

A Grammar of Crow

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Douglas R. Parks
Raymond J. DeMallie

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A GRAMMAR OF CROW

Apsáalooke Aliláau

Randolph Graczyk

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Abbreviations for sources of examples

AB	Bilingual Materials Development Center 1986
Acts	Wycliffe Bible Translators 1981
Animals	Bilingual Materials Development Center n.d.
Baapaalissúua	Bilingual Materials Development Center 1979
Baapiiháake	Bulltail 1980
Bachee	Walking Bear 1981
Bitáa	Medicine Horse 1980
Cleorash	Hill 1984
Emilysh	Cook 1981
Harold I–IV	Bilingual Materials Development Center 1980, vols. 1–4
Hawáte aá	He Does It 1980
Héettaa	Old Coyote 1979
Hinne Káal	Medicine Horse 1981
Isáahkawattee	Reed 1983
Isahkáa	Takes Gun 1984
Ishoóp	Bilingual Materials Development Center 1981
Isshii	Old Coyote 1980
Jesus Ammaaikee	Toineeta 1980
Jn	Gospel of John (Wycliffe Bible Translators 2005)
Lk	Gospel of Luke (Wycliffe Bible Translators 2005)
Lowie	Lowie 1960a
Mk	Gospel of Mark (Wycliffe Bible Translators 2005)
Mt	Gospel of Matthew (Wycliffe Bible Translators 2005)
Sees	Tushka n.d.
Ten Stories II	Toineeta 1999a
Ten Stories V	Toineeta 1999b
Ten Stories VIII	Toineeta 1999c
Uuwat	Old Coyote 1985

Abbreviations in grammatical glosses

Section references indicate where the principal discussions of the functions of categories can be found.

!	mirative (surprise) marker (<i>dee</i> ; §6.3.2.2, §13.10)
1	first person
2	second person
3	third person
A	A-set pronominal affixes (active subjects) (§6.1, §6.3, §§9.2–9.3)
AFFIRM	affirmative attitude marker (<i>hée</i> ; §16.2.2.2, §17.2.2)
APPROX	approximative (<i>aachílichí</i> ; §3.1.1.1)
AUG	augmentative (<i>kaáshí</i> ; §3.1.1.2, §5.6.5)
B	B-set pronominal affixes (nonactive) (§§6.1–6.2, §9.2–9.3)
CAUS	causative (§6.3.2.4, §13.9)
COMP	complementizer (<i>m, dak</i> ; §10.5.3)
COND	conditional subordinating clitic (<i>dak</i> ; §14.2.1, §14.5.1)
CONT	continuative marker (<i>a</i> ; §13.3.1)
COP	copula (<i>koó</i> ; §4.3)
COUNTERFACTUAL	counterfactual particle (<i>baleetdák</i> ; §14.5.2)
DECL	declarative sentence-final marker (<i>k</i> ; §16.2)
DEPOS	depossessivizer (<i>bale</i> ; §3.1.2.5, §10.4.1)
DET	determiner (§10.3)
DIMIN	diminutive (<i>káata</i> ; §3.1.1.3, §5.6.6)
DISTR	distributive (<i>aahí</i> ; §3.1.1.6, §5.6.3)
DISTR.PL	distributive plural (<i>ta</i> ; §5.6.13)
DS	different-subject marker (<i>m, dak</i> ; §§16.3–16.4)
DUB	dubitative (<i>dak, xxu</i> ; §16.2.1.4, §16.2.2.3)
EMPH	emphatic imperative (<i>wa</i> ; §6.6.3)
EXCL	exclamative attitude marker (<i>wí</i> ; §16.2.1.6)
GOAL	goal postposition (<i>(ku)ss(á)</i> ; §15.3.1, §15.3.9)
HAB	habitual aspect marker (<i>i</i> ; §5.6.11)
IMPER	imperative sentence-final marker (<i>h</i> ; §6.6)

INCL	first person inclusive (<i>woo</i> ; §6.3.2.2)
INDEF	indefinite nonreferential pronominal (<i>baa</i> ; §3.1.2.3, §12.5)
INDIR	indirect evidential sentence-final marker (<i>sho</i> ; §16.2.1.1)
INSTR	instrumental postposition (<i>ii</i> ; §15.7)
INTERR	interrogative sentence-final marker (?; §16.2.2.1)
LOC	locative postposition (<i>n</i> ; §15.3.3, §15.3.9)
NEG	negative (<i>ssaa</i> ; §6.7)
OPT	optative (<i>ih</i> , pl. <i>oh</i> ; §6.3.2.2, §13.2.1, §16.2.3.4)
PATH	path postposition (<i>taa</i> ; §15.3.2, §15.3.9)
PL	plural (<i>uu</i> , <i>aala</i> ; §2.5.13, §6.1, §6.6.1)
POL	polite imperative (<i>káwe</i> ; §6.6.2)
PORT	portative prefix (<i>aa</i> ; §5.4.4)
POS	possessive marker (alienable or inalienable) (§3.2)
PREF	unglossable prefix
PRO	emphatic or contrastive proform (singular and third person unless otherwise indicated) (§3.5)
PUNCT	punctual aspectual marker (<i>áhi</i> ; §5.6.1)
RECIP	reciprocal (<i>bach</i> , <i>bat</i> ; §6.5, §9.5.4)
REFL	reflexive (<i>ihchi</i> ; §5.4.2, §6.4, §9.5.3)
REL	relativizer (<i>ak</i> , <i>ala</i> ; §§3.1.2.1–3.1.2.2, §11.3)
REPORT	reportative sentence-final (<i>huuk</i> , <i>hcheilu</i> ; §10.5.2.3, §§16.2.1.7–16.2.1.8)
SG	singular
SDECL	strong declarative sentence-final marker (<i>sht</i> ; §16.2.1.2)
SIMULT	simultaneous temporal subordinating clitic (<i>m</i> ; §14.2.4)
SOURCE	source postposition (<i>kaa</i> ; §15.3.4, §15.3.9)
SPECLOC	specific location (<i>htee</i> , <i>chiisáa</i> ; §§15.3.6–15.3.7, §15.3.9)
SPORT	sportive, imitative (<i>kisshi</i> ; §3.1.1.4, §5.6.7)
SS	same-subject marker (<i>ak</i> [<i>laa</i> after motion verbs]; §§16.3–16.4)
STEM	part of stem before infixed pronoun (see “Treatment of examples” below)
TEMP	temporal habitual subordinating clitic (<i>t</i> ; §14.2.3)
VOCATIVE	vocative (<i>ssheeh</i> , <i>n</i> , <i>lussheen</i> ; §3.4)

Treatment of examples

When two abbreviations separated by a period occur under the same morpheme, it is an indication that the form is not cleanly segmentable or is a portmanteau form: e.g., in *shiassáa* 'not long', *ssáa* is glossed as NEG.PUNCT; the underlying segments are *-ssaa* NEG + *áhi* PUNCT.

In a number of instances in the morphemic analysis I have written underlying vowels that are not realized phonologically; these are enclosed in parentheses. I have done this in order to clarify the underlying morphological forms. For example, I write *(a)k* for the same-subject marker in order to distinguish this morpheme from the sentence-final declarative *k*.

In many instances, nonproductively derived, lexicalized forms are not broken down into their constituent morphemes, particularly when such a breakdown would not be relevant to the point under discussion. For example, *baaiihulishoopé* is glossed as 'table', although it is a derived form composed of three constituents: *baa* 'indefinite', *iihuli* 'leg', and *shoopé* 'four'.

In the case of verbs with infixes person markers, the part of the stem that precedes the infix is glossed STEM, as in (1):

- (1) *é-wa-hche-k*
STEM-1A-know-DECL
'I know'

In the translations of Crow examples I occasionally enclose in parentheses material from the discourse context that is not explicitly present in the given text, but which helps to make the translation more comprehensible.

Third person pronominal arguments in Crow, both active and stative, are phonologically null forms. In order to make the morpheme analyses more readable, I have not written these zeros except in cases where they are directly relevant to the discussion (in which case I use \emptyset).

1 Introduction

It is not easy to find a solution to linguistic questions.
—Robert Bourassa, Premier, Province of Quebec

1.1. Background

Crow is a native American language of the Siouan family spoken primarily on and near the Crow Reservation in southeastern Montana. There are perhaps three to four thousand speakers out of a tribal enrollment of over ten thousand. Unlike many other native languages of North America in general, and the northern plains in particular, the Crow language still exhibits considerable vitality: there are fluent speakers of all ages, and at least some children are still acquiring Crow as their first language. Many children, teenagers, and young adults who do not speak Crow are able to understand the language. Virtually all Crow speakers are also bilingual in English.

The reservation is divided into six local districts: Wyola, Lodge Grass, Reno, Black Lodge, St. Xavier, and Pryor. Settlement patterns on the reservation have generally followed the rivers: Wyola, Reno, and Black Lodge districts are along the Little Big Horn River, St. Xavier is on the Big Horn, and Pryor on Pryor Creek. Members of the Lodge Grass district live along Lodge Grass and Rotten Grass Creeks as well as along the Little Big Horn.

Apart from the irrigated river valleys, the greater portion of the reservation consists of rolling hills; the land is used primarily for cattle grazing and dry-land farming. The southern part of the reservation includes portions of the Big Horn and Pryor mountains; this area is owned by the tribe in common and is reserved for the exclusive use of tribal members.

There are five towns on the reservation: Wyola, Lodge Grass, Crow Agency, St. Xavier, and Pryor. Crow Agency, the largest, is the location of the tribal headquarters, Bureau of Indian Affairs offices, and an Indian Health Service hospital.

The Crows have been living on the reservation, and in daily contact with non-Indians, for over one hundred years. Nevertheless, many elements of their traditional culture are still vital: religious ceremonies such as the sun dance, peyote meetings, and the sweat lodge are practiced regularly, the traditional clan system is functioning, and the Crow language is the regular medium of communication for a large segment of the population. (For a survey of Crow history and culture, with further references and a map, see Voget [2001].)

1.2. Genetic relationships

Crow is a member of the Siouan language family, which has been classified as follows:

- Eastern Siouan
 - Catawba, Woccon
- Core Siouan
 - Southeastern Siouan
 - Biloxi, Ofo, Tutelo
 - Mandan
 - Crow-Hidatsa
 - Crow, Hidatsa
 - Mississippi Valley Siouan
 - Dhegiha
 - Omaha-Ponca
 - Kansa-Osage
 - Quapaw
 - Dakotan
 - Teton (Lakhota)
 - Santee-Sisseton
 - Yankton-Yanktonai
 - Assiniboine
 - Stoney
 - Winnebago-Chiwere
 - Winnebago, Iowa-Oto

Siouanists disagree on some details of the subdivisions; for a discussion of subgroupings, see Rood (1979), Koontz (1983), and Parks and Rankin (2001). It is universally accepted, however, that Crow and Hidatsa form an identifiable subgroup; according to Rankin (p.c. 2002), the ancestor of Crow and Hidatsa may have constituted the initial split from Proto-Siouan. These two languages share a number of phonological features (e.g., the mergers of Proto-Siouan voiced labial and

voiced dental sonorants and the loss of nasalization) and a large body of cognates; the outlines of the morphology and syntax are similar. Although the languages are not mutually intelligible, a speaker of one can easily learn the other. Estimates of the time depth of the split between the two languages vary from three hundred to eight hundred years (Matthews 1979; Hollow and Parks 1980).

More distant genetic relationships have been proposed for Siouan, including a grouping with Caddoan and Iroquoian and a relationship with Yuchi (Campbell 1997:262–69; Rankin 1998).

1.3. Previous research

The earliest sources for Crow language data are several nineteenth-century word lists. The earliest known to me is a short vocabulary compiled by Thomas Say in 1819–20 (Say 1966:299). Another short word list was recorded by Maximilian, Prince of Wied, in the early 1830s (Wied 1906). Other vocabularies are found in Hayden (1862) and Brown (1889). Hayden's Crow material also contains some remarks on grammar and a few brief sentences and texts.

Jesuit missionaries on the Crow reservation did considerable work on the language during the period 1880–1910, resulting in grammars, a dictionary, and translations of catechisms, sermons, and bible stories. These materials are available on microfilm at the Oregon Province Archives of the Society of Jesus, Crosby Library, Gonzaga University, Spokane, Washington (for the Jesuit Crow language materials, see Graczyk 2003).

The ethnographer Robert Lowie worked extensively on the Crow language during the early twentieth century, culminating in the posthumous publication in 1960 of his *Crow Texts* and *Word Lists*. While Lowie's texts and word lists give evidence of his solid grasp of the structure of the language, his only formal contribution to the study of Crow grammar is a brief grammatical sketch (1941). Moreover, Lowie's texts and word lists (1960a, 1960b) are full of errors, presumably due largely to the fact that they were published posthumously from his notes without benefit of correction or revision by the author.

Dorothea Kaschube has published several works on Crow, including *Structural Elements of the Language of the Crow Indians* (1967), done in a descriptivist item-and-arrangement framework, and a volume of Crow texts (1978).

Raymond Gordon, a linguist associated with the Summer Institute of Linguistics, published an article on Crow pitch accent (1972), and

helped to develop the orthography in use today. G. Hubert Matthews, also associated with the Summer Institute of Linguistics, has done considerable work on Crow, including nine chapters of an introduction to Crow for nonspeakers. Matthews also published a grammar of Hidatsa (1965) in an early generative-transformational framework.

Since the early 1970s, the Crow bilingual program has published Crow texts for use in reservation schools, as well as a dictionary (Medicine Horse 1987). The Wycliffe Bible Translators have published portions of the New Testament (1981, 2005), and are approaching their goal of translating the entire New Testament into Crow.

There are two 1974 MIT masters' theses by Crow speakers: "Some verb complements of the Crow Indian language" by Dale Old Horn, and a "Dictionary of the Crow language" by George Reed, Jr.

Two doctoral dissertations deal with Crow: John Read's "A sociolinguistic study of Crow language maintenance" (1978) and Karen Wallace's "Verb incorporation and agreement in Crow" (1993). Michael Kim's 1996 dissertation includes discussion of tone in Crow. Others who have done research on Crow in recent years include Danae Paolino, Jack Martin, Frank Bechter, and Steve Hibbard.

While it might appear from the above that a substantial amount of linguistic work has been done on Crow, there is need for an up-to-date description of the language. This volume attempts such a grammar.

1.4. Sources of data

I have drawn upon three basic sources of data in my research: written texts, primarily bilingual materials and New Testament translations, elicited data, and participant observation.

The vast majority of the examples in the grammar have been taken from written sources. These include about twenty texts published by the Crow Bilingual Materials Development Center, Crow Agency, Montana, which over the past three decades has published a series of readers for use in bilingual elementary education on the reservation. Those materials are of varying degrees of difficulty, ranging from traditional tales of considerable length and sophistication narrated by tribal elders, to simple texts a few lines long aimed at primary students learning to read. Another written source is the New Testament translation being prepared by the Wycliffe Bible Translators (1981, 2005). Native Crow speakers have helped produce these translations, which for the most part represent quite idiomatic Crow.

The second source of data is elicitation, which I have used to obtain data not found in the written sources, and to further check the accuracy of the analysis. I have been blessed with a number of coworkers who are not only fluent Crow speakers but are also deeply interested in their language and concerned about its preservation (see the Acknowledgments).

The third source of data is participant observation. Since 1970 I have ministered as a Catholic priest on the Crow Reservation. During this time span I have been in frequent and often daily contact with Crow speakers in a variety of situations; in fact my initial motivation for attempting to learn the Crow language was my desire to understand the conversations going on around me.

During these years I have participated, as both speaker and audience, in thousands of hours of Crow language use ranging across the full spectrum of speech genres. I have heard Crow spoken by two-year-olds and octogenarians, by semispeakers and speakers with total command of the rich resources of the language. I have heard Crow spoken around the dinner table, in the school yard, in the sweat lodge, at pow-wows. I have heard prayers, jokes, traditional stories, riddles, instructions, arguments, complaints, teasing, and words of wisdom.

This extensive exposure to the full vigor of a living language has, I believe, added a degree of depth to my understanding of Crow that would be impossible to achieve within a more limited period of fieldwork.

1.5. Typological sketch

Crow is a verb-final, head-marking language, and the basic word order is subject-object-verb. In noun phrases, the order is possessor-possessum, with person of possessor marked by a prefix to the possessum. Subordinate clauses precede matrix clauses, and are marked by a suffixed clause-final marker. Relative clauses are internally headed. Crow has postpositional phrases, with the postposition often occurring as a prefix to the following verb.

The following parts of speech can be distinguished: nouns, pronouns, demonstratives, verbs, adverbs, conjunctions, and interjections. There is no distinct category of adjectives; instead, stative verbs function as noun phrase modifiers.

Crow is an active-stative language, with verbs divided into two classes, active (both transitive and intransitive) and stative, largely on semantic grounds. Both active and stative verbs are subcategorized for the number of arguments with which they occur: zero, one, or two.

Cardinal numbers are a subclass of stative verbs. There are two sets of first and second person pronominal prefixes (sometimes infixes) that mark person of subject: one set (“A-set”) marks the subject of active verbs; the other (“B-set”) marks the subject of stative verbs and the object of transitive active verbs and postpositions.

Word formation processes for both nouns and verbs include both compounding and affixal derivation. Verb compounding is typologically unusual in that both elements of the compound are marked for person of subject. Compound auxiliary verbs are employed to mark future tense-modality, benefactive constructions (with auxiliary *kúu* ‘give’), purpose clauses, and continuative aspect.

Crow lexical stems may be modified by prefixes, suffixes, and infixes. Besides the pronominal prefixes or infixes that mark both subject and object, verbs may also be preceded by derivational prefixes that mark location and direction, instrument, repetition, and stative derivation.

Derivational verbal suffixes mark such notions as augmentative, diminutive, approximative, distributive, and sportive, among others. Other verbal suffixes include markers of aspect (punctual or habitual) and of negation. Plural number is marked by a verbal suffix. In main clauses, the final suffix of the verbal word is a marker of sentence type or evidentiality: declarative, interrogative, imperative, optative, etc.

Nouns phrases may begin with a demonstrative. Nouns may be preceded by a possessive prefix marking person of possessor. They may be followed by a derivational suffix marking augmentative, diminutive, etc., largely chosen from the same set of suffixes that occur with verbs. The final element in the noun phrase may be a suffixed determiner. Number is rarely marked on noun phrases.

Crow is a switch reference language; i.e., it marks continuity or change of subject by a clause-final suffix on verbs of clauses that are neither independent nor subordinate (see chapter 16). Only the final verb in a sequence is marked for sentence type or evidentiality.

1.6. Analytic framework

This grammar is a revision and enlargement of my doctoral dissertation, “Incorporation and cliticization in Crow morphosyntax” (1991). That work was written in the framework of autolexical syntax, a theory pioneered by Jerrold Sadock. This theory views a grammar as a set of modules—minimally, phonology, morphology, and syntax—conceived not hierarchically, so that the output of one level provides the input for

another, but rather as coexisting on the same level, so that the requirements of each module are satisfied simultaneously, the different components being related to each other by means of an interface. In other words, an expression of the language must be simultaneously well-formed in each of the modules in order to qualify as grammatical. One of the claims of this approach is that morphological elements of words may function directly in the syntax, a not unreasonable claim for a highly polysynthetic language like Crow, and one that I attempt to provide evidence for. In particular, I claim that the bound pronominals are syntactic constituents rather than agreement markers, and that noun, verb, and postposition incorporation are also syntactic processes.

While my thinking about grammar has been informed and influenced by the autolexical approach, my goal is to write a grammar that is primarily descriptive, one which will be useful to the linguistic community and to the Crow people as a summary of what is known at this point about the structure of the language. Hopefully this grammar will provide material and direction for future researchers.

R. M. W. Dixon uses the term "basic linguistic theory" to label "the fundamental theoretical apparatus that underlies all work in describing languages and formulating universals about the nature of human language" (1997:132). Hopefully this grammar will be comprehensible in terms of basic linguistic theory, and when I make claims that go beyond such theory, I attempt to provide argumentation that will support my claims. My goal is to write a grammar that will be useful for researchers of whatever theoretical persuasion.

1.7. Organization of the grammar

The following chapters discuss a number of different topics. Chapter 2 is a treatment of the phonology of Crow. Nominal morphology is dealt with in chapter 3, and deixis in chapter 4. The treatment of verb morphology is divided among two chapters: chapter 5 deals with verb derivation and chapter 6 with inflection. Adverbs are the topic of chapter 7, and quantifiers of chapter 8.

Chapter 9 discusses the basic structure of the simple clause in Crow, focusing on the active-stative patterning of the language, the status of the bound pronominal prefixes, and word order patterns.

In Chapter 10 the elements of the noun phrase are presented, including determiners, possessive or genitive constructions, nominalizations, and complements. Relative clauses are treated separately in chapter 11, and in chapter 12 noun incorporation is investigated.

Chapter 13 deals with verb incorporation, which involves the treatment of modal auxiliaries, aspectuals, benefactives, purpose constructions, verbal adverbs, comitatives, and the surprise marker.

Chapter 14 deals with subordinate clauses, and chapter 15 with postpositional phrases. Chapter 16 treats interclause organization, with special attention to switch reference and clause-final speech act or evidential markers. Finally, chapter 17 discusses yes-no questions and information questions.

2 Phonology

2.1. Orthography

This chapter sketches the phonology of Crow in sufficient detail to enable the reader to follow the presentation of the grammar. The present section discusses the orthography used. The consonant and vowel inventories of Crow are presented in §2.2, the phonotactics and morpheme structure constraints in §2.3, and the accentual system in §2.4. Section 2.5 treats a number of phonological and morphophonemic processes that are important for an understanding of the language. Section 2.6 discusses several problems in Crow phonology, and §2.7 concludes with a brief treatment of the comparative phonology of Crow and Hidatsa.

The orthography employed in this volume is the practical one developed by the Crow bilingual program and the Crow Bible Translation Project.¹ It is largely phonemic, with some exceptions.²

The orthographic representation of consonants differs from a phonemic representation in the following respects:

- /š/ is written *sh*, /č/ is written *ch*, and the geminates of these (/šš/ and /čč/) are written *ssh* and *tch* respectively (but see below).
- The cluster /šč/ is written *sch*.

¹ Special acknowledgement should be made of the contributions of Raymond Gordon and G. Hubert Matthews of the Summer Institute of Linguistics to the development of the Crow orthography. I am also indebted to them personally for their help in furthering my understanding of Crow phonology and grammar. A large part of the analysis presented in this chapter is based on their pioneering work.

² For the sake of consistency, all Crow examples in this work will be cited in the orthography described here. In the case of citations from Lowie's work (1941; 1960a; 1960b), this is a matter of different orthographic conventions; in the case of more recent texts it is a matter of minor adjustments based on my interpretation of Crow phonology, morphology and spelling conventions.

- The allophones of /m/ and /n/—*w* and *b*, *l* and *d*, respectively—are written as such; in this case the orthography is phonetic rather than phonemic.
 - Since the glottal stop appears only as a marker of interrogatives, it is represented by the question mark.
 - In one case the orthography reflects underlying forms rather than morphophonemic alternations: morpheme-final *s* and *ss* are written consistently, ignoring the effects of §2.5.3 below, whereby *s* and *ss* are realized as [sh] before all consonants except *x*:
- (1) *hawass-dáawi* [hawašdáawi] ‘go around’
bas-búupche [bašbúupče] ‘my ball’
bas-íkooshe [bašlíkooshe] ‘my whistle’
- The spelling also serves to distinguish the *t* that alternates with *ch* from underlying *t*, as is discussed in §2.5.8. In other words, *sh* is written as *sh* before underlying *t*, and as *s* before underlying *ch*, as illustrated in (2):
- (2) a. *kooshtá* ‘few’, pl. *kooshtúu* (underlying *t*)
ishtá ‘his eye’, pl. *ishtúu* (underlying *t*)
 b. *ischi* ‘his hand’, pl. *istúu* (underlying *ch*)
dúschí ‘take out’, pl. *dústuu* (underlying *ch*)

As a result of this spelling convention the plurals of *ishtá* and *ischi* are spelled differently although they are homonyms.

Table 2.1 summarizes the correspondences between the phonemic representation of consonants and their representation in the orthography, omitting the complications involving underlying forms.

TABLE 2.1. CONSONANTS IN PHONEMIC REPRESENTATION AND ORTHOGRAPHY

PHONEME	WRITTEN AS
č	<i>ch</i>
čč	<i>tch</i>
š	<i>sh</i>
šš	<i>ssh</i>
šč	<i>sch</i>
m	<i>m, b, w</i>
n	<i>n, d, l</i>

The orthographic representation of vowels and of accent differs from a phonemic representation in the following respects:

- Long vowels are written as digraphs (*ii, ee, aa, oo, uu*). Diphthongs are written *ia, ua, and ea*, even though phonetically they consist of a long vowel followed by a schwa off-glide.
 - An accent mark on the first grapheme of a long vowel or diphthong (e.g., *áa, ia*) indicates falling pitch, while an accent on the final grapheme marks high pitch (e.g., *eé, uá, iiá*).
 - Sequences of three or four identical vowels are to be interpreted as long vowels followed by another vowel, either long or short:
- (3) *baa-áatchili* 'fortunate'
baa-apáali 'plant'
bii-ikaak 'he saw me'
- A general principle of homophone reduction is followed, so that several morphemes that are phonetically identical are written differently, with a short vowel in one homophone and a long vowel in the other, as in (4):
- (4) a. *kon* 'independent pronoun'
koon 'there'
- b. *bale* 'depossessivizer'
balee 'first person plural B-set (nonactive) pronominal'
- The citation forms of lexemes ending in long vowels are written differently from the citation forms of diphthongs, although they are phonetically identical (long vowel plus glide), as illustrated in table 2.2. (See §2.5.12 for discussion of stems and citation forms.) Thus, in the orthography, Crow has both short-vowel-initial and long-vowel initial diphthongs, although all are pronounced the same.

TABLE 2.2. CITATION FORMS OF STEMS ENDING IN LONG VOWELS AND DIPHTHONGS

STEM	CITATION FORM	GLOSS
<i>buá</i>	<i>buá</i>	'fish'
<i>chiá</i>	<i>chiá</i>	'extinguished'
<i>buú</i>	<i>buuá</i>	'song'
<i>chii</i>	<i>chiiá</i>	'pack on back'

- The demonstrative pronoun *hinné* ‘this’ is written with an accent, while the corresponding noun phrase modifier is written without the accent):
- (5) a. *hinné basitchiwaak* ‘I like this’
 b. *hinne bacheé bulupiak* ‘I don’t like this man’

2.2. Phonemic inventory

Crow shares with many languages of the Plains the areal trait of a rather sparse phonemic inventory.

2.2.1. Consonants

Table 2.3 presents the consonant inventory of Crow.

TABLE 2.3. CONSONANT INVENTORY

	LABIAL	ALVEOLAR	PALATAL	VELAR	GLOTTAL
STOPS	<i>p</i>	<i>t</i>	<i>ch</i>	<i>k</i>	(<i>ʔ</i>)
FRICATIVES		<i>s</i>	<i>sh</i>	<i>x</i>	
SONORANTS	<i>m</i>	<i>n</i>			<i>h</i>

Consonants and their allophones are discussed in the following subsections.

2.2.1.1. Stops *p t ch k*

Unlike the three-way stop series of Dakotan (voiceless, aspirated, and glottalized) and the five-way series of Osage (preaspirated [tense], aspirated, plain, glottalized, and voiced [Quintero 2004:22]), Crow has a single stop series. Stops are aspirated word-initially, word-finally, when geminated (e.g., [pp^h]), and when following another stop (e.g., [pt^h]). Stops in a cluster with *h* as the initial member (*hp*, *ht*, *hk*) are unaspirated and lax. Geminate stops occur only intervocalically. Intervocalic nongeminate single stops are lax, unaspirated, and often voiced.

It is difficult to hear any contrast between voiced stops (allophones of *m* and *n*; see §2.2.1.3 below) and voiceless stops when they follow a fricative, since both are unaspirated and lax. For example, the labial

stops in *apashpía* 'moose' and *isbía* 'his sister' are pronounced identically.

The phoneme *k* has a palatalized allophone [kʲ] that occurs after *i*, *e*, *ch*, and *sh* (6a–d). Palatalization is not blocked if an *h* intervenes between the nonround vowel and *k*, as in (6e–f). The palatalized allophone often occurs word-finally (6g).

- (6) a. *ikaa* [ikʲaa] 'see'
 b. *bacheekáata* [bačɛekʲaata] 'little man'
 c. *háchka* [háčkʲa] 'tall'
 d. *áashka* [áaškʲa] 'testicles'
 e. *ihká* [ihkʲá] 'egg'
 f. *éhkúu* [éhkʲuu] 'they know'
 g. *éehk* [éehkʲ] 'that'

2.2.1.2. Fricatives *s sh x*

The fricatives are lax intervocalically; otherwise they are tense. Palatal *sh* is often voiced intervocalically; *s* is sometimes voiced in that environment; *x* is never voiced. The alveolar fricative *s* has an optional allophone *h* in phrase-initial position.

- (7) *sáapa* 'what' → [háapa]
sapée 'who' → [hapée]

2.2.1.3. Sonorants *m n h*

The voiced sonorants /m/ and /n/ have three allophones: *w* and /intervocalically (8a–b), *b* and *d* in word-initial position (9a–b) and following an obstruent (9c–d), and *m* and *n* elsewhere (10a–f). The intervocalic allophone of /n/ is realized as a tap *r* in more conservative speech; otherwise it is realized as *l*, possibly as a result of English influence. The *b* allophone of /m/ is optional word-initially, occurring in free variation with *m*, although *b* is the more common realization. Occasionally, in an exaggerated, emphatic pronunciation, ones hears *d* and *b* intervocalically instead of *l* and *w*.

- (8) a. /amá/ [awá] 'earth'
 b. /mini/ [biri] or [billi] 'water'
- (9) a. /maapá/ [baapá] or [maapá] 'day'
 b. /náamii/ [dáawii] 'three'
 c. /išmúpčii/ [išbúpčii] 'his ball'
 d. /áapnaxči/ [áapdaxči] 'hang'
- (10) a. /mačɛém/ [bačɛém] 'a man'
 b. /maammáxi/ [baammáxi] 'buckskin'
 c. /amnia/ [amnia] 'bank'

- d. /koón/ [koón] 'there'
 e. /annissúu/ [annissúu] 'dance hall'
 f. /minmuú/ [bimmuú]³ 'in the water'

It is more accurate to say that *m* and *n* are realized as *b* and *d* phrase-initially, since the continuant allophones commonly occur at word boundaries within phrases; e.g., *hinne baapé* 'this day' is phonetically [hinne waapé], except in hypercorrect speech.

The glottal sonorant *h* is in free variation with a voiceless nasal before *m* and *n*; i.e., it assimilates to the nasality of the following segment, but retains its voicelessness, as in (11a). It is not always realized phonetically in word-final position (11b). When *h* follows *i* or *e* and precedes *ch*, it may be realized as an alveopalatal fricative *sh* (11c–d):

- (11) a. *ahnushí* [ahnúʃi] or [annúʃi] 'eat a lot'
 b. *dúttah* [dúttah] or [dúttá] 'get it'
 c. *iíhchii* [iíhçii] or [iíʃçii] 'beard'
 d. *éhche* [éhçee] or [ééʃçee] 'know'

2.2.1.4. Glottal stop ?

The glottal stop is a defective phoneme that occurs only as the marker of interrogatives.

- (12) a. *dútchi?* [dúççi?] 'did you get it?'
 b. *shóosdalee?* [ʃóoʃdalee?] 'where are you going?'

In fast speech it is often omitted.

2.2.2. Vowels

The vowel inventory of Crow is given in table 2.4.

TABLE 2.4. VOWEL INVENTORY

	[-ROUND]		[+ROUND]	
	LONG	SHORT	LONG	SHORT
HIGH	<i>ii</i>	<i>i</i>	<i>uu</i>	<i>u</i>
MID	<i>ee</i>		<i>oo</i>	
LOW	<i>aa</i>	<i>a</i>		
DIPHTHONG	<i>ia</i> (<i>ea</i>)		<i>ua</i>	

³ *n* → *m* / __ *m*. See §2.5.2.

There are five distinctive vowel qualities in Crow, and length is phonemic, with the exception of the mid vowels. There are a number of minimal pairs that constitute evidence of phonemic length:

- (13) a. *báalaa* 'winter'
 bálaa 'money'
- b. *ilí* 'survive, escape'
 ilíi 'talk'
- c. *báxxu* 'ask' (3 sg.)
 báxxuu 'ask' (3 pl.)

Crow and Hidatsa lack the nasal vowels found in other Siouan languages. In addition to the five oral vowels, there are two diphthongs: *ia* and *ua*. There is also a marginal diphthong *ea* that occurs in only two nonderived stems: *déaxa* 'clear' and *béaxa* 'intermittent'.⁴

The phonetic qualities of the vowels are as follows:

- ii* Long nonround high vowel.
- i* Short nonround high vowel most commonly realized as [i] in open syllables and [ɪ] in closed syllables—i.e., when followed by two consonants, or one consonant word-finally.
- ee* Long mid nonround vowel, phonetically [ee]. In utterance-final position *ee* has a lax allophone [æ]. *Ee* also has a short allophone that occurs before *h* and in closed syllables; it is realized as [e].
- aa* Long, lax low vowel.
- a* Realized as schwa except word-initially, where it is sometimes realized as a low vowel [a]. This vowel is extremely reduced before the clause-final declarative marker *k* or the same-subject marker *ak*.
- oo* Long mid rounded vowel, phonetically [oo]. In utterance-final position *oo* has a lax allophone [ɔɔ]. *Oo* also has a short allophone before *h* and in closed syllables.
- uu* Long tense high rounded vowel.
- u* Short tense high rounded vowel.

⁴ The *a* in *ea* is an epenthetic glide between a front vowel and a velar fricative; note that the Hidatsa cognate of *déaxi* is *néexi*.

- ia* Realized phonetically as [ii] followed by a schwa off-glide (14a–b). If this diphthong has high rather than falling accent, both segments are short, as illustrated in (14c–d):
- (14) a. *bía* [bliá] ‘woman’
 b. *xaalíá* [xaaliá] ‘elderly’
 c. *iáxpá* [iáxpá] ‘wing’
 d. *iáxassáá* [iáxassáá] ‘snake’
- ua* Realized phonetically as [uu] followed by a schwa off-glide.
- ea* Realized phonetically as [ee] followed by a schwa off-glide.

2.3. Phonotactics and morpheme structure

2.3.1. Vowel sequences

Crow allows a variety of vowel sequences over morpheme boundaries (though only diphthongs and long vowels within morphemes): long vowel plus short vowel (*ii-akaawá* ‘sixth’, *baa-áp-hachka* ‘elephant’); long vowel plus long vowel (*ii-íisuu* ‘water bucket’, *baa-íip-xaxxi* ‘hawk’); and diphthong plus short vowel (*día-i* ‘do regularly’). Some sequences are eliminated by phonological rules that affect morpheme-final short vowels and diphthongs (§2.5.1, §2.5.5, §2.5.7). Word-finally, only *a* (in a diphthong) and *o*, *u* (allomorphs of the plural suffix, §2.5.13) can occur after a long vowel.

2.3.2. Consonant clusters

Table 2.5 lists the consonant clusters that occur in Crow (in phonemic transcription, except that *b d* are distinguished from *m n*); the clusters in parentheses occur only at morpheme boundaries. The following are examples of each of the clusters (hyphens mark morpheme boundaries):

pp	<i>appée</i> ‘swallow’	tb	<i>itbuúá</i> ‘sole’
pb	<i>baap-bassée</i> ‘Monday’	tt	<i>attá</i> ‘sharp’
pt	<i>apté</i> ‘liver’	td	<i>Akbaatat-día</i> ‘God’
pd	<i>sáap-dak</i> ‘something’	ts	<i>alats-ak</i> ‘he slipped ss’
ps	<i>Apsáalooke</i> ‘Crow’	tš	<i>itshé</i> ‘track’
pš	<i>inchipshia</i> ‘support’	tč	<i>bat-chichééo</i> ‘resemble each other’
pč	<i>íipche</i> ‘pipe’	tk	<i>iát-kaate</i> ‘very small’
pk	<i>dúup-kaate</i> ‘only two’	tx	<i>iiwát-xii</i> ‘gather’
px	<i>dáapxi</i> ‘bite’	sp	<i>ispe</i> ‘full to overflowing’
tp	<i>hut-púmmi-kaate</i> ‘whirlwind’		

TABLE 2.5. CONSONANT CLUSTERS

	p	b	t	d	s	š	č	k	x	m	n	h
p	pp	(pb)	pt	(pd)	ps	pš	pč	(pk)	px			
b												
t	(tp)	tb	tt	(td)	ts	tš	(tč)	(tk)	(tx)			
d												
s	sp				ss			sk	(sx)			
š	šp	(šb)	št	(šd)		šš	šč	šk	(šx)			(šh)
č							čč	čk	(čx)			(čh)
k	(kp)	(kb)		(kd)	ks	kš	kč	kk	(kx)			(kh)
x	xp	(xb)	xt	(xd)	xs	xš	xč	xk	xx			
m										mm	mn	
n											nn	
h	hp		ht				hč	hk	(hx)	(hm)	(hn)	

ss	<i>iissaa</i> 'furry'	kk	<i>áakkee</i> 'across'
sk	<i>dáaske</i> 'edge'	kx	<i>ak-xawíilia</i> 'evil person'
sx	<i>iis-xii</i> 'advance'	kh	<i>ák-hii</i> 'arrive on time'
šp	<i>iishpuua</i> 'stomach'	xp	<i>áxpe</i> 'companion'
šb	<i>ash-baaihée</i> 'other tribe'	xb	<i>áx-baaluushi</i> 'eat with'
št	<i>ishté</i> 'eye'	xt	<i>púxta</i> 'riddled with holes'
šd	<i>baaaash-dée</i> 'go hunting'	xd	<i>biláx-dichi</i> 'beat a drum'
šš	<i>isshe</i> 'case'	xs	<i>dúxsachi</i> 'squeeze'
šč	<i>isché</i> 'hand'	xš	<i>alaxshi</i> 'step in'
šk	<i>isaashké</i> 'his horse'	xč	<i>dúxchi</i> 'dig with hands, stuff'
šx	<i>kuss-xalússhi</i> 'run to'	xk	<i>puuxké</i> 'dirt'
šh	<i>ash-héelahke</i> 'wall'	xx	<i>dúxxiia</i> 'war party'
čč	<i>ítche</i> 'good'	mm	<i>chimmí</i> 'count'
čk	<i>ichkiise</i> 'ankle'	mn	<i>amnía</i> 'bank'
čx	<i>baatach-xaxúa</i> 'everything'	nn	<i>annáshe</i> 'old campsite'
čh	<i>ammach-híia</i> 'joint'	hp	<i>áhpee</i> 'evening'
kp	<i>ak-peela-chipasshíia</i> 'kind of bug'	ht	<i>áhta</i> 'near'
kb	<i>ak-baalía</i> 'doctor'	hč	<i>éhche</i> 'know'
kd	<i>ak-disshé</i> 'dancer'	hk	<i>iihke</i> 'chin'
ks	<i>aksée</i> 'parent'	hx	<i>xawuh-xáwua</i> 'crunch'
kš	<i>dáakshee</i> 'coup'	hm	<i>dá-h-miia</i> 'three times'
kč	<i>akchii</i> 'mount' (n.)	hn	<i>ah-nuushi</i> 'eat a lot'

Several comments can be made about these clusters:

- With the exception of /h/, all the consonantal phonemes of Crow can occur as geminates.
- The inventory of clusters that occur morpheme-internally is quite limited; there are many more clusters that occur at morpheme boundaries.
- Some of the gaps in the chart are due to morphophonemic alternations: e.g., *ch* → *t* before a labial or alveolar obstruent (§2.5.8).
- The voiced labials and dentals (phonemic *m* and *n*, with allophones *b, m, w* and *d, n, l*) are particularly resistant to clustering. Since *w* and *l* occur only intervocalically, they never occur in clusters. The stop allophones of *m* and *n* occur only as the second member of a cluster, and then only at morpheme boundaries. The nasal allophones cluster only with each other or with *h* at a morpheme boundary. Note that *nm* is a nonoccurring cluster.

2.3.3. Morpheme structure constraints

The following morpheme structure constraints are found in Crow:

- A word begins either with a vowel (long or short) or a single consonant; there are no word-initial clusters.
- Clusters occur only word-internally, with the exception of *sh*, which occurs in a single morpheme, *sh*, an emphatic sentence-final declarative marker.
- All consonants occur word-finally except *p* and *x*. The affricate *ch* occurs finally in only one word, *iach*, a plural demonstrative.
- All lexical noun and verb stems end in a vowel.
- With rare exceptions, nonderived noun and verb stems consist of one, two, or three syllables.⁵
- Only long vowels or diphthongs occur in one-syllable words: *ii* 'mouth', *suú* 'thunder', *día* 'do', *buá* 'fish'.

⁵ There are about a dozen stems of more than three syllables, and it is likely that most if not all of them are derived, from a diachronic perspective, even though their derivations are no longer transparent.

- Crow does not allow *ix* or *ex* clusters. An epenthetic glide is inserted, giving *iax* or *eax*. The following Crow-Hidatsa cognate sets illustrate this constraint: Crow *bíaxaaka* ‘duck’, Hidatsa *miíxaaka*; Crow *béaxa* ‘intermittent’, Hidatsa *bééxa*; Crow *iaxpá*, Hidatsa *ixpá* ‘wing’.

2.4. Accent

Accent is phonemic in Crow; i.e., the position of the accent in the stem is part of the lexical entry of the form. One important qualification must be added: accent placement in active verb inflectional paradigms is largely predictable from the conjugation class of the verb.

There is one other regularity that should be noted: accented short vowels in a word-initial syllable tend to be followed by a cluster, while accented long vowels in a word-initial syllable tend to be followed by a single consonant. The following verb stems with the instrumental prefix *du* ‘by hand’ illustrate this pattern:

- (15) a. *dúxpi* ‘unload, take off’
 b. *dúxxaxxi* ‘insert hand’
 c. *dúuchilua* ‘drag’
 d. *dúukaaxi* ‘scratch’

In general, morphemes, including virtually all noun and verb stems, are inherently accented. However, many prefixes and suffixes lack lexical accent; examples are *ala* ‘relativizer’, *kaka* ‘again’, *kala* ‘now, already’, *uu* ‘plural’, *shta* ‘very’, *aahi* ‘distributive,’ *ssaa* ‘negative’, and *i* ‘habitual’.

There are also some accented suffixes: they include *kaáshi* ‘augmentative’, *káata* ‘diminutive’, *kísshí* ‘sportive’, *táa(hi)li* ‘real, genuine’, and *áhi* ‘punctual’.

A few verb stems also lack lexical accent: they include quotative *he* ‘say’ and the bound verb stem *xii*. The existential verbs *bishí* ‘exist’ and *deetá* ‘not exist’ occur unaccented under most circumstances. However, in words that would otherwise lack a lexical accent, both *bishí* and *deetá* are accented on the final vowel, as in (16):

- (16) a. *an-neeeté* ‘wilderness’
 b. *ich-am-mishée-n* ‘around her feet’

A number of minimal pairs—or, as in (17f), a set of three stems—provide evidence that accent is phonemic in Crow:

- (17) a. *íaxua* 'cover'
íaxuá 'hide'
- b. *íi* 'mouth'
ii 'hair, fur; tooth'
- c. *chía* 'white'
chiá 'extinguish'
- d. *líka* 'handle'
iiká 'his older brother'
- e. *húupa* 'handle'
huupá 'shoe'
- f. *ílichi* 'be hit'
ilichi 'odor'
ilichi 'hind quarter of animal'

If a vowel is short, it may be accented or unaccented:

- (18) *biláxa* 'drum, bucket'
ahpá 'ear'
óhchipi 'dive'

If long, a vowel may be accented or unaccented; if accented, the accent may fall on either mora of the long vowel:

- (19) a. *báalaa* 'winter'
apáa 'be cold'
bíi 'fallen snow'
- b. *baáhpa* 'boulder'
xalaá 'rain'
bíi 'rock, stone'

With diphthongs, either the long vowel or the off-glide may bear the accent:

- (20) a. *chía* 'white'
chikúa 'sweet'
- b. *chiá* 'extinguish'
kuá 'center'

Once the position of the accent is known, the tones of all the vowels in the word can be predicted by the following rules:

- Accented vowels are high in pitch.

- All vowels following the accented vowel are low in pitch.
- All short vowels preceding the accented vowel are low in pitch.
- All long vowels preceding the accented vowel are high in pitch.
- Short vowels intervening between a long vowel and the accented vowel assimilate to high pitch.

The words in (21) illustrate how the pitch-accent system functions. (High pitch is marked by H, low pitch by L.)

- (21) a. *áakiiwilaxpaake* 'Indian'
 HL LL LL LL L
- b. *alachiwakáau* 'church'
 L L L L HLL
- c. *ammaachimmúua* 'school'
 L HH H HLL
- d. *baaiihulishoopé* 'table'
 HHHHH H HH H

For purposes of the pitch accent rules, unaccented *ia* behaves like a short vowel rather than a long vowel, as in (22):

- (22) a. *iaxpáshi* 'full'
 L H L
- b. *iaxpáaliiia* 'his medicine'
 L HL LLL

Several rules are needed to account for the placement of the accent in words composed of more than one morpheme:

- If the first accented morpheme of a word is accented anywhere except on the final mora of a stem-final vowel, the following morpheme loses its accent, as in (23):
- (23) a. *aashúu* 'head' + *xáapi* 'flat' → *aashúu-xaapi* 'Flathead'
- b. *iaxchi* 'reins' + *úuwata* 'metal' → *iaxch-uuwata* 'bridle'
- c. *itchi* 'good' + *kisshi* SPORT + *káata* DIMIN → *itchi-kisshi-kaata* 'cute'
- d. *báalaa* 'winter' + *n* LOC + *baapi* 'day' + *baahili* 'work' + *n* LOC + *deeta* 'not exist' *isáa* 'big' → *báalaa-m-maap-baahili-n-neet-isaa* 'Christmas' (lit., 'big winter day on which they don't work')

- If the first accented morpheme has its accent on the stem-final vowel mora, that morpheme loses its accent, as in (24):
- (24) a. *bili* 'water' + *chikúa* 'sweet' → *bili-chikúa* 'soda water'
 b. *balá* 'wood' + *áapa* 'leaf' → *bal-áapa* 'leaf of tree'
 c. *ishii* 'hair' + *dáaska* 'border' → *ishii-láaska* 'hairline'
 d. *baa* INDEF + *duushi* 'eat' + *bía* 'want to' → *baa-luush-bía* 'want to eat'
- If the morpheme following the first accent lacks lexical accent, the accent remains on the previous morpheme, as in (25):
- (25) *kootá* 'be like that' + *ssaa* NEG → *kootá-ssaa* 'be not like that'
- If an accented stem-final vowel is deleted when the following morpheme lacks lexical accent, the accent floats to the next vowel mora to the left, as in (26):
- (26) a. *bili* 'water' + *bishi* 'exist' → *bím-mishi* 'there is water'
 b. *iisá* 'face' + *xii* 'move in a direction' → *iis-xii* 'move forward'
 c. *koowí* 'finish' + *baa* 1A.CAUS → *koóm-maa* 'I finish'

Although these rules apply to the vast majority of Crow forms, there are a number of exceptions.

- A few stems with final falling accent have long high accent for purposes of word formation:
- (27) a. i. *húu* 'come'
 ii. *húu* + *a* CONT + *dawí* 'move along' → *huu-a-lawí* 'come along'
- b. i. *bikkáa* 'grass, hay'
 ii. *bikkaá* + *sapíi* 'soft' → *bikkaa-sapíi* 'cloth'
- c. i. *aksáa* 'parent'
 ii. *aksaá* + *bachéé* 'man' → *aksaa-wachéé* 'father'
- d. i. *daxpitchée* 'bear'
 ii. *daxpitchéé* + *úuxa* 'deer' → *daxpitchee-úuxe* 'pig'
- The punctual aspectual marker *áhi* overrides the regular word accent. *Áhi* is always accented, even in cases where the rules predict that the first morpheme should bear the accent:

- (28) a. *áakinnee* 'ride' + *áhi*
 → *aakinnaáhi* 'ride quickly'
 b. *dútchi* 'grab' + *áhi*
 → *duttée* 'grab quickly'⁶

- The exclamative sentence-final marker *wik* bears an accent in addition to the accent of the stem with which it combines:

- (29) a. *baatcháachi* 'great' + *wik* → *baatcháachi-wik* 'it's really great!'
 b. *dalóo* 'you come' + *wik* → *dalóo-wik* 'you've come!'

Vowel morae that occur between the first accent and *wik* are low in pitch.

- There are a number of instances in my data where the rules would predict that the accent should fall on the second of two morphemes; yet the accent is on the first:

- (30) a. *baaluushi* 'eat' + *koowí* 'finished' + *ee* CAUS + *ák* SS
 → *baaluúshkoowiiak* 'she finished eating' (**baaluush-koow-ii-ák*)
 b. *daasá* 'heart' + *báhta* 'fragile' → *daás-bahta* 'quick-tempered'
 (**daas-báhta*)
 c. *baapá* 'day' + *itchi* 'good' → *baáp-itchi* 'good day' (**baap-itchi*)
 d. *ishtá* 'eye' + *itchi* 'good' → *isht-itchi* 'good eyesight' (**isht-itchi*)
 e. *duushi* 'eat' + *isítche* 'like' → *duúsh-isítche* 'likes to eat'

In (31) there is a lexical contrast between one form with accent on the first morpheme, and another with accent on the second:

- (31) a. *daas-kxawii* 'be angry'
 b. *daás-kxawii* 'be sad'

2.5. Phonological and morphophonemic processes

2.5.1. Short vowel deletion

Stem-final short vowels are deleted at a morpheme boundary, unless a three-consonant cluster (as in (32c)) or a nasal plus voiceless obstruent

⁶ When suffixed to stems ending in a short vowel, the form of the punctual is *ée*.

cluster (as in (32d)) would result. This process applies only within words across a morpheme boundary, not between words.

- (32) a. *dáaka* 'child' + *bacheé* 'man' → *dáak-bachee* 'son'
 b. *úuxa* 'deer' + *dáaka* → *úux-daaka* 'fawn'
 c. *ishta* 'eye' + *kisshi* 'imitation' → *ishta-kisshi* 'eyeglasses' (**isht-kisshi*)
 d. *kala* 'already' + *koolúu* 'be there' → *kala-koolúu* 'they are already there' (**kan-koolúu*)

There are two exceptions to short vowel deletion. First, stem-final vowels do not delete before the coordinate NP conjunction *dak*:

- (33) a. *iiká-lak* *ichuuká-lak*
 older.brother-and younger.brother-and
 'his older and younger brothers'
 b. **iik-dak ichuúk-dak*

Second, the sentence-final evidential suffixes fail to trigger final short vowel deletion:

- (34) a. i. *kootá-wis* 'it's probably like that'
 ii. **koot-bis*
 b. i. *duushi-sho* 'he must have eaten it'
 ii. **duush-shó*

2.5.2. Nasal assimilation

The nasal *n* assimilates to a following *m* in a cluster; *nm* clusters are prohibited. This rule applies after stem-final short vowel deletion.

- (35) a. *koolá* 'be there' + *baa* 1A.CAUS → *koóm-maa* (**koón-maa*)
 b. *ala* REL + *bilaxpáake* 'live' → *am-milaxpáaka* 'life'
 (**an-milaxpáaka*)

2.5.3. Sibilant assimilation

The alveolar sibilants *s* and *ss* are realized as [š] at a morpheme boundary before all consonants except *x* and *s*.

- (36) a. *bas* 1POS + *iilaalee* → [bas-iilaalee] 'my car'
 b. *bas* 1POS + *bilaxpáake* → [baš-bilaxpáake] 'my people'

- (37) a. *kuss* GOAL + *ikaa* 'see' → [kuss-*l*kaa] 'look toward'
 b. *kuss* GOAL + *dée* 'go' → [kuʃ-*d*ée] 'go toward'
- (38) a. *iisá* 'face' + *dúupta* 'both' + *ssaa* GOAL → [iis-*d*úupta-*ss*aa] 'faces facing both ways'
 b. *iisá* 'face' + *xii* 'move' → [iis-*x*ii] 'move forward'
- (39) a. *is* 3POS + *sáaka* 'frog' → [is-*s*áaka] 'his frog'

Underlying *sh* is realized as [s] before *s*:

- (40) *daláshe* 'your name' + *saakio?* 'what do they say?'
 → [dalás-*s*aakio] 'what is your name?'

2.5.4. Vowel neutralization

In word-final position within a phrase, stem-final short vowels *i*, *a*, and *u* are neutralized to the corresponding mid nonround or round vowel: *i* and *a* become *e*, and *u* becomes *o*. When *e* and *o* are utterance-final, they are lowered and laxed to [æ] (nonrounded) and [ɔ] (rounded), respectively.

- (41) a. *chiaxxú* 'five' (stem)
 b. *chiaxxó* 'five' (word-final)
 c. *chiaxxó* 'five' (utterance-final)
- (42) a. *bili* 'water' (stem)
 b. *bilé* 'water' (word-final)
 c. *bilé* 'water' (utterance-final)
- (43) a. *awá* 'earth' (stem)
 b. *awé* 'earth' (word-final)
 c. *awé* 'earth' (utterance-final)

This rule also applies to noun and verb stems ending in *aa*, as in (44)–(45), but not to other stems in *aa*, which do not undergo neutralization to a mid vowel, as in (46). In other words, the rule is sensitive to the lexical category of the stem.⁷ These changes are discussed further in §2.5.12.

- (44) a. *báalaa* 'winter' (stem)
 b. *báalee* [báalee] (word-final)

⁷ Vocative noun stems do not generally undergo neutralization and laxing: e.g., *ihkáa* 'mother!' and *biikáa* 'brother-in-law!'

