-grade ablaut just like *čhéya* does in (319a). The verb *khúža* is also a truncating verb and in line with what we saw with the active verb *igláka* ‘to move camp’ in (283),

truncating stative V1s can be unreduced or reduced, so (319a) is correct with either *khúža ħpáye* or *khúš ħpáye*.

The two constructions in (319) are identical except for one property; the V1 in (319a) is a stative verb whereas the V1 in (319b) is an active verb. The two constructions, in fact, share all defining properties established for Simultaneous Predicate Constructions and given in 10.2.16.

That the two constructions are structurally two subcategories of one construction is further supported by the fact that they can be combined within a single multi-verb construction, as shown in (320). First examine (320a), which is a SimPC, then (320b) which is a SPC, and finally (320c) which is a combination of the two:

- (320) (a) *Čhéya yanká-he.*
čhéya Ø-yanká-hAŋ
 cry 3_{SG.A}-sit-CONT
 She was sitting **crying**.
 (data: BO-189)
- (b) *Čhaŋtésiča yanká-he.*
čhaŋtésiča Ø-yanká.hAŋ
 sad 3_{SG.A}-sit-CONT
 She was sitting **sad**.
 (data: RFT)
- (c) *Čhaŋtésiča čhéya omáwani.*
čhaŋtésiča čhéya o-má-wa-ni
 sad cry LOC-walk-1_{SG.A}-stem
 I walked about **sad, crying**.
 (data: BT p. 18, line 54)

The sentence in (320c), combines the V1 of the SimPC occurring in (320a) with the SP in (320b), and thus they are used as two co-occurring eventualities pertaining to the participant during the event expressed by the main predicate (*omáwani*).

The main morphosyntactic and semantic properties of the two constructions are summarized in Table 11.1.

Table 11.1 *Morphosyntactic and semantic properties SPCs and SimPCs*

	SPC	SimPC
core-cosubordination	+	+
both Vs can function as main V in a mono-verbal clause	+	+
V1 during the temporal frame of V2	+	+
describe a complex event (composed of simple events)	- (SV) / + (AV)	+
share the subject	+	+
subject marking on V2 only	+	+
object marking on V1 or V2	-	+
no prosodic separation	+	+
mono-clausal	+	+
ablaut on V1	a	a
V1 truncation	+ (optional)	+
Compounding	-	-
stress on V2 reduced	-	-
no unpredictable morpho-phonemics	+	+
no overt subordination or coordination	+	+
DM and PP between V1 and V2	+	+
Subject noun phrase between V1 and V2	+ (rare)	+ (sometimes)
multiple verbs before V2	+	+
V1 eventuality is simultaneous with V2	+	+
habituality marking with <i>šna</i> on V1	+	+
V1 negation	+	+

One of the properties in which the two constructions differ more significantly is the tendency for morphological modification of the V1, i.e. by truncation as an intermediate form or by suffixing *-ya*. The tendency for suffixation of *-ya* is much stronger for SPs than it is for the V1 in SimPCs, but both types of predicates truncated more often than not.

Another reason to consider these two constructions to be subtypes of one macro-construction is that truncation of the two types of V1, in fact, gave rise to a separate word category of words, as discussed in Chapter 12.

Older dictionaries document many of these reduced words in their non-truncated form which means that at one point in the past they could function as predicates in mono-verbal clauses. Thus we know, that *kabláš*, seen in (321a), originates from *kablážA* which was conjugated as a stative verb with 1sg *makáblaže*.²⁶ And we also know that *yuptúh̃*, shown in (321b), is the truncated form of the active transitive verb *yuptúgA* (1sg *bluptúg̃e*). Truncated forms with the instrumental prefix *yu-* are more likely to originate from an active verb (although a stative verb origin is not impossible), but truncated forms with the instrumental *ka-* or without an instrumental can have their origin in both active and stative verbs. The original verbs that gave rise to these truncated forms can sometimes be found by comparison with other dialects, especially Dakota and Assiniboine where some of them are still used as verbs. However, for a significant percentage of these truncated forms there is no diachronic data or morphological evidence that would help us determine whether they originated from stative or active verbs. In consequence this means that we do not know whether these reduced forms originally served as secondary predicates or V1s in SimPCs.

Due to the fact that the words in this group come from both stative and active verbs, I treat them as a separate category of derived modifiers of mixed origin. The existence of such a lexicalized word category of mixed origin is not surprising given the syntactic, morphological and semantic similarities between SPCs and SimPCs.

Additionally, some of these modifiers originate from stems that occur with verbs, but are not documented as functioning independently. An example is the stem *-skitA* ‘tight bound’ which cannot be used by itself but occurs in verbs like *yuskitA* ‘to

²⁶ This verb, and many other verbs of this kind, was originally recorded in its Dakota dialect form *kamdážA* in the Dakota dictionary by Riggs (1852) and the Lakota version was provided by Deloria during her work of writing Lakota variants into Riggs Dictionary (unpublished). The word is also given by Buechel (1970) although Buechel used Riggs extensively as a source of data without necessarily checking the data with native speakers (for a discussion see Ullrich, 2008: 8-16)

bind smth tightly’ and can also be used as a derived modifier in the form *skíl* and *skitáya*.

Words like *kabláš* and *yuptúh* are very frequent in the lexicon and they are traditionally classified as adverbs. But since many of them are strongly participant oriented a better term for these forms is “derived modifier” which allows contextual interpretation of their orientation as participant oriented (depictive modifiers) or event oriented (manner modifiers).

Many of these derived modifiers originate from transitive verbs and consequently they maintain their valence slot and require an object although the object is generally marked on the verb that follows the modifier. Examples of mixed derived modifiers are given in (322):

(322)

<i>kažál</i>	‘with limbs spread’
<i>kažál</i>	‘with legs spread’
<i>ipáhlal</i>	‘side by side, abreast’
<i>kah’ól</i>	‘hurling smth’
<i>kahtál</i>	‘loosened, slowing up, going limp’
<i>ipáweh</i>	‘incorrectly, wrongly, off course, off the subject, awry, off the trail’,
<i>kaóblel</i>	‘hanging loosely’
<i>kaót’iŋs</i>	‘compacting smth tightly in’
<i>kaslúl</i>	‘slipping out (as smth from the pocket, the tongue from the mouth), slipping through’,
<i>kašíkšil</i>	‘by odds and ends, by hook or crook, for no special reason’,
<i>kiníl</i>	‘almost, nearly’,
<i>paptús</i>	‘in a stooping position with the rear end sticking out’,
<i>pathúš</i>	‘bend down or forward, stoop, bow’,
<i>pšóskil</i>	‘hugging, embracing, clasping, holding about the neck (a verb follows)’
<i>pustág</i>	‘hunched over, stooping; squatting, crouching’
<i>skíl</i>	‘tight (as in "to hold tight")’
<i>yukážal</i>	‘spreading smth apart’
<i>yupáthuš</i>	‘making sb stoop’
<i>yupáptus</i>	‘holding sb bent forward’
<i>yupsíl</i>	‘making smth jump’
<i>yuptán</i>	‘turning smth over’
<i>yuptúl</i>	‘sparingly, in little bits, strewing on in tiny bits, a little at a time’
<i>yuthúh</i>	‘being doubled up, stooping, bending over’

Many of these derived modifiers can also have the suffix *-ya*.

Constructions with these words violate the defining property of SPCs and SimPCs which says that both verbs have to be able to participate independently as the main verb in a mono-verbal clause. These words were able to do so diachronically, but not synchronically.

This section discussed adjuncts that are derived morphologically from active verbs, stative verbs and from verbs of unknown category and that can function as participant oriented or event oriented derived modifiers, which makes them very similar to the depictive modifiers and manner modifiers discussed in Chapter 5.

13. Final conclusions

This thesis investigated several syntactic phenomena which are mutually interlinked through interplay between modification and predication for ascribing attributive concepts. The goals of this research were motivated primarily by the following questions: “How does Lakota express attributive modification and how does it express secondary predication, given the fact that it lacks adjectives?”

Extant research literature on Lakota states both implicitly and explicitly that attributive concepts are expressed by post-nominal stative verbs. However, this is true only for RP internal ad-nominal modification. In fact, stative verbs function predicatively more frequently and in more construction types than they do as modifiers.