- c. *báalee* [báalæ:] (utterance final)
- (45) a. *isáa* 'big' (stem)
 b. *isée* [isé:] (word-final)
 c. *isée* [isæ:] (utterance-final)
- (46) a. *húu* 'come' + *laa* SS → *húu-laa* (all contexts)
 b. *hawáttaa* 'one time' (adverb; all contexts)
 c. *aaláa* 'perhaps' (adverb; all contexts)

It is quite common for *i*, *e*, and *ee* to be lowered and laxed to [æ] before the interrogative glottal stop:

- (47) a. *dilúichi* 'you take' + ? INTERR → [dilúççæ?]
 b. *élahche* 'you know' + ? INTERR → [élahçæ?]
 c. *dalée* 'you go' + ? INTERR → [dalæç?]

2.5.5. Identical vowel reduction

With suffixes beginning with *a*, sequences of three or four identical vowel morae are reduced to two. Thus in (48) the sequences *aa-a* and *aa-aa* are reduced to *aa*.⁸

- (48) a. *íkaa* 'see' + *ák* SS → *íkaak*
 b. *íkaa* + *aahi* DISTR → *íkaahi*
 c. *íkaa* + *áhi* PUNCT → *íkaáhi*
 d. *íkaa* + *aala* PL + *h* IMPER → *íkaalah*

This rule does not apply to compounds or to prefixes, as exemplified in (49):

- (49) a. *biláa* 'fire' + *áapchi* 'light' → *biláa-aapchi*
 b. *baa* INDEF + *apá* 'nose' + *háchka* 'long' → *baa-ap-háchka* 'elephant'
 c. *baa-áakii* 'vision, mirage'

2.5.6. Long vowel reduction before *h*

Long vowels shorten before *h* in a syllable coda. Morphemes beginning with a word-final or preconsonantal *h* that trigger shortening in a pre-

⁸ In the morphemic analyses in this volume I often add the missing segments in parentheses in order to make clear the composition of the form, as in (i).

- (i) *dúusaa-(aa)la-h*
 put.down-PL-IMPER
 'put it down!'

ceding morpheme include indirect causative *hche* and imperative *h*, as illustrated in (50):

- (50) a. *dée* 'go' + *hche* CAUS → *déehche* [déhče] 'send'
 b. *dútchi* 'get' + *ssaa* NEG + *h* IMPER → *dútchissaa* [dúččissah] 'don't take it'

2.5.7. Final schwa deletion

The final schwa of a diphthong is deleted before suffixes beginning with *a* and before the plural (51a)–(51c); before other vowels, the schwa is retained (51d):

- (51) a. *óochia* 'stop' + *aahi* DISTR → *óochi-aahi*
 b. *iluxxúa* 'lie down' + *ak* SS → *iluxxú-ak*
 c. *dúuchilua* 'drag' + PL → *dúuchilu-o*
 d. *dia* 'do' + *immaachi* 'will' (future) → *día-immaachi*

2.5.8. Palatal-dental alternation

Stem-final *ch* and *t* are in complementary distribution, with *t* occurring before *a*-initial suffixes and plural *uu*, and *ch* elsewhere. The same alternation is found with *sh* and *s*. This alternation applies to geminate *tch* [čč] and *ssh* [šš] as well: *tt* and *ss* occur before *a*-initial suffixes and *uu*, and *tch* and *ssh* are found elsewhere.

- (52) a. *achi* 'join' + *uu* PL → *at-úu*
 b. *dútchi* 'grab' + *uu* PL → *dútt-uu*
 c. *aliishi* 'hungry' + *uu* PL → *aliis-uu*
 d. *ichisshi* 'love' + *uu* PL → *ichiss-uu*
 e. *awáachi* 'sit' + *ak* SS → *awáat-ak*
 f. *itchi* 'good' + *ak* SS → *itt-ak*
 g. *dúushii* 'put down' + *aahi* DISTR → *dúus-aahi*
 h. *dúuxshi* 'pull apart' + *aahi* DISTR → *dúuxs-aahi*

The *ch* and *sh* alternants occur before nonlow vowels, and *t* and *s* before low vowels. There are, however, a few exceptions to this complementary distribution, so that it is not possible to consider *ch* and *t* and *sh* and *s* as allophones (see §2.6.2 below).

The *t* alternant occurs before a labial or alveolar obstruent:

- (53) a. *bach-ichissuuk* 'they love each other'
 b. *bat-baluúok* 'they are fighting each other'
 c. *bat-dúupiok* 'they don't like each other'
 d. *úuchi* 'dry'

- e. *úut-baa* 'I dry'
 f. *bach-kuss-kiliixpi* 'sticking to each other'⁹

There are several reasons for considering *ch* and *sh* to be the more basic allomorphs. *Ch* and *sh* are the alternants that occur in the stem forms, and *t* and *s* are the alternants that occur when a suffix is added to the stem. Moreover, considering *t* and *s* as basic would result in a potential loss of information—if *t* were considered basic, it would be impossible to predict, e.g., whether the stem of *atúu* should be *achi* or **atá*. It is the *ch* and *sh* alternants that will need to be found in the lexicon.

2.5.9. Palatal-velar alternation

There is also an unproductive, lexically conditioned *ch* → *k* alternation where *k* occasionally surfaces before the plural and before suffixes beginning with *a*, instead of the expected *t*:

- (54) a. *éhche* 'know' + *uu* PL → *éhk-uu*
 b. *dússhichi* 'touch' + *áhi* PUNCT → *dússhikh-ée* 'touch quickly'
 c. *xachii* 'move' + *a* CONT + *dawi* 'continue in motion'
 → *xakáa-lawi* 'move along'

This alternation is the result of a historical sound change whereby *k* became *ch* before a nonlow vowel. For example, the Hidatsa cognate of *xachii* is *xakáa*.¹⁰

2.5.10. Stem ablaut

There is a lexically conditioned alternation that affects stem-final long vowels that I term "stem ablaut". This alternation is triggered by the plural morpheme, the imperative, and *a*-initial suffixes. Since the alternation is lexically conditioned—there are a number of stems ending in long vowels that do not undergo ablaut—the stems that do ablaut must be marked as such in the lexicon.¹¹

⁹ The *ssk* sequence represents an apparent violation of the CCC constraint. I would suggest that there is a minor rule whereby *ss* → *s / __C*.

¹⁰ According to G. Hubert Matthews (p.c. 1995) these alternations involve dialectal variation: in Pryor the plural of *dússhichi* is *dússhikkuu*, while in Crow Agency it is *dússhihtuu*.

¹¹ The term "ablaut" is used in the literature to describe similar phenomena in other Siouan languages. Shaw (1980) extensively discusses ablaut in Dakotan dialects; see Quintero (2004: 54–55) for an alternative account for Osage.

There are three types of alternations: *ii* → *aa*, *ee* → *ii*, and *ee* → *aa*.

2.5.10.1. *ii* → *aa* ablaut

The following are examples of the *ii* → *aa* alternation:¹²

- (55) *dáschii* 'chew' + PL → *dástaa-u*
bítchii 'knife' + PL → *bíttaa-u*
óoshii 'dip' + *ak* SS → *óosaa-(a)k*
chiwákii 'pray' + *h* IMPER → *chiwákáa-h*

Note that ablaut triggers the *ch* → *t* and *sh* → *s* alternations discussed in §2.5.8.

Examples of stems that do not ablaut are given in (56):

- (56) *chii* 'pack on back' + PL → *chii-o*
dii 'shoot at' + *áhi* PUNCT → *dii-áhi*
isshii 'drink' + *ak* SS → *isshii-ák*

2.5.10.2. *ee* → *ii* ablaut

In the second variety of ablaut, *ee* → *ii*. This alternation is limited to verbs derived with the direct causative *ee* and three other verbs, *sheé* 'say', *dappeé* 'kill', and *alapeé* 'kick' (see §6.3.2.4 for causative formation):

- (57) *sheé* 'say' + PL → *shii-o*
dappeé 'kill' + *áhi* PUNCT → *dappiiáhi*
iassee 'watch' + *ak* SS → *iasiiak*
alapeé 'kick' + *ah* IMPER → *alapiiah*

2.5.10.3. *ee* → *aa* ablaut

The third type of ablaut, *ee* → *aa*, has two variants. Some verbs of this class form their plural with *uu*, deleting the stem-final vowel before it as if that vowel were short, as illustrated in (58):

- (58) a. *áakinnee* 'ride' + PL → *áakinnuu*
 + *áhi* PUNCT → *aakinnaáhi*
 b. *éhche* 'know' + PL → *éhkuu*
 + *ak* SS → *éhkaak*
 c. *kalée* 'vomit' + PL → *kalíuu*
 + *h* IMPER → *kaláah*

¹² Almost all stems that undergo ablaut are verb stems; only a handful of noun stems (such as *bítchii* 'knife' in (55)) undergo ablaut.

(It is clear that the stem-final vowel of verbs in this class is long—note, e.g., the falling accent in *kalée*—even though it unexpectedly deletes before plural *uu*. See also §2.6.1.)

The following are examples of stems that undergo *ee* → *aa* ablaut before the plural as well:

- (59) a. *chiweé* 'tell' + PL → *chiwaáú*
 + *ak* SS → *chiwaák*
- b. *dée* 'go' + PL → *dáau*
 + *áhi* PUNCT → *daáhi*
- c. *kuleé* 'keep' + PL → *kulaáú*
 + *h* IMPER → *kulaáh*

The following are examples of stems ending in *ee* that do not ablaut:¹³

- (60) *chichée* 'resemble' + PL → *chichéeo*
tatée 'capable' + PL → *tatéeo*
dúhpapee 'frightened' + *ak* SS → *dúhpapeeak*
isakkupée 'sneaky' + *ak* SS → *isakkupéeak*

2.5.11. Low vowel ablaut

Stem-final *a* ablauts to *i* before the modals *immaachi* 'will', *ishdaachi* 'should', and *ih* 'may, might', and before the habitual suffix *i*:

- (61) a. *hawá* 'some' + *immaachi* 'will' → *hawí-immaachi*
 b. *hawá* 'some' + *immaachi* 'will' PL → *hawí-ommaachi*
 c. *koota* 'like that' + *ishdaachi* 'should' → *kootí-ishdaachi*
 d. *ilápi* 'fat' + *shta* 'very' + *i* HAB → *ilápishtí-i*

Example (61b), where the form is *hawí* before plural *ommaachi*, provides evidence that this alternation is lexically rather than phonologically conditioned.

2.5.12. Stems and citation forms

Lexical noun and verb stems occur in two forms: the **stem**, a bound form, and the **citation form**. The term "citation form" is used for the free, independent word form, since it is the form given by Crow speakers in response to a query about a lexical item, e.g., "What's the

¹³ All the examples in my data of nonablauting *ee*-stems are stative verbs, while all examples of ablauting *ee*-stems are active.

word for X?" The stem serves as the base to which other stems or suffixes are added, while the citation form occurs when the stem is word-final with no further suffixation. Since verbs seldom occur without some sort of suffix, citation forms of verbs are relatively uncommon.

The stem, as the name implies, is more basic, since the citation form can be derived from the stem by rule, while the converse is not true. All lexical noun and verb stems in Crow end in a vowel, and the citation form is derived from the stem by modifications to this vowel, as shown in table 2.6. Examples are given in table 2.7.¹⁴

TABLE 2.6. STEMS AND CITATION FORMS

STEM	CITATION FORM	STEM	CITATION FORM
<i>i</i>	<i>e</i>	<i>ii</i>	<i>iiia</i>
<i>e</i>	<i>e</i>	<i>ee</i>	<i>ee</i>
<i>a</i>	<i>e</i>	<i>aa</i>	<i>ee</i>
<i>o</i>	<i>o</i>	<i>oo</i>	<i>oo</i>
<i>u</i>	<i>o</i>	<i>uu</i>	<i>uua</i>
<i>ia</i>	<i>ia</i>	<i>ua</i>	<i>ua</i>

TABLE 2.7. EXAMPLES OF STEM AND CITATION FORMS

STEM FORM	CITATION FORM	GLOSS
<i>áachi</i>	<i>áache</i>	'breast'
<i>éhche</i>	<i>éhche</i>	'know'
<i>apá</i>	<i>apé</i>	'nose'
<i>dáaxo</i>	<i>dáaxo</i>	'lung'
<i>chiaxxú</i>	<i>chiaxxó</i>	'five'
<i>bítchil</i>	<i>bítchila</i>	'knife'
<i>bacheé</i>	<i>bacheé</i>	'man'
<i>báalaa</i>	<i>báalee</i>	'winter'
<i>akbinnawóo</i>	<i>akbinnawóo</i>	'scholar'
<i>awuú</i>	<i>awuuá</i>	'inside'
<i>bía</i>	<i>bía</i>	'woman'
<i>buá</i>	<i>buá</i>	'fish'

¹⁴ Although I conclude in §2.6.1 that mid vowels (*e* and *o*) are phonemically long, short *e* and *o* are included in tables 2.6 and 2.7 because these vowels are often written as short in the current orthography.

The citation form of stems ending in a short vowel involves a neutralization of vowel height, while the front/back contrast is preserved. When the stem ends in a long high vowel (*ii* or *uu*), the citation form adds a schwa off-glide. When the stem ends in a mid vowel or a diphthong, the citation form is identical to the stem. Recall that *iaa* and *uaa* are pronounced identically to *ia* and *ua* (see §2.1, before table 2.2).

When words ending in *e* and *o* are utterance-final or spoken in isolation, the final *e* and *o* are lowered and laxed to [æ] and [ɔ] respectively (see §2.5.4).

While it is generally true that no nouns or verbs have citation forms that end in a high vowel, there are exceptions. Proper names may end in a high vowel, e.g., *Déaxkaashdaawii* 'Three Eagles', and the plurals of stems ending in *aa* and *oo* have a final *u*.

In both derivation and inflection it is the stems that combine rather than the citation forms, as illustrated in (62):

- (62) *bili-chikúa* 'soda water, pop' < *bili* 'water' + *chikúa* 'sweet' (**bile-chikua*)

The citation form of *bili* is *bilé*, and it is the stem *bili* that combines with *chikúa*, not *bilé*.

There are, however, a few suffixes that combine with citation forms, (table 2.8; examples in table 2.9). These suffixes also trigger lengthening of a stem-final short vowel (*awéén* and *áakeetaa* in table 2.9) and a shift in accent from high to falling (*bachéesh* and *awúuan*).¹⁵

TABLE 2.8. SUFFIXES THAT COMBINE WITH CITATION FORMS

FORM	MEANING	CATEGORY
<i>sh</i>	definite	determiner
<i>m</i>	indefinite nonspecific	determiner
<i>n</i>	locative	postposition
<i>taa</i>	path	postposition
<i>ta</i>	'seem, resemble'	verbal suffix
<i>ht(aa)</i>	'even'	nominal suffix

The indefinite nonspecific determiner *m* is identical in form to the indefinite specific determiner, also *m*. The only difference between the

¹⁵ As discussed in §4.1, the deictic stems occur in the citation form before certain other suffixes.

two is that the specific determiner combines with the stem, while the nonspecific determiner combines with the citation form.

TABLE 2.9. EXAMPLES OF SUFFIXES COMBINING WITH CITATION FORMS

STEM	SUFFIX	SUFFIXED FORM
<i>bachéé</i> 'man'	+ <i>sh</i>	<i>bachéesh</i> 'the man'
<i>bili</i> 'water'	+ <i>sh</i>	<i>biléesh</i> 'the water'
<i>iichiili</i> 'horse'	+ <i>m</i>	<i>iichiileem</i> 'a horse'
<i>úuxa</i> 'deer'	+ <i>m</i>	<i>úuxeem</i> 'a deer'
<i>awá</i> 'earth'	+ <i>n</i>	<i>awéen</i> 'on the ground'
<i>awuú</i> 'inside'	+ <i>n</i>	<i>awúuan</i> 'inside'
<i>áaka</i> 'on top of'	+ <i>taa</i>	<i>áakeetaa</i> 'along the top'
<i>biaxsáa</i> 'under'	+ <i>taa</i>	<i>biaxséetaa</i> 'along the bottom'
<i>balá</i> 'wood'	+ <i>htaa</i>	<i>balée-htaa</i> 'even wood'

2.5.13. Plural formation

Plural formation is identical for nouns and verbs. The shape of the plural morpheme is determined by the final vowel of the stem, as is shown in table 2.10. Examples of plural nouns are given in table 2.11, and plural verbs in table 2.12.

TABLE 2.10. PLURAL FORMATION

STEM-FINAL VOWEL	CITATION FORM	PLURAL STEM	PLURAL CITATION FORM
<i>i</i>	<i>e</i>	<i>uu</i>	<i>uua</i>
<i>a</i>	<i>e</i>	<i>uu</i>	<i>uua</i>
<i>u</i>	<i>o</i>	<i>uu</i>	<i>uua</i>
<i>ii</i>	<i>iia</i>	<i>iio</i>	<i>iio</i>
<i>ii</i> (<i>ii</i> to <i>aa</i> ablaut)	<i>iia</i>	<i>aau</i>	<i>aau</i>
<i>ee, e</i>	<i>ee, e</i>	<i>eeo</i>	<i>eeo</i>
<i>ee</i> (<i>ee</i> to <i>aa</i> ablaut)	<i>ee</i>	<i>aau</i>	<i>aau</i>
<i>ee</i> (<i>ee</i> to <i>aa</i> ablaut; pl. <i>uu</i>)	<i>ee</i>	<i>uu</i>	<i>uua</i>
<i>ee</i> (<i>ee</i> to <i>ii</i> ablaut)	<i>ee</i>	<i>iio</i>	<i>iio</i>
<i>aa</i>	<i>ee</i>	<i>aau</i>	<i>aau</i>
<i>oo, o</i>	<i>oo, o</i>	<i>oou, ou</i>	<i>oou, ou</i>
<i>uu</i>	<i>uua</i>	<i>uuo</i>	<i>uuo</i>
<i>ia</i>	<i>ia</i>	<i>io</i>	<i>io</i>
<i>ua</i>	<i>ua</i>	<i>uo</i>	<i>io</i>

TABLE 2.11. EXAMPLES OF PLURAL NOUNS

STEM	STEM + PLURAL
<i>búupchi</i> 'ball'	<i>búupt-uu</i>
<i>balá</i> 'wood'	<i>bal-úu</i>
<i>baalú</i> 'bead'	<i>baal-úu</i>
<i>ii</i> 'mouth'	<i>ii-o</i>
<i>bítchii</i> 'knife' (<i>ii</i> to <i>aa</i> ablaut)	<i>bíttaa-u</i>
<i>bacheé</i> 'man'	<i>bacheé-o</i>
<i>alaxée</i> 'hip' (<i>ee</i> to <i>aa</i> ablaut)	<i>alaxáa-u</i>
<i>bíilaa</i> 'goose'	<i>bíilaa-u</i>
<i>akbinnawóo</i> 'scientist'	<i>akbinnawóo-u</i>
<i>aashúu</i> 'his head'	<i>aashúu-o</i>
<i>billá</i> 'door'	<i>billí-o</i>
<i>axúa</i> 'her body'	<i>axú-o</i>

NOTE: *Bítchii* and *alaxée* are examples of ablauting noun stems, which are relatively rare.

TABLE 2.12. EXAMPLES OF PLURAL VERBS

STEM	STEM + PLURAL
<i>áachiwi</i> 'climb'	<i>áachiw-uu</i>
<i>apúsa</i> 'cut through'	<i>apús-uu</i>
<i>aláxxu</i> 'fried'	<i>aláxx-uu</i>
<i>chii</i> 'pack on back'	<i>chii-o</i>
<i>páapii</i> 'stir' (<i>ii</i> to <i>aa</i> ablaut)	<i>páapaa-u</i>
<i>tawée</i> 'hot'	<i>tawée-o</i>
<i>chiléé</i> 'get up' (<i>ee</i> to <i>aa</i> ablaut)	<i>chilaa-u</i>
<i>appée</i> 'swallow' (<i>ee</i> to <i>aa</i> ablaut; pl. <i>uu</i>)	<i>app-úu</i>
<i>dappée</i> 'kill' (<i>ee</i> to <i>ii</i> ablaut)	<i>dappii-o</i>
<i>dúuxaa</i> 'spread out'	<i>dúuxaa-u</i>
<i>kuluú</i> 'piled up'	<i>kuluú-o</i>
<i>ía</i> 'wear over the shoulders'	<i>i-o</i>
<i>dúa</i> 'lift up'	<i>dú-o</i>

Stems that end in a short vowel simply delete that vowel and add *uu* for the plural. For stems ending in *ii*, *ee*, *uu*, *ia*, and *ua*, the plural form adds *o* to the stem. For stems ending in *aa* and *oo*, the plural adds *u* to the stem. Certain stems and suffixes mark the plural by *lu* instead, as discussed immediately below.

Plural *u* for *oo*-final stems and plural *o* for *uu*-stems appears to be a matter of dissimilation. With stems ending in other long vowels the

plural morpheme varies phonetically between *o* and *u*. (That is, writing *o* vs. *u* for the plural is simply a matter of orthographic convention, except for *oo*- and *uu*-stems.)

Ablauting stems ending in *ii* or *ee* change the stem-final long vowel to *aa* before the plural marker is added, with the exception of three *ee*-stems that ablaut to *ii*, e.g., *dappéé* in table 2.12. As discussed in §2.5.10, there are also ablauting *ee*-stems that form the plural in *uu*; e.g., the plural of *appée* is *appúu*, not **appáau*. These stems do ablaut before suffixes beginning with *a* (see §2.6.1 for further discussion).

In addition to regular plural formation with *uu*, *o*, or *u*, there are several special pluralizing morphemes. The modal verbs *ii* 'want to' and *ishdaachi* 'should' form their plural with *lu* (see §6.3.2.2); so do the habitual suffix *i* (§5.6.11) and the independent emphatic and contrastive pronouns *ih/kuh*, *ik/kuk*, *ihkan/kuhkan*, *iichiik/koochiik*, and *ittáchi/kuttáchi* (§3.5.2). Vocatives form their plural with *n* (§3.4). There is also a lexical pluralizing suffix *ammishi* (*ala* REL + *bishi* 'exist') that occurs with nouns referring to humans (§10.6). Finally, occasional suppletive plural forms of verbs will be noted at appropriate points in chapter 6.

2.6. Phonological problems

There are several problems in the analysis of Crow phonology that deserve a more expanded treatment: the phonemic status of *e* and *o*; the phonemic status of *ch* and *sh*; and the nature of the phonemes underlying the allophones *b,m,w* and *d,n,l*. This section considers each of these problems in turn.

2.6.1. Phonemic status of short mid vowels

My analysis departs from previous treatments of Crow (Kaschube 1967; Gordon 1972) in claiming that length is nondistinctive for the mid vowels: i.e., short *e* and *o* are not distinct phonemes, but merely allophones of *ee* and *oo*. The following are my reasons for making this claim.

First, tokens of unambiguously short nonfinal *e* and *o* in nonderived stems are extremely rare: there are no minimal or near-minimal pairs where short and long *e* and *o* contrast. The only examples of stem-internal short *e* and *o* in my data are *chékkee* 'click', *éche* 'know', *hóhpi* 'loose', *óhchipi* 'dive', *óhkapi* 'basin', *póhpummi* 'short', *póssee* 'pop, crackle,' and *póttee* 'plop'. These examples can all be accounted for by a rule that shortens *ee* and *oo* before *h* or in a closed syllable

within morphemes. A rule shortening vowels before *h* is independently motivated (see §2.5.6).

As far as stem-final *e* and *o* are concerned, let us first look at the facts of plural formation. To my knowledge all stems with orthographic final *o* have the plural form *ou*, the pattern for long vowels, rather than *uu*, the expected pattern after short vowels, suggesting that all stems with final *o* actually end in a long vowel. (We are concerned with a very small class of stems, probably less than a dozen.)

A number of *e*-final stems have plurals in *uu*, suggesting that they have stem-final short *e*. However, these are all ablauting stems that pattern like long vowels in combining with suffixes with initial *a*:

- (63) a. *he* 'say' + *ak* SS → *haa-(a)k* (pl. *huu*)
 b. *kalátche* 'believe' + *ak* → *kaláttaa-(a)k* (pl. *kaláttuu*)
 c. *áakinne* 'ride' + *ak* → *áakinnaa-(a)k* (pl. *áakinnuu*)

Moreover, there are other *e*-final stems with falling accent—clear evidence of a long vowel—that also form their plurals in *uu*:

- (64) a. *kalée* 'vomit', pl. *kalúu*
 b. *kulée* 'chase', pl. *kulúu*
 c. *axshée* 'beat', pl. *axsúu*
 d. *atchée* 'pitch tent', pl. *attúu*
 e. *chikitchée* 'respect', pl. *chikittúu*

There are also several stems in *aa* that form the plural in *uu* (e.g., *ikaa* 'see', pl. *ikuu*); thus the fact that a stem forms its plural in *uu* cannot be taken as conclusive evidence that the stem-final vowel is short (cf. §2.5.10.3).

Other *e*-final stems exhibit either *ee* to *ii* (65) or *ee* to *aa* (66) ablaut before the plural morpheme:

- (65) a. *alapeé* 'kick', pl. *alapii-o*
 b. *sheé* 'say', pl. *shii-o*
- (66) a. *chiweé* 'tell', pl. *chiwaá-u*
 b. *dakbilée* 'knock down', pl. *dakbiláa-u*

Since the *e*-stems that form their plurals in *uu* behave in other respects like stems with final long vowels in undergoing ablaut, and since there is no other solid phonological evidence of a contrast between long and short *e*, I conclude that short *e* is not phonemic in Crow. Likewise, since the few stems that appear to end in short *o* form their plurals in the same way as stems ending in long *oo*, I conclude also that short *o* is not phonemic.

Since there is no phonemic contrast between long and short mid vowels, it would not be surprising to find considerable variation in length in the phonetic realization of *ee* and *oo*, and this does, in fact, appear to be the case. Often *ee* and *oo* are realized phonetically as short vowels, especially in word-final position.

If this analysis is correct, the current Crow orthography is not consistent in writing *ee* and *oo*, since in many words they are written with short vowel symbols. Rather than attempting to revise the orthography, I have chosen to continue writing short *e* and *o* as I find them in the sources, e.g., *éhche* 'know', *he* 'say', *hche* 'causative', etc.

2.6.2. Phonemic status of *ch* and *sh*

The distribution of *ch* and *t* on the one hand, and *sh* and *s* on the other, leads one to suspect that they are actually allophones of single phonemes; in fact, such an analysis was proposed by Martin (1989). Within morphemes the general distributional pattern is as follows: *t* and *s* occur before low vowels, and *ch* and *sh* occur before nonlow vowels, as illustrated in (67)–(68):

(67) a. *ataali* 'steal'
 taláa 'grease, oil'

b. *sáashii* 'shining'
 sapii 'soft'

(68) a. *chía* 'white'
 chuá 'narrow'

b. *shíipa* 'intestines'
 shoopá 'four'

The claim that these sounds are in complementary distribution is supported by the alternations discussed in §2.5.8, where *t* and *s* are the alternants that occur before suffixes beginning with *a*. The fact that this alternation also occurs before plural *u*, however, is evidence that it is not a purely allophonic variation.

Moreover, there are a few stems where *t* and *s* appear before nonlow vowels (69a–b), and *ch* appears before a low vowel (69c):

(69) a. *téxia* 'near-sighted'
 teéluuwili 'dizzy'

b. *asii* 'emerge'
 suú 'thunder'

c. *baatcháachi* 'outstanding'

I have found no examples of *sh* occurring before *a* morpheme-internally.

There are also a few minimal or near-minimal pairs that lend support to the claim that there is a phonemic opposition, at least with regard to *sh* and *s*:

- (70) a. *aasúu* 'his house'
 aashúu 'his head'
- b. *shuá* 'spit'
 suú 'thunder'

Also, it is easy to find examples of *ch* and *sh* before low vowels at morpheme boundaries:

- (71) a. *bach-aw-áchiss-uu-k*
 RECIP-1A-love-PL-DECL
 'we love each other'
- b. *ash-ala-kool-úua*
 lodge-REL-be.at-PL
 'where their lodge is, their location'

Likewise, *t* and *s* may occur before nonlow vowels at morpheme boundaries:

- (72) a. *baat-ii-wil-issii-o*
 eating.utensil-INSTR-water-drink-PL
 'implement for drinking water, cup'
- b. *bas-iilaalee*
 1POS-car
 'my car'
- c. *kalaaxti-i-k*
 not.know-HAB-DECL
 'he never knows it'

In (72c) the stem final *a* of *kalaaxtá* becomes *i* before the habitual suffix *i* according to §2.5.11, resulting in an occurrence of *t* before a nonlow vowel.

The evidence suggests that at some point in the history of Crow both *ch* and *t* and *sh* and *s* were allophones in complementary distribution. However, there is enough evidence to justify treating them as distinct phonemes in a synchronic analysis.

2.6.3. Phonemes underlying [b m w] and [d n l]

It is clear that *b, m, w* are in complementary distribution, as are *d, n, l*; they are allophones of single phonemes. But it is not immediately evident which of the allophones should be viewed as the underlying phoneme. Kaschube (1967) treats *w* and *r* as the underlying phonemes, while Gordon (1972) and Martin (1989) consider *m* and *n* to be underlying.

On the basis of the distributional facts, I would argue that the underlying phonemes are the nasal allophones. The most restricted distributionally are *w* and *l*, which occur only intervocalically, while the nasal allophones are found word-initially, word-finally, and in clusters with nasals and *h*. Also, the oralization of nasals in an oral environment—i.e., between vowels—would seem to be more phonetically natural than the converse, the nasalization of sonorants word-initially or finally. Moreover, while languages without phonemic nasals are not unknown, they are quite rare cross-linguistically.

2.7. Comparative Crow-Hidatsa phonology

This section will discuss some of the developments that separate Crow and Hidatsa, without attempting a more complete treatment of Crow in relation to Proto-Siouan and the other languages of the family. It is apparent that Hidatsa generally has the more conservative phonology, and that Crow is the innovating language.¹⁶

Hidatsa *c* [ts] corresponds to Crow *t* before *a* and to Crow *ch* elsewhere:

(73)	HIDATSA	CROW
	<i>apíca</i> 'crane'	<i>apíta</i>
	<i>caráa</i> 'grease'	<i>taláa</i>
	<i>macée</i> 'man'	<i>bacheé</i>
	<i>cikúa</i> 'sweet'	<i>chikúa</i>

The change of *ts* to *ch* is a relatively recent development in Crow. In the Jesuit materials (see Boschi 1898) and in Lowie's publications, this phoneme is apparently realized as [ts] rather than [č]. Also, I have detected [ts] rather than [č] in the speech of several elderly Crow men, indicating that the sound change has not yet completely run its course.

¹⁶ The Hidatsa forms in this section are from unpublished notes of A. Wesley Jones (1984, n.d.; the latter were edited by John Boyle). The absence of an accent on a Hidatsa form indicates that the accent was not written in the source. Unless otherwise noted, the Crow gloss is identical to the Hidatsa gloss.

Hidatsa *t* corresponds to Crow *s* before *a* (except after *sh*, where it remains *t*, as in *ishtá*), and to Crow *sh* elsewhere:

(74)	HIDATSA	CROW
	<i>ciita</i> 'tail'	<i>chiisa</i>
	<i>ataali</i> 'go out'	<i>asaali</i>
	<i>ishtá</i> 'eye'	<i>ishtá</i>
	<i>atí</i> 'lodge'	<i>ashi</i>
	<i>tóopa</i> 'four'	<i>shoopá</i>

Hidatsa *sh* corresponds to Crow *s* stem-initially before low vowels, to Crow *s* or *t* elsewhere before low vowels, and to Crow *sh* elsewhere:

(75)	HIDATSA	CROW
	<i>shaaka</i> 'frog'	<i>sáaka</i>
	<i>sháhpua</i> 'seven'	<i>sáhpua</i>
	<i>céesha</i> 'wolf'	<i>cheéta</i>
	<i>awaasha</i> 'beans'	<i>awaasá</i>
	<i>shipisha</i> 'black'	<i>shipita</i>
	<i>shiipa</i> 'intestines'	<i>shiipa</i>

Hidatsa *sh* corresponds to both *t* and *s* before *a*.

Hidatsa *k* corresponds to Crow *ch* before nonlow, nonround vowels, and to Crow *k* elsewhere:

(76)	HIDATSA	CROW
	<i>áki</i> 'join'	<i>achi</i>
	<i>awáaki</i> 'sit'	<i>awáachi</i>
	<i>mihka</i> 'animal'	<i>bihka</i> 'female animal'
	<i>áaka</i> 'above, over'	<i>áaka</i>
	<i>kurée</i> 'chase'	<i>kulée</i>
	<i>kóawi</i> 'finished'	<i>koowi</i>

A number of lexical exceptions to this correspondence in Crow indicate that the sound change has not completely made its way through the lexicon. They include *bakii* 'beg', *dúchkichi* 'wring', *ichkiisa* 'ankle', *kée* 'give away', *chikeé* 'dig', *kisshi* 'sportive', and about a dozen other stems. Further evidence of the incomplete nature of this sound change is found in the irregular *ch* to *k* alternation occasionally found instead of the expected change of *ch* to *t* (see §2.5.9).

The distribution of the allophones of *m* and *n* differ in Crow and Hidatsa. In Hidatsa, *m* and *n* are the ordinary allophones in word-initial position, although word-initial *m* is optionally realized as a voiced bilabial fricative before *i*, and *n* is optionally realized word-initially as *r* (Harris and Voegelin 1939:183). In Hidatsa *m* is realized as *p* word-finally. Although the intervocalic allophone of *n* is commonly written

as *r* in Hidatsa, as opposed to the *l* that is written in the Crow orthography, it appears that in both Crow and Hidatsa this allophone is realized as a dental flap.

(77)	HIDATSA	CROW
	<i>mahú</i> 'bark'	<i>bahú</i>
	<i>náaka</i> 'child'	<i>dáaka</i>
	<i>awakáa</i> 'badger'	<i>awachii</i>
	<i>kiráa</i> 'husband'	<i>chiláa</i>

As a result of vowel syncope, Crow has nasal clusters that are lacking in Hidatsa:

(78)	HIDATSA	CROW
	<i>kiruwi</i> 'count'	<i>chimmí</i>
	<i>páruwi</i> 'short'	<i>pummi</i>
	<i>awaría</i> 'ridge'	<i>amnía</i> 'bank'
	<i>ki-wiri-ki-iri</i> 'come back in'	<i>chi-mmi-chi-ili</i>

Hidatsa *h* is often deleted intervocally in Crow, with subsequent vowel assimilation:

(79)	HIDATSA	CROW
	<i>narahu</i> 'you come'	<i>dalóo</i>
	<i>kirahí</i> 'get up'	<i>chiléé</i>
	<i>tahú</i> 'thunder'	<i>suú</i>
	<i>awahú</i> 'inside'	<i>awuú</i>

In other cognate sets Crow preserves intervocalic *h*:

(80)	HIDATSA	CROW
	<i>ahú</i> 'many'	<i>ahú</i>
	<i>maháa</i> 'spring'	<i>baháa</i>

Many instances of *ia* or *ea* in Crow correspond to *i* or *e* in Hidatsa before the velar fricative.¹⁷

(81)	HIDATSA	CROW
	<i>mixtáa</i> 'under'	<i>biaxsáa</i>
	<i>ixpá</i> 'wing'	<i>iaxpá</i>
	<i>ixpáti</i> 'be full'	<i>iaxpáshi</i>
	<i>néexi</i> 'bright, clear'	<i>déaxi</i>

Crow has inserted an epenthetic glide vowel between the front vowel and the velar.

¹⁷ Actually the development in Crow is *i* > *ia* > *a*, since /ia/ before /x/ is often realized as [a]: e.g., *iaxpá* [axpá] 'wing', *iaxpáshi* [axpáši] 'full', etc.

Cognates in Crow and Hidatsa generally correspond in vowel quality, though there are numerous irregular, unexplained correspondences, as in (82):

(82)	HIDATSA	CROW
	<i>mirá</i> 'wood'	<i>balá</i>
	<i>mashúka</i> 'dog'	<i>bishká</i>
	<i>marúxa</i> 'ice'	<i>bulúxa</i>
	<i>núcka</i> 'twin'	<i>dachká</i>
	<i>hopi</i> 'hole'	<i>hupi</i>

In a number of cognate sets, unstressed vowels in Hidatsa have been lost in Crow, resulting in a cluster where the corresponding Hidatsa form has a *CVC* sequence:

(83)	HIDATSA	CROW
	<i>áapaci</i> 'his voice'	<i>áapchi</i>
	<i>áashuka</i> 'testicles'	<i>áashka</i>
	<i>apishá</i> 'liver'	<i>aptá</i>
	<i>aráaxisha</i> 'not know'	<i>alaaxtá</i>
	<i>íitáki</i> 'rabbit'	<i>iischí</i>
	<i>míriwaari</i> 'I enter'	<i>bimmaali</i>

As is evident from (73)–(83), accent placement corresponds more often than not in Crow and Hidatsa cognates, although there are still examples where the accent differs.

3 Nominal morphology

3.1. Noun derivation

This chapter treats the morphology of nouns and pronouns. Noun formation, both by affixal derivation and by compounding, is treated in the present section. The inflection of nouns for alienable and inalienable possession is treated next (§3.2), followed by sections on proper names and vocatives (§§3.3–3.4). The chapter concludes with a presentation of the various types of independent pronouns (§3.5). Bound pronominal affixes are treated in chapter 6.

Two types of noun stems are found in Crow, basic and derived. There is no need to posit a deeper level “root” in Crow, at least for a synchronic analysis. Basic stems are of one, two, three, or rarely four syllables, and all stems end in a vowel:

(1) One-syllable stems

- áa* ‘that one’ (heard but not seen)
- beé* ‘louse’
- bii* ‘stone, rock’
- bia* ‘woman’
- ii* ‘mouth’
- suú* ‘thunder’

All monosyllabic stems have long vowels or diphthongs.

(2) Two-syllable stems

- áapa* ‘leaf’
- balá* ‘wood’
- bilia* ‘door’
- cheéta* ‘wolf’
- dachká* ‘twin’
- iitchi* ‘cane’

(3) Three-syllable stems

- apáaka* 'mosquito'
biláxa 'drum, bucket'
chiilapi 'bull'
dakáaka 'bird'
póopahla 'owl'
xóóxaashi 'corn'

(4) Stems of four or more syllables

- chiwáwuuli* 'rat'
ditchiláachi 'dangerous'
ilichile 'echo'

Derived noun stems are of two types: those derived by affixation, and those derived by compounding. Both processes are highly productive in Crow: the vast majority of the nouns in the lexicon are derivations formed from a limited number of basic stems. Nevertheless, derived nouns must be listed in the lexicon because of their unpredictable semantics, and in some cases because of unpredictable phonological changes.

3.1.1. Suffixal derivation

We will first consider nouns derived by affixation. There is a small set of suffixes that are employed in nominal derivation. Most of these suffixes also occur in verb derivation, which is discussed in chapter 5.

3.1.1.1. *aachi/lichi* 'approximative'

The form of this suffix is *aachi* following a stem-final short vowel, and *lichi* following a stem-final long vowel. *Aachi* marks resemblance or similarity; it may be glossed 'kind of, sort of, like'. With temporal expressions it means 'around the time of'. Examples of derived nouns with *aachi* are given in (5), and a sentential example in (6):

- (5) *shiip-aachi* 'banana, hot dog' < *shiipi* 'intestines'
buluhp-aachi 'pear' < *buluhpá* 'wild plum'
biláannee-lichi 'heater' < *biláannee* 'stove'
awus-aachi 'cellar' < *awushi* 'cave, den'
- (6) *hinne awus-aachée-sh bilia dúsh-t-ak ammuú-ss-dee-k*
 this cellar-APPROX-DET door open-SS down-GOAL-go-DECL
 'he opened the door of this cellar [a cavelike place] and went down'
 (Sees 12)

3.1.1.2. *kaáshi* 'real, true; very'

Kaáshi can be glossed 'real' or 'true'; it is also an augmentative translated 'very'. Lexical examples are given in (7), and a sentence with *kaáshi* in (8):

- (7) *baláxii-kaashi* 'bow for hunting' < *baláxii* 'weapon, gun'
iichiili-kaashi 'elk' < *iichiili* 'horse'
xakúp-kaashi 'canyon' < *xakúpa* 'ravine'
alúut-kaashi 'arrow' (for use with bow) < *alúuta* 'throwing arrow'
- (8) *hinne iichiil-itchi-kaashi-m iiwaa-aw-iaschim-mia-waa-k*
 this horse-good-AUG-DET STEM-1A-sell-want-1A-DECL
 'I want to sell this very good horse' (Sees 4)

3.1.1.3. *káata* 'diminutive'

The diminutive suffix can be glossed 'small, little' or 'dear'. In some derivations it clearly adds a diminutive sense; in others it simply adds a note of affection or endearment to the semantics of the noun.

- (9) *áash-kaata* 'creek, stream' < *áashi* 'river'
úux-daak-kaata 'fawn' < *úuxa* 'deer' + *dáaka* 'offspring'
ich-káata 'little toe' < *ichi* 'foot'

Examples of sentential usage are given in (10) and (11):

- (10) *shikáak-kaata-m kukaá iiwaannia-k(is)s-uu-t*
 boy-DIMIN-DET from play-SPORT-PL-TEMP
is-bassáa-lit-uua koó-i-k
 3POS-first-APPROX-PL COP-HAB-DECL
 'ever since he was a young boy, when they would play, he was their leader' (AB 53)
- (11) *d-iikukk-aala-h Apsáalook-kaat-uu*
 2A-listen-PL-IMPER Crow-DIMIN-PL
 'listen, dear Crows' (Baapiiháake 1)

3.1.1.4. *kíssshi* 'sportive, imitative'

The suffix *kíssshi* indicates resemblance or imitation. Examples are given in (12), and sample sentences in (13) and (14):

- (12) *áap-kíssshi* 'necktie' < *áapi* 'neck'
ishta-kíssshi 'eyeglasses' < *ishtá* 'eye'
baapáali-kíssshi 'flower' < *baapáali* 'plant'
bia-kíssshi 'female doll' < *bia* 'woman'
- (13) *Emily-sh-dak ischité Andrew-sh-dak bíia*
 E. DET-and her.sister's.husband A.-DET-and snow

aák bilaxpáak-ktsshi-li-o-k
with person-SPORT-make-PL-DECL

'Emily and her sister's husband Andrew are building a snowman'
(Emilysh 10)

- (14) *dáak-kisshe xuáhchee-ktsshi-m óo-kaashee-sh*
child-SPORT skunk-SPORT-DET bring-AUG-DET

hawáko kalaaxtá-m
one.time forget-DS

'one time he forgot his baby skunk doll that he always carried around'
(Hinne Kaal 13)

3.1.1.5. *táa(hi)li* 'real, genuine'

The suffix *táhili* 'real, genuine' is often reduced to *táli*. Examples are given in (15), and its usage in a sentence is illustrated in (16) and (17):

- (15) *huup-táhili* 'his/her moccasins' < *huupá* 'his/her shoes'
ash-táhili 'tipi' < *ashi* 'lodge, dwelling'

- (16) *bachee-isáa dii-wilaxpáak-taahill-m é-wa-hkaa-(a)k*
man-big 2B-person-genuine-COMP STEM-1A-know-SS
'Teacher, we know that you are a sincere person' (Mt 22:16)

- (17) *ikkúhpa-taale-lak is-kakée-lak áakee-n dúushii-m*
3POS.hat-real-and 3POS-coup.stick-and on.top-LOC lay.down-DS
'he laid his warbonnet and coup stick on top of it' (AB 82)

3.1.1.6. *aahi* 'here and there'

The distributive suffix *aahi* occurs most often with verbs, but it is also found occasionally with nouns, as illustrated in (18):

- (18) *áash-am-mishe ala-x(a)kúp-aahi-kaat-bis-aah-i-lua-sh*
river-REL-exist REL-ravine-DISTR-DIMIN-exist-DISTR-HAB-PL-DET
koot-dák koón awáat-ak daat-dak
like.that-DS there sit-SS remain-DS

'the way there are little coulees here and there around rivers, it was like that; he remained sitting there' (Héettaa 7)

3.1.1.7. *ht(aa)* 'even'

The suffix *htaa* or *ht* 'although, even though, even if', which marks concessive subordinate clauses, also appears as a noun suffix translated as 'even'. (In this construction, *ht* occurs more often than *htaa*.)

- (19) *úuxiihchiiwish-daakee-hí* *bii-dá-k(u)-deeta-k*
 goat-kid-even IB-2A-give-not.exist-DECL
 'you haven't given me even a kid goat' (Lk 15:29)

Htaa is one of the rare suffixes that combines with the citation form of the noun.

3.1.2. Prefixal derivation

A large number of derived nouns are lexicalized relative clauses. The following are examples with the different relativizers.

3.1.2.1. *ak* 'agent nominalizer'

As a derivational affix, *ak* derives agentive nouns from active verbs or verbs plus incorporated objects. Examples are given in (20):

- (20) *ak-bish-xáxxi-lia* 'Navaho' < *bishi* 'blanket' + *xáxxi* 'striped' + *día*
 'make' ('one who makes striped blankets')
ak-dúxxii-ikuchki 'pipe holder, war party leader' < *dúxxii* 'war party' +
ikuchki 'plan'
ak-disshí 'dancer' < *disshí* 'dance'
ak-kummi 'singer' < *kummi* 'drum and sing'

3.1.2.2. *ala* 'locative, temporal, or manner nominalizer'

Ala 'where, when, how' derives nouns from verbs or verbs plus incorporated nouns, as illustrated in (21):

- (21) *ala-taláa-iaschiluu* 'gas station' < *taláa* 'gas' + *iaschili* 'buy' + PL
 ('where they buy gas')
al-ihka-luus-úu 'Easter' < *ihká* 'egg' + *duushi* 'eat' + PL ('when they eat
 eggs')
ala-chiwakáa-u 'church' < *chiwakii* + PL ('where they pray')
ala-sáhta 'fork in a river' < *sáhta* 'forked, pronged'

In some examples *ala* follows the noun; these examples are lexicalized relative clauses, and the noun before *ala* typically stands in a subject relation to the verb:

- (22) *baakáat-al-awaachi* 'high chair' < *báakaata* 'child' + *awáachi* 'sit'
aashúu-ala-shooshiwe 'antlers' < *aashúu* 'head' + *shóoshiwe* 'in a row'
chiis-ala-shilia-wishi 'rattlesnake' < *chiisa* 'tail' + *shilia* 'rattle' + *bishi*
 'exist'
aw-ala-shiipi 'rugged country' < *awá* 'land' + *shiipi* 'rough'

3.1.2.3. *baa* 'indefinite nominalizer'

Indefinite *baa* derives nouns from stative verbs, as in (23), from inalienably possessed nouns plus stative verbs, as in (24), from active transitive verbs, as in (25), and from active intransitive verbs, as in (26).

(23) *baa* + stative verb

baa-chikúá 'sugar' < *chikua* 'sweet'

baa-óoshi 'colored plume' < *óoshi* 'cooked, dyed'

baa-apáali 'plant' < *apáli* 'grow'

(24) *baa* + noun + stative verb

baa-áap-hachka 'giraffe' < *áape* 'its neck' + *háchka* 'long'

baa-apáasa-isaá 'lion' < *apáasa* 'upper body' + *isáa* 'large'

(25) *baa* + active transitive verb

baa-lichíit-uu 'boiled meat' < *dichiichi* 'boil' + PL

baa-lúuchis-uu 'tanned hide' < *dúuchishi* 'tan a hide' + PL

(26) *baa* + active intransitive verb

baa-iláa-u 'council, meeting' < *ilii* 'speak' + PL

Baa also combines with nouns, as in (27). In this type of derivation *baa* serves as a depossessivizer: it combines with an inalienably possessed noun to derive a nonpossessed noun (see §3.1.2.5). (*Baa* also acts as a depossessivizer in examples like those in (24) above.)

(27) *baa* + noun

baa-iihulí 'tire, wheel' < *iihulí* 'leg'

baa-issshi 'container, bag, sack' < *issshi* 'outer surface'

Baa may combine with *kuss* to form a postpositional phrase that combines with an active intransitive verb, as in (28).

(28) *baa* + postposition + verb

baa-kuss-chiwakáa-u 'worship' < *kuss* GOAL + *chiwakii* 'pray' + PL

And in (29), *baa* combines with a noun, a postpositional phrase, and a verb.

(29) noun + *baa* + postposition + verb

báachii-waa-kuss-daxt-uu 'Christmas tree' < *báachii* 'pine' + *baa* + *kuss* GOAL + *daxchi* 'tie' + *uu* PL ('the pine tree they tie things to')

3.1.2.4. *ii* 'instrumental nominalizer'

The instrumental postposition *ii* forms nouns from active transitive and intransitive verbs, and from transitive verbs with incorporated nouns.

Examples of instrumentals derived from intransitive verbs are given in (30).

(30) *ii* + active intransitive verb

ii-lil-aat-uu 'walker' < *dili* 'walk' + APPROX + PL

ii-xap-úu 'pajamas, nightgown' < *xapí* 'lie down' + PL

ii-iis-uu 'water bucket' < *iishi* 'draw water' + PL

Instrumental nouns derived from transitive verbs with null objects are given in (31).

(31) *ii* + transitive verb with null object

ii-latchúus-uu 'whip' < *datchúushi* 'whip' + PL

ii-chilakaá 'steering wheel' < *chilakaá* 'drive a vehicle'

ii-chichút-tuu 'lock, keyhole' < *chichúchi* 'closed' + CAUS.PL

Instrumentals derived from transitive verbs plus incorporated nominal objects are given in (32).

(32) *ii* + incorporated object + transitive verb

ii-puuxk-óosaa-u 'drag line for strip mining' < *puuxká* 'dirt' + *óoshii* 'dip' + PL

ii-wilishpit-issii-o 'coffee cup' < *bilishpita* 'coffee' + *issii* 'drink' + PL

ii-axpis-dust-uu 'handkerchief' < *axpisa* 'snot' + *dúshi* 'take out' + PL

Often the object of the transitive verb is indefinite *baa*, as in (33).

(33) *ii* + *baa* + transitive verb

ii-waa-kulushiit-uu 'eraser' < *baa* INDEF + *kulushiichi* 'wipe' + PL

ii-waa-chichéhche 'memory' < *baa* INDEF + *chichéhche* 'remember'

ii-waa-lichit-uu 'kettle for boiling' < *baa* INDEF + *dichitichi* 'boil' + PL

It is even possible for a derived instrumental noun to incorporate a postpositional phrase, as in (34).

(34) *ii* + *baa* + postposition + transitive verb

ii-waa-kuss-kiliáxpi-o 'glue, paste' < *baa* INDEF + *kuss* GOAL + *kiliáxpi* 'stick to' + CAUS.PL

In (34) *waa-kuss* 'to something' is a postpositional phrase. There are also irregular nominalizations with *ii*, with examples in (35).

(35) *ii-héelapa* 'waist' < *héelapa* 'middle'

ii-shilia-wishi 'rattlesnake' < *shilia* 'to rattle' + *bishi* 'exist'

ii-kooshi 'whistle' < *kóoshi* 'to whistle' (irregular accent shift)

3.1.2.5. *bale* 'depossessivizer'

The prefix *bale*, which allows an inalienably possessed noun to occur without a possessor, is used to form a number of derived nouns, as in (36):

- (36) *bale-al-awáachi* 'chair' < *ala* REL + *awáachi* 'sit'
bale-an-níili 'mile' < *ala* REL + *díili* 'walk'
bale-ee-wiáxsáa 'plate' < *eé* 'food' + *biáxsáa* 'under'
bale-ii-lichí 'dentures' < *ii* 'tooth' + *lichí* APPROX
bale-wiísshi 'deceit' < *biísshi* 'tell a lie'

3.1.3. Compounding

Compounding is a highly productive process in Crow. There are two basic types: noun-noun compounds, and noun-verb compounds.

3.1.3.1. Noun-noun compounds

Noun-noun compounds often involve a whole-part relationship, with the first noun referring to the whole, and the second to the part. The following are examples of noun-noun compounds:

- (37) *áach-uhpa* 'nipple' < *áachi* 'breast' + *uhpá* 'tip'
ii-wili 'saliva' < *ii* 'mouth' + *bili* 'water'
áal-isshi 'sleeve' < *áli* 'arm' + *isshi* 'container'
aw-ischi 'lichen' < *awá* 'land' + *ischi* 'rust'

Members of the compound may themselves be compounds or derived nouns:

- (38) [*ihka-léax*]-*daaka* 'General George Armstrong Custer' < *ihka-léaxa* 'morning star' (< *ihká* 'star' + *déaxa* 'shining') + *dáaka* 'child'
 [*buluhpa-shiín*]-*bilaxxa* 'orange juice' < *buluhpa-shiili* 'orange' (< *buluhpá* 'wild plum' + *shiili* 'yellow') + *bilaxxa* 'juice'
iisashpit-[*baa-luus-uu*] 'lettuce' < *iisashpita* 'rabbit' + *baa-luus-úu* 'food' (< *baa* INDEF + *duushi* 'eat' + PL)

In both *ihkaléaxdaaka* and *buluhpashiinmilaxxa* the first members of the compound are themselves derived nouns consisting of a noun plus a stative verb.

3.1.3.2. Noun-verb compounds

The second type of compound consists of a noun plus a stative verb, as in (39):

- (39) *aashúu-xaapi* 'Flathead Indian' < *aashúu* 'head' + *xáapi* 'flat'
ahp-isáa 'donkey' < *ahpá* 'ear' + *isáa* 'big'

awa-xóosa 'salt' < *awá* 'earth' + *xóosa* 'moldy, grey'
bish-dappii 'shawl' < *bishi* 'blanket' + *dappii* 'fringed'

A subclass of noun-verb compounds consists of a noun plus one of the existential verbs *bishi* 'exist' or *deeta* 'not exist':

- (40) [*an-núchi*]-*wishi* 'frying pan' < *ala-* 'locative nominalizer' + *dúchi* 'grab' + *bishi* 'exist' ('having something to grab, having a handle')
iaxpá-wishi 'angel' < *iaxpá* 'wing' + *bishi* 'exist'
baa-axua-leetá 'spirit' < *baa* INDEF + *axúa* 'body' + *deeta* 'not exist'

In *baaxúaleeta*, *baa* acts as a depossessivizer, since *axúa* is inalienably possessed.