Stative verbs can occur in seven syntactic functions summarized as followed:

Modifying functions:

- (i) RP-internal ad-nuclear attributive modification: (a) in marked RPs, (b) in unmarked RPs
- (ii) modifier in N+SV compounds which generally functioning as nouns
- (iii) ad-nominal premodifier (VS+N compound)

Predicative functions:

- (iv) simple predicate (forms a sentence on its own or is separated from the RP cross-referenced with the core argument by a determiner, quantifier, particle or another separator)
- (v) complex predicate with a noun (N+SV, uncompounded, nuclear juncture cosubordination)
- (vi) simple or complex predicate internal to a relative clause
- (vii) secondary predicate (restricted to a small number of SVs)

In RP-internal modification an uncompounded N+SV sequence is characteristically followed by a determiner, conjunction, particle or another element that clearly indicates that the sequence is an RP constituent. The N in compounded N+SV, on the other hand, is not referential and the compound generally functions as a nominal or as a stative verb with a non-referential nominal component. Marginally SVs can function as adnominal attributive pre-modifiers compounded with the N.

Simple and complex predicates with SV are important for their ability to form oppositions in referentiality, where the nominal used with a simple predicate is

referential whereas the nominal forming a complex predicate with SV is non-referential. Both alienable and inalienable nouns can occur in these constructions, and the possession of inalienable nouns is coded by cross-referencing the core argument of the verb.

Both simple and complex predications with SVs can function as relative clauses, which is a construction frequently employed for ascribing attributive concepts, even in contexts where relative clauses would not normally be used in English.

The findings about the role of compounding and complex predication in constructions with stative verbs provide an important revision of the syntactic and semantic analysis from previous research literature on Lakota, in which stative verbs were described as always forming a compound with and modifying the adjacent N. What has been described as stress reduction in the extant literature is treated here as a downstep of the pitch accent peak (H*) associated with the stressed syllable of the second word of the intermediate intonational phrase.

An additional function of SVs, RP-external modification, is not listed here, because it is highly restricted. It can theoretically be fulfilled by any of the SVs that can function as SPs but, in fact, only the verbs *thánka* ‘to be big’ and *čik’ala* ‘to be small’ are found in this function in corpus data, and exclusively internal to postposition phrases. Otherwise, RP-external modification is a syntactic function restricted to modifiers derived from SVs.

This thorough investigation of the syntactic functions of Lakota stative verbs was prerequisite for a comprehensive study of secondary predication in Lakota. For instance, complex secondary predicates can be understood only if we understand that their internal structure involves complex predication.

Secondary predicates are lexically composed primarily of stative verbs, active verbs, nouns, numbers and non-numeral quantifiers. Active verbs functioning as SPs are more frequent in, but not limited to, object oriented depictives with verbs of perception as the primary predicate. Lakota secondary predicates are semantically depictives, resultatives and very rarely circumstantials. When the notional subject of the SP is the object of the primary predicate and both of the arguments are in 3rd person, then the sentence is structural identical to that of an unmarked complement

clause. This is, in fact, one of the reasons why object oriented secondary predication is infrequent and why marked complement clauses are used preferably.

One of the two approaches to syntactic analysis of secondary predication within constituency-based frameworks treats secondary predicates as simple adjuncts based on the fact that they are optional and dispensable. From the RRG perspective, adjuncthood is not defined merely by optionality and dispensability but is determined primarily by the occurrence of the constituent in a periphery. Since secondary predicates are by definition predicative expressions that share a core argument, they cannot be peripheral and thus they cannot be treated as adjuncts despite the fact that with some primary predicates they are optional. In the RRG syntactic analysis, the secondary predicate is linked to the primary predicate at a core juncture forming core cosubordination, i.e. they are co-dependent and share the core argument which cross-references the participant. This solves the issue that secondary predicates have a syntactic relationship to both the primary predicate and the participant.

Subject oriented secondary predication is a syntactic function with a high frequency of corpus occurrences but with a limited number of stative verbs that can function as secondary predicates (and an even smaller number of active verbs). Comparing the number of verbs that can function as SPs in older texts and newer texts indicates a decreasing tendency. There are some stative verbs, whose ability to function as secondary predicates seems to have been fossilized, but the majority of stative verbs have been subject to a diachronic development from secondary predication to a newly preferred strategy for ascribing depictive and resultative content. In the new strategy, stative verbs (and often also active verbs, nouns, numerals and non-numeric quantifiers) are morphologically modified with the suffix *-ya* and become [derived] modifiers.