Examples can also be found of noun-verb compounds that do not fit neatly into the above categories:

- (41) *áash*-[*bachee-itche*] 'Lodge Grass District' (Valley of the Chiefs) < *áashi* 'river valley' + *bacheeítche* 'chief'

In (41) the order is the opposite of other compounds with *áash*—e.g., *Alúut-aashe* 'Arrow Creek', *Déesh-ashe* 'Tongue River', and *Ichiilikaash-ashe* 'Yellowstone River'.

- (42) *xapáalia*-[*lust-uua*] 'medicine bundle opening' < *xapáalia* 'medicine' + *dústuua* 'they open' (< *dúschí* 'take out' + PL)

(42) is unusual in that it is composed of a noun and an active transitive verb.

- (43) [*áhpaam*]-[*maa-luus-úu*] 'evening meal' < *áhpaam* 'evening' + *m* (< *n* LOC) + *baa* INDEF + *duushi* 'eat' + PL

(43) consists of the temporal postpositional phrase *áhpaam* plus a nominalized verb.

3.2. Alienable and inalienable possession

Nouns are classified as inalienably or alienably possessed, depending upon which set of possessive markers they occur with. The formal classes of inalienable and alienable nouns correspond to a high degree to the semantic classes of nouns referring to inherently possessed entities, specifically, body parts and kin (inalienable), as opposed to nouns referring to entities that are not inherently possessed (alienable). Nevertheless, the correspondence is not absolute: there are some kin terms and body parts that are included in the class of alienably possessed nouns. Also, there are a few nouns referring to objects closely

associated with a person that are treated as inalienable: *aasúu* 'his house', *isahpá* 'her shoe', *isaashí* 'his blanket', *isaashkakaáshi* 'her dog', *isáá* 'his arrow', *isaashká* 'her horse', and *ishuú* 'his song'.

The contrast between alienable and inalienable possessor paradigms is illustrated in table 3.1. Note that the alienable possessive prefixes end in *s*, an element not present in the inalienable prefixes.¹

TABLE 3.1. ALIENABLE AND INALIENABLE POSSESSIVE PARADIGMS

ALIENABLE	INALIENABLE
<i>bas-óosshee</i> 'my food'	<i>b-apé</i> 'my nose'
<i>dís-oosshee</i> 'your food'	<i>d-ápe</i> 'your nose'
<i>is-óosshee</i> 'his/her food'	<i>Ø-apé</i> 'his/her nose'
<i>bas-óosshee-o</i> 'our food'	<i>b-ap-úua</i> 'our noses'
<i>dís-oosshee-o</i> 'your food'	<i>d-áp-uua</i> 'your noses'
<i>is-óosshee-o</i> 'their food'	<i>Ø-ap-úua</i> 'their noses'
(stem: <i>óosshee</i>)	(stem: <i>apá</i>)

If the semantics allow, both inalienable and alienable prefixes may occur with an inalienable stem: *báale* 'my arm, inalienable' refers to the arm that is part of my body, while *bas-áale* 'my arm, alienable' refers to an arm that I have in my possession, e.g., the forequarter of a deer or elk.

3.2.1. Alienable possession

Alienably possessed nouns are inflected for person and number of possessor, as in the paradigm in table 3.2. The plural number marker suffixed to the noun marks the possessor as plural; all possessed forms are ambiguous as to whether the possessed noun is singular or plural. In the second person forms the accent shifts from the stem to the prefix, the same pattern found in several active verb paradigms.

In the first person inclusive form (speaker plus hearer or hearers), the first person plural B-set pronominal *balee* is prefixed to the third person possessor marker and the plural suffix is omitted. Thus *balee-is-ílaalee* means 'our car(s)', where the possessor is 'I' (the speaker) plus 'you' (hearer or hearers).

¹ Possessive paradigms in tables 3.1, 3.2, and 3.4–3.7 are given in citation form (cf. §2.5.12), since possessed nouns are rarely if ever followed by determiners. When the citation form of a noun differs from the stem form, the stem form is noted below the paradigm. The lists of inalienably possessed nouns that follow the paradigms are given in stem form.

TABLE 3.2. ALIENABLE POSSESSION

1SG	<i>bas-iilaalee</i>	'my car(s)'
2SG	<i>dʔs-iilaalee</i>	'your car(s)'
3SG	<i>is-iilaalee</i>	'his/her car(s)'
INCL	<i>balee-is-iilaalee</i>	'our car(s) (me and you [sg. or pl.])'
1PL	<i>bas-iilaalee-o</i>	'our car(s) (me and him or me and them)'
2PL	<i>dʔs-iilaalee-o</i>	'your (pl.) car(s)'
3PL	<i>is-iilaalee-o</i>	'their car(s)'

3.2.2. Inalienable possession

There are several different inflectional paradigms for inalienably possessed nouns, with the differences conditioned to a large extent by the initial phonemes of the stem. Table 3.3 is a summary of the paradigms for inalienably possessed nouns. The majority of inalienably possessed nouns are inflected according to one of the first four paradigms, with the last two restricted to a few lexemes. It is possible to state a phonological environment for the first three paradigms only.

TABLE 3.3. INALIENABLE POSSESSION

PERSON OF POSSESSOR	STEM	STEM	STEM			
	INITIAL	INITIAL	INITIAL			
	<i>d</i>	<i>iC</i>	<i>V</i>			
1	<i>ba</i>	<i>b</i>	<i>b</i>	<i>bii</i>	<i>bu</i>	<i>baa</i>
2	<i>da</i>	<i>d</i>	<i>d</i>	<i>dii</i>	<i>di</i>	<i>da</i>
3	\emptyset	\emptyset	\emptyset	\emptyset	\emptyset	\emptyset

Note that in the third person the possessed form is identical to the stem, so that, for example, *ahkúxe* always means 'his or her ear', not 'ear'. In order to talk about 'ears' without referring to a possessor, it is necessary to prefix *bale* to the body part: *bale-ahkúxe* 'ear'.² This strategy of depossessivization is employed only with nouns referring to body parts, not with kin terms.³

² *Bale* is homophonous with the first person plural B-set prefix *balee*, which marks the object of an active verb and the subject of a stative verb. The forms are spelled differently simply to differentiate the two.

³ I am aware of one kin term that exceptionally appears with *baa* as a

3.2.2.1. Initial *d*

Inalienably possessed nouns with initial *d* form the possessive as in table 3.4.

TABLE 3.4. INALIENABLY POSSESSED NOUNS WITH INITIAL *d*

1SG	<i>ba-lúule</i> 'my back'	1PL	<i>ba-lúul-uua</i> 'our back(s)'
2SG	<i>da-lúule</i> 'your back'	2PL	<i>da-lúul-uua</i> 'your back(s)'
3SG	<i>Ø-dúule</i> 'his back' (stem: <i>dúula</i>)	3PL	<i>Ø-dúul-uua</i> 'their back(s)'

The accent does not shift in the second person. Nouns inflected like *dúule* include:

- (44) *dáaka* 'child, offspring'
dáakaaxee 'back of thigh'
daasá 'heart'
dáasshuli 'thigh'
dáata 'calf of leg'
datchawuú 'armpit'
dáxpa 'side of hip'
déeshi 'tongue'
dúuleepa 'jaw'
dúusa 'rib'

3.2.2.2. Initial *iC*

A sample paradigm of a noun with stem-initial *iC* is given in table 3.5. As this paradigm is analyzed here, the initial *i* of the stem changes to *a* in the first person forms. An alternative analysis would be to treat *shítá* as the stem, and *ba*, *dí*, and *i* as possessive prefixes. The advantage of this approach is that it avoids having to posit a change in the initial vowel of the stem in the first person forms. The disadvantage is that it requires us to posit a stem that never occurs on the surface, one that also begins with an initial cluster (*shít*) that is inadmissible in Crow phonology. Moreover, the nonpossessed form is not based on *shítá*, but *ishtá*: *bale-ishté* 'eye'. I conclude, then, that it is preferable to treat *ishtá* as the stem, and to posit either a vowel shift in the first person form, or possibly the deletion of the second vowel of a *VV* sequence: i.e., *ba-ishté* → *bashté*.⁴

depossessivizer: *Baaiilápxisaahkuua* 'President of the United States' and by extension, 'Washington, D.C.' (< *baa* + *iilápxisaahka* 'grandfather' + PL).

⁴ A similar analysis is needed to account for the inflectional pattern of verbs like *ikaa* and *ilii*, whose first person forms are *awákaa* and *balii*, respectively.

TABLE 3.5. INALIENABLY POSSESSED NOUNS WITH INITIAL *iC*

1SG	<i>b-ashtë</i> 'my eye'	1PL	<i>b-asht-úua</i> 'our eye(s)'
2SG	<i>d-ishte</i> 'your eye'	2PL	<i>d-isht-uua</i> 'your eye(s)'
3SG	<i>Ø-ishtë</i> 'her eye' (stem: <i>ishtá</i>)	3PL	<i>Ø-isht-úua</i> 'her eye(s)'

Possessed nouns referring to body parts that inflect according to this paradigm are given in (45):

- (45)
- | | |
|-------------------------------|--------------------------------|
| <i>ichi</i> 'foot' | <i>ishúushi</i> 'knee' |
| <i>icheechi</i> 'heel' | <i>isisa</i> 'buttocks' |
| <i>ichkiisa</i> 'ankle' | <i>iskuchkápi</i> 'wrist' |
| <i>iláshpi</i> 'shoulder' | <i>ispaxpá</i> 'fingernail' |
| <i>isbassá</i> 'thumb' | <i>isshii</i> 'hair' |
| <i>isbaxxáa</i> 'elbow' | <i>isshuli</i> 'biceps' |
| <i>ischi</i> 'hand' | <i>istéhpa</i> 'navel' |
| <i>ishíssaa</i> 'lower torso' | <i>itáxpúu</i> 'toenail, claw' |
| <i>ishkuli</i> 'finger' | <i>itbuú</i> 'sole' |
| <i>ishtá</i> 'eye' | <i>itchúa</i> 'side of head' |
| <i>ishúu</i> 'base of neck' | <i>itchúupa</i> 'shin' |

Kin terms that follow this paradigm include:

- (46)
- | |
|--|
| <i>ichuuká</i> 'younger brother' |
| <i>iláashi</i> 'man's brother-in-law' |
| <i>isaachihka</i> 'stepchild' |
| <i>isáaka</i> 'woman's father' |
| <i>isaalá</i> 'woman's older brother' |
| <i>isahchiíta</i> 'man's younger sister' |
| <i>isahkáata</i> 'older sister' |
| <i>isahká</i> 'mother' |
| <i>isbaapíta</i> 'grandchild' |
| <i>isbaaxia</i> 'father's sister' |
| <i>ischiíta</i> 'woman's brother-in-law' |
| <i>isooká</i> 'woman's younger sister' |
| <i>isshóhta</i> 'relative, relation' |

While it appears likely, from a historical perspective, that some of these forms contain the alienable possessor prefix *is*, it seems preferable, for the reasons given above as well as because of their semantics, to treat them as inalienably possessed.

3.2.2.3. Initial V

The paradigm for vowel-initial stems (table 3.6) is identical to the previous one, except that the stem-initial vowel does not shift to *a* in the first person.

TABLE 3.6. INALIENABLE POSSESSION WITH OTHER VOWEL-INITIAL STEMS

1SG	<i>b-iilápxe</i> 'my father'	1PL	<i>b-iilápx-uua</i> 'our father(s)'
2SG	<i>d-iilapxe</i> 'your father'	2PL	<i>d-iilapx-uua</i> 'your father(s)'
3SG	<i>Ø-iilápxe</i> 'his father' (stem: <i>iilápxa</i>)	3PL	<i>Ø-iilápx-uua</i> 'their father(s)'

Body part terms inflected according to this paradigm are listed in (47):

- (47)
- | | |
|--------------------------------|----------------------------|
| <i>ahkúxa</i> 'inner ear' | <i>áapa</i> 'neck' |
| <i>ahpá</i> 'outer ear' | <i>aashúu</i> 'head' |
| <i>alapáala</i> 'buttock' | <i>áaxuhka</i> 'kidney' |
| <i>alásshee</i> 'muscle' | <i>eelá</i> 'belly' |
| <i>alaxxaaló</i> 'spine' | <i>ihkapílii</i> 'foretop' |
| <i>apásaa</i> 'upper torso' | <i>ihhá</i> 'molar' |
| <i>apá</i> 'nose' | <i>ii</i> 'mouth' |
| <i>apitchúu</i> 'gall bladder' | <i>ii</i> 'tooth' |
| <i>aptá</i> 'liver' | <i>iihchii</i> 'beard' |
| <i>axúa</i> 'body' | <i>iihka</i> 'chin' |
| <i>axxíi</i> 'forehead' | <i>iisá</i> 'face' |
| <i>áachi</i> 'breast' | <i>iishpuu</i> 'abdomen' |
| <i>áali</i> 'arm' | <i>úushi</i> 'rectum' |

Examples of kin terms include:

- (48)
- | |
|--|
| <i>aksáa</i> 'parent' |
| <i>akúa</i> 'woman's husband's sister' |
| <i>iiká</i> 'man's older brother' |
| <i>iilápxa</i> 'man's father' |
| <i>usshí</i> 'man's mother-in-law; tabooed relative' |
| <i>uá</i> 'wife' |

3.2.2.4. Possessor in *bii*, *dii*

There is also a set of nouns that mark the possessor with the B-set pronominal prefixes, as in table 3.7. (A- and B-set prefixes are treated in §6.1.)

TABLE 3.7. INALIENABLE POSSESSION WITH B-SET PREFIXES

1SG	<i>bii-láaxo</i> 'my lung'	1PL	<i>balee-láaxo</i> 'our lung(s)'
2SG	<i>dii-láaxo</i> 'your lung'	2PL	<i>dii-láaxo-u</i> 'your lung(s)'
3SG	<i>Ø-dáaxo</i> 'her lung'	3PL	<i>Ø-dáaxo-u</i> 'their lung(s)'

This paradigm is used most often with nouns referring to internal body parts. Nouns in this set include:

- | | | |
|------|----------------------------|----------------------------|
| (49) | <i>alaachiisa</i> 'tendon' | <i>axóoxii</i> 'knee cap' |
| | <i>alacheewi</i> 'gland' | <i>chiwúsa</i> 'brain' |
| | <i>alashkúu</i> 'joint' | <i>dáaxo</i> 'lung' |
| | <i>alaxaawi</i> 'limb' | <i>iaxa</i> 'stomach' |
| | <i>alaxáa</i> 'hip bone' | <i>piaxiita</i> 'spleen' |
| | <i>alúa</i> 'abdomen' | <i>shíipa</i> 'intestines' |
| | <i>aluuli</i> 'flesh' | |

3.2.2.5. Irregular paradigms

There are a few other inalienable nouns with irregular paradigms:

- (50) *dusshúua* 'chest' (stem *dusshúu*): 1SG *bu-lusshúua*, 2SG *dl-lússhúua*
chiise 'tail' (stem *chiisa*): 1SG *baa-chiise*, 2SG *da-chiise*
chilée 'husband' (stem *chiláa*): 1SG *baa-chilée*, 2SG *da-chilée*

Also, a few nouns that are semantically inalienable follow the alienable inflectional pattern: *huli* 'bone', *iilaaxee* 'birthmark', *iili* 'blood', and *kahkahká* 'forearm'.

3.2.2.6. Suppletive possessed forms

A few inalienably possessed nouns have suppletive possessed forms, as in table 3.8.³

From a diachronic perspective many of these forms contain the alienable possessor prefix, although it seems preferable, for the reasons given above in the discussion of *iC*- stems, to treat them as synchronically inalienable.

³ Some of these forms are partly explainable in terms of historical developments. Crow applied the possessed form for 'dog' to horses when these animals became part of the tribe's cultural inventory. Then the suffix *kaáshi* 'real, genuine' was added to create a new possessed form for 'dog'. The nonpossessed form for horse, *iichiili*, is the original term for 'elk', which is now referred to by the term *iichiili-kaashi*.

TABLE 3.8. INALIENABLY POSSESSED NOUNS WITH SUPPLETIVE FORMS

STEM	POSSESSED FORM
<i>awaasúu</i> 'house'	<i>aasúu</i> 'her house'
<i>huupá</i> 'shoe'	<i>isahpá</i> 'his shoe'
<i>bishí</i> 'blanket'	<i>isaashi</i> 'her blanket'
<i>bishká</i> 'dog'	<i>isaashkakaáshi</i> 'his dog'
<i>alúuta</i> 'arrow'	<i>isaá</i> 'his arrow'
<i>iichiili</i> 'horse'	<i>isaashká</i> 'her horse'
<i>ihkáa</i> 'mother' (vocative)	<i>isahká</i> 'his mother'
<i>buú</i> 'song'	<i>ishuú</i> 'her song'

3.3. Personal names

Personal names constitute another distinct class of nouns. They differ from other nouns in that the definite determiner *sh* is suffixed to the stem rather than to the citation form, as illustrated in (51):

- (51) *Daxpitcheisáa-sh* 'Big Bear' (**Daxpitcheisée-sh*)
Axichi-sh 'Wet' (**Axíchee-sh*)
Déaxkaashdaawii-sh 'Three Eagles' (**Déaxkaashdaawii-sh*)

This subclass includes only personal names, not names of geographic locations, which generally do not occur with the definite determiner. With all names, the use of the determiner is optional.

With English names, the occurrence of the determiner is phonologically conditioned: the determiner follows names ending in a vowel or a sonorant (*Mary-sh*, *Peter-sh*, *Carol-sh*), while with other names it is omitted (*John*, *James*, *Joseph*).

3.4. Vocatives

Several kin terms have suppletive vocative forms. These include those in table 3.9.

If the stem ends in a short vowel, that vowel is lengthened in the vocative, as in table 3.10.

With both personal names and kin terms, the stem is employed with vocatives rather than the citation form, as in (52).

TABLE 3.9. SUPPLETIVE VOCATIVES OF KIN TERMS

STEM	VOCATIVE
<i>dáakbachee</i> 'son'	<i>ilóoshe</i>
<i>dáakbia</i> 'daughter'	<i>xúuche</i>
<i>iilápxa</i> 'father'	<i>axée</i>
<i>iláashi</i> 'brother-in-law'	<i>baashii</i>
<i>isahká</i> 'mother'	<i>ihkáa</i>

TABLE 3.10. VOCATIVES OF STEMS ENDING IN A SHORT VOWEL

STEM	VOCATIVE
<i>biiká</i> 'older brother'	<i>biikáa</i>
<i>bachuuká</i> 'younger brother'	<i>bachuukáa</i>

- (52) *huu-káwe-h Déaxkaash-daawii*
 come-POL-IMPER eagle-three
 'Three Eagles, come here!'

There are several suffixes that may occur with vocatives: *ssheeh* (singular), *n* (plural), and *lussheen* (plural). These suffixes combine with the citation form of the vocative rather than the stem. Their use is illustrated in (53):

- (53) *káalee-ssheeh* 'old woman!'
biilápaachee-ssheeh 'my friend'
shikáakee-n 'boys!'
biakalishatakaatee-n 'young women!'
bachée-lussheen 'men!'

To sum up, then, the lexicon contains a list of noun stems, with each stem marked as alienable or inalienable, or in some cases, both. The inflectional patterns of a few irregular inalienable nouns will need to be noted in the lexicon. In addition, personal names form an identifiable subclass of nouns.

3.5. Pronouns

There are three types of pronominals in Crow: bound forms that have the syntax of noun phrases; emphatic and contrastive pronouns, which are usually independent words, and which have the syntax of apposi-

tives rather than syntactic arguments; and interrogative-indefinite pronouns, treated in chapter 17.

There is a correlation between morphology and syntax in the first two types: the pronominals that function as arguments are for the most part bound forms, while the emphatic and contrastive pronouns are for the most part independent words.

3.5.1. Bound pronominals

There are two contrasting sets of bound pronominals that function as direct and oblique arguments: the A-set, which mark only subjects of active verbs, both transitive and intransitive, and the B-set, which mark subjects of stative verbs, direct objects, and objects of postpositions. The bound pronominals are discussed in the sections on verb inflection in chapter 6.

3.5.2. Emphatic and contrastive pronouns

Crow has a set of pronoun stems that mark emphasis or contrast; these cooccur with both A- and B-set bound pronominals. The emphatic and contrastive pronouns are most often independent words in apposition to a bound pronominal argument or to another constituent of the clause.

The basic stems which combine with various suffixes to form the emphatic and contrastive pronouns are given in table 3.11. The first and second person singular forms are identical to the B-set forms. The plural marker *lu* is an exceptional plural marker that also occurs with several other forms (see §2.5.13). Only the third person forms are unique to this paradigm, since in both active and stative verb paradigms the third person pronominal argument is null.

TABLE 3.11. BASIC PRONOUN STEMS

1SG	<i>bii</i>	1PL	<i>biilu</i>
2SG	<i>dii</i>	2PL	<i>diilu</i>
3SG	<i>ii/ku/koo</i>	3PL	<i>iilu</i>

The *lu* plural also occurs when the B-set pronominal is the object of a postposition, as in (54):

- (54) *dii-lu-ssee-sh* *ahóom-m-aa-k*
 2B-PL-GOAL-DET give.thanks-1A-say-DECL
 'I give thanks to you (pl.)'

These data suggest that the underlying plural of the B-set pronominals is *lu*, and that this plural has been supplanted by a suffix in the verbal paradigms.

The emphatic-contrastive stems may occur as bound forms in conjunction with regular B-set pronouns, thus doubling the forms, as in (55) and (56):

- (55) *ak-disshé iiláp-uu-lak duú-laa dii-ak "d-iluu-h*
 REL-dance two-PL-DET come.PL-SS reach.PL-SS 2A-stand-IMPER
dii-lii-wah-kúnnaa-wuu-o-k" huu-k
 2PRO-2B-1A-fetch-1A.PL.come-PL-DECL say.PL-DECL
 'two of the dancers came, they reached him, "get up, we have come after you", they said' (Baapaalissúua 19)

In (55) and (56) the emphatic *dii* occurs as a prefix to the regular B-set pronoun *dii*.

- (56) *Emily Pretty Raven huua bíá-kaat-kaata-m*
 E. P. R. say.PL woman-DIMIN-DIMIN-DET
dii-líi-ikuxx-aachi-k
 2PRO-2B-like-APPROX-DECL
 'Emily is a little girl pretty much like you' (Emilysh 1)

These emphatic stems can also be prefixed to the inalienable possessor prefixes, as in (57) and (58):

- (57) *hinne ahpaxée-sh koon Akbaatatdia iláa-(a)k hilia-shee-k*
 this cloud-DET SOURCE God speak-SS this-say-DECL
"hinne bíi-wa-laak-bacheé-k"
 this 1PRO-1POS-child-man-DECL
 'God spoke from this cloud and said this: "this is my son"' (Lk 9:35)
- (58) *éehk bíi-w-achuuká-k*
 that.one 1PRO-1POS-younger.brother-DECL
 'that one is my younger brother'

This basic stem-set combines with a number of different suffixes to produce a variety of independent emphatic and contrastive pronouns, listed in (59):

- (59) *iilaa* 'by Xself'
iiléen 'emphatic'
ih/kúh 'as for X, contrastive'
ik/kúk 'as for X, contrastive'
ihkan/kúhkan 'X in turn'

iichihk/koochihk 'X first'
ittáchi 'alone, by Xself'
ixáxua 'all of X'
iaxúa 'as for X, Xself'

The rest of this section gives the paradigms for the different pronouns, with textual examples.

Number is not marked with *iilaa* 'by Xself' (table 3.12; examples (60) and (61)); there are no distinct plural forms.

TABLE 3.12. *iilaa* 'BY XSELF'

1	<i>biilaa</i>
2	<i>diilaa</i>
3	<i>iilaa</i>

- (60) *Hileen d-iilapx-ammishe ko bacheé iilaa*
 these 2POS-father-PL that man PRO.by.self
hawassée-ommaachi-k
 take.care.of-will.PL-DECL
 'these fathers of yours will take care of that man themselves' (Uuwat 14)
- (61) *biilaa-laht hawéese día-waa-w-ii-k*
 IPRO.by.self-although the.rest do-1A-1A-will-DECL
 'even though I'm by myself, I'll do the rest' (Sees 13)

The paradigm of *iiléen* 'emphatic' is given in table 3.13; examples are seen in (62) and (63).

TABLE 3.13. *iiléen* 'EMPHATIC'

1SG	<i>biiléen</i>	1PL	<i>biiluun</i>
2SG	<i>diiléen</i>	2PL	<i>diiluun</i>
3SG	<i>iiléen</i>	3PL	<i>iiluun</i>

- (62) *dilléen balee-l-áxshee-lak hileén baatachxaxúa*
 2PRO 1B.PL-2A-beat-COND these all
aa-la-láa-(a)k biiluh balee-láappee-l-immaachi-k
 PORT-2A-go-SS IPRO.PL 1B.PL-2A.kill-2A-will-DECL
 'if you beat us, you will take everything; as for us, you will kill us'
 (Isahkáa 28)

- (63) *biiléen bu-lutt-ák dii-héela-ss-dee-wa-hk-uu-k*
 1PRO 1A-take-SS 2B-among-GOAL-go-1A-CAUS-PL-DECL
 'I am the one who took him and sent him among you' (Lk 9:35)

The singular forms of the paradigm of *ih/kúh* 'as for X, contrastive' (table 3.14; examples (64) and (65)) are the result of the phonological process that shortens long vowels before *h*.⁶

TABLE 3.14. *ih/kúh* 'AS FOR X, CONTRASTIVE'

1SG	<i>bíh</i>	1PL	<i>biiluh</i>
2SG	<i>díh</i>	2PL	<i>diiluh</i>
3SG	<i>ih/kúh</i>	3PL	<i>iiluh</i>

- (64) *bíh baa-wa-lá-ko koó-k*
 1PRO INDEF-1A-2B-give COP-DECL
 'as for me, this is what I give you' (Uuwat 11)

When an independent pronominal is in apposition to a noun phrase, as in (65), it follows the noun phrase.

- (65) *hileen bachée-sh kúh Jesús ala-kooté koot-úu-lak*
 these man-DET 3PRO J. REL-like.that like.that-PL-DS
 'as for these men, they were the same way that Jesus was' (Lk 9:29)

Like *ih*, the pronoun *ik/kúk* (table 3.15; examples (66) and (67)) is contrastive in meaning. *Ih/kuh* and *ik/kuk* can be view as essentially the same pronoun with variant endings: *h* for the former, and *k* for the latter.

TABLE 3.15. *ik/kúk* 'AS FOR X, CONTRASTIVE'

1SG	<i>bík</i>	1PL	<i>biiluk</i>
2SG	<i>dík</i>	2PL	<i>diiluk</i>
3SG	<i>ik/kúk</i>	3PL	<i>iiluk</i>

- (66) *baap-tatchée dík bii-al-áxp-ak dii-hileel-ák*
 day-every 2PRO 1B-2A-be.with-SS 2B-be.here-SS
 'as for you, everyday you are with me, you are here' (Lk 15:31)

In (67) the contrastive pronoun is in apposition to the locative adverb *hilihtée* 'here'.

⁶ This process is discussed in §2.5.6.

- (67) *kuhtée báalaa-k bíli-lak baatach-áakkapaa-k*
 there winter-DECL water-and everything-frozen-DECL
hilihtée kúk alée-k
 here PRO hot-DECL
 'there it is winter, the water and everything is frozen; here, however, it is hot' (Harold IV 15)

The paradigm of *ihkan/kúhkan* 'X in turn' is given in table 3.16; examples are given in (68) and (69). If the suffix *kan* is subtracted, this pronoun is identical to *ih/kuh*. It is likely that *kan* is related to the prefix *kala-* 'now, already.'

TABLE 3.16. *ihkan/kúhkan* 'IN TURN'

1SG	<i>bihkan</i>	1PL	<i>biiluhkan</i>
2SG	<i>dihkan</i>	2PL	<i>diiluhkan</i>
3SG	<i>ihkan/kúhkan</i>	3PL	<i>iiluhkan</i>

- (68) *díiluhkan baám dá-k-bia-l-uu-lak*
 2PRO.PL.in.turn something 2A-give-want.to-2A-PL-COND
koot-áala-h
 do.like.that-PL-IMPER
 'if you, in turn, want to give him something, do it' (Uuwat 10)
- (69) *Isáahkawuantee ihkan hinne baashilia-sh ii-lia-k*
 Old.Man.Coyote PRO.in.turn this bell-DET INSTR-do-DECL
ii-waa-luushi-k
 INSTR-INDEF-eat-DECL
 'Old Man Coyote in turn used this bell, by means of it he ate' (Iishoóp 6)

The paradigm of *iichihk/koochihk* 'X first' is given in table 3.17; examples are seen in (69) and (70).

TABLE 3.17. *iichihk/koochihk* 'X FIRST'

1SG	<i>biichihk</i>	1PL	<i>biiluchihk</i>
2SG	<i>diichihk</i>	2PL	<i>diiluchihk</i>
3SG	<i>iichihk/koochihk</i>	3PL	<i>iiluchihk</i>

- (70) *dáawi-h* *Iisaxpúatahcheechilape* *díichlĥk* *dáawi-h*
 go.on-IMPER Big.Horn.Ram 2PRO.first go.on-IMPER
 'go on, Big Horn Ram; you go first' (Uuwat 7)
- (71) *iichlĥk* *awaasúua* *bilichiili-k*
 PRO.first house go.back.in-DECL
 'he went back in the house first' (Sees 9)

The third person form *koochihk* often appears with first or second person subjects, as in (72). Apparently it is being reanalyzed as a simple adverb meaning 'first'.

- (72) *dis-bilaxpaake* *baám* *da-chíwee-wia-laa-lak* *koochihk*
 2POS-people something 2A-tell-want.to-2A-COND PRO.first
shuhpáa *da-páa-lak*
 four.times 2A-shout-COND
 'if you want to tell your people something, and if you first shout four times, ...' (Uuwat 12)

The paradigm of *iiaxúa* 'as for X; Xself' is given in table 3.18, and exemplified in (73) and (74). This paradigm is composed of the basic pronominal stems as given in table 3.11 plus inflected forms of the inalienably possessed noun *axúa* 'body'. (The regular rule of final short vowel deletion applies to the plural forms, i.e., *biilu-waxuo* becomes *biimaxuo*).

TABLE 3.18. *iiaxúa* 'AS FOR X; XSELF'

1SG	<i>biwaxúa</i>	1PL	<i>biimaxuo</i>
2SG	<i>diilaxúa</i>	2PL	<i>diinnaxuo</i>
3SG	<i>iiaxúa</i>	3PL	<i>iilaxuo</i>

- (73) *Uuwat-isa-a-sh* *iilápx-aachee-sh* *is-baaaxuássee*
 Metal-Big-DET his.father-APPROX-DET 3POS-clothes
ilúxeexaw-ak *káa-u-m* *ih* *iiaxúa* *alía-ss-dússhia-(a)k*
 torn.apart-SS remain-PL-DS PRO PRO back-GOAL-bent-SS
koom-maachi-k
 there-remain-DECL
 'Big Metal's stepfather's clothes were lying there torn apart, and as for him, he was lying there bent backward' (Uuwat 17)
- (74) *is-bilaxpáake* *baaik-shii-ak* *ihch-iwaataschili-k*
 3POS-people things-say-SS REFL-sell-DECL

hvu-koola-k *hehtaa ilaxúa ih daachéetaa*
 say.PL-continue-DECL but PRO PRO sometimes
baahili-kalatchi-ssaa-i-k
 work-believe-NEG-HAB-DECL

'his people would say things about him, they kept saying that he had sold out, but sometimes he himself would have doubts about what he was doing' (AB 79)

Finally, while *ittáchi* 'be alone' (table 3.19; examples (75) and (76)) is a stative verb that can occur as a clausal predicate, it patterns with the other emphatic-contrastive pronouns with respect to its plural paradigm: the first person plural form is *biiluttachi*, rather than **baleeittáchi*, which we would expect if it were a typical stative verb. Thus *ittáchi* is a lexeme that straddles the border between two lexical classes, stative verbs and pronouns.

TABLE 3.19. *ittáchi* 'ALONE, BY XSELF'

1SG	<i>bittáchi</i>	1PL	<i>biiluttachi</i>
2SG	<i>dittáchi</i>	2PL	<i>diiluttachi</i>
3SG	<i>ittáchi/kuttáchi</i>	3PL	<i>iiluttachi</i>

(75) *díiluttat* *balé daxxoochi-ssaa-(aa)la-h*
 2PRO.PL.alone wood go.into-NEG-PL-IMPER

'don't go into the woods alone' (Ten Stories VIII 20)

(76) *bassée baappaa-liss-úu-t* *bachee ihchissatuua*
 formerly daytime-dance-PL-TEMP man breechcloth
kuttách *ii-lía-k*

PRO.alone INSTR-do-DECL

'in the old days, when they did the Day Dance, the men would use only a breechcloth' (Baapaalissúua 37)

4 Deixis

4.1. Introduction

Crow has a set of locative-temporal deictic stems that combine with a variety of suffixes to form demonstratives, locative and temporal adverbs, and deictic verbs. The basic stems are listed in (1):

- (1) *hili* 'proximate' (near speaker)
éehku 'medial' (near addressee)
iilakaa 'distal'
iahku 'remote' (out of sight)
iwahku 'distal'
áa 'audible'
ku 'anaphoric' (discourse-referential deictic)
shóo 'where'

Shóo is the interrogative-indefinite counterpart to the deictic stems. It is included here since it patterns morphosyntactically with the deictics. *Shóo* is treated in more detail in chapter 17. Table 4.1 lists the forms derived from the various deictic stems. (Blanks in the table are an indication that the forms in question are not attested and could not be elicited.)

The goal postpositional suffix *ssaa/ssee* and the specific (punctual) locative suffix *htee* combine with the deictic stem; all the others combine with the citation form of the deictic.

4.2. Demonstratives

The second row of table 4.1 gives the forms of the deictics when they occur as demonstrative pronouns or modifiers. When they occur alone, as in (2), demonstratives have the syntax of noun phrases.

TABLE 4.1. DEICTIC FORMS

Stem	<i>hili</i> 'proximate'	<i>éehku</i> 'medial'	<i>iilakaa</i> 'distal'	<i>iahku</i> 'remote'
Demonstrative	<i>hinné</i> <i>hileen</i> (pl.)	<i>ééhk</i> <i>ákián</i> (pl.) <i>ákióm</i> (pl.)	<i>iilak</i>	<i>iahk</i> , <i>iak</i>
Predicative	<i>hinné-k</i> <i>hilóo-k</i> (pl.)	<i>ééhkoo-k</i> <i>áki-o-k</i> (pl.)	<i>iilakaa-k</i>	<i>iahkoo-k</i>
Goal PP	<i>hili-ssee</i>	<i>ééhku-ssee</i>		
Locative PP	<i>hileé-n</i>	<i>ééhkoo-n</i>	<i>iilakaa-n</i>	<i>iahkoo-n</i>
Punctual locative PP	<i>hili-htée</i>	<i>ééhku-htee</i>	<i>iilaka-htee</i>	<i>iahku-htee</i>
Verb of likeness	<i>hilia-ta</i>	<i>ééhkoo-ta</i>		<i>iahkoo-ta</i>
Verb of likeness + causative	<i>hilia-chee</i>	<i>ééhkoo-chee</i>		<i>iahkoo-chee</i>
Locative verb	<i>hilee-lá</i>	<i>ééhkoo-la</i>	<i>iilakaa-la</i>	<i>iahkoo-la</i>
Locative verb + causative	<i>hilee-l-ée</i>	<i>ééhkoo-l-ee</i>	<i>iilakaa-l-ee</i>	<i>iahkoo-l-ee</i>
Verb of saying	<i>hilia-shee</i>	<i>ééhkoo-shee</i>		<i>iahkoo-shee</i>

- (2) *hinné itchik* 'this is good'
ééhk háchkak 'that one is tall'
ko basitchiwaak 'I like that'
áa dikukku? 'did you hear that one?'

They may also occur as nominal modifiers:

- (3) [*hinne biakaate*] *baakuhpáak* 'this girl is sick'
[*ééhk baaapáalikisshe*] *itchikishik* 'that flower is pretty'
[*áa shikáake*] *baaikdiak* 'that boy is fooling around'
[*ko isáhke*] *éwahchek* 'I know that old man'

When the demonstratives are modifiers, they are initial in the noun phrase. We will now consider each of the demonstratives in turn.

TABLE 4.1. (cont.)

Stem	<i>iwahku</i> 'distal'	<i>áa</i> 'audible'	<i>ku</i> 'anaphoric' (discourse deictic)	<i>shóo</i> 'where' (interrogative- indefinite)
Demonstrative	<i>íwahk, iwak</i>	<i>áa</i> <i>iach</i> (pl.)	<i>ko</i>	
Predicative			<i>koó-k</i> <i>koó-u-k</i> (pl.)	<i>shóo-?</i> (interrogative)
Goal PP			<i>ku-ssee</i>	<i>shóo-ssee</i>
Locative PP			<i>koo-n</i>	<i>shóo-n</i>
Punctual locative PP			<i>ku-htée</i>	<i>shóo-htee</i>
Verb of likeness	<i>iwahkoo-ta</i>		<i>koo-lá</i>	<i>shóo-ta</i>
Verb of likeness + causative	<i>iwahkoo-chee</i>		<i>koo-chée</i>	<i>shóo-chee</i>
Locative verb			<i>koo-lá</i>	<i>shóo-la</i>
Locative verb + causative			<i>koo-l-ée</i>	<i>shóo-l-ee</i>
Verb of saying	<i>iwahkoo-shee</i>			

4.2.1. *hinné* 'proximate, at hand' (close to speaker)

Hilí is the proximate deictic stem; it combines with *de* to form the demonstrative *hinné*.¹ The source of *de* is not clear; it may be cognate with the Lakhota demonstrative *lé* 'this'.

Hinné is often used as a "presentative" (Hanks 1990:66)—'here it is, take it', when offering an object to someone:

- (4) *hinné xoóxaash-iaxshe shoopá-m ba-lá-k-bia-waa-k*
 here! corn-pemmican four-DET 1A-1B-give-want.to-1A-DECL
 'Here! I want to give you four pieces of corn pemmican' (Isshii 13)

When *hinné* is used as a demonstrative, it is best translated 'this'. As a demonstrative, the plural of *hinné* is *hileen* 'these'. When used as a

¹ Recall the orthographic convention that *hinné* is written with an accent when it is a demonstrative pronoun, but without the accent when it is a noun phrase modifier.

locative, however, *hileen* is translated 'here': *hileen dúusaah* 'put it down here'. *Hinné* and *hileen* appear in examples (5)–(8).

- (5) *káale hinné ii-sáap-dia-laa-?*
 old.woman this INSTR-what-do-2A-INTERR
 'old woman, what do you use this for?' (Bitáa 11)

Example (5) is taken from a traditional tale about two young boys; they are asking the old woman about her cooking pot.

- (6) *hinne sáakee-sh koo-m "hileen baa-isáa-kaashe*
 this frog-DET PRO-DET these INDEF-big-AUG
sáap-hil-uu-lak aalasship-úu-k hée-?" haa-(a)k
 what-do-PL-COND exaggerate-PL-DECL AFFIRM-INTERR say-SS
 'it was this frog, "what are these great big ones doing, they're going too far" he said' (Ten Stories II 15)

Here *hileen* refers to the humans who have just come upon the frog.

- (7) *al-awáache koon alia-s(s)-xuala-áh-aat-ak hinne*
 REL-sit there back-GOAL-lean-PUNCT-APPROX-SS this
baleiichiweé ko chiweé-k
 story PRO tell-DECL
 'he leaned back in his chair and told this story' (Bacheé 6)

The sentence in (7) introduces a story; we might consider the use of *hinne* here as an extended presentational use.

- (8) *hinne iisáakshee-sh hinne bachée-sh dúuxalu-ak*
 this young.man-DET this man-DET drag-SS
bin-náaske aa-ii-ák
 water-edge PORT-reach-SS
 'this young man dragged this man and brought him to the bank of the stream' (Bacheé 6)

In the story from which (8) is taken, the young man has found a wounded warrior lying in a stream, and he drags him to the bank. Both referents have been previously introduced into the discourse and thus occur with the definite determiner. The use of *hinné* here is a rhetorical device to emphasize the salience of the characters; it serves to highlight their immediacy and to draw the listener into the story. This use of *hinné* is common in Crow narrative.

As is generally the case with the deictic stems, there are a number of other forms derived from *hili*. The list in (9) does not include the forms listed in table 4.1.

- (9) *hilaá* 'just now, right at that time'
hilaakée 'now'
hileelée 'some time ago'
hileen 'here'
hiliatko 'beforehand; from now on, starting now'
hiliattala 'now, at this same time'
hiliattaleesh 'same time as now (past)'
hiliattannak 'same time as now (future)'
hilik 'what a surprise!, here you are!, well, well!'
hili-ko 'this side, on this side'
hilish, hilósh 'hopefully, I wish that'
hilisheekaateen, hilóosheekaateen 'perhaps, hopefully'
hinnik 'interjection'

4.2.2. *éehk* 'that, there' (medial, close to addressee)

The final vowel of *éehku* is lost when it occurs as an independent word. *Éehk* is the medial deictic, indicating that the referent is close to the addressee, or perhaps better, a short distance from both speaker and addressee. Corresponding to the presentative use of *hinné*, *éehk* can be used as a directive: *éehk!* 'there it is, look at it'.² An example of the directive usage is given in (10):

- (10) *Ada-sh koo-m "Éehk alawúsuu-k Apsáalooke*
 A.-DET PRO-DET that sweat.lodge-DECL Crows
am-maa-kuss-kalúua hawá-m
 REL-INDEF-GOAL-run.to one-DET
 'Ada said, "Look at that! It's a sweat lodge. That's one of the things the Crows run to [depend on]' (Ten Stories II 2)

Eehk is also used as a demonstrative, as in (11) and (12):

- (11) *bachuuk-káat éehk baa-l-ee-kísshee-sh*
 younger.brother-DIMIN that INDEF-2POS-own-SPORT-DET
bii-ikaa-hka(a)-áh-ah he-k
 1B-see-CAUS-PUNCT-IMPER say-DECL
 'little brother, let me see that little thing you have, he said' (Iishoop 9)

² The terms "presentative" and "directive" are taken from Hanks (1990:66).

- (12) *áachiwile isítche-k ééhk*
 milk like-DECL that.one
 'that one likes milk' (Sees 16)

In (11) *ééhk* is a modifier, while in (12) it is a subject noun phrase. *Eéhk* may also be used as a locative, as in (13) and (14):

- (13) *bachee-káata-m ééhk buluak-k(o)-óo koolá-k*
 man-DIMIN-DET there downstream-area-PUNCT be.there-DECL
da-láa-lak dii-kuxshi-immaachi-k
 2A-reach-COND 2B-help-will-DECL
 'there is a man there just downstream; if you go to him, he will help you' (Issii 14)
- (14) *"basahkáale ééhk bal-(h)éélee-n iisashpít-dak*
 grandmother there wood-among-LOC rabbit-DET
baappeé-k b-aliat-b-ee-m isáa-kaashi-k" he-m
 1A.kill-DECL 1A-think-1A-!-DS big-AUG-DECL say-DS
 'grandmother, I thought I killed a rabbit there in the woods, and to my surprise, it was very big' (Isahkáa 13)

Eéhk has two plural forms, *ákian* and *ákiom*, as illustrated in (15) and (16):

- (15) *ákian kúh awaxaw-úu-k haa-(a)k Cheétii-sh*
 those PRO mountain-PL-DECL say-SS Wolf.Mountains-DET
 "'those are mountains," he said, "the Wolf Mountains"' (Ten Stories VIII 4)
- (16) *ákiom koowáte-a-(a)k iláa-att-aat-uua-sh*
 those together-CAUS-SS talk-continue-APPROX-PL-after
 'after those ones got together and kept talking' (Isahkáa 30)

The predicative form of *ákian/ákiom* is *ákiok*.

There are also extended uses of *ééhk*. In the following example the referent is neither in sight nor anywhere nearby:

- (17) *bacheeítche . . . bacheé xaxúa bachaahii-ák óoppíi-ak*
 chief man all gather.together-SS smoke-SS
"ééhk shikáak-kaata-m xapíi-o-k"
 that boy-DIMIN-DET lost-CAUS.PL-DECL
 'the chief gathered all the men together, he smoked, "they lost that little boy" [he said]' (Uuwat 4)

In (17) the boy is missing and his mother cannot find him. This, then, is obviously an extended use of *éehk*.

Like *hinné*, *éehk* can also be used as a discourse deictic, as in (18):

- (18) *ittákkaa éehk bachúa bilée héela-ss-shi-la-t-dak*
 just that sinew fire middle-GOAL-STEM-2A-throw-COND
kala-koó-k³
 PREF-COP-DECL
 ‘if you just throw that sinew into the middle of the fire, that’s it’ (Uuwat 14)

The sinew in (18) was introduced into the discourse three sentences earlier; so it is a little removed from the current context, but not much, and we can view it as a medial discourse deictic.

- (19) *hiloósh éehk shee-la(a)-áhe kootá-k*
 maybe that say-2A-PUNCT like.that-DECL
 ‘maybe what you just said is correct’ (Sees 17)

In (19) the reference is to an immediately preceding statement, another good example of a medial discourse deictic.

4.2.3. *íilak* ‘distal’

Íilakaa is shortened to *íilak* (also spelled *ilak*) when it is an independent word. In most of the textual examples the referent of *íilak* is remote but still visible. *Íilak* and its derived forms are often subject to expressive lengthening, e.g. *iiiiíilak* ‘waaaaay over there’. Examples are seen in (20)–(22):

- (20) *ííilak shiché aw-ímmiil-ak buú-w-oo-mmaachi-k*
 over.there hill 1A-circle-SS 1A.PL.come-1A-PL-will-DECL
 ‘we’ll circle that hill way over there and come back’ (Isahkáa 21)
- (21) *dáakbachee kuss “Shikáak-dak hilee-láa-?” he-m*
 his.son GOAL boy-DET here-be.there-INTERR say-DS
“eeh ílak bahée ko awúua-la-k” he-m
 yes that spring PRO inside-be.there-DECL say-DS
 ‘he said to his son, “is there a boy here?”—“yes, he’s inside that spring over there” he said’ (Bitáa 5)

³ *Kala* is a prefix that can sometimes be translated ‘now, already’. In other cases it has no obvious semantic content and is glossed PREF ‘prefix’.

In this story father and son are at their camp, and it is likely that the spring referred to is some distance away but still visible.

- (22) *Otto-sh báaku-ss-ikaa-(a)k "Joe ikaa-h íllak íhká-m*
 O.-DET up-GOAL-look-SS J. look-IMPER that star-DET
xapi-k" he-lak
 fall-DECL say-DS
 'Otto looked up and said, "Joe, look! That star is falling"' (Ten Stories V 3)

Here Otto is pointing to a falling star in the night sky (remote but visible).

íllak can also be used as a discourse deictic, as in (23):

- (23) *iichiil-al-aakinnee-xxo dáa-wachia-xxo sáapee-m dia-laa-lak*
 horse-2A-ride-whether 2A-fight-or what-DET do-2A-COND
dii-aweeilichi-ssaa-immaachi-k íllak baa-wa-lá-ko koó-k
 2B-fall-NEG-will-DECL that INDEF-1A-1B-give COP-DECL
 'whether you're riding horseback or fighting, whatever you're doing, you won't fall down; that is what I give you' (Uuwat 10)

Here *íllak* refers to the gift of being preserved from falling that is being given to the hero of the story.

4.2.4. *íahk* 'remote, out of sight'

When *íahku* occurs as a separate word, the final vowel is lost, and it is spelled *íahk* or *íak*. This deictic points out a referent that is spatially remote. It differs from *íllak* in that the referent is out of sight. Examples are seen in (24)–(26):

- (24) *Mr. Latch íak chóosee-sh dútchi-sho is-awé*
 Mr L. that gray-DET get-INDIR 3POS-land
awuu-ss-i(i)-ak
 inside-GOAL-CAUS-SS
 'Mr. Latch must have gotten that gray; he put it inside his land' (Sees 17)

In (24) Mr. Latch and the gray horse are the topic of conversation, but they are absent from the scene.

- (25) *íahk hilaakée bii-ala-koolée-sh kala-koon awaxaawi-hisshe*
 there now 1B-REL-be.there-DET PREF-SOURCE mountain-red
al-ápasshi-ko kuss-baa-xalúss-ak baa-lée-k
 REL-touch-area GOAL-1A-run-SS 1A-go-DECL

'I ran from where my place is now toward the red mountain'
(Baapiiháake 1)

Here the narrator is relating a vision that he had received in a dream; *iahk* refers to the site of his home in Pryor, some distance from where he is telling the story. He is assuming that his listeners will know where his home is.

- (26) *"fak bacheé-m isaashké chóosee-sh hiliht-(t)áa-huua*
that man-DET his.horse gray-DET here-PATH-come
al-ákaa-?" he-lak
2A-see-INTERR say-DS
"have you seen that man with the gray horse come by here?" he said'
(Sees 15)

It is obvious that the referent is not visible; otherwise the boy would not be inquiring about his whereabouts.

4.2.5. *iwahk* 'distal'

The independent word form of *iwahku* is *iwahk* or *iwak*. This deictic is distal in reference, but it is not clear how *iwahk* differs from *iahk* or *iilak*. Examples appear in (27) and (28):

- (27) *fwak b-iilápxe koó-k*
there 1POS-father COP-DECL
'that one over there is my father' (Sees 3)

It is not obvious from the context if the referent is visible, but it is clear that he is some distance away.

- (28) *Jesus kool-ák "hinne baapé fwahk baa-láam-nee*
J. be.there-SS this day that INDEF-read-2A
d-iikukk-uua-sh kalakoon koot-ée-k" he-hcheilu-k
2A-hear-PL-DET now like.that-PUNCT-DECL say-REPORT-DECL
'Jesus it was, "today that reading that you heard is fulfilled" he said' (Lk 4:21)

In (28) *iwahk* could easily be interpreted as a medial deictic, or even as proximal. *Iwahk* occurs considerably less frequently in the texts than the other deictics.

4.2.6. *áa* 'audible'

Aa is a deictic that points to a referent that can be heard but not seen (examples (29)–(30)). Such a deictic is fairly rare but not unknown cross-linguistically. Yucatec Maya has what Hanks calls a “peripheral sensory” deictic indicating that the speaker has perceptual access to the referent, but can neither see nor touch it; the referent is accessed by hearing or possibly smell (Hanks 1990:255).

- (29) *áa óoppi-k biléeli-ssaa-h*
 that.one smoke-DECL go.in-NEG-IMPER
 'that one is smoking, don't go in' (Uuwat 19)

Here both the speaker and addressee are standing outside the tipi, while the referent of *áa* is inside.

- (30) *sapée-lak áa immee-?*
 who-COND that.one that.one-INTERR
 'who is it that just left?'

In (30) the speaker was in the sweat lodge when he heard a pickup drive off, so *áa* referred to the sound of the pickup, and by extension, the driver of the pickup: 'that one I heard'.

The suppletive plural form for *áa* is *íach*:

- (31) *íach ak-dii-chichiile kan dii-láasaas-uu-k*
 those REL-2B-look.for now 2B-call.by.name-PL-DECL
 'those ones who are looking for you are calling your name'
 (Baleiichiweé 44)

4.2.7. *ku, ko* 'discourse-referential deictic'

The underlying form of this deictic is *ku*; *koó* or *ko* is the citation form. *Ko* can be described as a discourse-referential deictic or a discourse anaphor, since it refers to someone or something that was present earlier in the discourse. I list it with the deictic stems for two reasons: it patterns with the other deictics in its combinatory possibilities, and it is deictic in an extended, discourse sense.

Like the other deictics, *ko* can be used both as a demonstrative modifier and as a demonstrative pronoun:

- (32) *ko báalee* 'that winter'
ko éwahchek 'I know that'

Ko combines with a wide variety of suffixes to form specialized locative, temporal and manner-adverbial expressions:

- (33) *baakoón* 'peacefully, without difficulty'
koochihtá 'without change, forever'
kookáata 'just right, right on the mark'
kookáasheen 'suddenly, just then, just at that time'
koolalée 'at that time, back then'
kooliash 'all the time, all that time, all along'
koon 'there'
kootáa 'immediately, right away; all over, everywhere'
koottennák 'at that time' (future)
koottaléesh 'at that time' (past)
kusskó 'previously, formerly, a long time ago'

Ko also occurs after a noun phrase as a focus marker, as illustrated in (34)–(36):

- (34) *Baáhpuo ko koolá-k íaxuhk-alaxxuahche ko*
 Pryor PRO be.there-DECL fox-society PRO
achi-k
 belong.to-DECL
 'he lived at Pryor; he belonged to the Fox Society' (AB 75)
- (35) *hilaakée Alaska ko bii-koolá-k áxxaashe it*
 now A. PRO 1B-be.there-DECL sun still
tawée-kaata-k
 hot-DIMIN-DECL
 'now I'm in Alaska; the sun is still warm' (Harold I 5)
- (36) *Alaska kuhtée b-iilápaat-uua-sh ko*
 A. there 1POS-friend-PL-DET PRO
kuss-bii-lasshihchí-hche-k
 GOAL-1B-think.about-CAUS-DECL
 'he made me think about our friends in Alaska' (Harold IV 15)

In this construction *ko* is in apposition to the preceding noun phrase.

In the focus construction there is a contrast between *kon* (agentive) and *ko* (nonagentive), illustrated in (37) and (38):

- (37) *Joe-sh kon dichí-k*
 J.-DET PRO hit-DECL
 'Joe hit him' or 'it's Joe who hit him'
- (38) *Joe-sh ko dichí-k*
 J.-DET PRO hit-DECL
 'he hit Joe' or 'Joe's the one he hit'

In (37), *Joesh* is the subject, while in (38) it is the object. In this usage, *ko/kon* helps to resolve any potential ambiguity regarding which noun phrase is the subject of the clause.

In another variety of focus construction we find the form *koóm*, as in (39) and (40):

- (39) *bacheé-m iaxpáaliia baapúxte koóm baapúxta-taali-m*
 man-DET his.medicine otter PRO otter-real-DET
aasúua ashkawúua-n dúushii-k
 his.house inside-LOC put.down-DECL
 'a man whose medicine was the otter put a live otter down inside his lodge' (Uuwat 19)
- (40) *hileen bacheé-sh koóm Herod al-iliia iikk-ák kan*
 these man-DET PRO H. REL-speak hear-SS then
dée-loo-m
 go-!.PL-DS
 'these men heard what Herod said, then they went' (Mt 2:9)

In (39) *koóm* is used as a presentative to introduce a new character into the discourse. In (40), however, the noun phrase *hileen bacheésh* is definite and already salient in the discourse.

4.2.8. *ilawe* and *limmee*

Finally, there are two specialized deictics: *ilawe* 'that one going by' (41) and *limmee* or *iimma* 'that one who just went by or just left' (42)–(43). *ilawe* is composed of a stem *ii* + the continuative verb *dawi* 'continue in motion'. *limmee* appears to be composed of a stem *iil* + *dée* 'go'.

- (41) *ilawe bia-kaate é-la-hche-?*
 that.going.by woman-DIMIN STEM-2A-know-INTERR
 'do you know that girl who is going by?'
- (42) *limmee bia-kaate é-la-hche-?*
 that.past woman-DIMIN STEM-2A-know-INTERR
 'do you know that girl who just went by?'
- (43) *iimma bacheé isaashkakaáshe itt-ak baatcháachi-k*
 that man his.dog good-SS very-DECL.
 'that man who just left has a very good dog' (Sees 8)

4.3. Predicatives

The citation form of the deictic combines with declarative *k* to express a complete predication:

- (44) *hinnée-k* 'here it is'
éehkoo-k 'there it is'
íilakaa-k 'it's way over there'
koó-k 'that's it'

Koó, the most semantically bleached of the deictic set, is used as a copula, as in (45)–(48):

- (45) *Larry-sh akbaawaachimmihche koó-k*
 L.-DET teacher COP-DECL
 'Larry is the teacher'
- (46) *Suzanne bas-akbaawaachimmihk-uua koó-k*
 S. 1POS-teacher-PL COP-DECL
 'Suzanne is our teacher'
- (47) *Eskimo kooté ala-kool-úua hilihtée koó-k*
 E. like.that REL-be.there-PL here COP-DECL
 'the place where the Eskimos live is right here' (Harold I 9)
- (48) *Alaxchii-ahu-sh Apsáalooke is-bacheeitt-uua kal-íiháake*
 coup-many-DET Crow 3POS-chief-PL PREF-last
koó-k
 COP-DECL
 'Plenty Coups was the last chief of the Crows' (AB 78)

In sentences with *koó* as copula, the noun phrases are definite in reference; if indefinite reference of the predicate NP is intended, the copula is omitted:

- (49) *Peter akbaawaachimmihchi-k*
 P. teacher-DECL
 'Peter is a teacher'
- (50) *hinne baa-m dappée-sh úuxa-k*
 this INDEF-DET kill-DET deer-DECL
 'this thing that he killed was a deer'

When used as a copula, *koó* may be inflected for number—the plural is *koóu*—but not for person. If one of the noun phrases in this predicate nominal construction is a first or second person pronominal, the copula is omitted, as in (51):

- (51) *akbaawaachimihche bii-k / *bii-koó-k*
 teacher I PRO-DECL / *I PRO-COP-DECL
 'I am a teacher' or 'I am the teacher'

Koó is also used in the Crow equivalent of a cleft construction, as illustrated in (52) and (53):

- (52) *Mr. Latch iichlile kam-maa-isítche koó-k*
 Mr. L. horse PREF-INDEF-like COP-DECL
 'horses are what Mr. Latch likes the most' (Sees 5)
- (53) *ashóo ii chikitt-úua koó-k*
 back.of.lodge INSTR respect-PL COP-DECL
 'the back of the lodge [the place of honor] is what they use to show respect' (Isshii 23)

The unclefted equivalent of (53) would be (54):

- (54) *ashóo ii chikitt-úu-k*
 back.of.lodge INSTR respect-PL-DECL
 'by means of the back of the lodge they show respect'

There are a number of examples in the texts where *koó* is a suffix to the preceding verb rather than an independent word, as in (55) and (56):

- (55) *awé b-ih baa-w-eé-koó-k*
 earth I PRO INDEF-1A-OWN-COP-DECL
 'as for me, the earth is what I own' (Isshii 20)
- (56) *iishbiiwishke iisuukaate dútt-uua kal-am-miá-koó-u-k*
 cat mouse catch-PL PREF-REL-survive-COP-PL-DECL
 'catching mice is how cats survive' (Animals 3)

4.4. Goal postpositional phrases

The deictics combine with the goal postposition *ss(ee)* to form postpositional phrases:

- (57) *hili-ssee ko beé-woo-?*
 this-GOAL PRO 1A.PL.GO-INCL-INTERR
 'shall we go this way?'
- (58) *aliis-uu-lak hili-ss-huu-hkaa-h*
 hungry-PL-COND this-GOAL-come-CAUS-IMPER
 'if they are hungry, send them this way' (Uuwat 15)

- (59) “*binnaxché kusseé bii-piisshe da-lóo-l-i(i)-?*” *he-lak*
 fence GOAL 1B-after 2A-come-2A-will-INTERR say-DS
dáaw-uu-k
 go-PL-DECL
 “will you come towards the fence behind me?” he said, and they went’
 (Sees 3)

Kuss(eé), a combination of deictic *ku* with the postpositional suffix *ss(ee)*, can be viewed as a complex postposition that combines with stems that are unable to combine directly with *ss(ee)* (see §15.3). (I do not segment *kuss(eé)* in examples.)

4.5. Locative postpositional phrases

The deictics also combine with the postpositional suffix *n* ‘locative’:

- (60) *hilee-n dúusaa-h*
 here-LOC set.down-IMPER
 ‘set it down here’
- (61) *éehkoo-n awáachi-h*
 there-LOC sit-IMPER
 ‘sit down over there’
- (62) *iíílakaa-n áashi-m koolá-m*
 way.over.there-LOC river-DET be.there-DS
 ‘way over there is a river’ (Isshii 10)
- (63) *amnia koon is-awus-úu-wishi-i-lu-k*
 bank there 3POS-den-PL-exist-HAB-PL-DECL
 ‘their [otters] dens are in banks’ (Animals 32)

In (63), *n* combines with *koo* to form a locative postposition. Recall that *n* combines with the citation form rather than the stem; hence the forms are *hileé-n*, *éehkoo-n*, etc., not **hili-n*, **éehku-n*.

4.6. Specific locative postpositional phrases

The deictics combine with the locative derivational suffix *htee* to indicate a specific or precise location, a point rather than an area, indicated in glosses as SPECLOC:

- (64) *hili-htée dúusaa-h*
 here-SPECLOC set.down-INTERR
 'put it down right here'
- (65) *éehku-htee baa-ahú-m baatcháachi-k*
 there-SPECLOC INDEF-many-DS very.much-DECL
 'there are lots of them right over there' (Isshii 5)
- (66) *bíiluk bikkaa-iilaa-apaale ko b-ashshuut-úu-k*
 IPRO grass-by.itself-grow PRO 1A-cut-PL-DECL
iíilaka-htee al-ákaa-?
 over.there-SPECLOC 2A-see-INTERR
 'As for us, we harvested the oats. Do you see them way over there?' (Ten Stories V 1)

Iíilakahtee in (66) is an example of expressive lengthening with deictics.

- (67) *hinne awé ala-kuss-kashée-sh ku-htée xalaa-ssaa-k*
 this land REL-GOAL-move.to-DET there-SPECLOC rain-NEG-DECL
 'this land that he had moved to, there was no rain there' (Lk 15:14)

4.7. Verbs of likeness

The deictic stems combine with the derivational suffix *ta* to form verbs meaning 'be like this, be like that', etc. These are stative verbs inflected as in table 4.2; examples are given in (68)–(70).

TABLE 4.2. INFLECTION OF VERBS OF LIKENESS

1SG	<i>bii-hiliata</i>	1PL	<i>balee-hiliata</i>
2SG	<i>dii-hiliata</i>	2PL	<i>dii-hiliat-uu</i>
3SG	<i>hiliata</i>	3PL	<i>hiliat-uu</i>

- (68) *am-maa-wii-chiwáa-u hillata-k haa-(a)k chiweé-hcheilu-k*
 REL-INDEF-1B-tell-PL like.this-DECL say-SS tell-REPORT-DECL
 'what they told me is like this, he said, and he told them' (Héettaa 23)
- (69) *bishké ilisshit-uua xawáa-u-k tahkoota-k*
 dog wild-PL bad-PL-DECL like.that-DECL
 'wild dogs are no good; it's like that' (Sees 32)

- (70) *ak-chiwakii-ssee ko kuhchée-k fiwahkoota-k*
 REL-pray-NEG PRO mean-DECL like.that-DECL
 'he meant the ones who didn't pray, that's the way it was' (Baapiiháake 3)

Kootá often occurs following English words that have been inserted into a Crow discourse context. In this usage *kootá* is semantically empty; it functions as a carrier of the nominal suffixal morphology, the derivational suffixes and determiners. This usage is illustrated in (71):

- (71) *computer kootám* (+ indefinite specific determiner)
computer kootéesh (+ definite determiner)
microscope kootkáateesh (+ *káata* 'diminutive' + determiner)
elephant kootkaásheesh (+ *kaáshi* 'augmentative' + determiner)

Crow has another construction where *kootá* 'be like that' follows a nominalized clause that ends in *i-lua-sh* (*i* 'habitual' plus *lu* 'plural' plus the definite determiner). Examples are seen in (72)–(74):

- (72) *iisáakshe itchi-i-lua-sh kootá-k*
 young.man good-HAB-PL-DET like.that-DECL
 'as good young men regularly are, he was like that' or 'he acted like a good young man' (Uuwat 18)
- (73) *baapixte ii-o attá-t-uua-sh kootá-k*
 otter tooth-PL sharp-DISTR.PL-PL-DET like.that-DECL
 'otters' teeth are sharp, he is like that' or better, 'he has sharp teeth like an otter's' (Bitáa 5)
- (74) *bachúa aláhpup-ak kaá-i-lua-sh kootá-k*
 sinew shriveled.up-SS remain-HAB-PL-DET like.that-DECL
 'he looked like a shriveled up piece of sinew' (Uuwat 18)

4.8. Verbs of likeness plus causative

The verbs of likeness in *ta* combine with the direct causative to derive verbs meaning 'do like this, do this', 'do like that, do that', etc. They are inflected as in table 4.3. Note that this inflection is irregular: we would have expected the third person singular and plural forms to be **hiliatchee* and **hiliattuu*, respectively, with gemination of the obstruent (see §6.3.2.4 for a treatment of causative formation). Examples are given in (75) and (76).

TABLE 4.3. INFLECTION OF CAUSATIVE VERBS OF LIKENESS

<i>hilla-chee</i> 'do this'			
1SG	<i>hiliat-baa</i>	1PL	<i>hiliat-buu</i>
2SG	<i>hiliat-daa</i>	2PL	<i>hiliat-duu</i>
3SG	<i>hiliach-ee</i>	3PL	<i>hiliat-uu</i>

- (75) *sáap-dia-laa-?* *he-m* *bii-hiliach-e-hk-uu-k*
 what-do-2A-INTERR say-DS 1B-like.this-CAUS-CAUS-PL-DECL
haa-(a)k
 say-SS
 "what did you do?" she said; "they made me do this" he said' (Isahkáa 35)

In (75) *bii*, the subject of the lower clause, is a B-set pronoun, the regular pattern with causatives.

- (76) *baa-ichúu-wee-leeta-k* *íiwahkoot-b-aa-k*
 INDEF-oppose-1A-not.exist-DECL like.that-1A-CAUS-DECL
 'I haven't opposed anyone, that is the way I acted' (Baapiiháake 4)

4.9. Locative verbs

The deictics combine with the locative verb *la* 'be at' to derive locative verbs meaning 'be here', 'be there', etc. These are stative verbs, and they are inflected as ordinary statives, as is seen in table 4.4.

TABLE 4.4. INFLECTION OF LOCATIVE VERBS

<i>hileelá</i> 'be here'			
1SG	<i>bii-hileelá</i>	1PL	<i>balee-hileelá</i>
2SG	<i>dii-hileelá</i>	2PL	<i>dii-hileel-úu</i>
3SG	<i>hileelá</i>	3PL	<i>hileel-úu</i>

- (77) *d-iilapxe* *hilee-lá-?*
 2POS-father here-be.at-INTERR
 'is your father here?'
- (78) *bas-iilaalee* *éhkoo-la-k*
 1POS-car there-be.at-DECL
 'my car is over there'

- (79) *awaxaawé ilakaa-la-k*
 mountains over.there-be.at-DECL
 'the mountains are way over there'

Koolá 'be there' is commonly used as a locative verb, as in (80):

- (80) *éehk shiché alítchia-n baá-m koolá-k*
 that hill behind-LOC INDEF-DET be.there-DECL
kuss-dée-ssaa-(aa)la-h
 GOAL-go-NEG-PL-IMPER
 'there is something behind that hill; don't go toward it' (Bitáa 13)

Koolá is also used to introduce a direct quotation, as in (81):

- (81) *Bill huua-sh koolá-(a)k "dáa-h óolapi-h" ... he-k*
 B. say.PL-DET be.there-SS go-IMPER find-IMPER say-DECL
 'Bill it was, "go find it," he said' (Sees 30)

There is a construction where *koolá* is suffixed to another verb. In this construction *koolá* refers to ongoing activity, as illustrated in (82)–(84):

- (82) *ko óotchia hinne bale-aashannáshee-sh kukaa*
 that night this DEPOS-old.campsite-DET SOURCE
iláa-u-koola-k
 talk-PL-be.there-DECL
 'that night from the direction of the old campsite came the sound of talking' (Isahkáa 36)
- (83) *baa-chiwaá-u-sh iikukk-aachi-ssaa is-bacheeitt-uua*
 INDEF-tell-PL-DET listen.to-APPROX-NEG 3POS-chief-PL
chiweé-ssaa dúxxii-lee-koola-k
 tell-NEG war.party-go-be.there-DECL
 'he didn't listen to what they had told him, he didn't tell their chiefs, he kept going on war parties' (AB 67)
- (84) *is-bilaxpáake baai-k-shii-ak ich-iwaaiaschili-k*
 3POS-people things-say-SS REFL-sell-DECL
huu-koola-k
 say.PL-be.there-DECL
 '[Plenty Coups'] people were saying things; they kept saying that he had sold himself (sold out)' (AB 79)

4.10. Locative verbs plus causative

The locative verbs can further combine with the direct causative to form verbs meaning 'situate oneself here', 'locate oneself there', etc: *hileelée*, *éehkoolee*, *íahkoolee*, *koolée*. These verbs are inflected as in table 4.5; examples are given in (85)–(87).

TABLE 4.5. INFLECTION OF CAUSATIVE LOCATIVE VERBS

<i>éehkoo-l-ee</i> 'situate oneself there'			
1SG	<i>éehkoo-m-m-aa</i>	1PL	<i>éehkoo-m-m-uu</i>
2SG	<i>éehkoo-n-n-aa</i>	2PL	<i>éehkoo-n-n-uu</i>
3SG	<i>éehkoo-l-ee</i>	3PL	<i>éehkoo-l-ii-o</i>

(85) *aa-la-lóo-lak* *balee-áxpá-(a)k* *hilee-l-ée-lak*
 PORT-2A-come-COND 1B.PL-be.with-SS here-be.at-CAUS-COND
shóot-dak
 how-COND
 'how would it be if you would bring him and he would be here with us?'
 (Bitáa 5)

(86) *éehkoo-l-ii-(a)k* *kalakoon* *baa-ikaa-h*
 there-be.at-CAUS-SS then INDEF-see-IMPER
 'situate yourself there and then watch' (Baapiiháake 1)

(87) *kooták* *éehkoo-n-n-aa-lak* *chiláakshilak*
 all.right there-be.at-2A-CAUS-COND tomorrow
baa-w-ashshik-aát-boo-k *he-k* *huu-k*
 INDEF-1A-consider-APPROX-INCL-DECL say-DECL say.PL-DECL
 'all right, if you take that spot over there, tomorrow we'll consider the
 matter' she said (Isshii 11)

4.11. Verbs of saying

The deictic stems combine with *sheé* 'say' to derive verbs meaning 'say this', 'say that', etc. They are inflected as in table 4.6; examples are seen in (88) and (89).

TABLE 4.6. INFLECTION OF VERBS OF SAYING

iiwahkooshee 'say that'
1SG *iiwahkooshee-waa* 1PL *iiwahkooshee-w-uu*2SG *iiwahkooshee-laa* 2PL *iiwahkooshee-l-uu*3SG *iiwahkooshee* 3PL *iiwahkoo-shii-o*

(88) *John kuss hilla-shee-k sáapa-ss da-luú-o-?*

J. GOAL this-say-DECL what-GOAL 2A-come.PL-PL-INTERR

'John said this to them, "why did you come?"' (Jn 3:7)

(89) *iiwahkoo-shii-ak hinne póopahta-chia-sh kuu-ák*

that-say-SS this owl-white-DET give-SS

'that is what he said, this White Owl, and he gave it to him' (Issii 25)

5 Verb derivation

5.1. Introduction

In this chapter we examine the derivational morphology of verbs. Crow derivational morphology includes prefixes, suffixes, one infix (*chi*), and several patterns of reduplication.

While the opposition between active and stative verbs is fundamental to Crow grammar, many of the derivational affixes can occur with both actives and statives. Thus it seems preferable to treat derivation in relation to both classes.

First we treat the prefixes: locative prefixes (§5.2), instrumental prefixes (§5.3), and other prefixes—*chi* ‘again’ (sometimes infix), *ihchi* ‘reflexive’, and *i* ‘stativizer’ (§5.4). Reduplication is treated in §5.5, and derivational suffixes in §5.6.

5.2. Locative prefixes *á(a)*, *í(i)*, *ó(o)*

The locative prefixes may be viewed from a diachronic perspective as postpositions that have been incorporated by their head, the verb stem; they express directionality or location. There are three locative prefixes: *á(a)* ‘on, onto’, *í(i)* ‘on, over, covering, touching’, and *ó(o)* ‘into’. (Locative prefixes appear with both long and short vowels, and it is not clear which are more basic and under just what circumstances each variant occurs.) Stems that include these prefixes are accented on the prefix. While most of the locative prefixes occur with active verbs, there are some that occur with statives. These are noted in the lists below.

Table 5.1 gives examples of stems with locative prefixes. (The locative stem formed from *xapi* has an epenthetic *a* after the velar to avoid an *ix* sequence, a regular pattern in Crow. Also, the *h* in *óhchipi* suggests that the stem is *hchipi*, with the *h* lost in the nonderived stem.)

TABLE 5.1. STEMS DERIVED WITH LOCATIVE PREFIX

STEM	LOCATIVE STEM
<i>shuá</i> 'spit'	<i>áasshua</i> 'spit on'
<i>kalée</i> 'vomit'	<i>ákalee</i> 'squirt on'
<i>xapí</i> 'lie down'	<i>íaxapí</i> 'cover oneself'
<i>chipí</i> 'drown'	<i>óhchipí</i> 'dive into'

Locative prefixes often serve to increase the valence of the verb. As a result, some locative stems are ditransitive, allowing both a goal and a theme object, as in (1):

- (1) *hinne hawát-kaatee-sh aa-lée-laa aashúua baáhpa-m áxxaxx-uua*
 this one-DIMIN-DET PORT-go-SS his.head rock-DET rub-PL
 'they took this one and rubbed his head against a rock' (Bitáa 15)

Verbs derived with the locative prefixes are inflected with the pronominal prefixes *aw* (first person) and *al* (second person); the paradigm for these verbs is given in §6.3.1 (table 6.14).

Examples (2)–(4) list stems occurring with the various locative prefixes.¹

- (2) *á(a)* 'on, onto':

áachiahi 'take away forcefully, confiscate'
áachiwi 'climb, step along'
áakaapi 'reach summit, come over hill'
ákalee 'squirt on'
ákaxpi 'step over, climb over'
áakinnee 'straddle, ride'
áapchi 'kindle fire'
áapchiaxxu 'sprinkle, pour over' (< *a* + *chi* 'again' + *páaxxu* 'pour')
áappasshi 'scramble for, dispute over'
áasshua 'spit on' (*shuá* 'spit')
áatchiichi 'peek, look over'
áaxxinnee 'retain for oneself'
áchippee 'be draped over, hang over' (stative)
ápaalia 'wrap around'
ápasshi 'touch together, touch with something'
ápchichi 'touch with something harmful'

¹ I include verbs in these lists primarily on the grounds of form: these are the stems that begin with initial accented *á*, *í*, or *ó*, and the active verbs inflect according to the paradigm in §6.3.1.7. However, many of these stems do not appear to have the semantics of locative verbs.

ápchishi 'rub on, spread, paint'²
ássaa 'be inside out' (stative)
ássasshi 'put on'
ássawua 'step on'
áwiissaa 'be suspended' (stative)
áxia 'stop intermittently'
áxpili 'compete'
áxxalua 'stick in, tuck in'
áxxaxxi 'rub against'
áxxichi 'be sticking into' (stative)

(3) *i(i)* 'on, over, covering':

ia 'wear over the shoulders'
iaschili 'buy'
iaxapi 'cover oneself'
iaxua 'cover'
iaxxaaxii 'stained, dirty, soiled' (stative)
ichishshi 'love'
ihchipshia 'support, brace' (stative)
ihkashia 'mix with, spread and mix'
ihkasshi 'live with, stay overnight with'
ihkukooxua 'cover, overwhelm, overcome'
ihee 'bet'
ihkuluu 'be touching' (stative, two-place)
iihkupchi 'splash water on rocks in sweat lodge'
iikaachi 'sit on'
iikuurwita 'revolve'
iilutchiki 'filled, plugged' (stative)
iipi 'have sexual intercourse with'
iishi 'dip (a liquid), get water in a container'
iishia 'mixed' (stative)
iishuwi 'wash'
iiwaxpi 'set (sun)' (stative)
ikaa 'see, look at'
ikaxxi 'lean on'
ikoochi 'hang up on'
ikuchki 'plan'
ikuxxa 'equal, equivalent' (stative)
immiili 'circle'
ische 'plan well'

² Both *ápchichi* and *ápchishi* contain two prefixes, locative *á* and instrumental *pi*.

ischili 'cause to carry on back'
issachi 'plugged, covered over' (stative)
isshi 'case, outer cover' (noun)

(4) *ó(o)* 'into':

óhchikaapi 'find something that was lost'
óhchipchi 'stick up for'
óhchipi 'dive' (*chipi* 'drown')
óhkapi 'basin' (noun)
óochia 'stop'
óoli 'wait for'
óolichi 'envy'
óolapi 'find by accident, discover'
óoschi 'unplug'
óoshii 'dip out, scoop, ladle'
óoshtachi 'cling to, stick to, crowd around' (stative)
óotchi 'steep' (stative)
óowia 'show'
óoxalia 'slide (on sled)'
óoxalua 'slide'
óoxalua 'steamed, vaporized' (stative)

5.3. Instrumental prefixes

Crow has a set of instrumental prefixes that combine with roots to form verb stems. These prefixes are found in all the Siouan languages, and they must have been a feature of the protolanguage.

They are less than fully productive, since a single stem never occurs with all the prefixes; therefore the speaker must know which stems occur with which prefixes. Also, the vast majority of the stems formed with instrumental and locative prefixes do not occur as independent verbs without prefixes. In most cases, the meanings of the prefixes are quite transparent in the derived stems. Table 5.2 lists the instrumental prefixes found in Crow.

With the exception of *alá* 'by heat or cold', all the instrumental prefixes form active verbs. One of the prefixes, *dak/daC*, forms both active and stative verbs.

The instrumental prefixes can be categorized into four classes on semantic grounds. They refer to the part of the body with which an action is performed: *dú(u)* 'by hand', *dá(a)* 'by mouth', and *ala* 'by foot'; the instrument with which an action is performed: *a* 'by blade (cutting)', and *oo/uu* 'by projectile (shooting)'; the manner in which an

action is performed: *dak/daC* 'by force', and *pá(a)* 'by outward pressure'; or, with stative verbs only, the external cause: *alá* 'by heat or cold' and *dak/daC* 'by inner force or wind'. While a number of different notions are encoded by the instrumental prefixes, they all provide an answer to the general questions: How was the action performed? Or how did the event happen?

TABLE 5.2. INSTRUMENTAL PREFIXES

PREFIX	GLOSS
<i>a</i>	'by blade (cutting)'
<i>ala</i>	'by foot'
<i>alá</i> (with stative verbs)	'by heat or cold'
<i>dá(a)</i>	'by mouth'
<i>dak/daC*</i> with active verbs	'by force'
with stative verbs	'by inner or natural force'
<i>dú(u)</i>	'by hand'
<i>pá(a)</i>	'by outward pressure'
<i>oó/óo/uú</i>	'by projectile (shooting)'

* I write *daC* to indicate that the *k* of the prefix sometimes assimilates to the following obstruent, giving *dapp*, *dassh*, *daxx*, etc.

Examples of stems occurring with a number of instrumental and locative prefixes are given in (5)–(7).

- (5) *alaxxaxxi* 'insert foot' (*ala*)
dúxxaxxi 'insert hand' (*dú*)
páxxaxxi 'insert' (*pá*)
oóxxaxxi 'shoot an arrow or bullet into a hole' (*oó*)
áxxaxxi 'rub against' (*á*)
- (6) *axeechi* 'break open' (*a*)
dáaxeechi 'tear with mouth' (*dáa*)
dúuxeechi 'tear' (*dúu*)
páaxeechi 'pierce' (*páa*)
oóxeechi 'pierce by shooting' (*oó*)
- (7) *alakoopi* 'break through with foot' (*ala*)
dáakoopi 'break through with teeth' (*dáa*)
dakkoopi 'poke a hole' (*dak*)
dúukoopi 'pierce' (*dúu*)
páakoopi 'punch a hole in' (*páa*)

In the rest of this section, in (8)–(16), are listed the verbs with instrumental prefixes that occur in my data. The paradigms for verbs formed with the different prefixes are given in §6.3.

(8) *a* ‘by cutting’:

- achúutchua* ‘cut finely’
- akáchi* ‘slash, slit, gash’
- akbíili* ‘cut according to pattern’
- aláhpí* ‘stab, puncture’
- apíhpi* ‘cut into but not all the way through’
- apúa* ‘twine, twist’
- apúsa* ‘cut through (as in skinning)’
- apúxi* ‘bite into, cut into, vaccinate’
- attáa* ‘cut into strips’
- axeechí* ‘break open’
- axúshi* ‘cut open, slice, cut through’
- hawáxi* ‘butcher’³

(9) *ala* ‘by foot’:

- alachílee* ‘push with the foot’
- alachkapi* ‘walk stealthily, cautiously’
- alachkú* ‘limp’
- alahchiáxi* ‘slip’
- alahchichí* ‘crush with foot’
- alakuuwí* ‘miss one’s step’
- alakoopí* ‘break through with foot’
- alakulí* ‘part hair’
- alakuuwí* ‘step in’
- alapeé* ‘kick’
- alapuuchí* ‘walk fast’
- alashí* ‘tromp’
- alashichí* ‘step on, press down with feet’
- alashéechí* ‘break with foot’
- alashkapi* ‘step on’
- alassihíchi* ‘touch with foot’
- alataxí* ‘limp’
- alatsí* ‘slip’
- alattachí* ‘break with foot’
- alaxaashí* ‘cling to the ground’
- alaxichí* ‘stop suddenly’
- alaxsachí* ‘step in (soft matter)’

³ In Hidatsa the ‘by cutting’ prefix is *ha*; in Crow the initial *h* is lost except in this one stem.

alaxshi 'trample, squash with foot'
alaxuuxshii 'crush with foot'
alaxxaxi 'insert foot'

The prefix *alá* 'by heat or cold' combines only with stative verbs:

(10) *alá* 'by heat or cold':

alá 'be frostbitten'
aláchishi 'be cold, freezing'
aláchuuchi 'singed'
aláhpupi 'singed, scorched'
alákkua 'smoked (meat)'
alápaapi 'smart, burn, sting'
alápee 'forest fire, range fire' (noun)
alátchii 'scorched'
aláttachi 'be cold'
aláxchiia 'browned over open fire'
aláxii 'burned'
aláxxu 'fried'
alée 'hot (weather)'
alóxxaxxi 'feel hot'

(11) *dá(a)* 'by mouth':

dáachiki 'suck on'
dáachilee 'draw, attract toward'
dáachipi 'lick, taste'
dáakoopi 'break through with teeth'
dáapxi 'bite' (refers to bite of an animal)
dáasaashi 'call by name'
dáashi 'name'
dáashia 'bite, hold with teeth'
dáawaxi 'gnaw, cut with teeth'
dáaxeechi 'tear with mouth'
dáaxeexawi 'chew, tear off with teeth'
daaxémmi 'break off with teeth'
dáaxuchi 'suck in (eating)'
dáchkapi 'squeeze, clamp with teeth'
dáhchichi 'crush with teeth'
dámmaxi 'gnaw'
dáputchi 'puff on, suck on'
dáschii 'chew'
dáshku 'draw out by mouth, suck out'
dássachi 'drink vigorously'
dásshushi 'break with mouth; bring down verbally'

dátschi 'grab with teeth'
dáttachi 'break off by biting'
daxcháxchichii 'gulp down'
dáxpíi 'hug'

The prefix *dak/daC* occurs with both active verbs (with gloss 'by force') and stative verbs (with gloss 'by inner or natural force'). Active stems with *dak/daC* are listed in (12):

(12) *dak/daC* 'by force' (active):

dahchichí 'smash'
dakaá 'pull'
dakaxí 'sweep aside'
dakbilée 'knock down'
dakkaashí 'pierce, drive into, sting, spur'
dakkachi 'emerge, come into the open'
dakkoopí 'poke a hole'
dakkuuwí 'miss (with arms or legs)'
dappaxí 'chop, split across the grain'
dappeé 'kill'
dappiliá 'switch, cause to sting'
daschí 'pound; bead, do beadwork'
daschichí 'rest head on'
dashpí 'track down'
dassachi 'split lengthwise'
dassheechí 'break, shatter'
dasshía 'catch, rope, hook'
dassihichí 'think about, ponder'
dasshílua 'slide'
dashhipí 'go beyond, pass'
dasshuuchí 'mow'
datchílua 'skate'
datchipí 'carve, whittle, peel, slice, pare'
datchúshi 'whip'
datchuuchí 'cut hair'
daxchí 'tie, bind'
daxoochí 'enter a group, crowd, thicket'
daxpupí 'lay on, hold down'
daxshíaxshishii 'break into pieces, smash'
daxxaá 'cut from group, hedge along'
daxxeechí 'pierce, tear open'
daxxeexawí 'shred, tear forcefully'
daxxémmi 'break into pieces, break forcefully'
daxxípi 'skin'
daxxóxxi 'peel, rasp'

daxxushi 'crush, smash'

daxxuwi 'paddle, row'

The stative stems with the prefix *dak/daC* are listed in (13). For at least some of these stems the notion 'by inner force, by natural force' appears to be a unifying semantic thread.

(13) *dak/daC* 'by inner or natural force' (stative):

dahkóhpi 'has lost weight'

dakkáhpi 'blown away, blown by wind'

dakkawi 'widely separated, wide apart'

dakkúchi 'swinging (as a tail)'

daksakshí 'fit into (a concave hollow), plugged'

daksálaa 'jolted, shocked; mischievous, daring'

dakshipi 'slow (animate)'

dakúxshi 'quick, frisky, high-spirited, lively'

dappachi 'wide'

dappiáxi 'light in weight'

dappichi 'soaked'

dappóoshi 'inflated, blown up'

dappóoxi 'blistered'

daschushi 'smoothed down, flat'

dashkú 'blown down (by the wind)'

dashtachí 'heavy'

dassaláshsi 'glossy'

dasshipi 'cave in, sink'

datcheepi 'penetrate, go inside body'

datchichi 'winded, exhausted'

datchiishi 'joined, hooked up; stuck in, plugged'

datchipi 'pinched'

daxsachi 'soft'

daxshishi 'broken'

daxxushi 'bruised, smashed, squashed'

(14) *dú(u)* 'by hand':

dúa 'lift up'

dúachi 'move camp'

dúchkapi 'pinch, bind'

dúchkichi 'wring out'

dúhkaa 'grab (fistful)'

dúhkapi 'scratch'

dúmmachi 'distribute'

dúmmaxi 'wade'

dúmmiili 'braid, twist'

dúshi 'take out, open'

- dúschichi* 'crush in hands'
dúschihchi 'snatch, steal'
dúshkapi 'press, squeeze, hold'
dúshkúa 'cast spell'
dúshpi 'break open'
dússachi 'tighten'
dússhia 'haunt'
dússhihchi 'touch'
dússhipi 'untie'
dússhishi 'break with hands'
dússhua 'bend'
dútatchi 'chop up'
dútchi 'grab, take, get'
dútchiki 'tighten'
dúttachi 'break apart'
dúuchiichi 'pluck, pull out feathers or hair of'
dúuchilee 'nudge'
dúuchilua 'drag'
dúuchishi 'stretch; drop; tan (hide)'
dúukalaa 'rip seams, undo sewed parts'
dúukaaxi 'scratch'
dúukoopi 'pierce'
dúupachi 'spread around'
dúupaxi 'drill'
dúupia 'hate, dislike'
dúuppii 'stretch'
dúusaaschii 'claw'
dúusachi 'scratch deeply'
dúusheechi 'break into pieces'
dúushii 'lay down, set down, bury'
dúushia 'pick off with the nails'
dúushilua 'peel off, skin animal'
dúuwili 'turn, twist'
dúuxaa 'spread out'
dúuxaashi 'hold on to'
dúuxalaa 'unbraid, unravel'
dúuxalua 'drag'
dúuxapi 'peel off, tear down'
dúuxawi 'pull hair, tear off'
dúuxeechi 'tear'
dúuxeexawi 'tear in anger'
dúuxshi 'open up, pull apart, make gash'
dúuxchi 'dig with hands or claws'
dúuxpi 'unload'

dúxsachi 'squeeze through fingers'
dúxua 'bend'
dúxxachi 'stick hand into accidentally'
dúxxaxxi 'insert hand'

(15) *pá(a)* 'by pushing, outward movement':

páachichi 'put pressure on, overpower'
páachilee 'push'
páachua 'project outward'
páakoopi 'punch a hole in'
páapii 'stir'
páasaa 'break through barrier by pushing'
páatchi 'crowd out'
páaxalua 'push (dead weight)'
páaxapi 'break, tear'
páaxeечи 'pierce'
páaxshi 'poke a hole in something with liquid in it'
páaxuushi 'push forcefully'
páaxxu 'pour, spill'
páaxua 'scrape'
páhchichi 'defeat completely'
páppaxi 'cut up'
páshku 'cut'
páshpushpi 'break open with pointed object' (reduplicated)
pássachi 'prick, pierce through, inject'
pásshihchi 'touch (with instrument)'
pátchi 'stick in ground, set up'
páxchi 'poke or stir by prodding (e.g., a fire)'
páxsachi 'massage, knead'
páxxaxxi 'insert'

(16) *oá/óo/uú* 'by weapon':

óottachi 'break by shooting, by projectile'
oóxeечи 'pierce by shooting'
óoxexawi 'shot up'
oóxxaxxi 'shoot an arrow or bullet into a hole'
oóxpi 'shoot at and hit, wound'
uú 'hit target'

5.4. Other prefixes

5.4.1. *chi/ku* 'again; possessive reflexive'

There is a nonproductive derivation that involves prefixing *chi* to the stem, as in table 5.3.

TABLE 5.3. STEMS DERIVED WITH *chi*

STEM	DERIVED STEM
<i>dakaá</i> 'pull'	<i>chi-lakaá</i> 'drive vehicle'
<i>dasshia</i> 'catch, rope, hook'	<i>chi-lasshia</i> 'catch a fish'
<i>daxchi</i> 'tie, bind'	<i>chi-laxchi</i> 'wrap up'
<i>baalaáchi</i> 'write'	<i>chi-waalaáchi</i> 'decorate, paint'
<i>bakii</i> 'beg'	<i>chi-wakii</i> 'pray'
<i>kaali</i> 'ask for'	<i>chi-kaali</i> 'praise'
<i>dahpi</i> 'get in vehicle'	<i>chi-lahpi</i> 'get off, dismount'
<i>éhche</i> 'know'	<i>chi-chéhche</i> 'remember'*

*The derivation of *chichéhche* is irregular: an epenthetic *ch* occurs between prefix and stem.

We also find derived stems in *ku*, which are conditioned variants of *chi* before stems beginning with *ku* or *du* (table 5.4).

TABLE 5.4. STEMS DERIVED WITH *ku*

STEM	DERIVED STEM
<i>kuú</i> 'give'	<i>ku-kuú</i> 'give back'
<i>dúupia</i> 'dislike, hate'	<i>ku-lupia</i> 'be tired of'
<i>dúushii</i> 'lay down, bury'	<i>ku-lushii</i> 'store, put away'
<i>dúuxapi</i> 'peel off'	<i>ku-luxápi</i> 'tear down'
<i>dútchi</i> 'get, grab'	<i>ku-lutchi</i> 'take back'
<i>dúusachi</i> 'scratch deeply'	<i>ku-lusáchi</i> 'divide'

There are verbs where (*h*)*chi* or *hk* appears as an infix (table 5.5). The infixed examples suggest that the underlying form is actually *hchi* rather than *chi*. In most of these examples (*h*)*chi* or *hk* is simply following a locative or instrumental prefix. With *ápáali/áhchipaali* and *áakkapaa/áhchikkapaa*, however, *hchi* appears to be a genuine infix. The final form in table 5.5, *ápchiaxxu*, contains three affixes: locative *áa*, instrumental *p(a)*, and *chi*.

TABLE 5.5. STEMS WITH INFIXED (*h*)*chi* OR *hk*

STEM	DERIVED STEM
<i>áachiahi</i> 'take away'	<i>á-hk-achiahi</i> 'take away violently'
<i>áakkapaa</i> 'frozen' (stative)	<i>á-hchi-kkapaa</i> 'frozen again'
<i>áapchi</i> 'light a fire'	<i>á-hchi-pchi</i> 'rekindle a fire'
<i>áappasshi</i> 'fight over'	<i>á-hchi-ppasshi</i> 'break up a fight'
<i>apáali</i> 'grow' (stative)	<i>á-hchi-paali</i> 'grow again'
<i>páaxxu</i> 'pour'	<i>á-p-chi-axxu</i> 'sprinkle on'

* Here the form of the prefix is *hk*, with *ch* → *k* before the low vowel.

Finally, there are examples where the underived stem does not occur synchronically in Crow:

- (17) *chi-lásaachi* 'pout, have a temper tantrum'
chi-lakappi 'choose, select'
chi-paxii 'bend'
ku-lushpia 'fix up, arrange'
ku-luchisshi 'mix'

The meanings of derived stems with *chi* are not always transparent. Often the meaning of the derived stem suggests a repeated activity, returning or going back, basically the same meaning as the English prefix *re* (table 5.6).

TABLE 5.6. STEMS OF REPEATED OR ENDURING ACTIVITY (*chi*)

STEM	DERIVED STEM
<i>axshée</i> 'win from'	<i>chi-axshée</i> 'win again, win back'
<i>daksakshi</i> 'fit into'	<i>chi-laksakshi</i> 'go back into place'
<i>páxsachi</i> 'knead, massage'	<i>chi-páxsachi</i> 'probe again'
<i>kuú</i> 'give'	<i>ku-kuú</i> 'give back'
<i>dútschi</i> 'get, grab'	<i>ku-lutchi</i> 'take back'

Hidatsa has a prefix *ki*, cognate with Crow *chi*, that denotes action on one's own possessions, sometimes called the possessive reflexive. Cognates of this prefix with similar meanings are also found in other Siouan languages. Some of the Crow forms with *chi/ku* have the semantics of the possessive reflexive (table 5.7).

TABLE 5.7. POSSESSIVE REFLEXIVES

STEM	DERIVED STEM
<i>dappeé</i> 'kill'	<i>chi-lappeé</i> 'murder' (kill one's own)
<i>dasshuuchi</i> 'mow'	<i>chi-lasshuuchi</i> 'shave'
<i>dáxpíi</i> 'embrace, hug'	<i>chi-laxpíi</i> 'sit on (as a hen sits on her eggs)'
<i>dakaschí</i> 'carry in one's arms'	<i>chi-lakaschí</i> 'carry one's own in one's arms'
<i>daxchí</i> 'tied up, bound up'	<i>baa-chi-laxchí</i> 'baby' (one's own wrapped up, as in a cradleboard)
<i>dúushíi</i> 'lay down, bury'	<i>ku-lushíi</i> 'store, put away (one's own)'

5.4.2. *ihchi* 'reflexive'

There are a number of verbs that are derived from a stem plus the reflexive pronominal *ihchi*. The form of the prefix is *ihk* before a low vowel, and *ihku* before the instrumental prefix *du*. These are nonproductive derivations: in many cases the nonderived stem does not occur independently, and they differ from productive reflexives in their inflection. In a syntactic reflexive construction the person of both subject and object are marked by verbal prefixes, as in table 5.8. However, in the derived reflexives, which are all intransitive, person is marked only once, as in table 5.9.

TABLE 5.8. INFLECTION OF SYNTACTIC REFLEXIVES

1SG	<i>b-ihchi-wah-kuxshi</i> 'I help myself'
2SG	<i>d-ihchi-lah-kuxshi</i> 'you help yourself'
3SG	<i>Ø-ihchi-Ø-kuxshí</i> 'she helps herself'
1PL	<i>b-ihchi-wah-kuxs-úu</i> 'we help ourselves'
2PL	<i>d-ihchi-lah-kuxs-uu</i> 'you help yourselves'
3PL	<i>Ø-ihchi-Ø-kuxs-úu</i> 'they help themselves'

TABLE 5.9. INFLECTION OF DERIVED REFLEXIVES

1SG	<i>b-ihkalaá</i> 'I stretch myself'
2SG	<i>d-ihkalaá</i> 'you stretch yourself'
3SG	\emptyset - <i>ihkalaá</i> 'he stretches himself'
1PL	<i>b-ihkalaá-u</i> 'we stretch ourselves'
2PL	<i>d-ihkalaá-u</i> 'you stretch yourselves'
3PL	\emptyset - <i>ihkalaá-u</i> 'they stretch themselves'

The following are examples of derived reflexives:

- (18) *ihchipúa* 'jump'
ihchisshi 'rest'
ihkalaá 'stretch oneself'
ihk-alaaxtá 'be surprised' (< *alaaxtá* 'not know')
ihkammáachi 'celebrate'
ihkammissaa 'hurry'
ihkiaxshi 'mispronounce a word'
ihkulupia 'hate oneself' (< *dúupia* 'hate')
ihkulushia 'undress'
ihkulutchi 'dress up' (< *dúutchi* 'get, grab')
ihkuluxáa 'relax' (< *dúuxaa* 'spread out')

In all these examples the agent is also the one affected by the action. These verbs are analogous to the "middle voice" in ancient Indo-European languages.

5.4.3. *i* 'stativizer'

The prefix *i* derives statives from active verbs. The derived verbs refer to the state that results from an activity. Examples with *i* are given in table 5.10.⁴ In several examples the prefix rather than the stem is accented, as in table 5.11.

⁴ Crows use the expression *bii-i-lússhishi-k* to mean 'I'm broke (out of money)' (cf. *i-lússhishi* 'be broken' in table 5.10). This is confirmation that these verbs are, in fact, statives, even though many of them obviously would occur only rarely if at all with first or second person referents.

TABLE 5.10. STATIVES DERIVED WITH *i*

ACTIVE STEM	DERIVED STATIVE STEM
<i>dúupachi</i> 'spread around'	<i>i-lúpachi</i> 'be burst open'
<i>dúshpi</i> 'break open'	<i>i-lúshpi</i> 'come apart'
<i>dússhishi</i> 'break'	<i>i-lússhishi</i> 'be broken'
<i>dúttachi</i> 'break apart'	<i>i-lúttachi</i> 'severed'
<i>dúuppi</i> 'stretch'	<i>i-lúuppi</i> 'stretched'

TABLE 5.11. STATIVES DERIVED WITH ACCENTED *i*

ACTIVE STEM	DERIVED STATIVE STEM
<i>dáashi</i> 'call by name'	<i>i-lashi</i> 'be named'
<i>dichi</i> 'hit'	<i>i-lichi</i> 'be hit'

5.4.4. *aa* 'portative'

The portative *aa* has the effect of transitivity motion verbs. It differs from the other prefixes discussed thus far in that it is prefixed to the inflected stem—i.e., it precedes the pronominal prefixes. In the paradigm in table 5.12, *aa* is prefixed to *iikuschi* 'go out', yielding *aaikuschi* 'bring out'.

The portative conveys the sense that the person in motion is carrying an object or accompanying an object. A few derived forms such as *aalakkachi* 'graduate' give evidence of semantic drift. Examples of motion verb stems with related portatives are given in table 5.13.

The fact that *aa* is prefixed to the inflected stem suggests that it is an incorporated postposition. However, the evidence of semantic drift with some of the forms, and of phonological reduction with *óo* and *aaii*, are indications that the formation of the portative is no longer a fully productive process.⁵

TABLE 5.12. INFLECTION OF A PORTATIVE VERB

<i>aaikuschi</i> 'bring out'			
1SG	<i>aa-w-iikuschi</i>	1PL	<i>aa-w-iikust-úu</i>
2SG	<i>aa-l-iikuschi</i>	2PL	<i>aa-l-iikust-uu</i>
3SG	<i>aa-Ø-iikuschi</i>	3PL	<i>aa-Ø-iikust-úu</i>

⁵ The portative form derived from *asaali* 'go out' is *aak-ásaali*. This is most likely derived from the postposition *ák* 'with' rather than from *aa*.

TABLE 5.13. PORTATIVE DERIVATIVES

STEM	PORTATIVE
<i>basáa</i> 'run'	<i>aa-wasáa</i> 'run a horse'
<i>biléeli</i> 'enter'	<i>aa-wiléeli</i> 'bring in'
<i>chisshii</i> 'return'	<i>aa-chisshii</i> 'bring back'
<i>dáakua</i> 'go home'	<i>aa-láakua</i> 'take home'
<i>dahkú</i> 'stay, live at'	<i>aa-lahkú</i> 'take in, take care of'
<i>dakkachi</i> 'emerge'	<i>aa-lakkachi</i> 'graduate'
<i>dasshipi</i> 'go beyond'	<i>aa-lasshipi</i> 'exaggerate'
<i>dée</i> 'go'	<i>aa-lée</i> 'take'
<i>hii</i> 'arrive'	<i>aa-ii</i> 'arrive with'
<i>húu</i> 'come'	<i>óo</i> (< <i>aa-húu</i>) 'bring'
<i>iikuschi</i> 'go out'	<i>aa-iikuschi</i> 'take out'

5.5. Reduplication

There are a number of verb stems in Crow that are derived by reduplication. Both active and stative stems can be reduplicated. This process adds an iterative, distributive, or intensive sense to the meaning of the stem. There are two basic patterns: in the first, a root-initial *CV* or *CCV* sequence is reduplicated; in the second, a *CVCV* sequence. Four variations on these two basic patterns can be distinguished. In the first, a root-initial *CV* segment is reduplicated. All of the examples of this pattern are stative verbs (§5.5.1). The second pattern involves *CVCV* reduplication (§5.5.2). The third pattern, which applies to active verbs with instrumental prefixes, involves root-initial (*C*)*CV* reduplication with lengthening of the final vowel of the stem (§5.5.3). In the fourth variety, *ahi* is suffixed to both *CV* and *CVCV* stems (§5.5.4).

5.5.1. Reduplication of root-initial *CV* segment

In the first pattern an initial *CV* sequence is reduplicated (table 5.14). The gemination seen in a number of the forms in the table has the effect of reproducing the aspiration of the initial syllable. Without gemination the reduplicated syllable would be laxed and even voiced, and thus would sound quite different from the initial syllable.

TABLE 5.14. ROOT-INITIAL CV REDUPLICATION

STEM	DERIVED STEM
<i>chia</i> 'white'	<i>chi-chi-a</i> 'very white, having white spots'
<i>chékkee</i> 'click'	<i>che-tche-kkéé</i> 'clicking or grinding sound'
<i>pummi</i> 'short'	<i>pó-hpu-mmi</i> 'short and thick'
<i>saxpi</i> 'noisy'	<i>sa-ssa-xpi</i> 'cackling'
<i>shúa</i> 'blue'	<i>shóo-shua</i> 'bluish-black' (<i>oo < ua</i>)
<i>xisshi</i> 'humped, knobby'	<i>xía-xisshi*</i> 'bumpy'

* A minor phonological rule inserts an epenthetic schwa between a high or mid front vowel and the velar fricative (§2.3.2).

Since reduplication applies to the root, the forms in (19) with the instrumental prefix *daC* are examples of this type of reduplication:

- (19) *dap-piáxi* 'light in weight', reduplicated *dap-pí-ppi-áxi* 'light in weight'
das-shuá 'bent, dented', reduplicated *das-shú-sshu-a* 'rough, bumpy'

5.5.2. Reduplication of root-initial CVCV segment

In this pattern an initial CVCV sequence is reduplicated, as in table 5.15. Here also the initial segment of the reduplication is geminated in order to preserve the phonetic similarity to the initial segment of the root. In the last example *ala* 'place where' is a prefix that does not affect the reduplication process.

TABLE 5.15. ROOT-INITIAL CVCV REDUPLICATION

STEM	DERIVED STEM
<i>puluá</i> 'purr, hum'	<i>pulu-ppúlu-a</i> 'hoot (owl)'
<i>chilía</i> 'jingle'	<i>chili-tchili-a</i> 'jingling sound'
<i>xawúa</i> 'roar, growl'	<i>xawu-xáwu-a</i> 'crunch'
<i>ala-xalúa</i> 'recess, ledge'	<i>ala-xalóo-xalua</i> 'stairs'

5.5.3. Reduplication of root-initial (C)CV plus length

In this pattern (table 5.16), the first syllable of the root—that is, the stem minus its instrumental prefix—is reduplicated, the final vowel of the stem is lengthened, and the accent falls on the first syllable of the root. This pattern appears only with active verbs containing instrumental prefixes. The reduplicated stems ablaut to *aa*; e.g., the third person plural form of *duxsáxsachii* is *duxsáxsataau*.

TABLE 5.16. ROOT-INITIAL (C)CV REDUPLICATION WITH LENGTHENING

STEM	DERIVED STEM
<i>alachkápi</i> 'walk cautiously'	<i>alachká-chka-pii</i> 'walk stealthily'
<i>dahchichi</i> 'crush with teeth'	<i>dahchi-hchi-chii</i> 'smash'
<i>dappaxi</i> 'split'	<i>dappá-ppa-xii</i> 'chop into little pieces'
<i>dassheechi</i> 'break, shatter'	<i>dasshéé-sšee-chii</i> 'break into little pieces'
<i>datchipi</i> 'carve, slice, pare, whittle'	<i>datchi-tchi-pii</i> 'cut up, cut into pieces'
<i>datchúushi</i> 'whip'	<i>datchú-tchu-shii</i> 'whip repeatedly'
<i>daxeechi</i> 'pierce, tear open'	<i>daxée-xee-chii</i> 'discipline severely'
<i>daxshishi</i> 'broken' (stative)	<i>daxshia-xshi-shii</i> 'break into pieces, smash'
<i>dússhishi</i> 'break'	<i>dusshi-shi-shii</i> 'break up'
<i>dúschí</i> 'take out'	<i>duschi-hchii</i> 'snatch, steal'
<i>dúxsachi</i> 'squeeze through fingers'	<i>duxsá-xsa-chii</i> 'knead (bread)'

5.5.4. Reduplication of CV or CVCV plus *ahi*

In this pattern one or two syllables are reduplicated, and *ahi* is suffixed to the stem (table 5.17).

TABLE 5.17. REDUPLICATION OF CV OR CVCV PLUS *ahi*

STEM	DERIVED STEM
<i>ihchipúa</i> 'jump'	<i>ihchipú-pu-ahi</i> 'jump up and down'
<i>kuluú</i> 'piled up' (stative)	<i>kulu-kúlu-ahi</i> 'piled up'
<i>shikúpa</i> 'bent' (stative)	<i>shikú-sshiku-ahi</i> 'crooked'
<i>xéexia</i> 'dangling, drooping'	<i>xée-xia-xia-(a)hi</i> 'dangling, lifeless'
<i>xía</i> 'dim, indistinct'	<i>xii-xia-(a)hi</i> 'dusk'
<i>xiipi</i> 'wrinkled'	<i>xiip-xi-h-pi</i> 'wrinkled, bunched'

Note that the last syllable of *shikúpa* is not found in the reduplicated stem. Also, in *xiipxíhpi, ahi*, reduced to *h*, is infix (see §5.6.1). The semantics of the derived forms suggest that the *ahi* suffix may be related to *aahi* 'distributive' (see §3.1.1.6 and §5.6.3).

There are several examples where the reduplicated sequence is vowel-initial *VCC*, as in table 5.18.

TABLE 5.18. REDUPLICATION OF *VCC*

STEM	DERIVED STEM
<i>áxpá</i> 'be with, marry'	<i>áxp-áxp-i</i> 'sleep with'
<i>hóhpi</i> 'loose'	<i>huhp-óhp-i</i> 'riddled with holes'
<i>ishtáxpua</i> 'close eyes'	<i>ishtáxp-áxp-uahi</i> 'blink one's eyes'

Finally, there are a few cases where the nonreduplicated stem is not found synchronically in the language:

- (20) *chúu-chuu-shi* 'tall and slender'
ché-hche-xxa 'be amazed, dumbfounded'
dash-dásh-i 'slippery'
iluxp-uxp-i 'comprehend partially'

In many of the above examples the reduplicated segment is not an exact match phonologically for the original. This, of course, is evidence of lexicalization. Nevertheless, reduplication is a frequent occurrence in spoken Crow, and it apparently retains some degree of productivity.

5.6. Derivational suffixes

There are a number of derivational suffixes that occur with verbs. Some of these also occur with nouns, as discussed in 3.1.1. Most of the following suffixes can occur with stative as well as active verbs. Also, more than one of these suffixes can occur in the same verb complex.