Secondary predicates lexically composed of nouns serve a variety of semantic functions, including the participant's role, function and rarely life stage (the last is generally expressed with temporal clauses). Some secondary predicates composed of nouns even express contexts with non-referential objects where English employs transitive constructions.

This investigation showed that derived modification represents a very complex area of Lakota morphosyntax. Previous studies treated derived modifiers as adverbs

and described their function as adverbial, whereas this thesis provides evidence that DMs frequently function as ad-nominal modifiers ascribing attributive concepts. Within the RRG framework these forms with *-ya* are given the orientation neutral term '[derived] modifier'. They can function as ad-core modifiers (traditionally 'adverbs'), ad-argument and ad-nominal (traditionally 'adjectives'), and rarely also as ad-nuclear (traditional 'adjectives'). Some derived modifiers are predominantly participant oriented (i.e. ad-nominal or ad-argument) and some are event oriented manner modifiers (i.e. ad-core modifiers), although many derived modifiers are generally vague in terms of their orientation to the participant or event. Thus, among other things, this study disconfirms the notion that Lakota lacks adjectives.

In complex sentences DMs gravitate away from the predicate and closer to the RP they modify which shows they are more tightly bound to the participant. The position to the right of the RP is often the only grammatical position of the DM in complex sentences. It can be assumed that dependency length minimization is in part responsible for the proximity of DMs to their nominal participants and their distance from the predicate. This suggests that the function of DMs is more similar to that of attributives than to the function of canonical manner modifiers (traditionally adverbials). I hypothesize that the diachronic development which led to the shift from secondary predication to derived modification was motivated by an attempt to avoid the morphosyntactic similarity between SPs and predicatives, as well as the similarities between SPCs and complement clauses. Replacing SPs with derived modifiers allows for easier real time parsing and it disambiguates SPCs from complement clauses. Furthermore, serialized DMs are often used in preference to stocked relative clauses, as they provide a simpler construction for real time parsing.

SPs are RP-external which makes them syntactically more similar to predicative stative verbs, whereas semantically they are closer to attributive stative verbs. Modifying them morphologically helps to alleviate this double similarity and it makes them more closely similar to attributives. However, there is some rare data in which the *-ya* forms that normally function as [derived] modifiers appear to behave as predicates. This indicates that they have begun a process of reanalysis leading to a less clear distinction between modifiers and predicates with respect to the *-ya* forms. This reanalysis most likely emanates from the use of the *-ya* forms as free adjuncts, which easily form elliptical clauses and the latter are subsequently re-interpreted as full

clauses due to the fact that Lakota has zero coding for inanimate and 3rd person subject.

Derived modifiers can be serialized or form a modifier phrase (MP) consisting of a noun and modifier connected via nuclear cosubordination. Such complex DMs are, in fact, derived from complex predicates involving N+SV. Serialized and complex DMs are pervasive and serve a large variety of semantic functions.

The orientation of DMs is determined by the semantics of the DM, the transitivity and semantics of the predicate and the syntactic position of the DM. DMs which describe physical appearance or material composition generally tend to be semantically oriented to the participant regardless of their syntactic scope. Many DMs are vague in that they can ascribe an attribution either to the participant or the predication, and can usually be interpreted as being either manner modifiers or participant modifiers (i.e. depictive or resultative modifiers), but both readings generally express an attribute of the participant. The term “manner modifier” is used here in the broader sense in that manner modifiers have syntactic scope over the predication, rather than over the participant. They however, do not always express the manner in which something is done, but rather they ascribe an attribute of the participant during the event expressed by the verb heading the clause. This semantic orientation toward the participant is a key feature shared by SPs and DMs. Some DMs function as true manner modifiers (in that they do not ascribe an attribute to the participant) and some DMs denote “pure-manner” semantics (i.e. they provide answers to questions like “in what manner was something done?”).

Derived modifiers are true adjuncts (as they occur in a periphery) and can also function as free adjuncts in LDP and RDP.