5.6.1. Punctual *áhi*

Áhi is an aspectual suffix that can be glossed as 'punctual'; it adds a note of immediacy to the meaning of the verb, indicating that the activity was performed quickly or instantaneously. It is also used to add emphasis to the verb. *Áhi* combines with verb stems to form a derived stem. On the one hand, this is a perfectly productive process, in that *áhi* can combine with any active verb stem whose meaning would allow a punctual interpretation, and with some statives and locatives as well. On the other hand, the formation of the derived stem is highly irregular, so that for many verbs the punctual form will need to be listed in the lexicon.

The general rules that account for the formation of the punctual stem are exemplified in table 5.19.

TABLE 5.19. EXAMPLES OF REGULAR DERIVED FORMS WITH *áhi*

	STEM	DERIVED STEM
<i>áhi</i> after a long vowel or diphthong:	<i>húu</i> 'come'	<i>huuáhi</i>
	<i>íkaa</i> 'see'	<i>ikaáhi</i>
	<i>dúushii</i> 'set down'	<i>duusaáhi</i>
	<i>áakinnee</i> 'ride'	<i>aakinnaáhi</i>
	<i>dappéé</i> 'kill'	<i>dappiiáhi</i>
	<i>awáxii</i> 'bend down'	<i>awaxaáhi</i>
	<i>iaxuá</i> 'cover, hide'	<i>iaxuáhi</i>
<i>áhi</i> after <i>a</i> and <i>i</i> :	<i>biléeli</i> 'enter'	<i>bileennée</i>
	<i>dútchi</i> 'take'	<i>duttée</i>
	<i>duushi</i> 'eat'	<i>duussée</i>
	<i>háchka</i> 'tall, long'	<i>hachkée</i>
	<i>iishuwi</i> 'wash'	<i>iishummée</i>
	<i>íkoochi</i> 'hang up'	<i>iikootée</i>
	<i>púmmi</i> 'short'	<i>pummée</i>
	<i>xapí</i> 'lie down'	<i>xappée</i>
<i>áhi</i> after <i>u</i> and <i>o</i> :	<i>awélako</i> 'outside'	<i>awelakóo*</i>
	<i>bakú</i> 'give me'	<i>bakóo</i>

**awelakóo* is a locative expression.

The rules can be summarized as follows:

- After a long vowel or diphthong, *áhi* is added directly to the stem. Two other phonological processes are involved in the derivations in this part of the table: the *a*-initial suffix triggers ablaut of the final vowel in ablauting stems (*dúushii*, *áakinnee*, *dappéé*, *awáxii*), and sequences of three identical vowel morae are reduced to two (*aaa* → *aa*).⁶ It should also be noted that *áhi* causes the stem to lose its lexical accent, the only morpheme in the language that has that effect.
- If the underived stem ends in *i* or *a*, the final vowel of the stem is deleted, the form of the punctual stem is *ée*, and a single consonant preceding the stem-final vowel is geminated. Also, stem-final *ch* → *t*, *sh* → *s*, *tch* → *tt*, and *ssh* → *ss*, the alternations that ordinarily occur before an *a*-initial suffix (see §2.5.8). The gemination of the

⁶ Stem ablaut is discussed in §2.5.10, and identical vowel reduction in §2.5.5.

final consonants of the stem in this table can be explained by the *h* of *áhi*: *Ch* → *CC*.

- Stems with final *u* or *o* have punctual forms in *oo*, and the consonant preceding the stem-final vowel is not lengthened.

As involved as the above rules are, they only account for a portion of the derived punctual stems; examples of forms not accounted for by these rules appear in table 5.20. Some stems ending in *u* and *i* have their punctual form in *úa*. With some verbs the addition of the punctual triggers an unproductive *ch* → *k* alternation, rather than the expected *ch* → *t*. There are also verbs where the punctual is an infix rather than a suffix. In these forms the punctual is reduced to *h* plus the attracted accent on the preceding vowel.

TABLE 5.20. EXAMPLES OF IRREGULAR PUNCTUALS

	STEM	DERIVED STEM
Punctual in <i>úa</i> :	<i>dúxpi</i> 'unload' <i>iikuxpi</i> 'get off' <i>páshku</i> 'cut' <i>iikuschi</i> 'come out' <i>dúschi</i> 'take out, open'	<i>duxpúa</i> <i>iikuxpúa</i> <i>pashkúa</i> <i>iikuskúa</i> <i>duskúa</i>
Punctual with <i>ch</i> → <i>k</i> alternation:	<i>awáachi</i> 'sit' <i>dússhihchi</i> 'touch' <i>dúschi</i> 'take out, open' <i>hiliachi</i> 'think' <i>xachii</i> 'move'	<i>awaakkée</i> <i>dusshihkée</i> <i>duskúa</i> <i>hiliakkée</i> <i>xakkée</i>
Infixed punctual:	<i>dúshipi</i> 'untie' <i>dashipi</i> 'pass' <i>áakkapaa</i> 'frozen' <i>dússachi</i> 'tighten' <i>dúschichi</i> 'crush in hands'	<i>dusshihpi</i> <i>dashihpi</i> <i>aakkáhpí</i> <i>dussáhchi</i> <i>duschihchi</i>

There are also examples where the only evidence of the presence of the punctual is a shift in accent, as in (21):

- (21) *it dii-ssáa* *óochi-o-m hawáta-m áxpe*
yet arrive.PL-NEG.PUNCT stop-PL-DS one-DET companion
kuss-iláa-(a)k
GOAL-speak-SS

'just before they reached him they stopped, and one of them spoke to his companions' (Uuwat 7)

In (21) the form without the punctual would be *dii-ssaa*. This example shows that the punctual need not be suffixed directly to the verb stem.

To sum up, then, the irregularity of the punctual forms suggests that these derived stems must be part of the lexical entry for a large number of verbs.

Examples of sentences with punctual verb forms appear in (22)–(25):

- (22) *chiis-uua aák bin-nit-úu-t b-itta(a)-áhi-i-k*
 tail-PL with water-hit-PL-TEMP 1A-wake.up-PUNCT-HAB-DECL
 'when they hit the water with their tails, I wake up right away' (Harold III 7)
- (23) *hilaakée kan-na-lée-lak al-oolapp-ée-l-immaachi-k*
 now now-2A-go-COND 2A-find-PUNCT-2A-will-DECL
 'if you go now, you will find them right away' (Uuwat 15)
- (24) *aa óoppi-k bileeli-ssa(a)-áh-ah*
 that.one smoke-DECL enter-NEG-PUNCT-IMPER
 'that one is smoking; don't go in' (Uuwat 19)

In (24), *áhi* adds a note of urgency or emphasis to the prohibition.

- (25) *bia-m ashi-m awela-kóo kool-ii-ak*
 woman-DET lodge-DET outside-area.PUNCT be.there-CAUS-SS
 'a woman was just outside a lodge' (Uuwat 19)

In (25) *áhi* has a locative rather than a temporal sense.

The comparative of stative verbs is also formed with *áhi*, as illustrated in (26)–(28):

- (26) *Jeffrey-sh is-baaxia ko pumm-ée-k*
 J.-DET 3POS-aunt PRO short-PUNCT-DECL
 'Jeffrey's aunt is shorter' (Emilysh 12)
- (27) *piishilée baaluu-áhi-shta-kaata-k*
 next difficult-PUNCT-very-DIMIN-DECL
 'the next one is just a little more difficult' (Isshii 10)
- (28) *Apsáalook-is-aw-úua kal-ia-kaat-áa-(a)k*
 Crow-3POS-land-PL now-small-DIMIN-PUNCT-SS
iisko am-milaxpáak-uua-sh kúh kal-iháata-m
 formerly REL-live-PL-DET PRO now-different-DS

'now the Crows' land was smaller and the old way of living had changed' (AB 67)

5.6.2. *aachi/lichi* 'approximative'

The approximative suffix is *aachi* following a stem-final short vowel (29), and *lichí* after a long vowel (30). It is a verbal hedge, and can be glossed 'rather, kind of, sort of'.

- (29) *am-m-ihchiss-úu-itchi-kaashi-m aw-óolap-uu-m*
REL-1A-rest-PL-good-AUG-DET 1A-find-PL-SIMULT
balee-laás-itt-aachi-k
1B.PL-heart-good-APPROX-DECL
'when we find a good place to rest, we feel pretty good' (Harold II 23)
- (30) *cheéte bishka-chichée-llit-uu-k*
wolves dogs-resemble-APPROX-PL-DECL
'wolves sort of resemble dogs' (Animals 21)

With temporal expressions, *aachi* can be glossed 'approximately, about', as in (31) and (32):

- (31) *áashii-saa-llit-dak bakkú-w-immaachi-k*
dawn-toward-APPROX-COND 1A.come.back-1A-will-DECL
'I'll come back around dawn' (Isahkáa 16)
- (32) *Isahkáalaxpe balee-l-áxshee-m baatcháachi-k hehtaa baapé*
I. 1B.PL-2A-beat-DS outstanding-DECL but day
pilak-ée-llit-dak buú-o-lak
ten-PUNCT-APPROX-DET 1A.PL.come-PL-COND
bach-llit-baa-woo-k
RECIP-race-1A-INCL-DECL
'Isahkáalaxpe, you really beat us, but when we come in about ten days, we will race each other' (Isahkáa 12)

In other cases it is not clear what semantic contribution, if any, this suffix makes to the verb, as in (33) and (34):

- (33) *ákiom koowát-e(e)-ak iláa-att-aat-uua-sh duú-laa*
PRO together-CAUS-SS talk-continue-APPROX-PL-DET come.PL-SS
'those ones got together, they kept talking, they came' (Isahkáa 30)
- (34) *Mr. Latch hinne chóosee-sh áaxxee-taa dée-llit-ak*
Mr. L. this grey-DET around-PATH go-APPROX-SS

chichikaa-lit-ak dahkú-k
 look.over-APPROX-SS continue-DECL

'Mr. Latch went around this grey and kept looking it over' (Sees 9)

In some forms semantic drift suggests that the combination of verb stem plus *aachi* is lexicalized, as in (35):

- (35) *Alvin-nak bach-aw-ákaa-(a)k*
 A.-and RECIP-1A-look.at-SS
bah-kaa-lit-ée-lit-uu-k
 1A-laugh-APPROX-PUNCT-APPROX-PL-DECL

'Alvin and I looked at each other and smiled' (Harold II 23)

The stem *káalichi* (*káa* 'laugh' plus *lichí*) has been lexicalized as a verb meaning 'to smile'. Note that in (35) *káalichi* 'laugh' is followed by another instance of *lichí* (after the punctual suffix), which makes sense if the *lichí* of *káalichi* has been lexicalized as part of the verb stem.

Overuse of the approximative adds a slangy, racy flavor to Crow speech that some more conservative speakers find disagreeable.

5.6.3. *aahi* 'distributive'

The suffix *aahi* is a manner adverbial indicating that an action is performed discretely or distributively, or that a state is characteristic of different places or times.

- (36) *basahkáale, baa-láa-(a)k hawass-baa-láw-aah-aat-ak*
 grandmother 1A-go-SS around-1A-go-DISTR-APPROX-SS
boó-w-ii-k
 1A.come-1A-will-DECL

'Grandmother, I'm going, I'll go around here and there, and then I'll come back' (Isahkáa 16)

- (37) *húu-laa hinne chóosee-sh hii-ák*
 come-SS this grey-DET reach-SS
hawass-dússhikh-aah-aachi-an
 around-touch-DISTR-APPROX-after

'he came, he reached this white horse, and after he ran his hand over him here and there' (Sees 4)

- (38) *Emily hileen baaaxuawaalaáche al-ákaa-(aa)h-aat-dak*
 E. these picture 2A-look.at-DISTR-APPROX-COND

aaláa dii-itt-ée-ih
perhaps 2B-good-PUNCT-OPT

'Emily, if you look over these pictures, you might feel better' (Emilysh 1)

- (39) *kan bíawakussaa-m awé it bii-wis-aah-aachi-m*
already spring-DS earth still snow-exist-DISTR-APPROX-DS
'it was already spring, and the ground still had patches of snow here and there' (Uuwat 17)

Aahi very often cooccurs with approximative *aachi*, as in (36)–(39). Examples (40) and (41), however, provide evidence that *aahi* can occur without the approximative:

- (40) *lishúuptassee-sh an-nakaáa-u-wis-aah-ak*
Two.Faces-DET REL-lead-PL-exist-DISTR-SS
kan-nuú-o-k
now-come.PL-PL-DECL
'some of the Two Faces came individually leading extra horses' (Isahkáa 21)

- (41) *aliiannee-taa baa-lée-m iilaalee-wis-aahi-m aw-ákaa-k*
road-PATH 1A-go-DS car-exist-DISTR-DET 1A-see-DECL
'going along the road I saw some cars here and there'

5.6.4. *shta* 'very'

The suffix *shta* is a manner adverbial that can be glossed 'very' or 'to a high degree'. It occurs only with stative verbs, as exemplified in (42)–(44):

- (42) *chiishdeaxa-m ishté shipítee-ta-(a)k dáaxpishi-shta-k*
grey-DS its.eyes black-appear-SS beautiful-very-DECL
'it was a grey; its eyes appeared black, it was very beautiful' (Isahkáa 19)
- (43) *Alvin kalatchi aw-ákaa-(a)k bii-itt-ée-shta-k*
A. again 1A-see-SS 1B-good-PUNCT-very-DECL
'I saw Alvin again and I felt much better' (Harold III 17)
- (44) *bas-bítchíia ii úux-baxxípe attá-shta-k*
1POS-knife INSTR deer-1A.skin sharp-very-DECL
'the knife I use to butcher deer is very sharp'

5.6.5. *kaáshi* 'augmentative'

The adverbial suffix *kaáshi* can be glossed 'very much', 'really', or 'to a great degree'.

- (45) *hinne is-bálee-sh chichiili-kaashe aa óhchikaapi-ihmah*
 this 3POS-money-DET look.for-AUG until find-will
 'she will search thoroughly for this money of hers until she finds it' (Lk 15:8)
- (46) *baapi-m is-bilaxpáake chiwaá-(a)k "b-iaxpáali-wishi-m*
 day-DET 3POS-people tell-SS 1POS-medicine-exist-DS
bii-ii-lia-laa-kaash-d-o-mmaachi-k"
 1B-INSTR-do-2A-AUG-2A-PL-will-DECL
 'one day he told his people, "I have a medicine; you will really make use of me"' (AB 18)
- (47) *dih dii-laás-xawii-kaash-b-aa-k*
 2PRO 2B-heart-bad-AUG-2A-CAUS-DECL
 'as for you, I have made you really feel bad' (Lk 15:21)

5.6.6. *káata* 'diminutive'

When the suffix *káata* follows an active verb, it must be followed by the direct causative verb *ee*, and it is the subject of the clause rather than the verb that is diminutivized. Moreover, the causative verb following *káata* makes no apparent contribution to the semantics of the clause. This construction is illustrated in (48) and (49):

- (48) *hinne baachilaxchi-káatee-sh koon xapi-hk-uu-lak koon*
 this baby-DIMIN-DET there lie-CAUS-PL-DS there
daach-káatch-ee-k huu-k
 remain-DIMIN-CAUS-DECL say.PL-DECL
 'they laid this little baby there and he remained there, they say' (Lk 2:7)
- (49) *hilaá diili-kaatch-ee-m dakáak-kaate óoshtat-ak*
 just walk-DIMIN-CAUS-DS bird-DIMIN gather-SS
haw-aashúua áakee-n awáat-doo-m
 some-her.head on-LOC sit-!.PL-DS
 'when she had just started walking some birds flocked together and some of them sat on her head' (Hinne Kaal 2)

Often this construction adds a connotation of affection or endearment rather than a diminutive sense, as in (50) and (51):

- (50) *bah-chiwakii-t Apsáalook-tatchia*
 1A-pray-TEMP Crow-every
bah-chiwakáa-(a)-wa-k(u)-kaat-b-aa-i-k
 1A-pray-CONT-1A-give-DIMIN-1A-CAUS-HAB-DECL
 'whenever I pray, I pray for all the Crows' (Baapiiháake 4)
- (51) *iisashpita-lak baaik-dappee-t isahkáale-lak duus-aat-ák*
 rabbits-and things-kill-TEMP his.grandmother-and eat-APPROX-SS
baakoón áahk-aach-kaat-uu-k
 peacefully remain-APPROX-DIMIN-CAUS.PL-DECL
 'when he would kill rabbits and things, he and his grandmother would eat them, they continued on undisturbed' (Isahkáa 4)

With stative verbs, *káata* occurs as a simple diminutive suffix without the causative, as in (52) and (53):

- (52) *bii-áx-baa-luushi-h b-ittách-kaata-k*
 1B-be.with-INDEF-eat-IMPER 1B-alone-DIMIN-DECL
 'eat with me, I'm alone' (Bitáa 3)
- (53) *piishilée baaluu-áhi-shta-kaata-k*
 next.one difficult-PUNCT-very-DIMIN-DECL
 'the next one is a little more difficult' (Isshii 10)

The diminutive suffix often occurs with color terms, but without any diminutive sense, as in (54) and (55):

- (54) *bas-báasho bimmaáhchii-kaata-lak shipit-kaata-lak*
 1POS-feathers green-DIMIN-and black-DIMIN-and
chia-kaata-lak koó-u-k
 white-DIMIN-and COP-PL-DECL
 'my feathers are green, black and white' (Harold I 3)
- (55) *bassáa-kaashe ittaashtee-o shúa-kaat-uu-k*
 first-AUG their.rob.es-PL blue-DIMIN-PL-DECL
piishilee shíili-kaat-ak iiláawiia hisshi-kaat-uu-k
 next yellow-DIMIN-SS third red-DIMIN-PL-DECL
 'the first ones had blue robes, the next, yellow, and the third group, red' (Baapiiháake 4)

5.6.7. *kísshí* 'sportive'

The adverbial suffix *kísshí* adds the notion that the action is performed casually, in a playful or carefree manner, or that the action is performed for pleasure or enjoyment.⁷

- (56) *bale-waa-luush-al-isáa-lia-waa-(a)k*
 DEPOS-INDEF-eat-REL-big-do-1A-SS
baa-w-ihkammáach-kísshí-w-uu-k
 INDEF-1A-rejoice-SPORT-1A-will.PL-DECL
 'we will have a great feast; we will celebrate' (Lk 15:23)
- (57) *bil-ish-bil-kísshí-woo-k*
 water-drink-1A-SPORT-INCL-DECL
 'let's drink some water (for the sheer enjoyment of it)'
- (58) *aashúua aa-la-lóo-lak bah-kulee-kísshí-w-i-k*
 his.head PORT-2A-come-COND 1A-have-SPORT-1-will-DECL
 'if you bring his head, I will be happy to have it' (Issihii 10)

5.6.8. *táa(hi)li* 'completely, totally'

The suffix *táa(hi)li* can be glossed 'completely', 'thoroughly', or 'totally'.

- (59) *aw-áxpe xaxúa kala-haawi-o-m*
 1POS-companion all now-destroyed-CAUS.PL-DS
baa-xap-ák baa-xachii-ssaa-taahim-mee-m
 1A-lie.down-SS 1A-move-NEG-at.all-1A.!-DS
 'they had massacred all my companions; I lay down, I didn't move at all, and to my surprise . . .' (Bachee 6)
- (60) *bacheé-m bimmúua-n "háah, háah" haa-latchi-m*
 man-DET in.water-LOC say-continue-DS
kooxii-taahlí-áa-(a)k
 approach-completely-PUNCT-SS
 'a man in the water kept saying "haah, haah"; he moved right up to him' (Bachee 6)

Táahili is often phonetically reduced to *táali*, as in (61):

- (61) *iiilak am-maa-haawi-táan-n-uua-sh*
 over.there REL-INDEF-destroyed-totally-2A-CAUS.PL-DET

⁷ The term 'sportive' was first suggested by Lowie (cf. Lowie 1960b:389).

kuss-díluu-ala-h

GOAL-stand-PL-IMPER

'stand facing that place way over there where your great massacre took place' (Isahkáa 31)

5.6.9. *hili* 'very'

Hili is another suffix that can be glossed 'very' or 'very much'; it occurs with both active and stative verbs, as in (62)–(64):

- (62) *xusshi-hil-ak ilápitchi-hil-ak baaan-nia xaxúa*
 swift-very-SS good.shot-very-SS REL-do everything
baatcháachi-k
 outstanding-DECL

'he was very fast, he was a really good shot, everything he did was outstanding' (Issii 1)

- (63) *akissatdee kúh ilikkákkaa-hil-ak kooxaá-(a)k*
 soldier PRO mock-very.much-SS approach-SS
dii-taahil-ak
 reach-completely-SS

'the soldiers also were really mocking him, they drew near, they came right up to him' (Lk 23:35)

- (64) *hawass-aláhpee-iishee-hili-k*
 around-stab-very.much-very.much-DECL
 'he was really stabbing all over' (AB 7)

5.6.10. *laash* 'very'

The suffix *laash* 'very' is unusual in that it is sentence-final, i.e., it does not cooccur with sentence-final markers *k*, *h*, etc.

- (65) *biaxaaka-lak dakáaka-lak ba-láshdee-laash*
 ducks-and birds-and 1A-feel.sorry.for-very
 'I feel very sorry for the ducks and the birds' (Harold IV 8)

5.6.11. *i* 'habitual'

Another commonly occurring verbal suffix is *i* 'habitual' (pl. *ilu*). This suffix is employed when the action or situation referred to by the verb is habitual, customary, or regularly repeated; it is also used in so-called 'gnomic' statements that refer to inherent characteristics. The use of *i*

to refer to habitual or regularly repeated actions is illustrated in (66)–(68):

- (66) *baapi-t hinne bachée-sh baa-aash-dée-t shikáakee-sh*
 day-TEMP this man-DET INDEF-hunt-go-TEMP boy-DET
ashee-n-naachi-í-k
 lodge-LOC-remain-HAB-DECL
 'during the day, when this man went hunting, the boy would stay at home' (Bitaa 3)
- (67) *chiis-uua aák bin-nit-úu-t b-itta(a)-áhi-í-k*
 tail-PL with water-hit-PL-TEMP 1A-wake.up-PUNCT-HAB-DECL
 'when they hit the water with their tails, I wake up right away' (Harold III 7)
- (68) *lichlil-aakinnee-t isshiiá ihch-ishóochee-n dúushii-í-k*
 horse-ride-TEMP his.hair REFL-in.front.of-LOC let.down-HAB-DECL
 'when he rode horseback he would let his hair down in front of him' (AB 18)

The gnomic use of the habitual is illustrated in (69) and (70):

- (69) *báalaa-t sas-chihpashi-í-k*
 winter-TEMP soon-dark-HAB-DECL
 'in winter it gets dark early'
- (70) *úuxkaashe baa-luus-úu-t hawátee-t baa-iassee-í-k*
 antelope INDEF-eat-PL-TEMP one-TEMP INDEF-watch-HAB-DECL
 'when antelope eat, one of them keeps watch' (Animals 14)

As can be seen in (66)–(70), the habitual regularly cooccurs with subordinate clauses and noun phrases marked with *t*.

5.6.12. *ta* 'appear to, seem'

Ta 'appear to, seem' is a morphological suffix with the semantics of an operator that applies to a proposition. There is no evidence that it is a syntactic verb in Crow, since it is not inflected for person. *Ta* is suffixed to the citation form of the stem. Sentences with *ta* are seen in (71)–(74):

- (71) *bía-sh iluú-hkaa-(a)k balá-m ihchipshia-hchee-m*
 woman-DET stand-CAUS-SS stick-DET propped.up-CAUS-DS
shée-ssee-ta-(a)k daachi-m iilaxp-awako óossh-ee-m
 die-NEG-appear-SS remain-DS lip-lower cooked-CAUS-DS
káalichee-ta-k
 smile-appear-DECL

'she stood the woman up, propping her up with a stick [so that] she appeared to be alive, she blackened her lower lip [so that] the woman appeared to be smiling' (Bitaa 1)

- (72) *chiishdeaxa-m ishtë shipitee-ta-(a)k*
 grey-DET its.eyes black-appear-SS
 'it was a grey, its eyes appeared black' (Isahkää 19)
- (73) *itáxpuaa-lak aashúua-lak sásas-aahee-t(a)-uu-k*
 their.hooves-and their.horns-and shining-DISTR-appear-PL-DECL
 'their hooves and horns appeared to be shining' (Uuwat 10)
- (74) *1877 kootée-sh baa-aash-dáa-(a)k koón oóxeet-uua-ta-(a)k*
 1877 like.that-DET INDEF-hunt-go-SS then shoot-PL-seem-SS
shée-k
 die-DECL
 'in 1877 he went hunting; at that time it seems that they shot him and he died' (AB 40)

In (74) *ta* is preceded by *uua*, the citation form of plural *uu*.

5.6.13. *ta* 'distributive plural'

I gloss this second suffix *ta* as 'distributive plural': it indicates that the verb applies to each individual member of the class or set referred to by the subject. Unlike *ta* 'seem, appear', it is suffixed to the stem, not the citation form. This *ta* might also be called an individualizer or specifier. Examples of sentences with *ta* 'distributive plural' are seen in (75)–(78):

- (75) *daxpitchée itáxpua-o attá-t(a)-uu-k*
 bear claw-PL sharp-DISTR.PL-PL-DECL
 'bears' claws are sharp' (Animals 19)
- (76) *Apsáalook-bachee ishshii-o háchki-t(a)-uu-htaa hinne*
 Crow-men their.hair-PL long-DISTR.PL-PL-but this
bacheé kúk chía baatcháachi-k
 man PRO very outstanding-DECL
 'Crow men all have long hair, but this man was really outstanding [in that respect]' (AB 18)
- (77) *káale biilee-t(a)-uu-k*
 old.women tell.tales-DISTR.PL-PL-DECL
 'old women all tell tales' (Isshii 23)

- (78) *Dakkoótee-lak* *Isaaushpuushé-lak* *Bikkaashée*
 Sioux-and Cheyenne-and Shoshone
bachia-t(a)-uu-k
 fight-DISTR.PL-PL-DECL

'both the Sioux and the Cheyenne fought with the Shoshones' (AB 39)

In (78) *ta* indicates that the Sioux and Cheyennes each fought the Shoshones separately, rather than combining forces against them.

5.6.14. *dee* 'inchoative'

The suffix *dee* is added to a noun to form an inchoative:

- (79) *basáa-m* *hilaá* *iisáaks-aat-dee-m* *awan*
 autumn-DET just.then young.man-APPROX-become-DS on.foot
dúxxii-laa-u-m *héelee-n* *dée-k*
 war.party-go-PL-DS among-LOC go-DECL

'one autumn when he was just becoming a young man they were going on a war party on foot; he went along' (AB 66)

6 Verb inflection

6.1. Pronominal prefixes

This chapter treats the inflection of both active and stative verbs. Crow verbs are inflected according to an active-stative pattern. One set of bound pronominal prefixes (the "A-set") marks the subjects of active verbs, both transitive and intransitive. A second set (the "B-set") marks subjects of stative verbs, direct objects of active verbs, and objects of postpositions. From the standpoint of their distribution, then, the A-set pronominals are marked, while the B-set are unmarked.

In both sets, the third person form is zero, reflecting a fundamental difference in the treatment of arguments referring to speech act participants, which are coded by an overt form, as opposed to arguments referring to third persons, which are coded by zero. Otherwise, B-set pronominals are fairly constant in form, while A-set pronominals are often somewhat fused with the stem. Their exact forms vary a good deal depending on the morphological or phonological nature of the stems they are added to.

Table 6.1 is a simplified chart that illustrates the two sets of bound pronominals.

TABLE 6.1. BOUND PRONOMINALS

PERSON	A-SET	B-SET
1SG	<i>baa</i>	<i>bii</i>
2SG	<i>dá(a)</i>	<i>dii</i>
3SG	\emptyset	\emptyset
1PL	<i>baa</i> + PL	<i>balee</i>
2PL	<i>dá(a)</i> + PL	<i>dii</i> + PL
3PL	\emptyset + PL	\emptyset + PL

6.1.1. Combinations of A-set and B-set pronominals

Table 6.2 illustrates the various subject-object combinations of A- and B-set pronouns with transitive active verbs. The verb shown is *dichi* 'hit'.

TABLE 6.2. INFLECTION OF A TRANSITIVE ACTIVE VERB

SINGULAR SUBJECT			
	1SG ('I')	2SG ('you')	3SG ('he, she')
OBJECT			
1SG ('me')		<i>bii-láa-lichi</i>	<i>bii-Ø-lichi</i>
2SG ('you')	<i>dii-waa-lichi</i>		<i>dii-Ø-lichi</i>
3SG ('him, her, it')	<i>Ø-baa-lichi</i>	<i>Ø-dáa-lichi</i>	<i>Ø-Ø-dichi</i>
1PL ('us')		<i>balee-láa-lichi</i>	<i>balee-Ø-lichi</i>
2PL ('you all')	<i>dii-waa-lit-úu</i>		<i>dii-Ø-lit-úu</i>
3PL ('them')	<i>Ø-baa-lichi</i>	<i>Ø-dáa-lichi</i>	<i>Ø-Ø-dichi</i>
PLURAL SUBJECT			
	1PL ('we')	2PL ('you all')	3PL ('they')
OBJECT			
1SG ('me')		<i>bii-láa-lit-úu</i>	<i>bii-Ø-lit-úu</i>
2SG ('you')	<i>dii-waa-lit-úu</i>		<i>dii-Ø-lit-úu</i>
3SG ('him, her, it')	<i>Ø-baa-lit-úu</i>	<i>Ø-dáa-lit-úu</i>	<i>Ø-Ø-dit-úu</i>
1PL ('us')		<i>balee-láa-lit-úu</i>	<i>balee-Ø-lit-úu</i>
2PL ('you all')	<i>dii-waa-lit-úu</i>		<i>dii-Ø-lit-úu</i>
3PL ('them')	<i>Ø-baa-lit-úu</i>	<i>Ø-dáa-lit-úu</i>	<i>Ø-Ø-dit-úu</i>

There are twenty-eight slots filled in table 6.2, but only eighteen distinct forms. First, the forms do not distinguish whether a third person object is singular or plural: with a third person object, the plural morpheme marks the subject as plural, never the object. Thus, *Ø-baa-lichi* means both 'I hit him/her/it' and 'I hit them'; *Ø-baa-lit-úu* means both 'we hit him/her/it' and 'we hit them'; *Ø-dáa-lichi* means both 'you (sg.) hit him/her/it' and 'you (sg.) hit them'; *Ø-dit-úu* means both 'they hit him/her/it' and 'they hit them'; and so on.

Second, the combination of second person B-set pronominal and plural suffix results in a form that is three ways ambiguous. The combination of second person B-set pronominal plus plural affix marks as plural either the subject, or the object, or both: using the above exam-

ples, *dii-waa-lit-úu* can mean 'I hit you all', 'we hit you (sg.)', or 'we hit you all'. *Dii-lit-úu* can mean 'he hit you all', 'they hit you (sg.)', or 'they hit you all'. Since, however, there is a distinct first person plural B-set pronominal (*balee*), the occurrence of the plural suffix with a first person object can only mean that the subject is plural, not the object: *balee-Ø-lit-úu* means only 'they hit us', and *balee-láa-lit-uu* means only 'you all hit us'.

This pattern is an example of what Leer (1991:160) has termed "promiscuous number marking": the number marker—in Crow, the plural suffix—is free to associate semantically with either the subject or the object of the verb, or with both. This pattern occurs only with the second person B-set pronoun; otherwise the plural morpheme can only be associated with the subject of the verb.

As in evident in table 6.2, when both A- and B-set pronominals co-occur with a verb stem, the order of affixes is B-set + A-set + verb, i.e., OSV order, as opposed to the SOV order that prevails with lexical subjects and objects. The contrast is shown in (1) and (2):

- (1) *dii-wu-lupia-k*
2B-1A-hate-DECL
'I hate you'
- (2) *Joe-sh Peter-sh dúupia-k*
Joe-DET Peter-DET hate-DECL
'Joe hates Peter'

There is a fundamental difference between the A-set and B-set pronominals: while the A-set forms are invariably prefixes to the verb stem, the B-set forms need not immediately precede either the stem or the A-set form, since they may occur as objects of postpositions. The B-set forms enjoy a greater degree of freedom of positional occurrence, although, like the A-set forms, they are obligatorily bound.

6.1.2. Plural formation

Verb stems form their plurals in the same way as nouns. See §2.5.13 for a discussion of plural formation.

6.2. Stative inflection

6.2.1. Basic stative paradigm

The inflectional paradigm for stative verbs is given in table 6.3; an inflected verb is given in table 6.4. *Balee* is a portmanteau form that

marks the subject as both first person and plural. Consequently the plural suffix does not cooccur with *balee*. In the second and third persons, plural number is marked by the regular plural suffix. The third person subject is a null pronominal. Unlike most active verb paradigms, the accent does not shift to the left in the second person forms.

TABLE 6.3. B-SET (STATIVE) INFLECTIONAL AFFIXES

1SG	<i>bii-</i>	1PL	<i>balee-</i>
2SG	<i>dii-</i>	2PL	<i>dii- + -uu</i>
3SG	\emptyset	3PL	$\emptyset + -uu$

TABLE 6.4. INFLECTION OF A STATIVE VERB

1SG	<i>bii-háchka-k</i> 'I am tall'
2SG	<i>dii-háchka-k</i> 'you are tall'
3SG	\emptyset - <i>háchka-k</i> 'he is tall'
1PL	<i>balee-háchka-k</i> 'we are tall'
2PL	<i>dii-háchk-uu-k</i> 'you are tall'
3PL	\emptyset - <i>háchk-uu-k</i> 'they are tall'

NOTE: Paradigm given in declarative form, with final *-k* (§16.2).

Bii and *dii* are reduced to *bi* and *di* before the goal postposition *ss*, as in (3):

- (3) *éehk búupche bi-ss-shiichi-h*
 that ball 1B-GOAL-throw-IMPER
 'throw me that ball'

There are several other combinations of B-set object plus postposition that are irregular in form:

- (4) a. *ba-pshée-n* 'behind me' (< 1B + *piishi* 'behind' + *-n* LOC)
dá-psheen 'behind you'
piisheen 'behind him'
- b. *ba-shóocheen* 'in front of me'
dí-shóocheen 'in front of you'
ishóocheen 'in front of him'

Predicate nominals are inflected with the same B-set prefixes, as exemplified in table 6.5.

TABLE 6.5. INFLECTION OF A PREDICATE NOMINAL

1SG	<i>bii-wacheé-k</i> 'I am a man'
2SG	<i>dii-wacheé-k</i> 'you are a man'
3SG	<i>Ø-bacheé-k</i> 'he is a man'
1PL	<i>balee-wacheé-k</i> 'we are men'
2PL	<i>dii-wacheé-o-k</i> 'you are men'
3PL	<i>Ø-bacheé-o-k</i> 'they are men'

NOTE: Paradigm given in declarative form, with final *-k* (§16.2).

6.2.2. Possessive paradigm

Crow has a set of semantically stative compound verbs that are inflected as in table 6.6. These verbs consist of an inalienably possessed noun referring to a body part plus a stative verb, so that *ba-lás-itchi-k* is literally 'my heart is good', and *b-aashúu-alee-k* is 'my head aches'. In verbs of this type, the nominal possessive inflection serves as the person marking for the compound verb, with the first and second person possessor markers occurring as prefixes to the noun, and the plural markers as suffixes to the verb. (In forms compounded with *daasá* 'heart', the first person plural form is marked with *balee*, as in a regular stative verb, instead of with possessive *ba-...-uu*.)

TABLE 6.6. POSSESSIVELY-INFLECTED STATIVES

1SG	<i>ba-lás-itchi-k</i> 'I am happy'
2SG	<i>da-lás-itchi-k</i> 'you are happy'
3SG	<i>Ø-daás-itchi-k</i> 'she/he is happy'
1PL	<i>balee-laás-itchi-k</i> 'we are happy'
2PL	<i>da-lás-itt-uu-k</i> 'you are happy'
3PL	<i>Ø-daás-itt-uu-k</i> 'they are happy'
1SG	<i>b-aashúu-alee-k</i> 'I have a headache'
2SG	<i>d-áashuu-alee-k</i> 'you have a headache'
3SG	<i>Ø-aashúu-alee-k</i> 'he/she has a headache'
1PL	<i>b-aashúu-alee-o-k</i> 'we have a headache'
2PL	<i>d-áashuu-alee-o-k</i> 'you have a headache'
3PL	<i>Ø-aashúu-alee-o-k</i> 'they have a headache'

NOTE: Paradigms given in declarative form, with final *-k* (§16.2).

Other verbs that follow this pattern include:

- (5) *ahkúx-itchi* 'mindful, well-behaved'
daas-átchuchi 'be stoic, strong-hearted'
daás-bahta 'be quick-tempered, hot-tempered'
daás-dee 'be compassionate, kind'
daas-dúupa 'be uncertain, have mixed feelings'
daás-hawata 'have a one-track mind'
daás-xawii 'feel bad, sad, depressed'
iishpuu-xachii 'have an upset stomach'
ishlá-xia 'have one's eyes half open'
úush-alee 'have the colic'

Examples (6)–(8) are sentences with verbs inflected according to the possessive paradigm:

- (6) *Henry huua-sh hinne isaashkakaáshe*
 H. say.PL-DET this 3POS.horse
kuss-dasshiht-ée-lichee-sh it daás-xawii-k
 GOAL-think.about-PUNCT-APPROX-DET still heart-bad-DECL
huu-k
 say.PL-DECL
 'when Henry thought about this dog of his, he still felt bad' (Sees 2)
- (7) *biaxaaka-lak dakáaka-lak ba-láshdee-laash*
 ducks-and birds-and 1POS-feel.sorry.for-very.much
 'I really feel sorry for the birds and ducks' (Harold IV 8)
- (8) *ichiil-ilisshit-aakinn-uu-lak dissúu-lak aw-ák-uu-leete ii*
 horse-wild-ride-PL-and dance-and 1A-see-PL-not.exist INSTR
ba-lás-xawii-k
 1POS-heart-bad-DECL
 'when I don't see the rodeo and the dance, I feel bad' (Harold II 15)

6.2.3. Quantifiers

Cardinal numbers and indefinite quantifiers such as *ahú* 'many', *hawa* 'some', *kooshtá* 'few', and *sáawi* 'how many, some' are a subclass of stative verbs in Crow with somewhat distinctive inflection. Quantifiers are discussed in chapter 8.

6.3. Active inflection

Active verbs are classified into a number of different inflectional paradigms based on combinations of A-set pronominal prefix (plus

locative or instrumental prefix) plus stem. In addition, a considerable number of active stems have irregular inflections.

From a phonological perspective it can be said that the inflectional pattern of an active verb varies with the shape of its initial segment(s), either a locative or instrumental prefix or the stem itself. The A-set prefixes often cause modifications to the initial portion of the stem (and vice versa), and in some cases are partially fused with it. Stems formed with locative and instrumental prefixes are not always semantically transparent: it is not at all obvious, for example why *dúupia* 'hate' is formed with the prefix *dú(u)* 'by hand'.

6.3.1. Regular inflections

Table 6.7 lists the person prefixes for the various active paradigms, which are discussed in the remainder of this section.

TABLE 6.7. OVERVIEW OF ACTIVE VERB INFLECTION (A-SET PREFIXES)

PARADIGM	1	2
<i>dú(u)</i> 'by hand'	<i>bu</i>	<i>di</i>
<i>dá(a)</i> 'by mouth'	<i>ba</i>	<i>da</i>
<i>ala</i> 'by foot'	<i>b</i>	<i>d</i>
<i>pá(a)</i> 'by pushing'	<i>ba</i>	<i>dá</i>
<i>dak/daC</i> 'by force'	<i>b</i>	<i>d(á)</i>
<i>a</i> 'by cutting'	<i>b(a)</i>	<i>d(á)</i>
<i>V</i> (accented) 'locative'	<i>aw</i>	<i>al</i>
<i>V</i> (unaccented)	<i>b</i>	<i>d</i>
<i>ch, k</i>	<i>bah</i>	<i>dáh</i>
<i>bVV, dVV, s, p, k, x, ch</i>	<i>baa</i>	<i>da</i>
<i>bV(V), dV</i>	<i>baa</i>	<i>dáa</i>

The A-set prefixes in the inflectional paradigm of *dú(u)* 'by hand' (table 6.8) are first person *bu* and second person *di*. The accent shifts to the second syllable in the second person forms. If the initial vowel of the stem is long, it is shortened in the first and second person forms, as with *dúupia* 'hate'.¹

The prefixes in the inflectional paradigm of *dá(a)* 'by mouth' are first person *ba* and second person *da* (table 6.9). Vowel shortening and accent shift are the same as for the paradigm of *dú(u)* 'by hand'.

¹ Like *dússhishi* 'break' in table 6.8, a number of the verbs used to illustrate the various paradigms in this chapter exhibit the alternations discussed in §2.5.8 and §2.6.2, whereby *ch* → *t* and *sh* → *s* before the plural marker and suffixes beginning with *a*.

TABLE 6.8. ACTIVE INFLECTION OF *dú(u)* 'BY HAND'

<i>dússhishi</i> 'break'			
1SG	<i>bu-lusshishi</i>	1PL	<i>bu-lusshis-uu</i>
2SG	<i>di-lússhishi</i>	2PL	<i>di-lússhis-uu</i>
3SG	<i>Ø-dússhishi</i>	3PL	<i>Ø-dússhis-uu</i>
<i>dúupia</i> 'hate'			
1SG	<i>bu-lúpia</i>	1PL	<i>bu-lúpi-o</i>
2SG	<i>di-lúpia</i>	2PL	<i>di-lúpi-o</i>
3SG	<i>Ø-dúupia</i>	3PL	<i>Ø-dúupi-o</i>

TABLE 6.9. ACTIVE INFLECTION OF *dá(a)* 'BY MOUTH'

<i>dáapxi</i> 'bite'			
1SG	<i>ba-lapxi</i>	1PL	<i>ba-lapx-úu</i>
2SG	<i>da-lápxi</i>	2PL	<i>da-lápx-uu</i>
3SG	<i>Ø-dáapxi</i>	3PL	<i>Ø-dáapx-uu</i>
<i>dáschii</i> 'chew'			
1SG	<i>ba-laschii</i>	1PL	<i>ba-lastáa-u</i>
2SG	<i>da-láschii</i>	2PL	<i>da-lástaa-u</i>
3SG	<i>Ø-dáschii</i>	3PL	<i>Ø-dástaa-u</i>

In the paradigm of *ala* 'by foot' (table 6.10), the A-set prefixes are first person *b* and second person *d*. The *l* of *ala* is lost in the first and second person forms. In the first and third person the accent falls on the last syllable of the stem; in the second person it shifts leftward to the initial vowel of the stem.

TABLE 6.10. ACTIVE INFLECTION OF *ala* 'BY FOOT'

<i>alatshí</i> 'slip'			
1SG	<i>b-aatshí</i>	1PL	<i>b-aats-úu</i>
2SG	<i>d-áatshí</i>	2PL	<i>d-áats-uu</i>
3SG	<i>Ø-alatshí</i>	3PL	<i>Ø-alats-úu</i>
<i>alaschichí</i> 'step on'			
1SG	<i>b-aaschichí</i>	1PL	<i>b-aaschit-úu</i>
2SG	<i>d-áschichí</i>	2PL	<i>d-áschit-uu</i>
3SG	<i>Ø-alaschichí</i>	3PL	<i>Ø-alaschit-úu</i>

In the paradigm of *pá(a)* ‘by pushing, outward movement’ (table 6.11), the pronominal prefixes are first person *ba* and second person *dá*; the accent shifts to the prefix in the second person forms. If the initial vowel of the stem is long, as with *páachile* ‘push’, it is deleted in the first and second person forms, unless a three-consonant cluster would result, in which case the stem-initial vowel is shortened, as with *páaxxu* ‘pour’. If the first vowel of the stem is short, the paradigm is as for *páshku* ‘cut’.

TABLE 6.11. ACTIVE INFLECTION OF *pá(a)* ‘BY PUSHING, OUTWARD MOVEMENT’

<i>páachile</i> ‘push’			
1SG	<i>ba-pchile</i>	1PL	<i>ba-pchil-uu</i>
2SG	<i>dá-pchile</i>	2PL	<i>dá-pchil-uu</i>
3SG	<i>Ø-páachile</i>	3PL	<i>Ø-páachil-uu</i>
<i>páaxxu</i> ‘pour’			
1SG	<i>ba-paxxú</i>	1PL	<i>ba-paxx-úu</i>
2SG	<i>dá-paxxu</i>	2PL	<i>dá-paxx-uu</i>
3SG	<i>Ø-páaxxu</i>	3PL	<i>Ø-páaxx-uu</i>
<i>páshku</i> ‘cut’			
1SG	<i>ba-pashkú</i>	1PL	<i>ba-pashk-úu</i>
2SG	<i>dá-pashku</i>	2PL	<i>dá-pashk-uu</i>
3SG	<i>Ø-páshku</i>	3PL	<i>Ø-páshk-uu</i>

The A-set prefixes for *dak/daC* ‘by force’ are first person *b* and second person *d*; the initial *d* of the stem is lost in the first and second person forms (table 6.12). In this paradigm either the second or third syllable is accented, and in the second person forms the accent shifts to the initial vowel, which is lengthened.

Comparative evidence suggests that the final segment of the ‘by force’ prefix is *k*. However, the *k* generally assimilates to the following consonant of the stem, as with *datchuushi*, or is otherwise modified, as with *daxchi*.

The ‘by cutting’ prefix is *ha* in Hidatsa; the initial *h* is lost in Crow. The prefixes for this paradigm are first person *ba* and second person *dá*, as in the inflection of *apihpi* ‘dice meat’, or *b* and *d*, as in the inflection of *attáa* ‘cut strips of meat’ (table 6.13). The accent shifts to the first syllable in the second person.

TABLE 6.12. ACTIVE INFLECTION OF *dak/daC* 'BY FORCE'

<i>daxchi</i> 'tie, bind'			
1SG	<i>b-axchi</i>	1PL	<i>b-axt-úu</i>
2SG	<i>d-áaxchi</i>	2PL	<i>d-áaxt-uu</i>
3SG	<i>Ø-daxchi</i>	3PL	<i>Ø-daxt-úu</i>
<i>datchuushi</i> 'whip'			
1SG	<i>b-atchuushi</i>	1PL	<i>b-atchuus-úu</i>
2SG	<i>d-áatchuushi</i>	2PL	<i>d-áatchuus-uu</i>
3SG	<i>Ø-datchuushi</i>	3PL	<i>Ø-datchuus-úu</i>

TABLE 6.13. ACTIVE INFLECTION OF *a* 'BY CUTTING'

<i>apihpi</i> 'dice meat'			
1SG	<i>ba-apihpi</i>	1PL	<i>ba-apihp-uu</i>
2SG	<i>dá-apihpi</i>	2PL	<i>dá-apihp-uu</i>
3SG	<i>Ø-apihpi</i>	3PL	<i>Ø-apihp-uu</i>
<i>attáa</i> 'cut strips of meat'			
1SG	<i>b-attáa</i>	1PL	<i>b-attáa-u</i>
2SG	<i>d-áttaa</i>	2PL	<i>d-áttaa-u</i>
3SG	<i>Ø-attáa</i>	3PL	<i>Ø-attáa-u</i>

In the paradigm shown in table 6.14, which includes the stems formed with the locative prefixes (though not only those stems), the initial vowel of the stem is accented, and the A-set prefixes are first person *aw* and second person *al*. Alternatively, verbs of this type might be analyzed as consisting of an initial prefix *a* followed by pronominals *wa* and *la*. There is, however, no obvious source for an *a* prefix here, since this paradigm includes verbs with the *a*, *i*, and *o* locative prefixes. It seems better to treat the pronominal prefixes as metathesized rather than to treat them as infixes. In this paradigm the accent is always on the initial vowel of the stem.

There is a variation of this paradigm, illustrated in table 6.14 by *ikaa* 'see', where the initial vowel of the stem shifts from *i* to *a* in the first and second person forms. Another verb that follows this inflectional pattern is *ichisshi* 'love'.

TABLE 6.14. ACTIVE INFLECTION OF VERBS WITH ACCENTED INITIAL VOWEL

<i>iaxua</i> 'cover'			
1SG	<i>aw-iaxua</i>	1PL	<i>aw-iaxu-o</i>
2SG	<i>al-iaxua</i>	2PL	<i>al-iaxu-o</i>
3SG	<i>Ø-iaxua</i>	3PL	<i>Ø-iaxu-o</i>
<i>óoli</i> 'wait for'			
1SG	<i>aw-óoli</i>	1PL	<i>aw-óol-uu</i>
2SG	<i>al-óoli</i>	2PL	<i>al-óol-uu</i>
3SG	<i>Ø-óoli</i>	3PL	<i>Ø-óol-uu</i>
<i>ikaa</i> 'see' (with shift of <i>i</i> to <i>a</i>)			
1SG	<i>aw-ákaa</i>	1PL	<i>aw-ák-uu</i>
2SG	<i>al-ákaa</i>	2PL	<i>al-ák-uu</i>
3SG	<i>Ø-ikaa</i>	3PL	<i>Ø-ik-uu</i>

In the paradigm exemplified in table 6.15, the initial vowel mora is unaccented, and the first and second person A-set prefixes are *b* and *d*. This paradigm is used for verbs with the prefix *oó* 'by shooting', among others. This paradigm also includes a small subset of verbs beginning with short *i* where the initial vowel of the stem is *a* in the first person form, as seen for *ilii* 'speak' in table 6.15. Other verbs showing this shift of *i* to *a* are *iluú* 'stand' and *ili* 'survive'. Verbs following this paradigm whose stems begin with a long vowel (*iikuschi* in table 6.15) or a *VCC* sequence (*ischúushi* 'aim at' in table 6.15) shift the accent to the initial syllable in the second person forms. Stems beginning with a *VCV* sequence generally do not shift the accent in the second person (see *ilii* in table 6.15), although there are a few verbs of this type that do shift the accent to the first syllable (see *ipúa* in table 6.15).²

² There is a strong tendency in Crow verb paradigms to disfavor the accentuation of initial light syllables, i.e., the first syllable in a word-initial sequence (C)V.CV.... In the second person forms of the *dú(u)* 'by hand' and *dá(a)* 'by mouth' paradigms, the accent falls on the second syllable, since the first syllable is light (see tables 6.8 and 6.9). However, in the *ala* 'by foot' and *dak* 'by force' paradigms, the accent is on the first syllable of the second person forms, since that syllable has a long vowel (see tables 6.10 and 6.12). Note also that in the third person forms of the *dú(u)* and *dá(a)* paradigms, the vowel of the instrumental prefix is almost always long when followed by a *CV* sequence, and short when followed by a *CCV* sequence (see tables 6.8 and 6.9), thus ensuring that the accent does not fall on an initial light syllable. The *pá(a)* 'by pushing' verbs provide a counterexample, since in this paradigm the accent may fall on an initial light syllable in the second person forms (see table 6.11). So we can conclude that not accenting initial light syllables is a strong tendency rather than an absolute rule.

TABLE 6.15. ACTIVE INFLECTION OF VERBS WITH UNACCENTED INITIAL VOWEL

<i>iikuschi</i> 'come out'			
1SG	<i>b-iikuschi</i>	1PL	<i>b-iikust-úu</i>
2SG	<i>d-likuschi</i>	2PL	<i>d-likust-uu</i>
3SG	<i>Ø-iikuschi</i>	3PL	<i>Ø-iikust-úu</i>
<i>ischúushi</i> 'aim at'			
1SG	<i>b-ischúushi</i>	1PL	<i>b-ischúus-uu</i>
2SG	<i>d-ischuushi</i>	2PL	<i>d-ischuus-uu</i>
3SG	<i>Ø-ischúushi</i>	3PL	<i>Ø-ischúus-uu</i>
<i>ipúa</i> 'run over'			
1SG	<i>b-ipúa</i>	1PL	<i>b-ipú-o</i>
2SG	<i>d-ipua</i>	2PL	<i>d-ipu-o</i>
3SG	<i>Ø-ipúa</i>	3PL	<i>Ø-ipú-o</i>
<i>ilii</i> 'speak' (with shift of <i>i</i> to <i>a</i> in first person only)			
1SG	<i>b-alii</i>	1PL	<i>b-aláa-u</i>
2SG	<i>d-ilii</i>	2PL	<i>d-iláa-u</i>
3SG	<i>Ø-ilii</i>	3PL	<i>Ø-iláa-u</i>

The A-set prefixes for verbs beginning with *chi* or *k* (table 6.16) are first person *bah* and second person *dáh*; the accent shifts to the prefix in the second person forms. Most of the stems that inflect according to this paradigm are formed with the derivational prefix *chi* 'again' (see §5.4.1). There are also verbs with *k*-initial stems that are inflected in this way. These include *káa* 'laugh', *kalaaxtá* 'forget', *kummi* 'sing', *kuxshí* 'help', *kalátche* 'believe', *kuleé* 'keep', and *kulusshíi* 'change'.

There are several verbs whose stems begin with *chi* (*chilii* 'fear' and *chiweé* 'tell') that are inflected according to the paradigm in table 6.17, rather than that of table 6.16; these verbs do not contain the *chi* prefix. Likewise, there are verbs beginning with *k* that follow the paradigm of table 6.17.

The paradigm in table 6.17 may be considered the default inflectional pattern for active verbs with stem-initial consonants and no derivational prefixes. The A-set prefixes for this paradigm are first person *baa* and second person *da*. In the second person forms the accent shifts to, or remains on, the initial vowel of the stem. Stems in initial *bVV* and *dVV* follow this paradigm if the accent falls on the initial vowel of the stem (see *díili* 'walk' and *bíiwi* 'swim' in table 6.17); otherwise they follow the paradigm in table 6.18.