There is a small number of primary predicates which require the presence of a SP, DM, PP or adverbial phrase. This group of primary predicates includes stance verbs (*nážiŋ* ‘to stand’, *yaŋká* ‘to sit’, *h̄páyA/yaŋká* ‘to lie’, *hÁŋ* ‘to stand (inanimate)’), verbs of existence (*úŋ* ‘to be’), descriptive predication (*ečhéča*) and the verbs *škáŋ* ‘to be busy with a task, carry on an activity’, *h̄’áŋ* ‘to have done an act’ and *oĥ’áŋ* ‘to act or behave’.

The secondary predicate construction shares a number of morphosyntactic and semantic properties with the simultaneous predicate construction. They overlap to such an extent that it is possible to consider them a single macro-construction expressing simultaneous eventuality. Their main difference lies in their semantics; SPCs express depictive and resultative content, whereas SimPCs describe an activity which is simultaneous with the main predicate. This emanates from the fact that the lexical composition of SPCs is primarily based on stative verbs (i.e. in words that ascribe attributive content) whereas SimPCs are composed exclusively of active verbs. The fact that active verbs can function as both subject-oriented and object-oriented secondary predicates is another indication that the difference between SimPCs and SPs is not determined morphosyntactically but semantically. Syntactically both constructions are analyzed as core cosubordination and they both show a tendency for morphological modification of V1, even though this tendency is significantly stronger for SPs.

When one of the durative stance verbs, verbs of existence or activity engagement is the primary predicate following another verb, they appear to code aspect more often than contribute their own semantics. This is also true of constructions with transportation verbs as the V2.

The Purposive Construction is another multi-verb construction investigated in this thesis. It differs from the Simultaneous Predicate Construction primarily with respect to phonological tightness, where SimPCs are non-compounded (linked as core cosubordination) and PCs are compounded (forming nuclear coordination). While the form and meaning correlation of these two constructions was implicitly established in one of the early Lakota grammars (Boas and Deloria, 1941), it has been applied inconsistently in the extant literature due to poor understanding of the role of V1 truncation, which has been considered to be a sign of subordination and associated primarily with PCs, whereas in reality it occurs in both constructions. Additionally, under certain morphosyntactic and prosodic conditions the form and meaning correlation is sometimes neutralized resulting in polysemy. Another property that was not well understood with respect to SimPCs and PCs is that main verbs with durative lexical aspect generally participate only in SimPCs (with the exception of verbs of coming and going, which occur as the main verb in both constructions). An important

discovery is that when V1 is a transitive verb then the distinction between purpose (PC) and simultaneous action (SimPC) is usually made via the choice of travel verb (e.g. *yÁ*) or transportation verb (e.g. *áyA*) as V2 respectively, in addition to the difference in phonological tightness. When the main verb is one of the intransitive travel verbs, the SimPC has two meanings: (i) coming/going back doing an activity, and (ii) coming/going back from doing an activity.

Another property that makes Simultaneous Predicate Constructions different from Purpose Constructions is the ability of the former to involve more than one verb before the main verb (with examples that involve up to 5 or 6 simultaneous predicates).

The present study offers a new classification of Lakota Multi-Verb Constructions, which is based primarily on their semantics and syntactic properties, rather than on their phonological types. This classification (given in Table 10.2) recognizes seven types of MVCs and classification accounts for all MVCs in Lakota (with the exception of constructions with the verbs *čhíŋ* ‘to want to’, *okíhi* ‘can’ and *uŋspé* ‘to know how to’, which are beyond the scope of the present study and which probably form a category of their own each).

One of the recurrent findings in the present investigation is the fact that various syntactic constructions previously described as phonologically tight are, in fact, uncompounded. It appears that compounding is significantly less frequent and its role in modification, complex predication and multi-verb constructions is less salient than how it is described in the extant literature. It seems that the research on compounding has been mainly based in impressionistic analysis of constructions elicited in isolation and primarily influenced by the assumptions about compounding made early on by Boas&Deloria (1941) whose grammar did not differentiate between word-level compounding and a phrase level intonational phenomena, such as the downstep of the pitch accent peak associated with the stress of the second word in an intermediate intonational phrase. This intonational pattern can be represented as H* !H* where the second !H* indicates the peak which is down-stepped relative to the peak of the first member of the construction. Boas&Deloria interpreted this phrase level prosodic phenomena as a stress reduction that results from lexical and syntactic compounding, but their transcription shows frequent inconsistencies in the representation of phonological tightness of the various two-word constructions, such as N+V, ADV+V,