TABLE 6.16. ACTIVE INFLECTION OF VERBS WITH INITIAL *chi, k*

<i>chikáachi</i> 'sew'			
1SG	<i>bah-chikáachi</i>	1PL	<i>bah-chikáat-uu</i>
2SG	<i>dáh-chikaachi</i>	2PL	<i>dáh-chikaat-uu</i>
3SG	<i>Ø-chikáachi</i>	3PL	<i>Ø-chikáat-uu</i>
<i>chikitchée</i> 'respect'			
1SG	<i>bah-chikitchée</i>	1PL	<i>bah-chikitt-úu</i>
2SG	<i>dáh-chikitchee</i>	2PL	<i>dáh-chikitt-uu</i>
3SG	<i>Ø-chikitchée</i>	3PL	<i>Ø-chikitt-úu</i>
<i>kuxshí</i> 'help'			
1SG	<i>bah-kuxshí</i>	1PL	<i>bah-kuxs-úu</i>
2SG	<i>dáh-kuxshi</i>	2PL	<i>dáh-kuxs-uu</i>
3SG	<i>Ø-kuxshí</i>	3PL	<i>Ø-kuxs-úu</i>

TABLE 6.17. ACTIVE INFLECTION OF VERBS WITH INITIAL *bVV, dVV, s, p, k, x, ch*

<i>bíwi</i> 'swim'			
1SG	<i>baa-wíwi</i>	1PL	<i>baa-wíiw-uu</i>
2SG	<i>da-wíwi</i>	2PL	<i>da-wíiw-uu</i>
3SG	<i>Ø-bíwi</i>	3PL	<i>Ø-bíiw-uu</i>
<i>díili</i> 'walk'			
1SG	<i>baa-liili</i>	1PL	<i>baa-liil-uu</i>
2SG	<i>da-liili</i>	2PL	<i>da-liil-uu</i>
3SG	<i>Ø-díili</i>	3PL	<i>Ø-diil-uu</i>
<i>sáaxi</i> 'snore'			
1SG	<i>baa-sáaxi</i>	1PL	<i>baa-sáax-uu</i>
2SG	<i>da-sáaxi</i>	2PL	<i>da-sáax-uu</i>
3SG	<i>Ø-sáaxi</i>	3PL	<i>Ø-sáax-uu</i>
<i>kulée</i> 'chase'			
1SG	<i>baa-kulée</i>	1PL	<i>baa-kul-úu</i>
2SG	<i>da-kúlee</i>	2PL	<i>da-kúl-uu</i>
3SG	<i>Ø-kulée</i>	3PL	<i>Ø-kul-úu</i>

In another set of stems beginning with *bV(V)* or *dV* the accent shifts to the prefix in the second person forms, and the vowel of the second person prefix is long (table 6.18). All stems with initial *bVC* and *dVC* inflect according to this paradigm (see *disshí* 'dance' and *báxxu* 'ask' in table 6.18), as well as stems with initial *bVV* or *dVV* that are not

accented on the initial syllable of the stem (see *biishi* 'crawl' and *diishi* 'cut meat into thin slices').

TABLE 6.18. ACTIVE INFLECTION OF VERBS WITH INITIAL *bV(V)*, *dV*

<i>disshi</i> 'dance'			
1SG	<i>baa-lisshi</i>	1PL	<i>baa-liss-úu</i>
2SG	<i>dáa-lisshi</i>	2PL	<i>dáa-liss-uu</i>
3SG	<i>Ø-disshi</i>	3PL	<i>Ø-diss-úu</i>
<i>báxxu</i> 'ask'			
1SG	<i>baa-wáxxu</i>	1PL	<i>baa-wáxx-uu</i>
2SG	<i>dáa-wáxxu</i>	2PL	<i>dáa-wáxx-uu</i>
3SG	<i>Ø-báxxu</i>	3PL	<i>Ø-báxx-uu</i>
<i>diishi</i> 'cut meat into thin slices'			
1SG	<i>baa-liishi</i>	1PL	<i>baa-liis-úu</i>
2SG	<i>dáa-liishi</i>	2PL	<i>dáa-liis-uu</i>
3SG	<i>Ø-diishi</i>	3PL	<i>Ø-diis-úu</i>
<i>biishi</i> 'crawl'			
1SG	<i>baa-wiishi</i>	1PL	<i>baa-wiis-úu</i>
2SG	<i>dáa-wiishi</i>	2PL	<i>dáa-wiis-uu</i>
3SG	<i>Ø-biishi</i>	3PL	<i>Ø-biis-úu</i>

Two general observations may be made about the active verb paradigms. First, with a few exceptions, the inflectional pattern of active verbs is predictable from the initial segment or segments of the stem. Exceptions are verbs with stems beginning with *ch* and *k*, which will need to have the inflection type marked in the lexicon. In addition, there are many irregular verbs whose inflections will need to be listed.

Second, in second person forms there is a strong tendency for the accent to shift to the beginning of the word, either to the pronominal prefix or to the first syllable of the stem. This same shift is found in nominal possessor inflection. With stative stems, on the other hand, the accent most often remains on the same syllable in all three persons.

6.3.2. Irregular inflections

6.3.2.1. Motion verbs

As is often the case cross-linguistically, the paradigms for the motion verbs are irregular in Crow; table 6.19 shows the more common ones.

TABLE 6.19. PARADIGMS OF MOTION VERBS

<i>dée</i> 'go'			
1SG	<i>baa-lée</i>	1PL	<i>baá-u</i>
2SG	<i>da-lée</i>	2PL	<i>da-laá-u</i>
3SG	<i>Ø-dée</i>	3PL	<i>Ø-daá-u</i>
<i>húu</i> 'come'			
1SG	<i>b-oó</i>	1PL	<i>b-uú-o</i>
2SG	<i>da-lóo</i>	2PL	<i>da-luú-o</i>
3SG	<i>Ø-húu</i>	3PL	<i>Ø-duú-o</i>
<i>híi</i> 'arrive'			
1SG	<i>b-áá</i>	1PL	<i>b-íi-o</i>
2SG	<i>da-láa</i>	2PL	<i>da-líi-o</i>
3SG	<i>Ø-híi</i>	3PL	<i>Ø-díi-o</i>
<i>dáawi</i> 'go about'			
1SG	<i>baa-lawí</i>	1PL	<i>baa-law-úu</i>
2SG	<i>dáa-lawí</i>	2PL	<i>dáa-law-uu</i>
3SG	<i>Ø-dáawi</i>	3PL	<i>Ø-dáaw-uu</i>
<i>kuú</i> 'return'			
1SG	<i>ba-kkú</i>	1PL	<i>b-áakk-uu</i>
2SG	<i>da-láakku</i>	2PL	<i>da-láakk-uu</i>
3SG	<i>Ø-kuú</i>	3PL	<i>Ø-dáakk-uu</i>
<i>asaalí</i> 'go out'			
1SG	<i>ash-b-aalí</i>	1PL	<i>ash-b-aal-úu</i>
2SG	<i>ash-d-áali</i>	2PL	<i>ash-d-áal-uu</i>
3SG	<i>as-Ø-aalí</i>	3PL	<i>as-Ø-aal-úu</i>
<i>biléeli</i> 'enter'			
1SG	<i>bím-m-aali</i>	1PL	<i>bím-m-aal-uu</i>
2SG	<i>bín-n-aali</i>	2PL	<i>bín-n-aal-uu</i>
3SG	<i>bil-Ø-éeli</i>	3PL	<i>bil-Ø-éel-uu</i>
<i>bilichiili</i> 'go back inside'			
1SG	<i>bím-m-achiili</i>	1PL	<i>bím-m-achiil-uu</i>
2SG	<i>bín-n-achiili</i>	2PL	<i>bín-n-achiil-uu</i>
3SG	<i>bil-Ø-ichiili</i>	3PL	<i>bil-Ø-ichiil-uu</i>
<i>dáakua</i> 'go home'			
1SG	<i>b-aakua</i>	1PL	<i>b-aákaa-u</i>
2SG	<i>da-lákua</i>	2PL	<i>da-laákaa-u</i>
3SG	<i>Ø-dáakua</i>	3PL	<i>Ø-dáakaa-u</i>

In some cases the segmentation of stems and affixes in table 6.19 is somewhat arbitrary, since the forms are so irregular. (I leave many of these forms unsegmented in examples.) For the use of motion verbs as incorporators, see §13.5 and §13.11. Remarks on some of the individual verbs follow.

Dée 'go' can be analyzed as having two stems: the singular stem *dée*, and the first person plural stem *beé*. Both stems ablaut before plural *u* (see §2.5.10.3). Examples (9) and (10) show *beé* in a non-ablauting environment:

- (9) *beé-ssuu-k*
 1A.PL.GO-NEG.PL-DECL
 'we didn't go'
- (10) *beé-woo-k*
 1A.PL.GO-INCL-DECL
 'let's go'

The paradigms of *húu* 'come' and *hii* 'arrive' involve considerable stem suppletion.

Dáawi 'go about' follows the the paradigm of table 6.18 above, except that the initial vowel of the stem is shortened in the first and second person forms.

With *kuú* 'return', the first syllable of the stem is lost in the third person singular, and also in the first person singular and plural forms.

Asaali 'go out' is apparently derived from an incorporated object, *ashí* 'lodge', plus *aali*, with the (A-set) pronominals inserted after the incorporated object. *Aali* does not occur as an independent stem. If the incorporated object is disregarded, *asaali* follows the paradigm for stems beginning with an unaccented vowel (table 6.15 above).

Biléeli 'enter' contains another incorporated stem, *bil*, perhaps derived from *bilía* 'door', plus *aali*. Related stems include *bilichiili* 'go back inside', derived from *biléeli* plus infix *chi* 'again', and *chimmichiili* 'go back in where one came out', which contains *chi* both prefixed and infix. *Chimmichiili* follows the paradigm of table 6.16.

6.3.2.2. Modal verbs

Modal auxiliary verbs are another subclass of stems with irregular inflections (table 6.20). Modals are dependent stems that always occur with an incorporated, main verb complement. It is not clear that the modal verbs fit neatly into either the active or the stative class. Most of the modals occur with both active and stative verbs, and when modals occur with stative verbs, they are not inflected for person. (For uses of these forms, see §13.2, §13.10, and §13.11.)

TABLE 6.20. PARADIGMS OF MODAL VERBS

<i>ihmaachi, immaachi</i> 'will' (future)			
1SG	<i>b-ihmaachi</i>	1PL	<i>b-o-hmaachi</i>
2SG	<i>d-ihmaachi</i>	2PL	<i>d-o-hmaachi</i>
3SG	<i>Ø-ihmaachi</i>	3PL	<i>Ø-o-hmaachi</i>
<i>ii</i> 'want to, intend'			
1SG	<i>b-ii</i>	1PL	<i>b-ii-lu</i>
2SG	<i>d-ii</i>	2PL	<i>d-ii-lu</i>
3SG	<i>(Ø-bia)</i>	3PL	<i>(Ø-bi-o)</i>
<i>bia</i> 'want to, be going to'			
1SG	<i>biá-waa</i>	1PL	<i>biá-w-uu</i>
2SG	<i>biá-laa</i>	2PL	<i>biá-l-uu</i>
3SG	<i>bia-Ø</i>	3PL	<i>bi-o</i>
<i>isshi</i> 'be anxious to, ready to'			
1SG	<i>b-isshi</i>	1PL	<i>b-iss-uu</i>
2SG	<i>d-isshi</i>	2PL	<i>d-iss-uu</i>
3SG	<i>Ø-isshi</i>	3PL	<i>Ø-iss-uu</i>
<i>ishdaachi</i> 'should, ought'			
1SG	<i>b-ishdaachi</i>	1PL	<i>b-i-lu-shdaachi</i>
2SG	<i>d-ishdaachi</i>	2PL	<i>d-i-lu-shdaachi</i>
3SG	<i>Ø-ishdaachi</i>	3PL	<i>Ø-i-lu-shdaachi</i>
<i>ih</i> 'may, might' (optative)			
1SG	<i>b-ih</i>	1PL	<i>b-oh</i>
2SG	<i>d-ih</i>	2PL	<i>d-oh</i>
3SG	<i>Ø-ih</i>	3PL	<i>Ø-oh</i>
<i>dee</i> 'become'; 'mirative'			
1SG	<i>b-ee</i>	1PL	<i>b-oo</i>
2SG	<i>d-ee</i>	2PL	<i>d-oo</i>
3SG	<i>d-ee</i>	3PL	<i>d-oo</i>
<i>hee-lee</i> 'realize, notice, to one's surprise'			
1SG	<i>b-aa-w-ee</i>	1PL	<i>b-aa-w-oo</i>
2SG	<i>d-aa-l-ee</i>	2PL	<i>d-aa-l-oo</i>
3SG	<i>Ø-hee-Ø-lee</i>	3PL	<i>Ø-hee-Ø-loo</i>
<i>deele</i> 'pretend to'			
1SG	<i>b-ee-w-ee</i>	1PL	<i>b-ee-w-oo</i>
2SG	<i>d-ee-l-ee</i>	2PL	<i>d-ee-l-oo</i>
3SG	<i>d-ee-l-ee</i>	3PL	<i>d-ee-l-oo</i>

Some additional remarks may be made on some of the modal verb paradigms.³

- An alternate form of the stem *ihmaachi* 'will' is *immaachi*, with *h* assimilating to the following nasal. It also has a shortened form *imma*.
- The verb *ii* 'want to, intend to' lacks a third person form; the gap is filled by the third person form of *bia* 'want to, be going to'. This stem occurs with the plural marker *lu*.
- The modal *bia* 'want to, be going to' is composed of *bia* plus the direct causative.
- The stem *ishdaachi* is apparently composed of two morphemes, and the plural marker *lu* is infixes.
- The second and third person forms of *dee* 'become' are identical.
- *Dee* 'mirative' (or 'surprise marker'; see §13.10) is a suffixal verb that is homophonous with, and inflected identically to, *dee* 'become'. I do not know whether they are etymologically identical.
- *Hee-lee* 'realize, notice, to one's surprise' is a frequently-occurring combination with *dee* 'mirative'. *Hee* is homophonous with, or perhaps derived from, *he* 'say'. Both verbs are inflected for person.
- *Deelee* 'pretend to' is a reduplication of *dee* 'become'. It is doubly inflected for person.

In addition to the fully inflected modals in table 6.20, there is a first person inclusive hortative form *woo* 'let us, we will, shall we?' that patterns morphologically and syntactically with the modal verbs. (First

³ There appears to be an underlying modal verb paradigm as follows:

1SG <i>b-ii</i>	1PL <i>b-oo</i>
2SG <i>d-ii</i>	2PL <i>d-oo</i>
3SG <i>ii</i>	3PL <i>oo</i>

The following modals follow this paradigm, at least in part: *i(i)hmaachi*, *ii*, *i(i)shdaachi*, and *i(i)h*. The existence of this basic modal paradigm is obscured by several facts. First, two of the modals, *ii* and *ishdaachi*, have *lu* as the plural rather than *oo*. Also, although *ihmaachi* and *ih* are written with initial short *i*, they most likely have an initial long *ii*, since *ii* shortens before *h* (see §2.5.6). And it is likely that *ishdaachi* also has an underlying long *ii*, since *h* following a front vowel is often realized as a palatal fricative (see §2.2.1.3). Finally, *ii* has suppletive third person forms. The hortative inclusive modal *woo* 'let us, shall we?' is also a member of this basic paradigm.

person inclusive means that the addressee is included in the group: you and I, we and you.)

6.3.2.3. Continuative verbs

I use the term “continuative” to refer to a class of verbs with irregular inflections that occur both as incorporators and as independent stems. These verbs are reflexes of Proto-Siouan verbs meaning ‘sit’, ‘stand’ and ‘lie’; they are often referred to in the Siouan literature as “positionals” (Rankin 2004). They are used as markers of continuative aspect, and have the general meaning ‘continue in a state or activity’. All have irregular inflectional patterns. Table 6.21 lists continuative verbs and their paradigms. (Uses of the continuatives are discussed in §13.3.1 and §13.11.4.)

TABLE 6.21. PARADIGMS OF CONTINUATIVE VERBS

<i>daachi</i> ‘remain voluntarily’			
1SG	<i>baa-lichí</i>	1PL	<i>ba-kaá-u</i>
2SG	<i>dáa-lichí</i>	2PL	<i>da-kaá-u</i>
3SG	<i>Ø-daachi</i>	3PL	<i>Ø-kaá-u</i>
<i>baachi</i> ‘remain involuntarily’			
1SG	<i>baa-wachí</i>	1PL	<i>ba-kaá-u</i>
2SG	<i>dáa-wachí</i>	2PL	<i>da-kaá-u</i>
3SG	<i>Ø-baachi</i>	3PL	<i>Ø-kaá-u</i>
<i>dawí</i> ‘continue in motion’			
1SG	<i>baa-lawí</i>	1PL	<i>báa-waa-líi-o</i>
2SG	<i>dáa-lawí</i>	2PL	<i>dáa-laa-líi-o</i>
3SG	<i>Ø-dawí</i>	3PL	<i>dáa-Ø-líi-o</i>
<i>dahkú</i> ‘stay, remain’			
1SG	<i>baa-káhku</i>	1PL	<i>áa-wa-hk-uu</i>
2SG	<i>dáa-kahku</i>	2PL	<i>áa-la-hk-uu</i>
3SG	<i>Ø-dahkú</i>	3PL	<i>áa-Ø-hk-uu</i>
<i>datchi</i> ‘continue (by mouth)’			
1SG	<i>baa-kaa</i>	1PL	<i>baa-kaa-u</i>
2SG	<i>daa-kaa</i>	2PL	<i>daa-kaa-u</i>
3SG	<i>Ø-datchi</i>	3PL	<i>Ø-att-uu/watt-uu</i>
<i>ilúu</i> ‘do or happen repeatedly’			
1SG	<i>b-alúu</i>	1PL	<i>b-alúu-o</i>
2SG	<i>d-ilúu</i>	2PL	<i>d-ilúu-o</i>
3SG	<i>Ø-ilúu</i>	3PL	<i>Ø-ilúu-o</i>

Remarks can be made on some of the continuative paradigms:

- The verb *daachi* 'remain voluntarily' has a suppletive plural stem *kaá*, and the initial vowel of the singular stem is shortened in the first and second person forms.
- The plural forms for *daachi* 'remain voluntarily' and *baachi* 'remain involuntarily' are identical.
- *Dawí* 'continue in motion' has a suppletive plural stem, and there is double person marking in the first and second person plural forms.
- The verb *dahkú* 'stay, remain' is inflected with pronominal infixes in the plural, and the various shapes of the stem exhibit partial suppletion.
- *Datchi* 'continue (by mouth)' is used with verbs referring to an activity performed by mouth: e.g., *ilii* 'talk', *iivee* 'cry', etc. Two different variants of the third person plural form occur in the data.

6.3.2.4. Causative verbs

There are two causative stems in Crow: *ee* 'direct causative', and *hche* 'indirect causative'. From a morphological viewpoint they are suffixes to the verb stems that they causativize; they combine with a verb stem to form a verb stem subcategorized for an additional argument.

The causative markers must nonetheless be treated as verbs rather than derivational affixes, since they are inflected for person of causer. In contrast to causative formation in other languages where the causative marker is clearly a derivational affix, in Crow it is the verb stem that is more affixlike and less verblike, since it is not inflected for person of subject; it is the causative that bears subject marking.

As far as the semantics is concerned, the direct causative conveys the notion that the causer directly brings about the effect. With the indirect causative the relationship between causer and effect is less direct and the causer has less control; the causee ordinarily plays some role in bringing about the effect. The indirect causative covers a range of meanings: it may be translated 'let, permit, allow, have'.

The distribution of the causatives corresponds fairly closely to the active and stative verb classes of Crow: direct causatives most often combine with stative verbs, indirect causatives with active verbs. Since active verbs have an agentive subject, their causativization is more likely to involve less direct, mediated causation.

Examples of causatives are given in tables 6.22 and 6.23. (Uses of causatives are discussed in §13.9 and §13.11.)

TABLE 6.22. INDIRECT CAUSATIVES

STEM	CAUSATIVE
<i>xalússhi</i> 'run'	<i>xalússhi-hche</i> 'cause to run, allow to run'
<i>dée</i> 'go'	<i>dée-hche</i> 'send'
<i>duushi</i> 'eat'	<i>duushi-hche</i> 'feed, cause to eat, allow to eat'
<i>óochia</i> 'be healed'	<i>óochia-hche</i> 'heal, restore to health'

TABLE 6.23. DIRECT CAUSATIVES

STEM	CAUSATIVE
<i>shipita</i> 'black'	<i>shipitch-ee</i> 'blacken'
<i>xachii</i> 'be moving'	<i>xachii-a</i> 'move, set in motion'
<i>óoshi</i> 'cooked, ripe'	<i>óossh-ee</i> 'cook'
<i>háchkka</i> 'tall'	<i>háchk-ee</i> 'lengthen'

The paradigm for the indirect causative *hche* is invariant. Table 6.24 presents the paradigm of the indirect causative, and of a sample stem causativized with the indirect causative.

TABLE 6.24. INDIRECT CAUSATIVE ACTIVE INFLECTION

(i) Paradigm of the indirect causative marker *hche*

1SG	<i>-wa-hche</i>	1PL	<i>-wa-hk-uu</i>
2SG	<i>-la-hche</i>	2PL	<i>-la-hk-uu</i>
3SG	<i>-Ø-hche</i>	3PL	<i>-Ø-hk-uu</i>

(ii) Inflection of a stem with indirect causative:

iliihche 'cause to speak'

1SG	<i>ilii-wa-hche</i>	1PL	<i>ilii-wa-hk-uu</i>
2SG	<i>ilii-la-hche</i>	2PL	<i>ilii-la-hk-uu</i>
3SG	<i>ilii-Ø-hche</i>	3PL	<i>ilii-Ø-hk-uu</i>

Subject inflection of the direct causative, including sample stems, is given in table 6.25. In this paradigm the ablauting stem vowel appears in the third person singular in one of five different phonetic shapes: *ee*, *aa*, *ii*, *a*, or zero. The table also shows third person singular forms followed by the same-subject marker *ak*, since final vowels surface in

a somewhat different form before suffixes like *ak* that trigger ablaut (see §2.5.10).

TABLE 6.25. DIRECT CAUSATIVE ACTIVE INFLECTION

(i) Paradigm of the direct causative marker

1SG	- <i>b-aa</i>	1PL	- <i>b-uu</i>
2SG	- <i>d-aa</i>	2PL	- <i>d-uu</i>
3SG	- <i>Ø-ee/a</i>	3PL	- <i>Ø-uu/o/iio</i>

(ii) Inflection of causativized stems

Stems ending in *VCV*, where *C* is a single obstruent

óoshi 'ripe, cooked': causative *óssh-ee* 'cook'

1SG	<i>óosh-baa</i>	1PL	<i>óosh-buu</i>
2SG	<i>óosh-daa</i>	2PL	<i>óosh-duu</i>
3SG	<i>óssh-ee</i>	3PL	<i>óoss-uu</i>
3SG + <i>ak</i> SS: <i>óoss-aa-(a)k</i>			

chichúchi 'hard': causative *chichútch-ee* 'harden; lock'

1SG	<i>chichút-baa</i>	1PL	<i>chichút-buu</i>
2SG	<i>chichút-daa</i>	2PL	<i>chichút-duu</i>
3SG	<i>chichútch-ee</i>	3PL	<i>chichútt-uu</i>
3SG + <i>ak</i> SS: <i>chichútt-aa-(a)k</i>			

Stems ending in *ii*, *ee*, or a diphthong

sapii 'soft': causative *sapii-a* 'soften'

1SG	<i>sapii-waa</i>	1PL	<i>sapii-wuu</i>
2SG	<i>sapii-laa</i>	2PL	<i>sapii-luu</i>
3SG	<i>sapii-a</i>	3PL	<i>sapii-o</i>
3SG + <i>ak</i> SS: <i>sapii-a-(a)k</i>			

tawée 'hot': causative *tawée-a* 'heat, make hot'

1SG	<i>tawée-waa</i>	1PL	<i>tawée-wuu</i>
2SG	<i>tawée-laa</i>	2PL	<i>tawée-luu</i>
3SG	<i>tawée-a</i>	3PL	<i>tawée-o</i>
3SG + <i>ak</i> SS: <i>tawée-a-(a)k</i>			

chiá 'burned out (fire), extinguished': causative *chiá-(a)* 'extinguish'

1SG	<i>chiá-waa</i>	1PL	<i>chiá-wuu</i>
2SG	<i>chiá-laa</i>	2PL	<i>chiá-luu</i>
3SG	<i>chiá</i>	3PL	<i>chi-o</i>
3SG + <i>ak</i> SS: <i>chiá-(a)k</i>			

TABLE 6.25. (cont.)

Stems ending in *u**iikukkú* 'hear': causative *iikukkóo* 'cause to hear'

1SG	<i>iikukkú-waa</i>	1PL	<i>iikukkú-wuu</i>
2SG	<i>iikukkú-laa</i>	2PL	<i>iikukkú-luu</i>
3SG	<i>iikukk-óo</i>	3PL	<i>iikukkú-o</i>
3SG + <i>ak</i> SS: <i>iikukkóo-ak</i>			

All other stems

koowí 'finished': causative *koow-ée* 'finish'

1SG	<i>koóm-maa</i>	1PL	<i>koóm-muu</i>
2SG	<i>koóm-naa</i>	2PL	<i>koóm-nuu</i>
3SG	<i>koow-ée</i>	3PL	<i>koow-ii-o</i>
3SG + <i>ak</i> SS: <i>koow-ii-ak</i>			

chúhka 'flat': causative *chúhk-ee* 'flatten'

1SG	<i>chúhka-waa</i>	1PL	<i>chúhka-wuu</i>
2SG	<i>chúhka-laa</i>	2PL	<i>chúhka-luu</i>
3SG	<i>chúhk-ee</i>	3PL	<i>chúhk-ii-o</i>
3SG + <i>ak</i> SS: <i>chúhk-ii-ak</i>			

awuússaa 'toward the inside': causative *awuúss-ee* 'place inside'

1SG	<i>awuússaa-waa</i>	1PL	<i>awuússaa-wuu</i>
2SG	<i>awuússaa-laa</i>	2PL	<i>awuússaa-luu</i>
3SG	<i>awuúss-ee</i>	3PL	<i>awuúss-ii-o</i>
3SG + <i>ak</i> SS: <i>awuúss-ii-ak</i>			

hupí 'hole': causative *hup-ée* 'make a hole'

1SG	<i>húp-baa</i>	1PL	<i>húp-buu</i>
2SG	<i>húp-daa</i>	2PL	<i>húp-duu</i>
3SG	<i>hup-ée</i>	3PL	<i>hup-ii-o</i>
3SG + <i>ak</i> SS: <i>hup-ii-ak</i>			

The first and second person forms of the direct causative are identical in all environments, but the various third person forms are phonologically conditioned as follows.

If the stem of the verb to which *ee* is suffixed ends in a *VCV* sequence where the final vowel is short and *C* is a single obstruent (not a geminate or cluster), that obstruent is geminated. However, if the final vowel of the stem is accented, gemination does not take place and inflection follows the paradigm for *hup-ée*. In this pattern the causative stem is *aa* before a suffix beginning with *a*, and the third person plural

is *uu*, as with *óosshe* 'cook' and *chichútchee* 'harden, lock' in table 6.25. The gemination effect suggests that the historically underlying third person singular form is *hee*, since aspirated obstruents become geminates in Crow: **óosh-hee* → *óosshee*. There is at least one verb paradigm where third person singular *hee* actually surfaces, namely *baannátchii-hee* 'skeptical, leery', a lexicalized causative whose first person form is *baannátchii-waa*.

If the stem ends in *ii*, *ee*, or a diphthong, the third person singular ending is *a* and the third person plural is *o*, as with *sapiia* 'soften', *tawéea* 'heat', and *chia* 'extinguish' in the table. The *a-a* sequence that results when third person *a* follows a diphthong is reduced to *a*. Note that with *chia* the accent shifts from high to falling in the causative form.

If the stem ends in *u*, the third person singular ending is *oo* (with deletion of the *u*), as with *iikukkóo* in the table.⁴

With all other stems, the third person singular ending is *ee*, which ablauts to *ii* before the third person plural marker and suffixes beginning with *a*, as with *koowée* 'finish', *chúhkee* 'flatten', *awuússee* 'place inside', and *hupée* 'make a hole' in the table. Stems ending in *aa* delete the final long vowel in the third person forms, as with *awuússee*. *Hupée* 'make a hole' is an example of a final *CV* stem that does not geminate, since the accent is on the final short vowel of the stem.

In the plural forms of the direct causative, *uu* and *o* are portmanteaux that mark both causative and plural. However, when the third person plural ending is *iio*, *ii* is the causative stem and *o* is the plural marker.

There are a number of lexicalized causatives where the noncausativized form does not exist as an independent stem in the language. Most of these are formed with the direct rather than the indirect causative. They include those in (11).

- (11) *dáawee* 'read, sing'
día 'do, make'
iassee 'watch'
bía 'depend on, rely on'
sheé 'say'

An example of a lexicalized causative formed with the indirect causative marker is *éhche* 'know'. Inflectional paradigms for *día* 'do,

⁴ Thanks to Hu Matthews (p.c. 2005) for alerting me to the existence of this paradigm.

make' and for *éhche* are given in table 6.26. In examples, the lexicalized direct causative marker is simply glossed as 1A, 2A, rather than as CAUS.

TABLE 6.26. ACTIVE INFLECTION OF LEXICALIZED CAUSATIVES

(i) direct causative: <i>día</i> 'do, make'			
1SG	<i>día-waa</i>	1PL	<i>día-w-uu</i>
2SG	<i>día-laa</i>	2PL	<i>día-l-uu</i>
3SG	<i>día-Ø</i>	3PL	<i>dí-Ø-o</i>
(ii) indirect causative: <i>éhche</i> 'know'			
1SG	<i>é-wa-hche</i>	1PL	<i>é-wa-hk-uu</i>
2SG	<i>é-la-hche</i>	2PL	<i>é-la-hk-uu</i>
3SG	<i>é-Ø-hche</i>	3PL	<i>é-Ø-hk-uu</i>

6.3.2.5. *kuú* 'give'

The verb *kuú* 'give', which also functions as the benefactive (see §13.4 and §13.11), is inflected for both subject and object pronominals, the latter indicating the recipient, and its paradigm is highly irregular. As can be seen from the basic paradigm given in table 6.27 (with understood third person recipient: 'I give to him', 'you give to him', etc.), the stem vowel is short in the first and second person forms, and long in the third person.

TABLE 6.27. BASIC INFLECTION OF *kuú* 'GIVE'

1SG	<i>ba-kú</i>	1PL	<i>ba-k-úu</i>
2SG	<i>dá-ku</i>	2PL	<i>dá-k-uu</i>
3SG	<i>Ø-kuú</i>	3PL	<i>Ø-kuú-o</i>

Table 6.28 gives the full paradigm of *kuú* with pronominal subjects and recipients (objects).

These forms are atypical in several respects. The order of pronominal prefixes is first person + second person, rather than object + subject, as is otherwise the case with pronominal prefixes. The first person plural object prefix with a third person subject is *bilik* rather than *balee*. And finally, *ba* and *da* function as object prefixes in some of these forms, where regular verb paradigms have *bii* and *dii*.

TABLE 6.28. FULL INFLECTION OF *kuú* 'GIVE'

SINGULAR SUBJECT			
	1SG	2SG	3SG
RECIPIENT			
1SG		<i>bii-lá-ku</i>	<i>ba-kú</i>
2SG	<i>ba-lá-ku</i>		<i>dá-ku</i>
3SG	<i>ba-kú</i>	<i>dá-ku</i>	<i>kuú</i>
1PL		<i>balee-lá-ku</i>	<i>bilik-kú</i>
2PL	<i>ba-lá-k-uu</i>		<i>dá-k-uu</i>
3PL	<i>ba-kú</i>	<i>dá-ku</i>	<i>kuú</i>
PLURAL SUBJECT			
	1PL	2PL	3PL
RECIPIENT			
1SG		<i>bii-lá-k-uu</i>	<i>ba-k-úu</i>
2SG	<i>ba-lá-k-uu</i>		<i>dá-k-uu</i>
3SG	<i>ba-k-úu</i>	<i>dá-k-uu</i>	<i>kuú-o</i>
1PL		<i>balee-lá-k-uu</i>	<i>bilik-kuú-o</i>
2PL	<i>ba-lá-k-uu</i>		<i>dá-k-uu</i>
3PL	<i>ba-k-úu</i>	<i>dá-k-uu</i>	<i>kuú-o</i>

TABLE 6.29. DOUBLY INFLECTED VERBS

<i>isítchee</i> 'like'			
1SG	<i>bas-ítchi-waa</i>	1PL	<i>bas-ítchi-w-uu</i>
2SG	<i>dis-ítchi-laa</i>	2PL	<i>dis-ítchi-l-uu</i>
3SG	<i>ts-ítch-ee</i>	3PL	<i>ts-ítchii-o</i>
<i>chichéhche</i> 'remember'			
1SG	<i>bah-chiché-wa-hche</i>	1PL	<i>bah-chiché-wa-hk-uu</i>
2SG	<i>dáh-chiche-la-hche</i>	2PL	<i>dáh-chiche-la-hk-uu</i>
3SG	<i>Ø-chiché-Ø-hche</i>	3PL	<i>Ø-chiché-Ø-hk-uu</i>
<i>immía</i> 'work at survival, get by, hustle'			
1SG	<i>b-am-miá-waa</i>	1PL	<i>b-am-miá-wuu</i>
2SG	<i>d-im-mia-laa</i>	2PL	<i>d-im-mia-luu</i>
3SG	<i>Ø-im-mia</i>	3PL	<i>Ø-im-mi-o</i>

6.3.2.6. Other irregularly inflected verbs

Crow has a number of active verbs whose inflections are irregular in one way or another. It is impossible to give an exhaustive listing here. The following examples are simply meant to indicate the types of irregularities that can be found.

A few verbs are doubly inflected for subject, as in table 6.29. For instance, *isítchee* 'like' has personal prefixes identical to the alienable possessor markers, and suffixes identical to the direct causative; *chichéhche* 'remember' has the pronominal prefixes of table 6.16, and has the indirect causative as suffixes; *immia* 'work at survival, get by, hustle' is composed of *ili* 'survive, escape' and the modal auxiliary *bia* 'want to, be going to'.

A number of verbs have A-set pronominals infixed rather than prefixed, as in table 6.30. It is likely that, diachronically, these stems are compounds, though their derivation is not always transparent. Among the stems in the table, *éhche* 'know' is formally an indirect causative. (It prefixes B-set pronominals to the entire verb, e.g., *dii-é-wa-hche-k* 'I know you'.) The initial segment *am/aw* of *awáachi* 'sit' may be derived from *awá* 'earth'. The Hidatsa cognate of *isshii* is *hii* 'drink', which suggests that the Crow verb is composed of two morphemes. Other stems of the infixing type include *biléeli* 'enter' and *asaali* 'go out' (see table 6.19 in §6.3.2.1 above).

TABLE 6.30. VERBS WITH PRONOMINAL INFIXATION

<i>éhche</i> 'know'			
1SG	<i>é-wa-hche</i>	1PL	<i>é-wa-hk-uu</i>
2SG	<i>é-la-hche</i>	2PL	<i>é-la-hk-uu</i>
3SG	<i>é-Ø-hche</i>	3PL	<i>é-Ø-hk-uu</i>
<i>awáachi</i> 'sit'			
1SG	<i>ám-m-aachi</i>	1PL	<i>ám-m-aat-uu</i>
2SG	<i>ám-n-aachi</i>	2PL	<i>ám-n-aat-uu</i>
3SG	<i>Ø-awáachi</i>	3PL	<i>Ø-awáat-uu</i>
<i>isshii</i> 'drink'			
1SG	<i>ish-b-ii</i>	1PL	<i>ish-b-ii-o</i>
2SG	<i>ish-d-ii</i>	2PL	<i>ish-d-ii-o</i>
3SG	<i>ishsh-Ø-ii</i>	3PL	<i>ishsh-Ø-ii-o</i>

There are several verbs where the second and third person forms are identical, as in table 6.31. Other verbs inflected like *iippatdee* include *aliliiatdee* 'imitate the speech of' and *iichúulee* 'be opposed to'; these verbs evidently contain the modal auxiliary *dee* 'become' (§6.3.2.2 above).

TABLE 6.31. VERBS WITH IDENTICAL SECOND AND THIRD PERSON FORMS

<i>iiwaannia</i> 'play'			
1SG	<i>iiwaam-m-ia</i>	1PL	<i>iiwaam-m-i-o</i>
2SG	<i>iiwaan-n-ia</i>	2PL	<i>iiwaan-n-i-o</i>
3SG	<i>iiwaan-n-ia</i>	3PL	<i>iiwaan-n-i-o</i>
<i>iipatdee</i> 'jump in water'			
1SG	<i>iipat-b-ee</i>	1PL	<i>iipat-b-uu</i>
2SG	<i>iipat-d-ee</i>	2PL	<i>iipat-d-uu</i>
3SG	<i>iipat-d-ee</i>	3PL	<i>iipat-d-uu</i>

There are few verbs whose inflections combine features of both the active and the stative paradigms, as in table 6.32. These verbs straddle the line between active and stative verbs.

TABLE 6.32. VERBS WITH MIXED PARADIGMS

(i) Without accent shift:			
<i>aliishi</i> 'be hungry'			
1SG	<i>b-aliishi</i>	1PL	<i>balee-aliishi</i>
2SG	<i>d-aliishi</i>	2PL	<i>d-aliis-uu</i>
3SG	<i>Ø-aliishi</i>	3PL	<i>Ø-aliis-uu</i>
(ii) With accent shift:			
<i>alaaxtá</i> 'not know'			
1SG	<i>baa-laaxtá</i>	1PL	<i>balee-alaaxtá</i>
2SG	<i>dáa-laaxta</i>	2PL	<i>dáa-laaxt-uu</i>
3SG	<i>Ø-alaaxtá</i>	3PL	<i>Ø-alaaxt-úu</i>

One sort of mixed inflection is exemplified in table 6.32 by *aliishi* 'be hungry'. This verb patterns like an active verb in that it has *b* and *d* as pronominal prefixes; however, *balee* occurs in the first person plural form, diagnostic of a stative verb. Also, the accent does not shift in the second person forms, another pattern found in stative verbs. Other verbs that follow this pattern are *apásshé* 'be tired', *iáxxo* 'be hurt', and *iishihta* 'be lazy'. In the case of *iáxxo* and *iishihta*, the *b* and *d* person

markers could simply be the result of a reduction in vowel length, i.e., *bii-i* → *b-i*. Such an explanation, however, does not account for *allishi* and *apásshe*.

Another sort of mixed paradigm is seen in *alaaxtá* 'not know' in table 6.32. Here the first and second person singular and second person plural pronominal prefixes follow the pattern of active verbs, and the accent shifts to the prefix in the second person forms, as is characteristic of active verbs. However, *balee* is found in the first person plural form.

The last form of inflectional irregularity to be considered in this section is that at least one verb can exceptionally occur with both active and stative person markers: that verb is *daxchi* 'tie, bind, imprison (active)' (cf. table 6.12); 'choke, gag (stative)', as in table 6.33.

TABLE 6.33. FLUID PERSON MARKING: *daxchi* 'TIE; CHOKE'

ACTIVE: 'tie, bind'			
1SG	<i>b-axchi</i>	1PL	<i>b-axt-úu</i>
2SG	<i>d-áaxchi</i>	2PL	<i>d-áaxt-uu</i>
3SG	<i>Ø-daxchi</i>	3PL	<i>Ø-daxt-úu</i>
STATIVE: 'choke, gag'			
1SG	<i>bii-laxchi</i>	1PL	<i>balee-laxchi</i>
2SG	<i>dii-laxchi</i>	2PL	<i>dii-laxt-úu</i>
3SG	<i>Ø-daxchi</i>	3PL	<i>Ø-daxt-úu</i>

6.4. Reflexives

The reflexives are pronominals coreferential with the subjects of the clauses in which they occur. The reflexive paradigm is given in table 6.34. Both the reflexive object and the A-set subject are formally expressed in the reflexive verb, as illustrated in table 6.35.³

TABLE 6.34. REFLEXIVE PARADIGM

1	<i>bihchi-</i> 'myself, ourselves'
2	<i>dihchi-</i> 'yourself, yourselves'
3	<i>ihchi-</i> 'himself, herself, itself, themselves'

³ By contrast, in Lakshota the reflexive pronominal encodes both subject and object: *mič'i-kte* 'I kill myself', *nič'i-kte* 'you kill yourself'.

TABLE 6.35. INFLECTION OF A REFLEXIVE VERB

	<i>ihchikuxshi</i> 'help oneself'
1SG	<i>bihchi-wah-kuxshi</i> 'I help myself'
2SG	<i>dihchi-lah-kuxshi</i> 'you help yourself'
3SG	<i>ihchi-Ø-kuxshi</i> 'he helps himself'
1PL	<i>bihchi-wah-kuxs-úu</i> 'we help ourselves'
2PL	<i>dihchi-lah-kuxs-uu</i> 'you all help yourselves'
3PL	<i>ihchi-Ø-kuxs-úu</i> 'they help themselves'

A reflexive may also serve as the object of a postposition, as in (12):

- (12) *iichliil-aakinnee-t isshiiá ihch-ishóochee-n dúushii-i-k*
 horse-ride-TEMP his.hair REFL-in.front.of-LOC let.down-HAB-DECL
 'when he rode horseback he would let his hair down in front of him' (AB 18)

The Crow reflexive forms are derived from *ihchi* plus reduced forms of the B-set pronominals *bii* and *dii*.

6.5. Reciprocals

The reciprocal pronominal is *bach/bat*; this form is invariant for first, second, and third persons. *Bach/bat* is prefixed to the verb before the subject (A-set) pronominals. An example of a first person reciprocal is seen in (13):

- (13) *bat-bas-koochii-w-uua kala-koóm-m-aa-(a)k*
 RECIP-1POS-enemy-1A-CAUS.PL now-finished-1A-CAUS-SS
bat-bah-kuxs-ák
 RECIP-1A-help-SS
 'let's stop being enemies, let's help each other' (AB 40)

In (14) the reciprocal occurs with a stative verb:

- (14) *Charlie-sh-dak Dan-nak bat-chichée-o-k*
 C.-DET-and D.-and RECIP-resemble-PL-DECL
 'Charlie and Dan look like each other'

In (15) the reciprocal is the object of an active transitive verb:

- (15) *bíam-nak bachée-m bach-áxpá-wi-o-lak*
 woman-and man-DET RECIP-marry-want.to-PL-COND
 'if a woman and a man want to marry each other' (Lk 20:34)

6.6. Imperatives

6.6.1. Simple imperative

The singular of the simple imperative is formed by adding *h* or *ah* to the stem; the *ah* alternant occurs after stems with *ee* → *ii* ablaut. The plural morpheme for imperatives is *aala*; the *aa* is shortened or deleted entirely after a stem ending in a long vowel. These forms are illustrated in table 6.36.

TABLE 6.36. SIMPLE IMPERATIVE

(i) Stems with <i>ee</i> → <i>ii</i> ablaut		
STEM	IMPERATIVE SG.	IMPERATIVE PL.
<i>iassee</i> 'watch'	<i>iassii-ah</i>	<i>iassii-a(a)la-h</i>
<i>alapeé</i> 'kick'	<i>alapii-ah</i>	<i>alapii-a(a)-la-h</i>
<i>dappeé</i> 'kill'	<i>dappii-ah</i>	<i>dappii-a(a)la-h</i>
(ii) Stems with initial unaccented <i>i</i> (imperative based on second person)		
STEM	IMPERATIVE SG.	IMPERATIVE PL.
<i>iikukku</i> 'hear'	<i>d-iikukku-h</i>	<i>d-iikukk-aala-h</i>
<i>ihchipúa</i> 'jump'	<i>d-ihchipua-h</i>	<i>d-ihchipua-(aa)la-h</i>
<i>iluu</i> 'stand'	<i>d-iluu-h</i>	<i>d-iluu-a(a)la-h</i>
<i>iitchi</i> 'miss'	<i>d-iittaa-h</i>	<i>d-iitt-aala-h</i>
<i>ilii</i> 'speak'	<i>d-iláa-h</i>	<i>d-iláa-(aa)la-h</i>
(iii) All other stems		
STEM	IMPERATIVE SG.	IMPERATIVE PL.
<i>baláxi</i> 'sing'	<i>baláxi-h</i>	<i>baláx-aala-h</i>
<i>dichi</i> 'hit'	<i>dichí-h</i>	<i>dit-áala-h</i>
<i>páaxxu</i> 'spill'	<i>páaxxu-h</i>	<i>páaxx-aala-h</i>
<i>dée</i> 'go'	<i>dáa-h</i>	<i>dáa-(aa)la-h</i>
<i>dúushii</i> 'lay down'	<i>dúusaa-h</i>	<i>dúus-aala-h</i>
<i>dútchi</i> 'get, take'	<i>dúтта-h</i>	<i>dúтт-aala-h</i>

Both the singular and plural imperatives trigger ablaut in ablauting stems. Stems like *iassee* 'watch' and *alapeé* 'kick', which undergo *ee* to *ii* ablaut, have *ah* as the imperative marker.⁶

With most verbs, the imperative is formed from the third person singular stem. However, with vowel-initial verbs whose first mora is unaccented *i*, the imperative is based on the second person form, as in part (ii) of table 6.36.⁷

6.6.2. Polite imperative

The mild or polite imperative is formed by adding *kawe* to the stem, followed by the regular imperative marker *h* (table 6.37). Since *kawe* is consonant-initial, it does not trigger ablaut. In plural polite imperatives, *kawe* follows the usual plural morpheme rather than the special imperative plural *aala*. Stems that form the regular imperative from the second person (i.e., vowel-initial stems whose first segment is unaccented *i*) form the polite imperative in the same way as in part (i) of the table.

TABLE 6.37. POLITE IMPERATIVE

(i) Stems with initial unaccented *i* (imperative based on second person)

STEM	IMPERATIVE SG.	IMPERATIVE PL.
<i>iitchi</i> 'miss target'	<i>d-iitchi-kawe-h</i>	<i>d-iittaa-u-kawe-h</i>
<i>iháwi</i> 'sleep'	<i>d-iháwi-kawe-h</i>	<i>d-iháw-uu-kawe-h</i>
<i>iiwaachissaa</i> 'hurry'	<i>d-iiwaachissaa-kawe-h</i>	<i>d-iiwaachiss-uu-kawe-h</i>

(ii) Other stems

STEM	IMPERATIVE SG.	IMPERATIVE PL.
<i>disshi</i> 'dance'	<i>disshi-káwe-h</i>	<i>diss-úu-kawe-h</i>
<i>duushi</i> 'eat'	<i>duush-káwe-h</i>	<i>duus-úu-kawe-h</i>
<i>chimmí</i> 'count'	<i>chimmí-káwe-h</i>	<i>chimm-úu-kawe-h</i>
<i>dée</i> 'go'	<i>dée-kawe-h</i>	<i>dáa-u-kawe-h</i>
<i>húu</i> 'come'	<i>húu-káwe-h</i>	<i>duú-o-kawe-h</i>
<i>óochia</i> 'stop'	<i>óochia-kawe-h</i>	<i>óochi-o-kawe-h</i>

⁶ There are a few stems ending in a short vowel that ablaut. These include *dúichi* 'get', *dúshi* 'take out', and *iikuschi* 'come out'.

⁷ *Biisshi* 'tell a lie' is a stative verb whose imperative is also based on the second person form: e.g., *dii-wiisshi-ssaa-h* 'don't lie'.

6.6.3. Emphatic imperative

The emphatic imperative is formed by suffixing *wa* to the stem, followed by imperative *h*, as in table 6.38. The emphatic imperative adds a note of insistence: 'do it or else!' As with other imperatives, emphatic imperatives of verbs with initial unaccented *i* are based on the second person singular.

TABLE 6.38. EMPHATIC IMPERATIVE

STEM	EMPHATIC IMPERATIVE
<i>iháwi</i> 'sleep'	<i>d-iháwi-wa-h</i>
<i>biléeli</i> 'enter'	<i>biléeli-wa-h</i>
<i>isshii</i> 'drink'	<i>isshii-wa-h</i>

6.7. Negative

The negative marker ('not') in Crow is the suffix *ssaa*; the citation form is *ssee* and the plural is *ssuu*. Examples are seen in (16)–(18):

- (16) *baaxuawishé al-ikuua xaxúa chilli-ssaa*
 animal REL-see.PL all fear-NEG
kulé-wia-i-lu-k
 chase-ready.TO-HAB-PL-DECL
 'they are not afraid of any animals they see; they are ready to chase them' (Animals 16)
- (17) *d-áasua ashkawúua-n hulé dappaxi-ssa(a)-h*⁸
 2POS-lodge inside-LOC hole dig-NEG-IMPER
 'don't dig holes inside your lodges' (Uuwat 13)
- (18) *ashtáali-m shiché alitchia-la-m*
 teepee-DET hill behind-be.there-DET
kuss-dée-hche-ssuu-k
 GOAL-go-CAUS-NEG.PL-DECL
 'he forbade them to go to a teepee that was behind the hill' (Bitaa 15)

The existential verb *deetá* 'not exist' is used as a negative in two contexts. First, it is used to negate possession or existence:

⁸ The fact that the negative is spelled with a short vowel in this sentence reflects the shortening of long vowels before *h* (see §2.5.6).

- (19) *bas-bálaa-leeta-k*
IPOS-money-not.exist-DECL
'I don't have any money'
- (20) *éehkuhtee baa-ham-neeta-k*
over.there INDEF-some-not.exist-DECL
'there's nothing over there'
- (21) *balapáale ahú-k awaasúu-leeta-k iilaalee-leeta-k*
tree many-DECL house-not.exist-DECL car-not.exist-DECL
bilaxpáak-deeta-k baláxxii-leeta-k
people-not.exist-DECL gun-not.exist-DECL
'there were lots of trees—no houses, no cars, no people, no guns'
(Harold II 23)

Second, *deetá* is used to form the negative of a perfect construction:

- (22) *aw-ákaa-leeta-k*
IA-see-not.exist-DECL
'I haven't seen it'
- (23) *iisko baaxawua-chikúá hiliat-buush-deeta-k*
formerly bread-sweet like.this-IA.eat-not.exist-DECL
'I've never eaten cake like this until now' (Sees 7)

The use of *bishí* 'exist' and *deetá* 'not exist' are discussed in §13.8.1.

The sentential negative is *baaleeták* or *baaleetáa* 'no!', both formed from *baa* 'indefinite' plus *deetá* 'not exist'.

- (24) *Ammalapáshkuua-ss-da-lee-?* — *baaleetáa*
Billings-GOAL-2A-go-INTERR no
'did you go to Billings?' — 'no'

7 Adverbs

7.1. Introduction

Across languages, adverbs tend to be an eclectic category that includes a variety of lexemes that do not obviously fit into any other category. Such is the case in Crow.

Because of the eclectic nature of the category, it is also not obvious how adverbs should be classified. As far as Crow is concerned, there are at least three possible classifications: by semantic category, i.e., adverbs of time, location, manner, and speaker attitude; by morphological and lexical properties, i.e., their derivation and their status as independent words, prefixes, suffixes, and in one case, a circumfix; and by syntactic properties, i.e., sentential adverbs, verb phrase modifiers, and verb modifiers.

Since the vast majority of Crow adverbs are derived from other parts of speech, they are discussed here in terms of their morphological and lexical properties.

7.2. Adverbs derived with suffixes

There are a few suffixes that derive adverbs: these include *(h)aa*, *saa*, *ko*, *sh*, and *dak*.

7.2.1. *haa* 'adverb'

This suffix derives manner and temporal adverbs, but does not appear to have any semantic content of itself. The initial *h* of the suffix either assimilates to the previous obstruent, e.g. *baappaa* < *baap-haa*, or is lost entirely, as in *koochihkáa*. Examples are given in table 7.1.

All of the nonderived stems in table 7.1 are stative verbs except for *koochihk*, an emphatic-contrastive pronoun, and *baapí*, a noun.

TABLE 7.1. ADVERBS FORMED WITH SUFFIX *haa*

STEM	DERIVED STEM
<i>chichiáxi</i> 'round'	<i>chichiáxxaa</i> 'in a circle'
<i>ikuxxa</i> 'equal'	<i>ikuxxaa</i> 'at the same time'
<i>ia-káata</i> 'small' + DIMIN	<i>iakáattaa</i> 'barely'
<i>itchi-káata</i> 'good' + DIMIN	<i>itchikaattaa</i> 'carefully'
<i>baapi</i> 'day'	<i>baappaá</i> 'during the day'
<i>háhoo-kaata</i> 'slow' + DIMIN	<i>háhooakaattaa</i> 'slowly'
<i>koochiik</i> 'first in turn'	<i>koochiikáa</i> 'first, at first'
<i>hawáta</i> 'one'	<i>hawátaa</i> 'once, one time'
<i>ittáchi</i> 'alone'	<i>ittákkaa</i> 'merely, just'

7.2.2. *saa* 'toward (the time of)'

Several temporal adverbs are derived with *saa*: *áhpaasaa* 'toward evening' from *áhpaá* 'evening', *áashiisaa* 'toward dawn' from *áashi* 'dawn', and *háaksaa* or *háakasaa* 'finally' from *háaka* 'last'.

7.2.3. *sh* 'past', *dak* 'future'

There are pairs of temporal adverbs that suffix *sh* 'definite determiner, past' or *dak* 'irrealis, future' to contrast past and future readings. Examples are given in table 7.2.

TABLE 7.2. ADVERBS WITH PAST AND FUTURE FORMS

PAST	FUTURE
<i>chiláaksheesh</i> 'this morning' (past)	<i>chiláakshilak</i> 'tomorrow morning'
<i>shóottaleesh</i> 'when' (past)	<i>shóottannak</i> 'when' (future)
<i>baapéesh</i> 'today'	<i>baapdáak</i> 'some day'
<i>kóottaléesh</i> 'then' (past)	<i>kóottannák</i> 'then' (future)

There are other adverbs derived with *dak*, e.g., *shookkéelitdak* 'somehow', and *shóolaatdak* 'at times'. *Dak* also occurs with number expressions to mark future time, e.g., *baapé pilak-dák* 'in ten days'.

7.2.4. *ko* 'at; from'

A number of temporal adverbs have *ko* as a suffix meaning either 'at that time' or 'from that time', as in table 7.3.