V+V, N+P, etc. Both in their grammar (Boas&Deloria 1941) and in Deloria's published texts (Deloria, 1932) and archival texts, these constructions are variably spelled as compounded or uncompounded, frequently showing instances of these constructions with identical lexemes but different coding of the phonological tightness. This inconsistency had a profound impact on Lakota linguistics because the major influential studies on Lakota phonology (e.g. Chambers 1978, Shaw 1980) and compounding (de Reuse 1994, 2006) were based mainly on the textual data produced by Boas&Deloria (1941) and Deloria (1932) and on elicited expressions used impressionistically and in isolation, rather than on phonological analyses of audio recordings. The only exception is Mirzayan (2010) who is concerned primarily with phrase and sentence level prosody and whose study represents a major contribution toward a better understanding of Lakota phonology on the word level.

The reliance on the textual data resulted in many assumptions and generalizations that call for a revision, including the defining properties of what is a lexical compound and what is a syntactic compound in Lakota, which cannot be satisfactorily revised without understanding the role of co-predication and cosubordination and their prosodic properties. As shown in the chapter on N+SV co-predicates, the Dakota Stress Rule (also termed Dakota Accent Rule) cannot account for the stress position of many of the compounds with word initial stress but the core cosubordination analysis in combination with an understanding of Lakota phrase level intonation can reliably account for them.

The present study also discussed constructions expressing grammatically coded change of state, specifically those involving the verbs *áya*, *au*, *ahí* and *hinglá*. The study showed evidence and analysis showing that these verbs are not auxiliaries, as they have been treated hitherto, but function as the main predicates in SPCs.

The chapter concerned with the Lakota passive voice confirmed the existence of the passive in the language and offered an analysis of the syntactic function of the N representing the semantic agent in the passive, showing it is an optional V-modifier and that it modifies the passive predicate at the NUC level which accounts for the non-referentiality of the N.

All syntactic constructions investigated in this thesis can be ordered in a continuum from tightest to loosest, and this continuum can be mapped onto the syntactic linkage

relations ranked hierarchically from strongest to weakest. The strength of the syntactic linkage depends on “how integrated the units are into a single unit or how distinctly they are coded as separate units” (Van Valin, 2005).

This mapping of the syntactic constructions onto the linkage relations hierarchy is shown in Table 13.1.

Table 13.1 *Mapping of investigated constructions on nexus-juncture types*

STRONGEST	TIGHTEST	Chapter
Nuclear cosubordination	- Noun incorporation - Complex Predicate N+SV - Directional compound verbs	8.5, 9.1 3.2 10.3
Nuclear subordination Daughter Peripheral	- DM [1] – ad-nuclear modif. (RP-internal) - SV as ad-nominal modifiers (RP-internal)	5 3.4
Nuclear coordination	- Purposive Construction - Serialized SPs and V1s	10 10, 4.6
Core cosubordination	- Simultaneous Predicate Construction [1] - Secondary Predicate Construction	10 4, 7
Core subordination Daughter Peripheral	- DM [2] – ad-core modif.	5
Core coordination	- Constructions with auxiliary verbs	5.16
Clausal cosubordination		
Clausal subordination Daughter Peripheral	- Complement clause - Relative clause	4.4, 7.2 3.7. (5.13)
Clausal coordination		
Sentential subordination		
Sentential coordination		
WEAKEST	LOOSEST	

Figure 13.1 shows a schematic map of the structural overlaps and relationships among the various constructions. At the center of the map are the circles representing SPs and SimPCs which have the largest overlap because they share the majority of their morpho-syntactic properties and sometimes are indistinguishable. Both of these constructions also overlap with unmarked complement constructions, because under certain morphophonemic conditions, one and the same string of morphemes can be interpreted as any one of the three constructions.

This threefold structural ambiguity is likely one of the motivations for changing these constructions structurally, resulting, on the one hand, in marked complement clauses (at the top of the map), and on the other hand, in changing the VIs in SPCs and SimPCs into Derived Modifiers, as indicated toward the bottom of the map.

An additional overlap exists between SimPCs and PCs (on the very right of the map), because the phonological tightness that normally distinguishes them sometimes disappears due to tonal crowding and perhaps in fast speech.

Represented with their own circles showing no overlap are also predicatively functioning verbs and attributively functioning stative verbs.

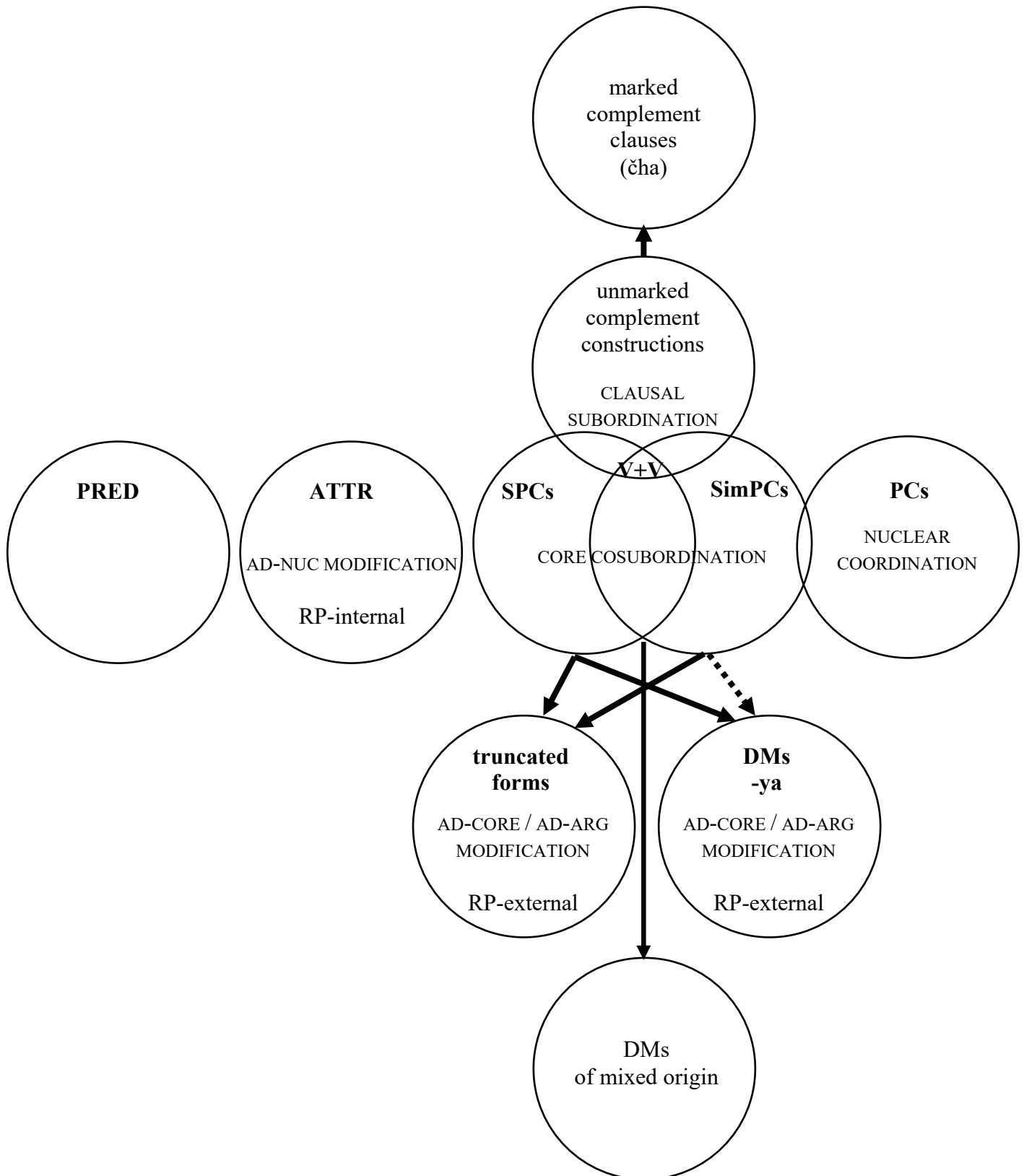


Figure 13.1 Schematic map of V+V constructions, their overlaps and related constructions

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