TABLE 7.3. TEMPORAL ADVERBS WITH SUFFIX *ko*

STEM	DERIVED ADVERB
<i>iisá</i> 'face'	<i>iisko</i> 'formerly'
<i>hiliata</i> 'like this'	<i>hiliatko</i> 'from this time on'
<i>húuli</i> 'yesterday'	<i>húuliko</i> 'since yesterday'
<i>bassáa</i> 'first'	<i>bassáako</i> 'long ago'
<i>baa</i> INDEF + <i>bassáa</i> 'first'	<i>baawassáako</i> 'long ago'
<i>baa</i> + <i>uhpá</i> 'end' + <i>bassáa</i> 'first'	<i>baauhpawassáako</i> 'from earliest times'

7.2.5. *hchee* 'distributed location'

Several adverbs of place are formed with a suffix *hchee* 'distributed location'. Examples are given in table 7.4.

TABLE 7.4. PLACE ADVERBS WITH SUFFIX *hchee*

STEM	DERIVED ADVERB
<i>iháa</i> 'different'	<i>iháhcheeche</i> 'everywhere' (with reduplication)
<i>awá</i> 'land, earth' + <i>iháa</i> 'different'	<i>awiháhchee</i> 'different places, here and there'
<i>hawá</i> 'some'	<i>hawahchéé</i> 'here and there'

7.3. Adverbs formed with verbal and nominal derivational suffixes

Adverbs are also derived utilizing some of the common derivational suffixes found with nouns and verbs: *aachi/lichi* 'approximative', *aahi* 'distributive', *kaáshi* 'augmentative', and *káata* 'diminutive'. Examples are given in (1)–(4):

- (1) *aachi/lichi* 'approximative':

aalaat-aachi-an 'finally'
kuhtáa-(aa)h-aache 'around that time'
kuhtaa-liché 'around that time'
shookkéé-lít-dak 'somehow'
húul-aach-kaatee-n 'recently'

- (2) *aahi* 'distributive':

kuht-ááhe 'around that time'
kuhtáa-(aa)h-aache 'around that time'

- (3)
- kaáshi*
- 'augmentative':

aalahku-kaáshi-an 'finally'*koo-kaáshee-n, kala-koo-kaáshee-n* 'just then, immediately, suddenly'*hilaak-kaáshe* 'just now, right now'

- (4)
- káata*
- 'diminutive':

kuhtáa-kaat-taa 'exactly like that'*hilóoshee-kaatee-n* 'perhaps, hopefully'*húul-aach-kaatee-n* 'recently'*ia-káat-taa* 'barely'

7.4. Deictics and interrogatives

Many adverbs are derived by adding various suffixes to the interrogative and deictic demonstrative stems discussed in chapters 4 and 17. Adverbs formed from the various deictics and interrogatives are listed in (5)–(12):

- (5) From
- hili*
- 'this, here':

hilaá 'just now'*hillatko* 'from now on, starting now'*hilaakkaáshe* 'right now'*hilish, hilósh* 'hopefully'*hilóosheekaateen* 'perhaps, hopefully'*hilichiisáa* 'on the other hand'

- (6) From
- éehku*
- 'that, there':

éehkuhtee 'right over there'

- (7) From
- ilaka*
- 'that, there' (distal):

ilakahtee 'over there'

- (8) From
- iahku*
- 'that, there' (out of sight):

lahkoon 'out there'*lahkooleesh* 'a while ago'

- (9) From
- koo/ku*
- 'that' (discourse referential):

koon, kalakoon 'there; then'*kooliash* 'all the time, all that time'*kookaásheen, kalakookaásheen* 'just then, immediately'*baakoon* 'peacefully, easily, effortlessly, patiently'*koochiháa* 'always'*koolalée* 'at that time, back then'

kootáa 'entirely, all over; right away'
kootalé 'in the past, ago'
kuhtée 'right there'
kuhtaáhe 'around that time'
kuhkáa 'only'
kuhtaaliché 'around that time'
kuhtáahaache 'around that time'
kuhtáakaattaa 'exactly'

- (10) From *shóo* 'where':

shóolaatdak 'at times'
shóotdaht(aa) 'probably'
shóolaachiinnak 'time after time, once in a while'
shookkéelitdak 'somehow'
shóottannak 'when?' (future)
shóottaleesh 'when?' (past)

- (11) From *sáapa* 'what':

sáaptaasaapdaht 'no matter what, whatever happens'

- (12) From *sáawi* 'how many':

sáhmiialak 'several times'

7.5. Adverbs derived from nouns

Adverbs may be derived from nouns; *baapi* 'day' is a good example:

- (13) *baappaá* 'during the day, daytime' (*haa* 'adverbial')
baap-tatchée 'every day' (*tatchée* 'every')
baapdak 'some day' (*dak* 'irrealis, future')
baapésh 'today' (*sh* 'definite determiner')
baawaapshía 'all day long' (*baa* 'indefinite', *shía* 'long')

Several adverbs are formed from *húuli* 'yesterday':

- (14) *húuleesh* 'yesterday' (*sh* 'definite determiner')
húuliluupeesh 'day before yesterday' (*dúupa* 'two' + *sh*)
húulaachkaateen 'several days ago' (*aachi* 'approximative' + *káata* 'diminutive' + *n* 'locative')
húuliko 'since yesterday' (*ko* 'from, since')

Other examples of adverbs derived from nouns are given in (15):

- (15) a. *chiláakshilak* 'tomorrow' (*chiláakshi* 'morning' + *dak*)
chiláakshiluupe 'day after tomorrow' (*dúupa* 'two')

- b. *áashisaa* 'toward dawn' (*áashii* 'dawn' + *saa* 'toward')
- c. *áhpaa* 'toward evening' (*áhpaa* 'evening' + *saa* 'toward')
- áhpaaatatchee* 'every evening' (*áhpaa* 'evening' + *tatchée* 'every')
- d. *baaóotchiashia* 'all night long' (*baa* 'indefinite' + *shía* 'long')

Noun phrases may be used adverbially without any further derivation, as in (16):

- (16) *ko báalee* 'that winter'
ko óotchia 'that night'
baapi-m 'one day' (*m* 'indefinite determiner')
áhpaa-m 'one evening' (*m* 'indefinite determiner')
baapé iishoopé 'on the fourth day'

7.6. Adverbs derived from stative verbs

Adverbs may be derived from stative verbs, as in (17)–(23):

- (17) From *shía* 'long time':
shílassaa 'not long, soon' (*ssaa* 'negative')
shíahaachim 'after some time' (*aahi* 'distributive' + *aachi* 'approximative' + *m* 'indefinite determiner')
baawaapshía 'all day long' (*baa* 'indefinite' + *baapi* 'day')
baaóotchiashia 'all night long' (*baa* + *óotchia* 'night')
- (18) From *háhoo* 'slow' (inanimate):
háhookaattaa 'slowly' (*káata* 'diminutive' + *haa* 'adverbial')
- (19) From *íá* 'small':
baalálash 'almost' (*baa* 'indefinite' + *íá* + *lash* '(?)')
íákaattaa 'barely' (*káata* 'diminutive' + *haa*)
- (20) From *hawá* 'some':
hawattan 'somewhere'
hawáttaa 'once'
- (21) From *baheelá* 'not as much, in part, not quite':
báheelia 'in vain, to no purpose, for nothing, instead'
- (22) From *óhkapi* 'basin':
óhkapia 'in a circle' (*haa* 'adverbial')

(23) From *sasá* 'not long, soon':

sasia 'soon'

sas 'soon'

sasá-kaa 'beforehand' (*kaa* 'source postpositional suffix')

Example (24) provides evidence that *sasá* is actually a stative verb rather than an adverb:

(24) *bii-sas-káati-immah*

1B-not.long-DIMIN-will.be

'I won't be long'

At times stative verbs can be used adverbially without further derivation. An example with *awateé* 'far' is seen in (25), and an example with *shía* in (26):

(25) *awateé dée-ssaa-h*

far go-NEG-IMPER

'don't go far'

(26) *hileen ak-baa-aash-dée-sh hawáta-m shía dáa-(a)k*

these REL-INDEF-hunt-go-DET one-DET long.time go-SS

xapii-k

lost-DECL

'one of these hunters went for a long time and became lost' (Cleorash 5)

It should be noted that both multiplicative and distributive numbers are adverbial. The multiplicatives indicate how many times an action occurs: *hawáhtaa* 'once', *dúhpaa* 'twice', *dáhmiia* 'three times', *sáhmiia* 'several times', etc. The morphology of multiplicatives, with infix *h* and suffixed *aa*, suggests that they are formed with the adverbial suffix *haa* which has somehow been split into two segments (see §8.4).

The distributives are adverbs formed with the suffix *ttachii*: *hawáta-ttachii* 'one by one', *dúupa-ttachii* 'two by two', *kooshta-ttáchii* 'little by little, a little at a time', etc. Another distributive formed with *hawáta* is *hawáhchisshiin* 'one at a time'.

7.7. Adverbs derived from continuative auxiliaries

There are several adverbs that are derived from continuative auxiliary verbs. The *an* in these forms is apparently the same as the subordinate conjunction meaning 'when, while':

- (27) From
- daachi*
- 'remain':

daachlan 'after a while' (*an* 'when, while')
daachéetaa 'sometimes, once in a while' (*taa* 'resemble')
aalaachlan 'finally' (*aa* 'portative' + *daachi* + *an* 'when')
aalaataachlan 'finally' (*aa* + *daachi* + *aachi* 'approximative' + *an*)

- (28) From
- dahkú*
- 'remain':

aalahkúan 'finally' (*aa* 'portative' + *dahkú* + *an*)
aalahkukaáshian 'finally' (*aa* + *dahkú* + *kaáshi* 'augmentative' + *an*)

7.8. Adverbs derived from motion verbs

A few adverbs are derived from motion verbs:

- (29) *déelaa* 'then' (*dée* 'go' + *laa* 'and')
aaléelaa 'then' (*aa* 'portative' + *dée* + *laa*)
alakúkaahuuleettaa 'suddenly' (*ala* 'where' + *akú* 'beyond' + *kaa*
 'source' + *híu* 'come' + *deeta* 'not exist' + *haa* 'adverb')

Déelaa and *aaléelaa* are clause connectives. They are clearly derived from verbs, and in many cases are still employed as verbs translated 'he went and' and 'she took it and', respectively. Note that *laa* is a special same-subject marker that occurs only with motion verbs. However, in many cases they have lost their verbal function and have been transformed into adverbs. An example of *déelaa* used as a verb is seen in (30):

- (30) *Awé Kúa-l-awaachi-sh dée-laa Chief Washakie hii-ák*
 land middle-LOC-sit-DET go-SS Chief W. meet-SS
 'Sits in the Middle of the Land went and met Chief Washakie' (AB 40)

In (31), *déelaa* can be interpreted either as a verb or as an adverb:

- (31) *baapi-m sas-káat asaál-ák dée-laa shich-im alitchia-n*
 day-DET early-DIMIN go.out-SS go-SS hill-DET behind-LOC
iaxu-ák
 hide-SS
 'one day he got up early, he went out, he went and hid behind a hill' or
 'he went out, and then he hid behind a hill' (Bitáa 5)

In (32), however, *déelaa* can only be an adverb:

- (32) *is-báalee axpáwakaawa-m iichiil-ataal-ak déelaa is-báalee*
 3POS-year sixteen-SIMULT horse-steal-SS then 3POS-year

axpíluupahpi-m kan dáakshe dit-ák
 eighteen-SIMULT already coup strike-SS
 'when he was sixteen he stole horses; then when he was eighteen he
 counted coup' (AB 66)

7.9. Nonderived adverbs

After eliminating the various types of derived adverbs, we are left with a small residue of forms.

- (33) *chiiá, chia* 'too, too much'
chi, kalatchi 'again'
daataaláa 'by and by, some time'
aaláa 'perhaps'
óolia 'again, right away'
kannaá 'all the more'

It is likely that some of these are derived, although the derivations are not obvious.

7.10. Proclitic adverbs

A few adverbs are proclitics to the verb, as listed in (34):

- (34) *kala, kam, kan* 'now, already'
kaka 'again'
itta...daa 'almost'
baan 'so much, to such a degree'
éetshii 'in every direction'
awan 'on foot'
koosaa 'close to, near to'
it 'still, yet'
hiisá 'rapidly, loudly'
sas 'soon'

Kala occurs frequently both in spoken discourse and in texts. Sometimes it can be glossed 'now, already', but often it is semantically empty.

Examples with proclitic adverbs are given in (35)–(44):

- (35) *kam-masáa-k baapé kala-chilia-law-uu-k*
 already-autumn-DECL day already-cold-become-PL-DECL
 'it's already autumn; the days are already getting cold' (Harold II 1)

- (36) *dáak-bachee-kaate bishé píischiisaa kaka chim-mishi-k*
 her.child-man-DIMIN born after again husband-exist-DECL.
 'after her son was born she married again' (Uuwat 1)
- (37) *Bill huua-sh kon itta waa-kóox-daa-k*
 B. say-PL PRO almost INDEF-catch.up-almost-DECL
 'Bill almost caught up' (Sees 32)
- (*Itta...daa* is actually a circumfix, with *itta* preceding and *daa* following the verb.)
- (38) *bilápa-m baan-nuush-iss-aachi-m dappii-áhi-k*
 beaver-DET so-eat-anxious.to-APPROX-DS kill-PUNCT-DECL
 'he was so anxious to eat a beaver that he killed it right away' (Iishoop 23)
- (39) *d-áktaa-u kala-héele itche dútt-ak éetshii-laa-(a)k*
 2POS-mount-PL PREF-among good take-SS in.every.direction-go-SS
chichiil-aala-h
 look.for-PL-IMPER
 'take your best mounts, go in every direction, look for him' (Uuwat 4)
- (40) *basáa-m hilaá iisáaks-aat-dee-m awan*
 autumn-DET still young.man-APPROX-become-SIMULT on.foot
dúxxii-laa-u-m héelee-n dée-k
 war.party-go-PL-DS among-LOC go-DECL.
 'one autumn when he was still a young man, they were going on a war party on foot; he went with them' (AB 66)
- (41) *Apsáalooke is-aw-úua kala-koosaa buú-o-k*
 Crow 3POS-land-PL now-close.to 1A.PL.come-PL-DECL
 'now we are coming close to Crow country' (Harold II 14)
- (42) *bilaxpáake ahú-m it is-ashtáal-uu-wishi-m itchi-k*
 people many-DET still 3POS-tipi-PL-exist-COMP good-DECL
 'it's good that many people still have tipis' (Harold II 14)
- (43) *híish-da(a)-áh-nawe aa shia-ssáa kan xalússhi-k*
 fast-go-PUNCT-continue until long-NEG.PUNCT then run-DECL
huu-k
 say.PL-DECL
 'he kept going fast, and before long he was running' (Sees 37)

- (44) *chiláakshilak sas-chiláá-h*
 tomorrow early-get.up-IMPER
 'get up early tomorrow'

Although these adverbs are often written as separate words, more often than not they are pronounced as proclitics.

7.11. Sentential adverbs

Crow has a set of sentential adverbs that are markers of speaker attitude. These are listed in (45):

- (45) *aaláa* 'perhaps'
baawiishkaá 'hopefully'
hilish 'I wish, hopefully'
hilósh 'hopefully'
hilóosshееkaateen 'perhaps, hopefully'

Their usage is illustrated in (46)–(48):

- (46) *aaláa bii-waaáatchil-ak baa-m bii-ikuxxi-ih*
 perhaps 1B-lucky-SS INDEF-DET 1B-equal-OPT
 'maybe I'll be lucky and something will be equal to me' (Isahkáa 13)

(*Aaláa* often cooccurs with the optative marker *ih*.)

- (47) *baawiishkaá d-immia-laa-lak kala-koó-k*
 hopefully 2A-hustle-2A-COND then-COP-DECL
 'hopefully if you do your best, things will be all right' (Isahkáa 26)
- (48) *hilósh éehk shee-la(a)-áhe kootá-k*
 perhaps that say-2A-PUNCT right-DECL
 'perhaps what you just said is right' (Sees 17)

7.12. Verbal derivational suffixes

A number of the derivational suffixes described in chapter 5 have the semantics of manner adverbials:

- (49) *aachi/lichi* 'to some degree, to some extent, sort of'
aahi 'distributive'
shta 'very'
kaáshi 'very, really, to a great degree'
káata 'a little, to a small degree'
kisshi 'casually, playfully, for the fun of it'

táahili 'completely, totally, really'
iishée 'very, to a great degree'
baatcháachi 'very, to a great degree'
hili 'very, to a great degree'
daash 'to a great degree'

Examples of these are given in chapter 5.

7.13. Postpositional phrases

Postpositional phrases are often locative or temporal adverbial adjuncts. These are discussed in detail in chapter 15.

7.14. Subordinate clauses

Subordinate clauses function as modifiers of the verb phrase or the clause, and thus can be considered adverbial; many are locative, temporal or manner adverbials. These are discussed in chapter 14.

8 Quantifiers

8.1. Introduction

The class of quantifiers in Crow includes numbers and other quantifiers such as *ahú* ‘many’, *hawa* ‘some’, *kooshtá* ‘few’, *sáawi* ‘how many, some’, and *xaxúa* ‘all’. Cardinal numbers and these other quantifiers are inflected as stative verbs with a slightly modified paradigm, given in §8.6. The ordinal numbers occur as nominal modifiers or noun phrases, and the multiplicatives and distributives are adverbs.

8.2. Cardinal numbers

The cardinal numbers for ‘one’ to ‘ten’ are given in table 8.1.

TABLE 8.1. CARDINAL NUMBERS ‘ONE’ TO ‘TEN’

<i>hawáta</i>	‘one’
<i>dúupa</i>	‘two’
<i>dáawii</i>	‘three’
<i>shoopá</i>	‘four’
<i>chiaxxú</i>	‘five’
<i>akaawá</i>	‘six’
<i>sáhpua</i>	‘seven’
<i>dúupahpi</i>	‘eight’
<i>hawátahpi</i>	‘nine’
<i>pilaká</i>	‘ten’

The forms *dúupahpi* ‘eight’ and *hawátahpi* ‘nine’ are composed of the stems for ‘two’ and ‘one’, respectively, and the suffix *ahpi*, perhaps related to *axpi* ‘left over, remaining’. Sentences with cardinal numbers are exemplified in (1)–(3):

- (1) *hileen shikáak-kaatee-sh isaashkakaás-uua dáawii-kaashi-k*
 these boys-DIMIN-DET their.horses-PL three-AUG-DECL
 'these boys have three horses' (Hawáte áá 5)
- (2) *balapáale dáawii-m bat-sheéss-ah-ta-kaat-uu-k*
 tree three-DET RECIP-facing-near-DIMIN-PL-DECL
 'there are three trees that are close together facing each other' (Bitáa 15)
- (3) *uá shoopá-m dáawíia dée-hche-k*
 his.wife four-DS three go-CAUS-DECL
 'he had four wives, he divorced three of them' (AB 56)

A slightly different set of cardinal numbers, seen in table 8.2, is employed in counting. These differ from the previous set in that the accent is on a different syllable in some of the forms, and in the form for 'six' the final syllable is missing.

TABLE 8.2. COUNTING NUMBERS

<i>hawáta</i>	'one'
<i>dúupa</i>	'two'
<i>dáawii</i>	'three'
<i>shoópa</i>	'four'
<i>chiáxxu</i>	'five'
<i>áka</i>	'six'
<i>sáhpua</i>	'seven'
<i>dúupahpi</i>	'eight'
<i>hawátahpi</i>	'nine'
<i>piláka</i>	'ten'

The cardinal numbers from 'eleven' to 'nineteen' are listed in table 8.3. These consist of the prefix *axpi* 'left over, remaining, plus' followed by one of the cardinal numbers from one to nine. Examples of cardinal numbers from 'eleven' to 'nineteen' are given in (4) and (5).

- (4) *is-báalee axpi/shoopa-m koon ak-dúxxii-lee héelee-n*
 3POS-year fourteen-SIMULT then REL-war.party-go among-LOC
dáa-(a)k bili-kkuxshi-k
 go-SS people-help-DECL
 'when he was fourteen he went on a war party and helped out' (AB 66)

TABLE 8.3. CARDINAL NUMBERS 'ELEVEN' TO 'NINETEEN'

<i>axpáwata</i>	'eleven'
<i>axpiluupa</i>	'twelve'
<i>axpilaawii</i>	'thirteen'
<i>axpishoopa</i>	'fourteen'
<i>axpichiaxxu</i>	'fifteen'
<i>axpákaawa</i>	'sixteen'
<i>axpíshapua</i>	'seventeen'
<i>axpiluupahpi</i>	'eighteen'
<i>axpáwatahpi</i>	'nineteen'

- (5) *is-báalee axpákaawa-m kalakoon awaxaawé*
 3POS-year sixteen-SIMULT then mountain
kuss-bilishhiissaannee-lee-k
 GOAL-fast-go-DECL

'when he was sixteen he went to the mountains to fast' (AB 53)

Since the cardinal numbers above 'twenty' involve the multipliers, they are treated in §8.4.

Numbers quite commonly occur with derivational suffixes, as in (6)–(9):

- (6) *Apit-isa-sh bishí-m baapé duup-ée-lichi-m kalakoón*
 crane-big-DET born-DET day two-PUNCT-APPROX-DET then
iilápxe shée-m
 his.father die-DS
 'about two days after Big Crane was born his father died' (AB 66)
- (7) *hileen shikáak-kaatee-sh isaashk-úua shoop-kaáshi-k*
 these boy-little-DET 3POS.horse-PL four-AUG-DECL
 'these little boys have four horses' (Hawáte aá 1)

With the suffixes *káata* 'diminutive' and *kaáshi* 'augmentative', numbers can be glossed as 'as few as X, only X' and 'as many as X', respectively:

- (8) *ichiile chiaxxukáate* 'as few as five horses, only five horses'
ichiile chiaxxukaáshe 'as many as five horses'

In other cases, the addition of the diminutive adds little or nothing to the semantic content of the expression:

- (9) *sáawe hii-?* — *dáawit-kaate hii-k*
 how.many reach-INTERR three-DIMIN reach-DECL
 'what time is it?' — 'it's three o'clock'

8.3. Ordinal numbers

The basic set of ordinal numbers is given in table 8.4. In these forms *ii* is prefixed to the cardinal number, with irregular or suppletive forms for 'first', 'second', and 'third'.

TABLE 8.4. ORDINAL NUMBERS

<i>bassáa</i>	'first'
<i>iilúupa, iilápa</i>	'second'
<i>(ii)piishilée</i>	'following, second'
<i>iiláawi, iiláwi</i>	'third'
<i>iishoopá</i>	'fourth'
<i>iichiaxxú</i>	'fifth'
<i>iikaawá</i>	'sixth'
<i>iisáhpua</i>	'seventh'
<i>iilúupahpi</i>	'eighth'
<i>iihawátahpi</i>	'ninth'
<i>iipilaká</i>	'tenth'
<i>iiháaka</i>	'last'

Examples (10) and (11) are sentences with ordinal numbers:

- (10) *bassáa-kaashe iittaashtee-o shúa-kaat-uu-k piishilée*
 first-AUG their.shirt-PL blue-DIMIN-PL-DECL following
shíili-kaat-ak iiláawíla hisshi-kaat-uu-k
 yellow-DIMIN-SS third red-DIMIN-PL-DECL
 'the first group had blue clothing, the second yellow, and the third red'
 (Baapiiháake 3)
- (11) *baapé iishoopé kan baapaalée-m kalakoón sapée-o-lak*
 day fourth then dawn-SIMULT then someone-PL-DET
iláa-(a)-watt-uu-m iikukkú-k
 talk-CONT-continue-PL-COMP hear-DECL
 'on the fourth day at dawn he heard some people talking' (Uuwat 5)

There are also examples where numbers with the *ii* prefix are used as cardinal numbers, as in (12) and (13):

- (12) *hee-lee-m iisaxpúatahchee iisáhpú-o-k*
 notice-!-DS mountain.sheep seven-PL-DECL
 'he was surprised to see that they were seven mountain sheep' (Uuwat 7)
- (13) *baapée-sh baapúxte illáp-uu-m iivaanni-o-m aw-ákaa-k*
 day-DET otter two-PL-DET play-PL-COMP 1A-see-DECL
 'today I saw two otters playing' (Harold III 5)

It is not clear why the ordinal forms are used in these examples.

8.4. Multiplicative numbers

The multiplicative or adverbial numbers, which indicate how many times an action occurs, are given in table 8.5. These are formed from the cardinals by infixing *h* after the penultimate vowel (which is shortened, if long), and suffixing *aa* to the final vowel of the stem.¹

TABLE 8.5. MULTIPLICATIVE NUMBERS

<i>hawáhtaa</i> 'once'
<i>dúhpaá</i> 'twice'
<i>dáhmiia</i> 'three times'
<i>shuhpáa</i> 'four times'
<i>chiaxxúa</i> 'five times'
<i>akammáa</i> 'six times'
<i>sáhpua</i> 'seven times'
<i>dúupahpia</i> 'eight times'
<i>hawátahpia</i> 'nine times'
<i>pilahkáa</i> 'ten times'

Examples of multiplicatives are seen in (14)–(16):

- (14) *akammáa daákshe dit-ák*
 six.times coup strike-SS
 'six times he counted coup' (AB 75)
- (15) *dámmiia ihchi-láak-ee-hche-wia-(a)k*
 three.times REFL-child-CAUS-CAUS-try.to-SS
 'three times he tried to get himself adopted' (AB 67)

¹ The multiplicatives are apparently formed from the cardinal stem plus the adverbial suffix *haa*, with this suffix somehow splitting into two parts, with *h* in the penultimate syllable, and *aa* at the end.

- (16) *dis-bilaxpaake baá-m da-chíwee-wia-laa-lak koochihk*
 2POS-people INDEF-DET 2A-tell-want.to-2A-COND first
shuhpáa da-paa-lák dii-w-iikukk-ák
 four.times 2A-shout-COND 2B-1A-hear-SS
dii-wah-kuxshí-w-immaachi-k
 2B-1A-help-1A-will-DECL
 'if you want to tell your people something, first shout four times; I will hear you and help you' (Uuwat 12)

The cardinal numbers for 'twenty', 'thirty', etc. are formed from the multiplicatives plus *pilaká* 'ten', as in table 8.6.

TABLE 8.6. CARDINAL NUMBERS FROM 'TWENTY' TO 'ONE HUNDRED'

<i>dúhpaa-pilaka</i> 'twenty'
<i>dáhmíia-pilaka</i> 'thirty'
<i>shuhpáa-pilaka</i> 'forty'
<i>chiaxxúa-pilaka</i> 'fifty'
<i>akammáa-pilaka</i> 'sixty'
<i>sáhpua-pilaka</i> 'seventy'
<i>dúupahpia-pilaka</i> 'eighty'
<i>hawátahpia-pilaka</i> 'ninety'
<i>pilak-isáa (pilaká 'ten' + isáa 'big')</i> 'one hundred'

Illustrations are seen in (17) and (18):

- (17) *Awé Kúa-l-awaachi-sh bacheéitche shuhpáapilaka-m*
 land middle-LOC-sit-DET chief forty-DET
áx(p)-baahili-i-k
 with-work-HAB-DECL
 'Sits in the Middle of the Land worked with forty chiefs' (AB 39)
- (18) *hinne shéé-sh is-báam-mish-dak sáhpua-pilake-lak*
 this die-DET 3POS-year-exist-DET seventy-and
dúupahpiapilake-lak kua-améaxe ko kooli-immaachi-k
 eighty-and middle-between PRO be.there-must.be-DECL
 'when he died he must have been between seventy and eighty' (AB 19)

The cardinals for 'twenty-one', 'twenty-two', etc., are formed as in (19):

- (19) *dúhpapilak-axpáwata* 'twenty-one'
dúhpapilak-axpíluupa 'twenty-two'
dúhpapilak-axpílaawii 'twenty-three', etc.

The second elements of these compounds are identical to the numbers from 'eleven' to 'twenty'. In the forms for 'eleven' to 'twenty', the number 'ten' is understood: e.g., (*pilak*)*axpáwata* 'ten plus one'. An example is seen in (20):

- (20) *iiháakkaa-li-o bale-ichkulé dúhpaapilak axpí-chiaxxu-k*
 last-do-PL DEPOS-foot twenty plus-five-DECL
huu-k
 they.say-DECL
 'the last time they did it (measured his hair), it was twenty-five feet long'
 (AB 18)

A slightly different variant is illustrated in (21) and (22), where the first part of the number (e.g., *dúhpaapilak-ak* in (21)) ends with the same-subject marker *ak*:

- (21) *is-báalee dúhpaapilak-ak axpí-luupa-m kam-macheeitchi-k*
 3POS-year twenty-SS plus-two-DET now-chief-DECL
 'at the age of twenty-two he was a chief' (AB 59)
- (22) *Dakkoótee al-iishshii-o hii-m iichiili-lak ahpisáa-lak*
 Sioux REL-camp-PL reach-DS horses-and mules-and
pilakisáa-luup-ak akammáapilakee-m kuu-ák
 hundred-two-SS sixty-DET give-SS
 'he reached the Sioux camp, they gave him two hundred and sixty horses and mules' (AB 39)

In a further variation, in (23) the adverb *akukkulée* 'beyond' is added between the two parts of the number.

- (23) *lichiil-(h)achka-sh kalakoón iisáakshe pilakisáa-lichi-m*
 horse-long-DET then young.men one.hundred-APPROX-DET
aa-lée-laa Dakkoótee iipilakisáa-(a)k akukkulée
 PORT-go-SS Sioux one.hundred-SS beyond
chiaxxúapilak-aachi-m bachia-k
 fifty-APPROX-DET fight-DECL
 'then Long Horse led a war party of over one hundred young men against about one hundred and fifty Sioux' (AB 35)

(Sentences (22) and (23) in addition are examples of large numbers.)

8.5. Distributive numbers

The distributive numbers are also adverbs; they are formed by suffixing *ttachii* to the cardinal stem, as seen in table 8.7.

TABLE 8.7. DISTRIBUTIVE NUMBERS

<i>hawáta-ttachii</i>	'one by one'
<i>dúupa-ttachii</i>	'two by two'
<i>dáawii-ttachii</i>	'three by three'
<i>shoopa-ttáchii</i>	'four by four'
<i>chiaxxu-ttáchii</i>	'five by five'
<i>kooshta-ttáchii</i>	'little by little'

The use of the distributives is illustrated in (24)–(26):

- (24) *hawátattachila baa-kuu-ák dáak-ii-o-k*
 one.by.one INDEF-give-SS child-CAUS-PL-DECL
 'one by one they gave things to him, they adopted him' (Uuwat 13)
- (25) *Jesus koolá-k "chiáxxúa pílakattáchii kulukkúluu-(a)ahe*
 J. be.there-DECL by.fifties piled.up-DISTR
awáachi-hk-aala-h"
 sit-CAUS-PL-IMPER
 'Jesus said, have them sit down in groups of fifty' (Lk 9:14)
- (26) *hinne ilúkee-sh kooshtattáchii kuu-ák duushi-hche-k*
 this meat-DET little.by.little give-SS eat-CAUS-DECL
 'he gave him the meat a little at a time; he let him eat' (Sees 37)

Example (27) contains a distributive multiplicative, with *ttachii* suffixed to the distributive form.

- (27) *ii-bacheeitt-uua shoopá-t shuhpáattachii díá-k*
 INSTR-chieft-PL four-DET four.times.each do-DECL
 'he achieved the four chiefly war deeds four times each' (AB 53)

8.6. Inflection of numbers

Cardinal numbers and the indefinite quantifiers listed in §8.7 are inflected as in table 8.8. The inflection of quantifiers differs from the regular stative pattern in several respects: the form *balee* does not occur in the first person; the accent shifts leftward in the second person, which

is not typical of stative verbs; and often there is a third person prefix *ii*, instead of the zero found in the regular stative paradigm.

TABLE 8.8. INFLECTION OF NUMBERS

1PL	<i>bii-shoop-úu</i>	'we are four'
2PL	<i>dii-shoop-uu</i>	'you are four'
3PL	<i>(ii)-shoop-úu</i>	'they are four'

An example of a number inflected with a second person pronominal is seen in (28):

- (28) *dii-xaxua dii-waatcháat-uu-htaa dil-shoop-uua-m*
 2B-all 2B-outstanding-PL.-although 2B-four-PL-DET
dii-wu-lutt-úu-lak bach-kuxs-áala-h
 2B-1A-pick-PL-COND RECIP-help-PL-IMPER
 'all of you are outstanding, but I am picking four of you; help each other'
 (Uuwat 7)

8.7. Other quantifiers

There are several other quantifiers that are inflected like numbers. These include *hawa* 'some', *kooshtá* 'few', *ahú* 'much, many', *sáawi* 'how many', and *xaxúa* 'all, every'. One other quantifier, *tatchée* or *tatchia* 'each, every', appears only as a noun modifier and is not inflected.

Like the numbers, these quantifiers may appear with the *ii* third person prefix:

- (29) *ii-xaxúa bii-chichiil-uu-m bii-chiweé-k*
 3B-everyone 1B-look.for-PL-COMP 1B-tell-DECL
 'he told me that everyone had been looking for me' (Harold III 17)

Quantifiers may also appear with first and second person prefixes, as in (30):

- (30) *dii-lapuu-xuh dil-ham-mis-áa-u-lak ba-láshe*
 2B-two-or 2B-some-exist-PUNCT-PL-COND 1POS-name
ii bat-da-lii-o-lak kan
 INSTR RECIP-2A-reach-PL-COND already

dii-wii-héélee-l-uu-k

he-k

2B-1B-among-be.there-PL-DECL say-DECL

“when two or more of you are gathered together in my name, I am in your midst,” he said’ (Mt 18:20)

9 Basic clause structure

9.1. Introduction

This chapter discusses various aspects of Crow clause structure, including argument coding and the ordering patterns for the clause and the verb complex. Section 9.2 treats the division of Crow verbs into two lexical classes: active and stative. Verbs of both classes are subcategorized for the number of arguments with which they are associated, as well as the semantic roles of these arguments; this is the topic of §9.3.

Section 9.4 investigates the syntactic status of arguments, both pronominal and lexical. This is followed in §9.5 by a treatment of the various word order patterns to be found in the clause, and in §9.6 by a discussion of the order of elements in the verb complex.

9.2. Active-stative patterning

From a typological perspective Crow can be described as an active-stative language, as opposed to the nominative-accusative or ergative-absolutive language types. Another term for this pattern is “split intransitive”: this term emphasizes the fact that the subjects of one class of intransitive verbs are treated differently than the subjects of the other class.

For Crow, this means that first and second person pronominal subjects of stative verbs are identical in form to the pronominal objects of transitive verbs, while the pronominal subjects of transitives and active intransitives are marked identically. Since third person pronominal subjects and objects are phonologically null, the active-stative opposition is formally realized only in the first and second person forms.

While in the vast majority of cases it is possible to classify a verb as active or stative simply on the basis of its semantic properties, there

are a few verbs where this is not possible: e.g., *biisshi* 'tell a lie' is a stative verb, while *ili* 'be alive', *chilli* 'be afraid', and *shée* 'die' are active. Verbs of perception and knowledge are also active. Therefore verbs must be marked as active or stative as part of their lexical entry. Nevertheless, it remains true that knowledge of the meaning of a verb will almost always enable one to predict its class membership.¹

Merlan (1985:325) notes that in active languages the two sets of intransitive verbs (active and stative) tend to be unequal in size: one class is generally larger and more open, while the other is smaller, closed and specialized. On the basis of size alone, it is clear that in Crow, active intransitive verbs are the smaller, closed class (less than one hundred), while the stative intransitives are the larger, open class (hundreds of members). Moreover, since lexical nouns can function syntactically as stative verbs, marked for subject with B-set pronominals, the class of stative stems is potentially quite large.

Examples (1)–(3) illustrate the active-stative marking pattern in Crow. Example (1) gives the paradigm for transitive subjects and objects, (2) the paradigm for active intransitives, and (3) the paradigm for statives:²

- (1) Active transitive:
- a. *dii-waa-lichi-k*
2B-1A-hit-DECL
'I hit you'
 - b. *bii-láa-lichi-k*
1B-2A-hit-DECL
'you hit me'
 - c. *bii-Ø-lichi-k*
1B-3A-hit-DECL
'he hit me'
 - d. *Ø-baa-lichi-k*
3B-1A-hit-DECL
'I hit him'

¹ There are several verbs with mixed paradigms where it is not entirely clear on morphological grounds whether the stems should be classified as active or stative, as discussed in §6.3.2.6.

² See §6.3.1 for a discussion of the various phonological shapes of the A-set pronominal prefixes in combination with different types of verb stems.

- e. *Ø-Ø-dichí-k*
3B-3A-hit-DECL
'he hit him/them'
- (2) Active intransitive:
- a. *baa-xalússhi-k*
1A-run-DECL
'I was running'
- b. *da-lée-k*
2A-go-DECL
'you went'
- c. *Ø-disshi-k*
3A-dance-DECL
'he was dancing'
- (3) Stative:
- a. *bil-apáa-k*
1B-cold-DECL
'I am cold'
- b. *dii-háchka-k*
2B-tall-DECL
'you are tall'
- c. *Ø-baakuhpáa-k*
3B-sick-DECL
'he is sick'

The object prefixes in (1) are identical in form to the subject prefixes of the stative verbs in (3).

Besides functioning as objects of active verbs and subjects of stative verbs, the B-set pronominals occur as objects of postpositions and (for a subset of nominal stems) as inalienable possessor prefixes (see §3.2.2.4). Moreover, the independent emphatic-contrastive pronominals (see §3.5.2) are based on the B-set forms. On distributional grounds, then, the B-set pronominals are the unmarked forms, while the A-set forms are marked.

Crow, then, has a two-way case system for first and second person pronominal arguments: an active case for subjects of active verbs, and a nonactive case for all other grammatical relations.

9.3. Verb subcategorization

The subcategorization frame of a verb—i.e., its predicate-argument structure—is a lexical feature in Crow.

9.3.1. Active verbs

Active verbs may be intransitive, transitive, or ditransitive, depending upon the number of nominal arguments that they are subcategorized for. An intransitive verb takes a subject, a transitive verb a subject and an object, and a ditransitive verb a subject and two objects.³

9.3.1.1. Active intransitive verbs

An example of a clause with an intransitive verb is seen in (4):

- (4) *shikáak-kaata-m bitáalasshia alítchia-n iikust-ák*
 boy-DIMIN-DET lodge.screen behind-LOC come.out-SS
 'a little boy came out from behind the lodge screen' (Bitáa 3)

There are several derivational processes that serve to increase the valence of—that is, to transitive—*intransitive* verbs. Causativization is one such process, as illustrated in (5):

- (5) *éehk da-láak-uua baa-ilishe chia kala-shia-k*
 that 2POS-child-PL INDEF-suffer too now-long-DECL
kan-náakua-wa-hche-woo-k
 now-go.home-1A-CAUS-INCL-DECL
 'that child of yours has been suffering too long; let's send him home now' (Baapaalissúua 25)

In (5) the intransitive verb *dáakua* 'go home' is causativized and therefore transitive; the object here is a null pronoun.

The portative prefix *aa* 'with' (accompaniment, not instrument), which occurs only with verbs of motion, also serves to transitive intransitive verbs:

- (6) *hileen ak-disshee-sh hinne iisáakshee-sh*
 these REL-dance-DET this young.man-DET
kuá-ss-aa-lakkat-ak
 middle-GOAL-PORT-emerge-SS

³ This statement refers to the subcategorization properties of lexical verb stems. Since, however, any verb may be causativized (a lexical derivational rather than a syntactic process), and since causativization may apply recursively, the number of objects is multiplied accordingly: e.g., a causativized ditransitive may have three objects.

'these dancers brought this young man out into the middle'
(Baapaalissúua 21)

In (6) an intransitive stem, *dakkachi* 'emerge', is transitivized by the addition of portative *aa*.

9.3.1.2. Active transitive verbs

An example of a clause with a transitive verb is seen in (7):

- (7) *hinne shikáak-kaatee-sh iichiilee-sh xaxúa ihaa-(a)k*
this boy-DIMIN-DET horse-DET all bet-SS
'this little boy bet all the horses' (Isahkáa 11)

If a transitive verb occurs with an additional goal argument that is not part of the verb's predicate-argument structure, that argument occurs as the object of the goal postposition (*ku*)*ss*. In (8), *biléeli* 'enter' (first person *bimmaali*), a transitive verb, has its object slot filled by the incorporated object *ashí* 'house, lodge; consequently the goal, *di(i)*, must occur as the object of the postposition *ss*.

- (8) *hinne baapé di-ss-ash-bim-m-aam-m-immaachi-k*
this day 2B-GOAL-house-STEM-1A-enter-1A-will-DECL
'today I'm going to visit your house' (Lk 19:5)

In (9) the transitive stem *chimmi* 'count' has its object slot filled by indefinite *baa* with the lexicalized meaning 'study, go to school'. Since there is no other available object slot, the object of study, *biilukaailaau* 'Crow language', must occur as the object of a postposition.

- (9) *biilukaa-ilaa-u kuss-baa-chimmi-k*
Crow-speak-PL GOAL-INDEF-count-DECL
'he's studying Crow'

9.3.1.3. Active ditransitive verbs

There is a small class of nonderived ditransitive verbs that are subcategorized for two objects. I do not distinguish indirect objects from direct objects, since I can find no syntactic or morphological grounds for doing so. If the objects are lexical noun phrases they are distinguished neither on formal grounds nor on the basis of word order.

Nonderived ditransitive verbs include *chiweé* 'tell', *kuú* 'give', *báxxu* 'ask', and *axshéé* 'win from'.

- (10) *baa-m dii-waa-chiweé-w-ii-k*
INDEF-DET 2B-1A-tell-1A-will-DECL
'I'll tell you something'

- (11) *Larry-sh bálaa-m Billy-sh kuú-k*
 L.-DET money-DET B.-DET give-DECL
 'Larry gave Billy some money'
- (12) *Mary-sh Julie-sh baa-m báxxu-k*
 M.-DET J.-DET INDEF-DET ask-DECL
 'Mary asked Julie something'
- (13) *ammaa-walee-l-áxshee xaxúa bah-kulutt-ák*
 REL-1B.PL-2A-win everything 1A-get.back-SS
 'I got back everything that you won from us' (Isahkää 28)

(In (13) the two objects of *axshée*, *ammaa* and *walee*, are both bound forms.)

There is a difference between these verbs and a verb like *kaali* 'ask for', which is not ditransitive. With *kaali* the goal appears as the object of *kuss*:

- (14) *Harry-sh Joe-sh kuss-ilúk-kaali-k*
 H.-DET J.-DET GOAL-meat-ask.for-DECL
 'Harry asked Joe for meat'

In the same way, *kuú* 'give' and *kée* 'give away' differ as to their transitivity: *kuú* is ditransitive, while *kée* is transitive. The goal of *kée* must be expressed as the object of a postposition:

- (15) *is-ak-ash-biléelee-sh kuss-baa-kée-k*
 3POS-REL-lodge-enter-DET GOAL-INDEF-give.away-DECL
 'he gave away to his visitors'

There are also a number of derived ditransitive verbs subcategorized for two objects.

The first set comprises a small group of verbs that contain the locative prefix *a* 'on'. Irregularities of both morphology and semantics indicate that these stems are not productively derived and must be listed in the lexicon as subcategorized for two objects. This set includes verbs like *ápchiaxxu* 'pour on', *áxxaxxi* 'rub on', and *áasshua* 'spit on', illustrated in (16) and (17):

- (16) *hinne taláa-lichi-m kulée-sh iché ápchiaxxu-k*
 this grease-APPROX-DET carry-DET his.foot pour.on-DECL
 'she poured this oil that she carried over his feet' (Lk 7:30)

In (16) the two objects of *ápchiaxxu* 'pour on' are *hinne taláalichim kuléesh* 'this oil that she carried' and *iché* 'his feet'.

- (17) *ichihchishiia dútt-ak dástaa-(a)k d-ihch-ápchis-aala-lh*
 root take-SS chew-SS 2-REFL-rub.on-PL-IMPER
 'take roots, chew them, and rub them on yourselves' (Isáahkawattee 16)

The two objects of *ápchishi* 'rub on' in (17) are the null pronoun coreferential with *ichihchishiia* 'roots' and the reflexive *dihch(i)* 'yourselves'.

A second class of derived ditransitives consists of a group of verbs formed from postpositions plus *ss* 'goal' plus the direct causative. The process of forming these is quite productive with postpositions. Examples are seen in (18)–(20).

- (18) *baaxuawishé am-maa-luus-úua bikkée awuú-ss-ee-lak*
 animal REL-INDEF-eat-PL hay inside-GOAL-CAUS-DS
 'she put hay inside the animals' feeding trough' (Sees 15)

- (19) *Henry baaté shúa-kaat-uu-lak dútt-ak baa-ihuli-shoopé*
 H. dish blue-DIMIN-PL-DET get-SS INDEF-leg-four
áaka-ss-ee-lak
 top-GOAL-CAUS-DS
 'Henry got some blue dishes and put them on the table' (Sees 11)

- (20) *kan-náawii-t iichiil-aasuua kan ashkawuú-ss-ii-ak*
 now-three-DET horse-house now inside-GOAL-caus-SS
 'now he put the three inside the barn' (Sees 13)

There is no restriction on the order of occurrence of the objects: in (18) the goal object is first in linear order, while in (20) the theme precedes the goal.

The valence of transitive verbs is increased by causativization, so that they become ditransitive:

- (21) *hinne b-asooké baatachxaxúa b-ittách bii-lia-hkaa-(a)k*
 this IPOS-younger.sister everything 1-alone 1B-do-CAUS-SS
 'this sister of mine makes me do everything by myself' (Lk 10:38–42)

In (21) the causative verb *diahche* 'cause to do' has two objects, *baatachxaxúa* 'everything' and *bii* 'me'.

- (22) *shikáak-kaatee-sh akchiia xaxúa chiis-deaxee-sh áappaa*
 boy-DIMIN-DET his.mount all tail-shining-DET with
ihee-hkaa-(a)k
 bet-CAUS-SS
 'they made the boy bet all his mounts as well as the grey horse' (Isahkúa 21)

In (22) the two objects of the causativized transitive *iheehche* 'cause to bet' are *shikáakkaateesh* 'the boy' and *akchiiá xaxúá* 'all his mounts'.

The portative prefix *aa* 'with' can also derive ditransitive verbs:

- (23) *hinne iichiili-m dútchee-sh ítche ashé aa-ii-lak*
 this horse-DET get-DET well home PORT-reach-DS
 'he reached home easily with this horse that he had gotten'
 (Baapaalissúua 33)

Hii 'reach' (*ii* after the portative) is a transitive verb; when the portative is prefixed, the derived form has two objects, *hinne iichiilim dútcheesh* 'this horse that he had gotten' and *ashé* 'home'.

9.3.2. Stative verbs

Stative verbs are subcategorized for zero, one, or two nominal arguments.

9.3.2.1. Impersonal statives

First, there is a small set of impersonal verbs that do not occur with any nominal arguments. Since the distinction between active and stative verbs is based on their occurrence with the active and nonactive sets of pronominal affixes, and since these verbs never occur with any pronominal affixes, it is not evident on purely formal grounds that they should be treated as statives. On semantic grounds, however, they are clearly stative, since they do not denote activities performed by agents. The set of impersonal statives includes meteorological terms such as *xaláá* 'be raining', *biihpi* 'be snowing', *kalihchii* 'lightning', *suú* 'thunder', *baákahpaa* 'hail', *alée* 'be hot (weather)', *chília* 'be cold (weather)' and *bixúalichi* 'frost'. Examples are seen in (24) and (25):

- (24) *Montana kultéé chília-(a)k biihpi-k*
 M. there cold-SS snow-DECL
 'in Montana it is cold and snowing' (Harold IV 17)
- (25) *hinne baapé chiá alée-k*
 this day too hot-DECL
 'it's too hot today'

9.3.2.2. Statives with one argument

Stative verbs with a single nominal argument are a large open class denoting qualities and states. This class includes many verbs whose translation equivalents are adjectives in languages like English. The argument may be either a lexical noun phrase, a B-set pronominal prefix, or a null pronoun, as in (26)–(28) respectively:

- (26) *baapé kala-chilia-law-uu-k*
 day now-cold-become-PL-DECL
 'the days are getting cold now' (Harold II 1)
- (27) *kam-mii-xaalia-htaa*
 now-1B-old-even.though
 'even though I am old now' (Uuwat 6)
- (28) *Ø-daásitchi-k*
 3B-happy-DECL
 'she's happy'

Nouns may also function syntactically as stative verbs, as in (29) and (30):

- (29) *Mary-sh akbaawaachimmihche-k*
 Mary-DET teacher-DECL
 'Mary is a teacher'
- (30) *bii-akbaawaachimmihche-k*
 1B-teacher-DECL
 'I am a teacher'

In (30) the first argument is realized as a B-set pronoun, the same pattern we find with stative verbs.

The combination of a stative verb plus the punctual aspectual suffix *áhi* conveys the meaning of the comparative degree:⁴

- (31) *piishil-ée baaluu-áhi-shta-kaata-k*
 next.one-PUNCT difficult-PUNCT-very-DIMIN-DECL
 'the next one is just a little more difficult' (Isshii 10)
- (32) *Jeffrey-sh is-baaxia ko pumm-ée-k*
 J.-DET 3POS-aunt PRO short-PUNCT-DECL
 'Jeffrey's aunt is shorter' (Emilysh 2)
- (33) *al-ákaa-(aa)h(i)-aat-dak aaláa dii-itt-ée-ih*
 2A-see-DISTR-APPROX-COND maybe 2B-good-PUNCT-OPT
 'if you look these over, maybe you will feel better' (Emilysh 1)

There is a subclass of stative verbs that may not take an animate subject without being first causativized, as in (34)–(36) (data from Old Horn 1974:16):

⁴ For a discussion of *áhi* as a punctual aspectual marker, see §5.6.1.

- (34) *balapáalee-sh póssee-k*
 tree-DET crackle-DECL
 'the tree made a crackling noise'
- (35) **bachée-sh póssee-k*
 man-DET crackle-DECL
 ('the man made a crackling noise')
- (36) *bachée-sh póssee-hche-k*
 man-DET crackle-CAUS-DECL
 'the man made a crackling noise'

9.3.2.3. Statives with two arguments

A few nonderived stative verbs, mostly symmetrical predicates, are sub-categorized for two arguments. This set includes *achí* 'belong to, join', *baaiáleeta* 'be proud of', *chichée* 'resemble', *ihkuluu* 'be touching', and *ikuxxa* 'be equal to':

- (37) *Jeffrey-sh-dak iiké-lak ak-búupchi-lia at-úu-k*
 J.-DET-and his.brother-and REL-ball-do belong.to-PL-DECL
 'Jeffrey and his older brother belong to a ball team' (Emilysh 6)

If the arguments of these verbs are pronominal, they are both selected from the B set, as in (38):

- (38) *dii-wil-waaiáleeta-k*
 2B-1B-proud.of-DECL
 'I'm proud of you'

Another set of stative verbs with two arguments includes derived verbs based on the locative stem *la* 'be at' and the manner stem *ta* 'be like'.⁵

Verbs in *la* include *koolá* 'be at, be there', *shóola* 'be where', *hileelá* 'be here', *éhkoola* 'be there', *iilakaala* 'be over there', and *iahkoola* 'be over there', as well as a number of verbs derived from postpositions: *awúuala* 'be inside', *áakeela* 'be on top', *ishóochela* 'be in front of', *piisheela* 'be behind', etc. One of the arguments associated with these verbs refers to the person or object that is located, the other to the location:

⁵ The verb *la* is obviously related to the locative postposition *n*: *n* and *l* are in complementary distribution in Crow, and both forms refer to location at a place. See §15.3.3 for a discussion of *n* as a postposition.

- (39) *hiulee-sh bacheé iiláp-uu-m báashee-m awúua-l-uu-m*
 yesterday-DET man two-PL-DET boat-DET inside-be.at-PL-DS
 'yesterday two men were in a boat' (Harold II 3)
- (40) *hilaakée Aashbacheeitché bii-koola-k*
 now Lodge Grass 1B-be.at-DECL
 'I'm at Lodge Grass now'

In (39), *bacheé iilápuum* 'two men' represents the persons located, and *báasheem* 'a boat' is the location. In (40), *bii* 'I' is the person located, and *Aashbacheeitché* 'Lodge Grass' is the location.

- (41) *iilúpta ash-iilúpupee-l-uu-k*
 both house-other-be.at-PL-DECL
 'both of them were in the other room'

In (41), *iilúpta* 'both' represents the persons located, and the location is included in the verb *ashiilúpupeela* 'be in the other room'. Derived verbs in *la* allow for two syntactic possibilities: the locative expression incorporated by *la* may itself be the location, as in (41); or there may be an additional external argument, as in (39) and (40).

Verbs in *ta* include (*kala*)*kootá* 'be like that, be thus, be true', *hiliata* 'be like this,' *éehkoota* 'be like that', and *shóota* 'how, like what'. These verbs are also stative, since they are marked with B-set pronouns, and they may occur with two noun phrases. Examples are seen in (42)–(44):

- (42) *dii bilaxpáaka-ssaa-k ahpaláaxe koo-líi-kalakootá-k⁶*
 2B person-NEG-DECL ghost PRO-2B-like.that-DECL
 'you are not a person; you are like a ghost' (Uuwat 19)
- (43) *puuxké daahóon-nak ilíche awaxóosshipite ko kalakootá-k*
 dust smell-COND smell pepper PRO like.that-DECL
 'when he smelled the dust, the smell was like pepper' (Sees 14)
- (44) *bía-m huupá-m awúualee-sh ko kan-bii-kalakootá-k⁷*
 woman-DET shoe-DET inside-DET PRO now-1B-like.that-DECL
 'I'm like the old woman who lived in a shoe' (Hinne Kaal 1)

⁶ So written in the source, with the 2B prefix *dii* written as a separate word; one might have expected *dii-wilaxpáaka-ssaa-k* instead. Recall that word-initial orthographic *b* after a vowel within the phrase is often pronounced [w] (§2.2.1.3). (Note that if *dii* in this example were an independent pronoun, a 2B prefix *dii* should still occur on the verb as well.)

⁷ *Kan-bii-* appears in this word because it was so written in the source. It would actually be pronounced *kammii-*.

9.3.3. Subcategorization frames

Subcategorization frames are quite rigid in Crow, and it is not generally possible to omit a subcategorized argument. If a transitive active verb is used intransitively, it requires the indefinite nonspecific object *baa*:

- (45) *shikáakee-sh chíishdeaxee-sh al-íhee xaxúa ákkuuwi-a-(a)k*
 boy-DET grey.horse-DET REL-bet all ready-CAUS-SS
baa-óol-ak daachi-k
 INDEF-wait.for-SS remain-DECL
 'the boy got the grey and all his bets ready, he stayed there waiting'
 (Isahkáa 27)

In (45), *óoli* 'wait for' is used intransitively, but *baa* is necessary to satisfy the verb's subcategorization requirements. If *baa* were not present, the verb could only be interpreted as having a specific third person object. To put it another way, *baa* derives intransitive verbs from transitives.

A null third person pronominal subject or object is sufficient to satisfy the subcategorization requirements of both active and stative verbs:

- (46) \emptyset - \emptyset -*dichi-k*
 3B-3A-hit-DECL
 'he/she/it hit him/her/it'
- (47) \emptyset -*baakuhpáa-k*
 3B-sick-DECL
 '(s)he is sick'
- (48) \emptyset - \emptyset -*chichée-k*
 3B-3B-resemble-DECL
 '(s)he resembles her/him'

To sum up, then, if a verb has one of its argument slots filled neither by an overt NP, nor by an overt pronominal prefix, nor by *baa*, then that argument slot must be interpreted as an anaphoric third person pronoun.

There are a few exceptions to the general rule that Crow verbs cannot be used both transitively and intransitively. In (49), *dassihichí* 'think about, consider' appears as a typical transitive stem with indefinite *baa* as its object:

- (49) *baa-lasshihk-ák dáa-lam-nee-m dakáak-kaatee-sh kalatchii*
 INDEF-think.about-SS go-continue-!-DS bird-DIMIN-DET again

húu-laa hii-ák
 come-SS reach-SS

'he was going along thinking things over, and to his surprise, the little bird came again, it reached him' (Isahkáa 17)

Now consider (50):

- (50) *Alaska kuhtée b-iilápaat-uua-sh ko*
 A. there 1POS-friend-PL-DET PRO
kuss-bii-lasshihchi-hche-k
 GOAL-1B-think.about-CAUS-DECL

'he got me to think about our friend in Alaska' (Harold IV 15)

In (50), *dasshihchi* is causativized, a valence-increasing process that would lead us to expect two objects. However, the second object, *biilápaatuash ko* 'our friend', is syntactically the object of the incorporated postposition *kuss*, indicating that *dasshihchi* is treated here as an intransitive verb.

Ordinarily *ikaa* 'see' is a typical transitive active verb, as in (51):

- (51) *iisáaks-uu-m dáale itchúa-taa-laalii-o-sh sáapdak*
 young.man-PL-DET caravan side-PATH-travel-PL-DET something
ikaa-(a)k
 see-SS

'some young men who were going alongside the caravan saw something' (Uuwat 17)

In (51), the subject of *ikaa* is *iisáaksuum dáale itchúataalaaliiosh* 'some young men who were going alongside the caravan', and the object is *sáapdak* 'something'. In (52), however, *ikaa* is used intransitively:

- (52) *hileen ak-húua-sh kuss-ikaa-(a)k daachi-k*
 these REL-come-DET GOAL-look-SS remain-DECL

'he kept looking in the direction of those who were coming' (Sees 3)

In (52), *ikaa* lacks a direct object: here its complement is the postpositional phrase *hileen akhúuash kuss* 'in the direction of those who were coming'.

Other verbs that are used both transitively and intransitively include *hii* 'arrive' (intransitive), 'arrive at, reach, meet' (transitive), *alaxxaxí* 'leery, distrustful, wary (of)', and *aalasshipí* 'go beyond, exaggerate'.

9.4. Syntactic status of pronominal and lexical arguments

The claims that I make in this section may be summed up as follows: first and second person pronominal prefixes are syntactic arguments rather than agreement morphology; the phonologically null third person pronoun is a syntactic formative in the absence of lexical noun phrases; and lexical noun phrases in Crow function as genuine syntactic arguments rather than adjuncts or appositives coreferential with the null pronominal affix.

There are several arguments that support the claim that first and second person bound pronominals are syntactic arguments rather than agreement morphology.

First, if a verb is inflected with bound pronominals, no independent pronouns are necessary; the bound pronominals are sufficient to fill out the predicate-argument structure of the clause, as in (53):

- (53) *dii-wu-lupia-k*
 2B-1A-dislike-DECL
 'I don't like you'

Dúupia 'dislike, hate' is a transitive verb; in this example *wu*, a first person A-set pronominal, is the subject, and *dii*, a second person B-set pronominal, is the object.

Bound pronominals may cooccur with lexical noun phrases in the argument structure of a clause, as in (54):

- (54) *b-asahké bii-ichisshi-k*
 1POS-mother 1B-love-DECL
 'my mother loves me'

Here a lexical noun phrase, *basahké* 'my mother', is the subject of *ichisshi*, and a bound pronominal, *bii*, is the object.

There are independent pronouns in Crow, as discussed in §3.5.2, but these are syntactically optional, and they always occur in addition to the bound pronominals. Syntactically, these independent pronouns are best viewed as appositives coreferential with the bound pronominals. When independent pronouns do occur in a clause, they have an emphatic or contrastive discourse function, as in (55)–(57). In (55), *wa*, the first person marker preceding the causative verb, is the syntactic subject of the clause; the independent pronoun *biiluun* adds an emphatic note, as indicated in the gloss:

- (55) *hileen awaxaawé bñluun xalússhi-wa-hk-uu-k*
 these mountains 1PRO.PL run-1A-CAUS-PL-DECL
 'we are the ones who run [are in charge of] these mountains' (Uuwat 10)

In (56), the meaning of the independent pronoun *dñiluk* is contrastive:

- (56) *dñiluk bñi-sapée-k d-iliat-uu-?*
 2PRO.PL 1B-who-DECL 2A-think-PL-INTERR
 'as for you, who do you think that I am?' (Lk 9:20)

The two-clause sequence in (57) again illustrates the contrastive function of the independent pronouns:

- (57) *dñiléen balee-l-áxshee-lak hileen baatachxaxúa*
 2PRO 1B.PL-2A-beat-COND these everything
aa-la-láa-(a)k bñiluh balee-láappee-l-immaachi-k
 PORT-2A-reach-SS 1PRO.PL 1B.PL-2A.kill-2A-will-DECL
 'if you beat us, you will take everything; as for us, you will kill us'
 (Isahkáa 28)

A second reason for treating bound pronominals as syntactic arguments is that they may occur as conjuncts in coordinate noun phrases where the other conjunct is a lexical noun phrase.

Coordinate noun phrases consist of a series of noun phrases conjoined by means of the clitic conjunction *dak*, which is suffixed to each conjunct; its appearance on the final conjunct is optional. Typical coordinate noun phrases are illustrated in (58) and (59):

- (58) *kalakoón kan [úuxa-lak iichiilikaashi-lak] ko dappée-m*
 then PART deer-and elk-and PRO kill-DS
 'then he killed deer and elk' (Isahkáa 15)
- (59) [*Peter-lak John-nak James-dak*] *áxp-ak daá-u-k*
 P.-and J.-and J.-and with-SS go-PL-DECL
 'Peter, James, and John went with him' (Lk 9:28)

Coordinate noun phrases with a bound pronominal as one of the conjuncts are illustrated in (60)–(62). In (60), the first conjunct, *Alvin-nak*, consists of a lexical noun phrase plus the coordinate enclitic *nak* 'and', while the second conjunct can only be the bound A-set pronominal *aw*:

- (60) *Alvin-nak bach-aw-ákaa-(a)k bah-kaalit-ée-lit-uu-k*
 A.-and RECIP-1A-see-SS 1A-smile-PUNCT-APPROX-PL-DECL
 'Alvin and I looked at each other and smiled' (Harold II 23)

In (61), the first conjunct of the coordinate noun phrase subject is *éehk awáxpelak* 'my companions', and the second is the A-set pronominal *waa*:

- (61) *éehk aw-áxpe-lak* *baa-waa-chiwa(a)-ák*
 those 1POS-companions-and INDEF-1A-tell-SS
koóm-m-uu-lak
 finish-1A-CAUS.PL-COND
 'when those companions of mine and I are finished telling him things'
 (Uuwat 10)

Example (62) contains a coordinate noun phrase with a lexical noun phrase, *disáhkaalelak*, as its first member, and a second person pronominal as its second:

- (62) *biimaxuo b-ihch-aw-ih-uu-lak* *d-isáhkaale-lak*
 1PRO.PL 1-REFL-1A-bet-PL-COND 2POS-grandmother-and
diiluh d-ihch-Ø-ih-aala-h
 2PRO.PL 2-REFL-2A-bet-PL-IMPER
 'as for us, we will bet ourselves; you and your grandmother, you bet yourselves!' (Isahkáa 25)

This example also contains an independent second person plural pronoun, *diiluh*. The fact that *diiluh* is plural is evidence that it is not the second member of the conjunct, since the context of this example clearly indicates that the 'you' referred to is a single individual. Rather, *diiluh* is in apposition to the coordinate noun phrase that is the subject of the imperative verb.

Since Crow does have independent pronominal forms, as illustrated in (55)–(57), the fact that the free pronouns are not used in these coordinate noun phrases is a strong argument for the syntactic reality of the bound pronominals.

My second claim regarding the syntactic status of bound pronominals is that the zero that marks third person arguments in both the A and B sets is a syntactic formative in the absence of an overt lexical argument; that is, the null third person argument has optional syntax.

A verb that occurs with an appropriate clause-final marker but lacks any overt pronominal affixes can constitute a complete utterance, as in (63):⁸

⁸ Since in an example like (63) there is no morphological evidence that the B-set zero precedes the A-set zero, I simply assume that the order of the null pronominals is the same as the order of the overt pronominals.

- (63) *Ø-Ø-ataali-k*
 3B-3A-steal-DECL
 '(s)he stole it'

A sentence like (63) is interpreted as having two third person pronominal arguments, and the referents of these arguments are recoverable from the context.

Also, a null third person pronoun can serve as the antecedent of a reflexive or reciprocal, as in (64) and (65) respectively:

- (64) *baa-luúsh-koow-ii-ak hinne óotchia-sh xap-ák*
 INDEF-eat-finish-CAUS-SS this night-DET lie.down-SS
ihch-Ø-lassee-k huu-k
 REFL-3A-watch-DECL say.PL-DECL
 'he finished eating, that night he lay down, he watched himself, they say'
 (Issii 5)
- (65) *bach-Ø-kuxs-úu-k*
 RECIP-3A-help-PL-DECL
 'they helped each other'

The null pronominal subject is the antecedent of the reflexive in (64), and of the reciprocal in (65).

A lexical noun phrase can serve as the antecedent for a series of null pronominals in a switch-reference construction, as in (66):

- (66) *Hisshishtawia húu-laa uá dappii-ák eelé axús-ak*
 Red.Eyed.Woman come-SS his.wife kill-SS belly slit-SS
dáake dachka-káat-uu-m dútt-ak hawáte bitáalasshia
 her.child twin-DIMIN-PL-DET grab-SS one lodge.screen
alitchia-s(s)-shiiit-ak hawáte bahée awúua-s(s)-shiichi-k
 behind-GOAL-throw-SS one spring inside-GOAL-throw-DECL
 'Red Eyed Woman came, she killed his wife, slit her belly, she grabbed her twin children, one she threw behind the lodge screen, the other she threw into the spring' (Bitáa 1)

This example consists of six clauses linked by same-subject markers. The null subjects of the last five clauses are coreferential with *Hisshishtawia* 'Red Eyed Woman', the subject of the first.

It is also possible for a zero pronoun in a lower clause to be coreferential with a zero in a higher clause, as in (67):

- (67) [[*Ø-shée-ssee aa*] *Ø-xaalia-kaati-immaache*] *ko*
 3A_j-die-NEG until 3B_j-old-DIMIN-will.be PRO
Ø-Ø-chiweé-k
 3B_j-3A_j-tell-DECL
 'he, [the bear] told him_j [Plays with His Face] that he_j would not die until
 he_j was old' (AB 7)

Here the null subject of the embedded adverbial clause *shéessee aa* 'he would not die until' is coreferential with the subject of the verb of the complement clause (*xaaliakaatiimmaache* 'he would be old'), which subject, in turn, is coreferential with the null object of the matrix clause.

Null pronominalization is not restricted to subcategorized arguments: objects of postpositions and possessor noun phrases may also be realized as null pronouns in Crow. Examples of postpositional phrases with null objects are seen in (68) and (69). In (68), the null-pronominal object of *biaxsée* 'under' refers to the twin brothers who are the protagonists of this story:

- (68) *baá-m* [*Ø biaxsée*]-*n dée-loo-t*
 INDEF-DET under-LOC go-!.PL-TEMP
 'when something goes under them' (Bitáa 15)

In (69), the object of the instrumental postposition *ii* is a null pronoun coreferential with the null object of the previous clause (the null glossed '3B'). The reference of these zeros is clear from the discourse context.

- (69) *ba-Ø-k-úu-m* [*Ø ii*]-*waa-ilit-baa-wia-waa-k*
 1B-3B-3A-give-PL-DS INSTR-INDEF-race-1A-will-1A-DECL
 'since they gave [the horse] to me, I am going to race with it' (Isahkáa 20)

Similarly, for a subset of inalienably possessed nouns, the third person possessor prefix is zero, as exemplified in the paradigms in table 9.1.

TABLE 9.1. INALIENABLY POSSESSED NOUNS WITH ZERO THIRD PERSON

<i>dúule</i> 'back'		<i>iilápxe</i> 'father'	
1	<i>ba-lúule</i> 'my back'	1	<i>b-iilápxe</i> 'my father'
2	<i>da-lúule</i> 'your back'	2	<i>d-iilapxe</i> 'your father'
3	<i>Ø-dúule</i> 'his/her back'	3	<i>Ø-iilápxe</i> 'his father'

As is evident from the above discussion, null pronominals fill a number of different grammatical roles in Crow. In all cases, they fill exactly the same grammatical roles as do lexical noun phrases.

In these grammatical roles null pronouns, whose reference is established in the discourse, also contrast with indefinite noun phrases, which must be overtly expressed. Indefinite objects of transitives are examples; indefinites also appear as possessor noun phrases and as objects of postpositions, as in (70) and (71). *Itshi* is an inalienably possessed noun; in (70) the prefixing of indefinite *baa* (in both clauses) makes it possible for *itshi* to occur without a specific, referential possessor.

- (70) *baa-itshi-lashpi-wia-lit-doo-m* *baa-itshé* *ahó*
 INDEF-track-follow-try.to-APPROX-!.PL-DS INDEF-track many
ii-waaliúu-k
 INSTR-difficult-DECL

'they were trying to follow tracks, but to their surprise there were so many tracks that it was difficult' (Uuwat 4)

In (71), the object of *piishe* 'after' is indefinite and nonspecific in reference.

- (71) *ittákkaa kan baa-piishe baa-lée-k*
 just now INDEF-after 1A-go-DECL
 'I just go after, I'm just a follower' (Harold IV 1)

Wallace Chafe discusses a similar pattern in Caddo, where there is a set of "defocusing" pronominal prefixes that are used by the speaker to avoid direct, focused, reference to a participant. In some grammatical contexts these defocusing prefixes contrast with a null pronoun that refers to a focused participant. As Chafe puts it, "It may seem paradoxical that defocused participants are represented by an overt prefix whereas focused third persons are not represented by any prefix at all. A focused third person, however, is already at center stage, and for that reason needs no overt marking within the verb" (1990:60). Such an explanation can also account for the distribution of null and overt pronouns in Crow.

There is additional evidence involving coordinate noun phrases that supports the claim that null third person pronouns are syntactic arguments. Consider (72):

- (72) *iisashpíta-lak baaik-dappee-t* [*isahkáale-lak*
 rabbits-and stuff-kill-TEMP his.grandmother-and

Ø]-*duus-aat-ák*

3A-eat-APPROX-SS

'when he would kill rabbits and other things he and his grandmother would eat them' (Isahkáa 4)

In this example, *isahkáalelak* 'and his grandmother' is one conjunct of a coordinate subject noun phrase; the null pronoun is the other.

There are other examples where one conjunct of a coordinate noun phrase is a bound indefinite pronoun, as in (73), where *baa* is the second conjunct:

- (73) *kan [bishée-lak baa]-haaw-ák kan baa-wachía-ssuu-m*
 then buffalo-and INDEF-gone-SS then INDEF-fight-NEG.PL-DS
baakoón kaa-lit-úu-k
 just remain-APPROX-PL-DECL

'then the buffalo and things [i.e., the trappings of the pre-reservation way of life] were gone, they didn't fight anymore, they just survived' (AB 68)

The above examples show that null pronouns contrast both with lexical noun phrases and with overt pronominal affixes in coordinate noun phrases. We have also seen that null pronouns have the same referential and syntactic functions as lexical noun phrases and bound pronominals. I conclude, then, that third person null pronouns should be viewed as having the same syntactic reality as lexical noun phrases and bound pronominals.

The claim has been made (by Jelinek [1984, 1987, 1989] for a variety of languages, by Van Valin [1985] for Lakhota, and by Baker [1990] for Mohawk, among others) that in pronominal argument languages the pronominal affixes are syntactic arguments, while the independent pronouns and lexical noun phrases coreferential with the bound pronominals are adjuncts or appositives.

While I agree that this claim is valid for Crow with regard to first and second person pronominals, I would propose a different solution for the third person null pronouns: namely, that in the absence of a lexical noun phrase these zeros are genuine arguments. If, however, lexical noun phrases are present that satisfy the subcategorization requirements of the verb, these lexical noun phrases are the syntactic arguments.

My reason for making this claim is as follows. Lexical noun phrase subjects and objects differ from the first and second person bound pronominal arguments that cooccur with independent pronouns in one important respect. Independent pronouns have an emphatic or contrastive force, while lexical arguments have no such emphatic or contrastive meaning: they are normal, unmarked noun phrases.

Furthermore, there is no evidence that they ought to be viewed as focused or topicalized. This suggests that they are what they appear to be: syntactic subjects and objects.

Even if one views incorporation as a lexical derivational process (e.g., Mithun 1984), one must account for the fact that compounds are generally composed of members of form classes that otherwise function as syntactic formatives (nouns, verbs, adjectives), and that compounds often resemble productive syntactic phrases in both form and meaning (e.g., verb-object compounds and noun-modifier compounds).

For these reasons I will treat null pronouns as syntactic arguments only in the absence of lexical noun phrase arguments. Crow, then, can be described as a “mixed argument” language: first and second person pronominals are arguments, and lexical noun phrases may be arguments as well.

9.5. Argument order

We turn now to a discussion of the linear order of both lexical and pronominal arguments in the clause.

9.5.1. Order of lexical arguments

The unmarked word order for transitive clauses is subject–object–verb (SOV), as in (74):⁹

- (74) *shikáak-kaatee-sh ashé hii-ák*
 boy-DIMIN-DET home reach-SS
 ‘the little boy reached home’ (Isahkáa 7)

In ditransitive clauses the unmarked order is SOOV. The two objects may appear in either order. There are examples where the goal object precedes the theme, as in (75), as well as the reverse, illustrated in (76).

- (75) *bishkaxchia iisé áxxit-ak íiwaa-(a)-latchi-lak*
 dog.brush his.face stick.in-SS cry-CONT-continue-DS
 ‘he stuck his face into the dog brush, he kept crying’ (Isshii 7)
- (76) *hinne baa-lii-waa-chiwaá-u xaxúa dis-bilaxpaake chiwaá-h*
 this INDEF-2B-1A-tell-PL all 2POS-people tell-IMPER
 ‘tell all these things we have told you to your people’ (Uuwat 15)

⁹ Unlike languages where one lexical noun phrase per clause is the general rule, clauses with two or more lexical arguments are not uncommon in Crow texts.

However, examples with OSV order are not uncommon, as in (77) and (78). In the second clause of (77), the fact that the verb is plural makes clear that *áxpe* is the subject and *hawáte* is the object:

- (77) *hawáte is-dáxxiia kulushkúa-m hawáte áxpe*
 one 3POS-gun grab.from-DS the.other his.companions
dappii-o-k
 kill-PL-DECL
 'he grabbed the gun from one while his companions killed the other' (AB 60)
- (78) *ééhk daaskoo-káate iilak chiisalashiliawishee-sh appée-m*
 that runt-DIMIN that rattlesnake-DET swallow-DS
 'that rattlesnake swallowed that runt' (Héettaa 11)

The 'runt' referred to in (78) is a baby horned toad. Both (77) and (78) can be viewed as examples of topicalization, with the objects topicalized.

Another frequently occurring word order pattern in Crow clauses is OVS, as illustrated in (79)–(81):

- (79) *iaxp-úua itchi-kiss-uua-sh kootáa hii-k*
 their.feathers-PL good-SPORT-PL-DET entirely reach-DECL
hinne talée-sh
 this oil-DET
 'it entirely covered their beautiful feathers, this oil' (Harold IV 8)
- (80) *baakoón káa-(aa)la-h haám-m-aa-w-o-mmaachi-k*
 just wait-PL-IMPER destroyed-1A-CAUS-1A-PL-will-DECL
he-k iháa-m
 say-DECL other-DET
 "'just you wait, we will destroy him" said another' (Isahkáa 24)
- (81) *chiwee-lák kalakoón dée-k huu-sht hinne iisáakshee-sh*
 tell-DS then go-DECL say.PL-SDECL this young.man-DET
 'she told him, and then he went, they say, this young man' (Isshii 6)

In this construction the extraposed noun phrase occurs after the sentence-final speech act marker. In fact, in (81) *hinne iisáaksheesh* 'this young man' is extraposed out of the embedded complement of the reportative verb *huu* 'they say'.

These sentences can be viewed as examples of what Mithun (1987:314) calls the "afterthought" construction, in which a lexical noun phrase appears at the end of a clause. Such noun phrases provide

more precise specification of entities referred to by zero-affixal arguments of the verb.

We conclude, then, that Crow has basic SOV syntactic word order. However, discourse-pragmatic considerations are also involved in determining the surface order of clausal arguments.

9.5.2. Order of pronominal arguments

We turn now to a discussion of the bound pronominal arguments. The basic order of A- and B-set pronominals differs from the unmarked order of lexical arguments. For lexical arguments the basic order is SOV, while the order of bound pronominals is OSV, with B-set pronominals preceding A-set forms.

- (82) *dii-waa-lichi-k*
 2B-1A-hit-DECL
 'I hit you'

Crow allows more than one B-set pronominal preceding the verb, as in the causatives in (83):

- (83) a. *John bit-lil-Ø-lichi-hche-k*
 J. 1B-2B-3A-hit-CAUS-DECL
 'John made me hit you' or 'John made you hit me'
- b. *John dil-wil-Ø-lichi-hche-k*
 J. 2B-1B-3A-hit-CAUS-DECL
 'John made me hit you' or 'John made you hit me'

It is evident from the glosses that the ordering of the B-set pronominals is free.

Two-place stative verbs also allow for the possibility of two B-set pronominals:

- (84) a. *bil-lil-chichée-k*
 1B-2B-resemble-DECL
 'you resemble me' or 'I resemble you'
- b. *dil-wil-chichée-k*
 2B-1B-resemble-DECL
 'you resemble me' or 'I resemble you'

Again, the two pronominals are apparently freely ordered. According to Wallace, "A striking feature of Crow which is quite unusual crosslinguistically is that when more than one clitic is attached to the verb, or when a clitic cooccurs with an incorporated noun, these

elements are usually freely ordered" (1993:53). Another example with two B-set pronominals is given in (85):

- (85) *ii-kooté dii-lap-uu-xuh dii-ham-misa-áh-uu-lak*
 INSTR-like.that 2B-two-PL-or 2B-some-exist-PUNCT-PL-COND
ba-láshe ii bat-da-lii-o-lak kan
 1 POS-name INSTR RECIP-2A-meet-PL-COND then
dii-wii-héélee-l-uu-k
 2B-2B-among-be.there-PL-DECL
 'therefore, when two or more of you are gathered together in my name,
 I am in the midst of you' (Mt 18:20)

Further data may be needed to clarify the ordering principles for two B-set pronominal prefixes.

In cases where the verb complex contains both an incorporated noun-plus-postposition and a B-set pronominal, the complex postposition occupies one of the "B" slots in the verb complex. Example (86) illustrates the possibility of alternative morpheme orders in such a case:

- (86) a. *ak-dii-ammalapáshkuua-ss-aa-lee-waa-chiin-moo-k*
 REL-2B-Billings-GOAL-PORT-go-1A-look.for-INCL-DECL
 'we'll look for someone to take you to Billings'
 b. *ak-ammalapáshkuua-ss-dii-aa-lee-waa-chiin-moo-k*
 (same translation as (86a))

In (86a) the B-set pronominal *dii* precedes the postpositional phrase, while in (86b) the postpositional phrase occurs first. Just as independent lexical objects of ditransitives may occur in either order, the same is true of bound formatives in "B" slots in the verb complex. It is possible that there are pragmatic differences between the different orderings; this remains to be investigated.

It is also possible to have two B-set pronouns and an incorporated postpositional phrase preceding the verb, as in (87):

- (87) *b-iilápxe bil-lii-héela-ss-huu-hkuua-sh bih*
 1 POS-father 1B-2B-among-GOAL-come-CAUS.PL-DET 1PRO
kan-nii-waa-héela-ss-dee-wa-hche-wia-waa-k
 now-2B-INDEF-among-GOAL-go-1A-CAUS-will-1A-DECL
 'my father has sent me into your midst; I, in turn, am going to send you
 out into the midst of people' (Jn 20:21)

9.5.3. Reflexive *ihchi*

Reflexives occupy a B-set pronominal slot in the verb complex. They most often appear as objects of verbs, as in (88) and (89):

- (88) *bia-isitchee-sh ii-ihchi-shée-a-k*
 woman-like-DET INSTR-REFL-die-CAUS-DECL
 'because he liked women, he brought about his own death' (Isshii 20)
- (89) *bimmaxuoo b-ihch-aw-ih-uu-lak d-isáhkaale-lak*
 1.PRO.PL 1-REFL-1A-bet-PL-COND 2POS-grandmother-and
diiluh d-ihch-ih-aala-h
 2.PRO.PL 2-REFL-bet-PL-IMPER
 'as for us, we will bet ourselves; you and your grandmother, you bet yourselves!' (Isahkää 25)

They may also occur as goal objects of ditransitive verbs, as in (90)—

- (90) *ichihchishiia dútt-ak dástaa-(a)k d-ihch-apchis-aala-h*
 root get-SS chew-SS 2-REFL-rub.on-PL-IMPER
 'get some roots, chew them, and rub them on yourselves'
 (Isáhkawuatee 16)

—and as objects of postpositions, as in (91):

- (91) *kalakoón Peter-lak John óo-hkaa-(a)k*
 then P.-and J. bring-CAUS-SS
ihch-ishóot-uua-n iluú-hkaa-(a)k
 REFL.-in.front.of-PL-LOC stand-CAUS-SS
 'then they had Peter and John brought, and they had them stand before them' (Acts 4:7)

In (91), the plural marking on *ishóotuuán* 'in front of themselves' marks the reflexive object as plural.

9.5.4. Reciprocal *bach*

Like the reflexive, the reciprocal may fill a variety of grammatical roles: direct object, indirect (goal) object, object of postposition, subject of stative verb, and possessor noun phrase. Examples of reciprocals in direct object grammatical roles are seen in (92)–(94):

- (92) *Henry huua-sh-dak iiláppe-lak bach-kuxs-ák*
 H. say.PL-DET-and his.father-and RECIP-help-SS
 'Henry and his father helped each other' (Sees 1)

- (93) *Emily-sh-dak isahkáate Sarah-sh-dak*
 E.-DET-and her.older.sister S.-DET-and
bach-ik-uu-leeta-t shía-i-k
 RECIP-see-PL-not.exist-TEMP long.time-HAB-DECL
 'Emily and her older sister don't see each other very often' (Emilysh 10)
- (94) *bach-áxp-awaat-aala-h*
 RECIP-be.with-sit-PL-IMPER
 'sit with each other'

In (94), *bach* is the object of *áxp* 'be with', an active verb that in this example is incorporated. In (95), *bach* is the object of a postposition:

- (95) *kootáa bach-áaka-ss-kal-uu-k*
 immediately RECIP-top-GOAL-flee-PL-DECL
 'immediately they ran away on top of each other (they were climbing all over each other trying to get away)' (Bachee 10)

The reciprocal also occurs as an argument with stative verbs subcategorized for two arguments:

- (96) *Jeffrey-sh-dak isahké-lak ala-háchk-uua bach-ikuxx-uu-k*
 J.-DET-and his.mother-and REL-tall-PL RECIP-equal-PL-DECL
 'Jeffrey and mother are the same height' (Emilysh 12)

In (96), *bach* is one of the arguments of *ikuxxa* 'be equal'; the other is *Jeffreyshdak isahkélak alaháchkuua* 'Jeffrey's and his mother's height'. *Bach* can also occur as a possessor noun phrase, as in (97) and (98):

- (97) *Billy-sh-dak Junior-sh-dak bach-akúp-uu-k*
 B.-DET-and J.-DET-and RECIP-sibling-PL-DECL
 'Billy and Junior are each other's siblings; Billy and Junior are brothers'
- (98) *Jeanie-sh-dak Carol-lak bach-ischiá-xachii-o-k*
 J.-DET-and C.-and RECIP-3POS.hand-move-PL-DECL
 'Jeanie and Carol are shaking each other's hands'

B-set pronominals, reflexives, and reciprocals have several features in common: they have the syntax of noun phrases; they occur in all grammatical roles except that of active subject; and they are bound forms, morphological prefixes that precede the A-set pronominals.

The ordering of the pronominal prefixes in Crow is an illustration of the general principle that the morphological requirements of lexemes take precedence over their syntactic requirements. For Crow, this means that A- and B-set pronominals must occur in their proper slots in the

verb complex (OSV), rather than in their proper place in the syntactic phrase structure (SOV).

9.6. Order of elements in the verb complex

I conclude this chapter with some remarks on the ordering of elements in the verb complex.

9.6.1. Adverbial proclitics

There is a small set of adverbial proclitics that occur initially in the verb complex. These include *kala* 'now, already', *kaka* 'again', *itta* 'almost', *koosaa* 'near to', *baan* 'so much', *éetshii* 'in every direction', *awan* 'on foot', *it* 'still, yet', and *sas* 'soon'. These are discussed further in §7.10.

- (99) *baa-walee-l-áxshe* *xaxúa kak-al-ihee-lak*
 INDEF-1B.PL-2A-win.from all again-2A-bet-COND
 'if you bet everything that you won from us again' (Isahkâa 25)

9.6.2. B-set elements

These proclitics are followed by one or more elements from the set that includes the B-set pronominals, reciprocal *bach*, reflexive *ihchi*, indefinite *baa*, and incorporated postpositional phrases. There can be two or even three of these elements, as illustrated in (100) and (101):

- (100) *dii-waa-luushi-hche-wi-o-k*
 2B-INDEF-eat-CAUS-want-to-PL-DECL
 'they want to feed you'
- (101) *b-iilápxe bii-lii-héela-ss-huu-hkuua-sh bih*
 1 POS-father 1B-2B-among-GOAL-come-CAUS.PL-DET 1PRO
kan-nii-waa-héela-ss-dee-wa-hche-wia-waa-k
 now-2B-INDEF-among-GOAL-go-1A-CAUS-will-1A-DECL
 'my father has sent me into your midst; I, in turn, am going to send you out into the midst of people' (Jn 20:21)

In the first clause of (101), *bii* 'me' is a B-set pronominal object, and *liihéelass* 'among you' is an incorporated postpositional phrase, while in the second clause *nii* 'you' and *waahéelass* 'among people' occupy the B-set slots.

9.6.3. A-set pronominals

The A-set pronominals ordinarily follow the B-set forms, as illustrated in (102):

- (102) *bii-láh-kuxshi-lak ba-liat-ak ii-woo-k*
 1B-2A-help-COMP 1A-think-SS INSTR-1A.come-DECL
 'I thought that you would help me; that is why I came' (Isshii 11)

There are also a number of verbs where the A-set pronominals are infixes, as discussed in §6.3.2.6. Examples can be seen in (103)–(105):

- (103) a. *éhche*
 'he knows'

- b. *é-wa-hche*
 'I know'

- (104) a. *asaali*
 'go out'

- b. *ash-b-aali*
 'I go out'

- (105) a. *isshii*
 'drink'

- b. *ish-b-ii*
 'I drink'

A few verbs derived from direct causatives can be analyzed synchronically as having suffixal A-set pronouns. *Dia* 'do', as in (106), is an example:

- (106) a. *dia-waa*
 'I do'

- b. *dia-laa*
 'you do'

- c. *dia*
 'he/she does'

In a productive causative, *aa* is the causative stem, and *w* and *l* are the first and second person pronominals. In the third person the causative stem is reduced to the final *a* of the diphthong. (See §6.3.2.4 for the details of causative formation.) Since there is no simple stem from which causativized *dia* is derived, it is plausible to treat *waa* and *laa* as

pronominal suffixes.¹⁰ Other verbs that inflect like *día* are *kúa* ‘tease, fool, deceive’ *bía* ‘rely on, depend on’, and the modal auxiliary *bía* ‘want to, be going to’.

9.6.4. Locative prefixes

The locative prefixes (see §5.2) follow the A-set pronominals, as in (107)–(109):

- (107) a. *kalée*
‘vomit’
b. *ákalee*
‘squirt on’
c. *aw-ákalee*
‘I squirt on’
- (108) a. *faxua*
‘cover’
b. *aw-faxua*
‘I cover’
- (109) a. *chipí*
‘drown’
b. *óhchipí*
‘dive into’
c. *aw-óhchipí*
‘I dive into’

They precede the instrumental prefixes, as indicated by the few verbs that have both: e.g., *ápchiaxxu* ‘sprinkle over’ (*áa* ‘locative’ + *p(áa)* ‘by pushing’), and *ápchishi* (*á* ‘locative’ + *p(áa)* ‘by pushing’).

9.6.5. Instrumental prefixes

The instrumental prefixes immediately precede the stem, and interact phonologically with pronominal prefixes in complex ways, as can be seen in the paradigms for the instrumental prefixes (§6.3.1).

¹⁰ Based on direct causative verbs like *día*, John Boschi, S.J., in his manuscript *Crow grammar* divided verbs into three conjugation classes, depending on whether the pronominal affixes are prefixes, infixes, or suffixes (1898:82).

- (110) a. *alatshí*
'slip' (*ala* 'by foot')
- b. *baatshí*
'I slip'
- (111) a. *dáashia*
'bite' (*dá* 'by mouth')
- b. *ba-lashía*
'I bite'
- (112) a. *dúa*
'lift up' (*dú* 'by hand')
- b. *bu-lúa*
'I lift up'

9.6.6. Stem modification

The stem itself can be modified by reduplication (§5.5), or by the prefixation or infixation of *chi/ku* 'again' (§5.4.1). Examples of reduplication are given in (113):

- (113) a. *áxpá* 'be with'
áxpáxpá 'cohabit, marry'
- b. *dassheechí* 'break'
dasshéessheechii 'break into little pieces'
- c. *hóhpi* 'loose'
huhpóhpi 'riddled with holes'

Prefixation and infixation with *chi/ku* is illustrated in (114):

- (114) a. *kaali* 'ask for'
chi-kaali 'praise'
- b. *baalaáchi* 'write'
chi-waalaáchi 'paint, decorate'
- c. *apáli* 'grow'
á-hchi-paali 'grow again'
- d. *kuú* 'give'
ku-kuú 'give back'

9.6.7. Derivational suffixes

The verb stem may be followed by derivational suffixes such as *káata* 'diminutive', *aachi/lichi* 'approximative', *kaáshi* 'augmentative', and *aahi* 'distributive' (see §5.6.3):

- (115) a. *isítchee* 'like, be pleased with'
isítchee-lichi 'like, sort of'
 b. *xawii* 'bad'
xawii-kaashi 'really bad'
 c. *hawassdéé* 'go around'
hawassdáa-(aa)hi 'go around here and there'

There may be more than one derivational suffix, as illustrated in (116) and (117):

- (116) *hut-bishi-shta-kaata-t* *báachiia uhpé shilia-(a)-watchi-t*
 wind-exist-very-little-TEMP pine tip rustle-CONT-continue-TEMP
koon b-iháw-uu-t *ítchi-i-lu-k*
 there 1A-sleep-PL-TEMP good-HAB-PL-DECL

'when there is a very little breeze, and the tips of the pine trees make a rustling noise and we fall asleep there, it is good' (Bitáa 15)

- (117) *húu-laa isché* *hawa-ss-dúupaa-(aa)h-aachi-k*
 come-SS his.hand around-GOAL-sniff-DISTR-APPROX-DECL
 '[the dog] came; he sniffed around his hand' (Sees 3)

In (116) *shta* 'very' and *káata* 'little' are both derivational suffixes, and in (117) we find *aahi* 'distributive' and *aachi* 'approximative'.

9.6.8. Punctual *áhi*

The punctual marker *áhi* (see §5.6.1) usually follows the derivational suffixes, as in (118):

- (118) *dissúua shia-taahil-ée-lak* *hinne akashippéeliliia-sh . . .*
 dance long-very-PUNCT-COND this announcer-DET
he-k
 say-DECL

'the dance went on for a really long time, and this camp crier said . . .'

(Baapaalissúua 25)

If there is no derivational suffix, punctual *áhi* immediately follows the stem:

- (119) a. *hii* 'arrive'
 hii-áhi 'arrive quickly'
 b. *biléeli* 'enter'
 bileen-née 'enter right away'
 c. *awáachi* 'sit down'
 awaak-kée 'sit down quickly'

There are also examples where *áhi* follows the stem and precedes the derivational suffixes, as in (120):

- (120) *piishil-ée* *baaluu-áhi-shta-kaata-k*
 next.one-PUNCT difficult-PUNCT-very-DIMIN-DECL
 'the next one is just a little more difficult' (Isshii 10)

It is evident, then, that the position of *áhi* is not rigidly fixed.

9.6.9. Continuative, modal, or benefactive auxiliary

The verb stem may be followed by an incorporating continuative, modal, or benefactive verb inflected for person, as in (121) and (122). In (121), *baa-láa* 'I go' is followed by the continuative auxiliary *waa-lawe* 'I continue in motion', and *bah-chisshii* 'I return' is followed by the future auxiliary *w-ihmaachi*. In both clauses, both verbs are inflected for person:

- (121) *baa-láa-(a)-waa-lawe* *aa* *b-asaashké* *iiwaa-aw-iaschin-nak*
 1A-go-CONT-1A-continue until 1POS-horse STEM-1A-sell-TEMP
hilaá *uhpá-ss-bah-chisshii-w-ihmaachi-k*
 then south-GOAL-1A-return-1A-will-DECL
 'I'll travel around until I sell my horse; then I'll go back south' (Sees 6)

The sequence *diawaaitchiwaawalakak* in (122) confirms that as many as three verbs inflected for person may be incorporated in a single verb complex: the matrix verb *diawaa* 'I do', a direct causative verb *itchiwaa* 'I do well', and *walaku* 'I give you', a form of benefactive *kuú* inflected for both subject and object.¹¹

- (122) *báalee* *hám-mish-taahili-m* *baaala-shee-lée* *xaxúa*
 year some-exist-truly-DET REL-say-2A everything

¹¹ In the boldfaced verb in (122) we have a sequence of three pronominals: the first, *waa*, is the suffixal subject of *diá*, a lexicalized causative, while *wa* and *la* are the subject and object, respectively, of *ku*.

día-waa-itchi-waa-wa-la-k-ak baalíá-waa-wa-la-ku-k
do-1A-good-1A-1A-1B-give-SS work-1A-1A-1B-give-DECL

'for many years I have done well for you everything that you have told me, I have worked for you' (Lk 15:29)

9.6.10. Habitual *i*

The habitual aspectual marker *i* comes towards the end of the verb complex preceding the plural marker, as in (123) and (124):

- (123) *bah-chiwakii-t Apsáalook-tatchia*

1A-pray-TEMP Crow-every

bah-chiwakáa-(a)-wa-k(u)-kaat-b-aa-t-k

1A-pray-CONT-1A-give-DIMIN-1A-CAUS-HAB-DECL

'whenever I pray, I pray for all the Crows' (Baapiiháake 4)

- (124) *baá-m biaxsée-n dée-loo-t bach-kuxxáa*

INDEF-DET under-LOC go-!.PL-TEMP RECIP-equal

awá-ss-daa-(a)k dappii-áhi-t-lu-k

down-GOAL-go-SS kill-PUNCT-HAB-PL-DECL

'whenever something goes underneath them, they move down together and kill it' (Bitáa 15)

9.6.11. Plural

The plural marker immediately precedes the sentence-final speech act marker, as in (125) and (126):

- (125) *dii-wachee-waatcháat-uu-k*

2B-man-outstanding-PL-DECL

'you are outstanding men' (AB 80)

- (126) *iiláwii-t bach-áxpa-k daákaa-u-k*

three-DET RECIP-be.with-SS go.home-PL-DECL

'the three went home together' (Bitáa 7)

9.6.12. Clause-final markers

One of a variety of clause-final markers occupies the final position in the verb complex. These include the sentence-final speech act and evidential markers, switch reference markers, and subordinate clause markers.

9.6.12.1. Speech act and evidential markers

Examples of final speech act and evidential markers are given in (127):

- (127) *ikaa-k* 'she saw it' (declarative)
ikaa-h 'look at it' (imperative)
ikaa-ʔ 'did he see it?' (interrogative)
ikaa-wis 'she probably saw it'
ikaa-sho 'he must have seen it'

These are discussed in further detail in §16.2.

9.6.12.2. Switch reference markers

Crow clauses may include a clause-final switch reference marker that indicates whether the subject of the following clause is the same as or different from the subject of the marked clause (see §§16.3–16.4):

- (128) *Martha huu-ák ashé biléeli-k*
 M. come-SS house enter-DECL
 'Martha came and entered the house'
- (129) *Martha húu-m ashé biléeli-k*
 M. come-DS house enter-DECL
 'Martha came and he [someone else] entered the house'

In (128), *ák* indicates that the subjects of both clauses are coreferential, while the *m* in (129) shows that the subjects of the two clauses are different.

9.6.12.3. Subordinate clause markers

Subordinate clauses end in a marker of subordination, as in (130)–(132):

- (130) *shikáakee-sh ahkúx-uu-leet-dassheen ashée-sh kuss-daa-u-k*
 boy-DET ear-PL-not.exist-because tipi-DET GOAL-go-PL-DECL
 'because the boys had no ears [didn't pay attention], they went to the teepee' (Bitáa 15)
- (131) *John baakuhpáa-htaa kootáa baa-chimmi-lée-wa-hche-k*
 J. sick-although anyway INDEF-count-go-1A-CAUS-DECL
 'even though John was sick I sent him to school anyway'
- (132) *baakáate küh ik-uu-lak isitche-o-mmaachi-k*
 children PRO see-PL-COND like-PL-will-DECL
 'if the children also see it, they will like it' (Emily 15)

Although the various clause-final markers occupy the final position in the verb complex, they are not necessarily final in the sentence; there may be a postposed noun phrase, as illustrated in (133):

- (133) *baakoón káa-la-h haám-m-aa-w-o-mmaachi-k*
 peacefully remain-PL-IMPER destroy-1A-CAUS-1A-PL-will-DECL

he-k iháa-m
say-DECL other-DET

“just you wait, we will destroy him,” said another’ (Isahkáa 24)

9.6.12.4. Clauses without final markers

There are a few types of clauses that lack any type of clause final marker. First, dependent clauses that terminate with negative *ssaa* frequently lack a clause final marker:

(134) *it dalée-ssaa it hawáta-m dii-waa-chiwéé-w-ii-lu-k*
yet 2A-go-NEG still one-DET 2B-1A-tell-1A-want.to-PL-DECL
‘before you go there is still one thing we want to tell you’ (Uuwat 14)

(135) *baaxuawishé al-ik-uua xaxúa chilli-ssaa*
animals REL-see-PL all fear-NEG
kulée-wia-i-lu-k
chase-ready.to-HAB-PL-DECL
‘they are not afraid of any animals they see; they are ready to chase them’ (Animals 16)

Second, in clauses that terminate with *aa* ‘until’, the clause final marker is a separate word, and the verb complex occurs in the citation form, as in (136) and (137):

(136) *hinne is-bálee-sh chichiili-kaashe aa óhchikaapi-ihmah*
this 3POS-money-DET look.for-AUG until find-will
‘she searches for this money of hers thoroughly until she finds it’ (Lk 15:8)

(137) *baapée-sh bim-ma-hp-ák*
day-DET STEM-1A-swim-SS
hawa-ss-b-iikusk-aáh-aache aa
around-GOAL-1A-come.out-DISTR-APPROX until
b-ashtá-wis-aat-bee-m bittáchi-k
1POS-eyes-open-APPROX-1A.!-DS 1PRO.alone-DECL
‘today I went swimming, I was coming out here and there until I opened my eyes and to my surprise I was alone’ (Harold III 11)

Finally, in clauses that end with *kootáa* ‘as soon as’, an independent word, the verb complex also occurs in the citation form, as in (138) and (139):

- (138) *sapéelak huu-lák iikukkó kootáa iikussa(a)-áh-nee-lak*
 someone come-COMP hear as.soon.as turn.around-PUNCT-!-DS
 'when he heard someone coming he immediately turned around' (Sees 22)
- (139) *iiwaakuluttáuuu-sh dútche kootáa baáchuua-sh*
 container-DET grab as.soon.as berries-DET
úuwuu-ss-paaxu-lak
 inside.mouth-GOAL-pour-DS
 'as soon as he grabbed the container with the berries, he poured them into his mouth' (Baleiichiweé 45)

9.6.13. Negative *ssaa*

Negative *ssaa* (pl. *ssuu*) tends to occur at the end of the verb complex, immediately preceding the sentence-final speech act marker, as in (140) and (141):

- (140) *d-áasuuu ashkawúua-n hulé dappaxi-ssaa-h*
 2POS-lodge inside-LOC bone split-NEG-IMPER
 'don't split bones inside your lodge' (Uuwat 13)
- (141) *kalatchii shikáakee-sh alilás-ak ashtáali-m shiché*
 again boys-DET scold-SS tipi-DET hill
alítchia-la-m kuss-dée-hche-ssuu-k
 behind-be.there-DET GOAL-go-CAUS-NEG.PL-DECL
 'he scolded the boys again and forbade them to go to a tipi that was behind the hill' (Bitáa 15)

However, the negative regularly precedes habitual aspectual *i*, as in (142):

- (142) *Uuwat-isa-sh hinne baapúxtee-sh isítchee-lichi-ssaa-(a)k*
 metal-big-DET this otter-DET like-APPROX-NEG-SS
innii-ssaa-i-k
 talk.to-NEG-HAB-DECL
 'Big Metal didn't like this otter; he wouldn't talk to him' (Uuwat 10)

The negative may also precede the modal verbs *immaachi* 'future' and *woo* 'first person plural inclusive', as in (143) and (144):

- (143) *bii-shia-ssaa-immaachi-k*
 1B-long-NEG-will-DECL.
 'I won't be long' (Bachee 6)

- (144) *kam-maa-xap-ák baa-xachii-ssaa-woo-k*
 now-1A-lie.down-SS 1A-move-NEG-INCL-DECL
 'we'll lie down and we won't move' (Isahkáa 36)

Also, the negative may precede the derivational suffixes *táhili* and *kaáshi*, as in (145) and (146):

- (145) *baa-xap-ák baa-xachii-ssaa-taahim-mee-m duú-laa*
 1A-lie-SS 1A-move-NEG-at.all-1A.!-DS come.PL-SS
bih baashúua dútt-uu-k
 1PRO my.scalp take-PL-DECL
 'I lay down, I didn't move at all, and to my surprise, they came and scalped me' (Bachee 6)
- (146) *Henry huua-sh dútt-ak daás-duupa-ssaa-kaas-ak dée-k*
 H. say.PL-DET take-SS heart-two-NEG-AUG-SS go-DECL
 'Henry took it, he was really determined, he went' (Sees 25)

Finally, negative *ssaa* may precede the punctual suffix *áhi*, as in (147) and (148):

- (147) *áxxaashe it asii-ss(aa)-ée-htaa*
 sun yet appear-NEG-PUNCT-although
 'although the sun had not yet risen' (Uuwat 7)
- (148) *aa óoppii-k bileeli-ssa(a)-áh-ah*
 that.one smoke-DECL go.in-NEG-PUNCT-IMPER
 'that one is smoking, don't go in' (Uuwat 19)

In summary, it is not possible to assign the negative to a definite slot in the verb complex, although it tends to occur towards the end. It appears that questions of scope can affect the placement of the negative.

In conclusion, it is clear that Crow cannot be adequately described in terms of a template, since in some cases the ordering of a particular element is not rigidly fixed. As Rankin, Boyle, and Graczyk have noted, "Siouan languages really do not lend themselves to description in terms of templatic morphology" (2002:186). Nevertheless, the above ordering statements provide a sense of how the verb complex is constructed in Crow.

10 Noun phrase structure

10.1. Introduction

This chapter treats the structure of noun phrases in Crow. Three topics are dealt with in some detail: noun phrase-final determiners, possessive noun phrases, and nominalizations. Deictics are treated in chapter 4, and relative clauses in chapter 11.

In order to provide a framework for the discussion of these topics, the chapter will begin with an overview of the syntax of noun phrases in Crow.

10.2. Noun phrase syntax

Crow has configurational noun phrase syntax, in the sense that it is possible to specify phrase structure rules that will account for the ordering and cooccurrence possibilities of the various noun phrase constituents.

10.2.1. Phrase structure rules

The following rules account for the structure of the noun phrase (NP) in Crow:

- (1) a. $NP \rightarrow N' (\text{DET})$
b. i. $N' \rightarrow N$
ii. $N' \rightarrow [S \dots N'_{\text{head}} \dots]$ (relative clause)
iii. $N' \rightarrow NP N'$ (genitive/possessive)
iv. $N' \rightarrow PP N'$ (PP modifier)
c. $QP \rightarrow DP Q$ (quantifier phrase)

- d. DP → DEM NP (demonstrative phrase)
- e. NP → NP NP (appositive)
- f. NP → S (COMP) (nominalization)
- g. i. NP → (NP CONJ)* (coordinate NP with *dak*)
- ii. NP → (N' CONJ)ⁿ DET (coordinate N' with *xxo*)

The above rules show that there are two phrases superordinate to NP, namely DP (demonstrative phrase) and QP (quantifier phrase), in which the demonstrative and the quantifier, respectively, are phrasal heads. I discuss each of the structures in (1) in turn.

10.2.2. Simple noun phrases

Phrase structure rules (1a) and (1b.i) are repeated here for reference:

- (1) a. NP → N' (DET)
- b. i. N' → N

As these indicate, in its simplest form, a noun phrase consists of a bare noun. The noun may be followed by a suffixed determiner (DET), as in (2):

- (2) a. *bia-m*
'a woman'
- b. *iisáakshee-sh*
'the young man'
- c. *Póopahatchia-sh*
'White Owl'

As (2c) makes evident, proper names may occur with the definite determiner.¹

The determiner is an enclitic suffixed to the final word of the noun phrase, as illustrated in (3):

¹ The conditions governing the occurrence of the definite determiner with personal names are somewhat complex. First, the determiner never cooccurs with *Akbaatatdía* 'God' and *Isáahkawuátee* 'Old Man Coyote' (the culture hero). With some names, the determiner occurs regularly in discourse, while with others it is just as regularly absent. With English names, the conditioning is phonological: the determiner follows names ending in a vowel or a sonorant (e.g., *Mary-sh*, *Charlie-sh*, *Peter-sh*, *Carol-sh*), while with other names it is omitted (e.g., *John*, *James*, *Joseph*, etc.). With all names, the determiner is apparently optional. Finally, the determiner is never used with vocatives.

- (3) a. [*biakaata*]-*m*
 girl-DET
 'a girl'
- b. [*biakaate shoop-úu*]-*m*
 girl four-PL-DET
 'four girls'
- c. [*biakaate shoop-úu-m húulee-sh aw-ákee*]-*sh*
 girl four-PL-DET yesterday-DET 1A-see-DET
 'the four girls I saw yesterday'

10.2.3. Expansions of N'

Phrase structure rule (1b), repeated below for reference, specifies that N' (the constituent corresponding to the noun phrase minus determiner, demonstrative, and quantifier) may be expanded as (i) a lexical noun (N), (ii) an internally-headed relative clause ([_S...N'_{head}...]), (iii) a genitive or possessor NP plus N', or (iv) a postpositional phrase (PP) plus N'.²

- (1) b. i. N' → N
 ii. N' → [_S...N'_{head}...] (relative clause)
 iii. N' → NP N' (genitive/possessive)
 iv. N' → PP N' (PP modifier)

We have already considered the simplest case, where N' is a lexical noun stem. N' may also be expanded as a relative clause, as in (4), with the head noun in bold, and the relative clause in brackets:

- (4) [*ítsáakshi-m búupchee-sh ak-ataalée*]-*sh aw-ákaa-k*
 young.man-DET ball-DET REL-steal-DET 1A-see-DECL
 'I saw the young man who stole the ball'

Relative clauses are discussed in greater detail in chapter 11.

N' may be expanded as a genitive or possessor NP plus N':

- (5) [*Clara-sh [is-iilaalee]*] *sapéen ataali-?*
 C.-DET 3POS-car who steal-INTERR
 'who stole Clara's car?'

² I use the term "genitive" as well as "possessor," since there are several different constructions that can be included under this syntactic rule, not all of which can be considered examples of possession in the strict sense.

In a genitive construction the person of the possessor is indicated by a prefix to the possessum, and the number of the possessor by a suffix to the possessum. Genitive and possessive constructions will be treated in §10.4.

N' may consist of a postpositional phrase plus N'. Examples are seen in (6)–(8). In (6), *báasheem awuuá* 'inside the boat' is a postpositional phrase modifying *taláashpita* 'oil':

- (6) [[*báashee-m awuuá*] *taláashpita*]-*m*] *bimmui-ss-dee-m*
 boat-DET inside oil-DET in.water-GOAL-go-DS
hinne taláashpitee-sh bilé kootáa íshii-k
 this oil-DET water thoroughly mixed-DECL
 'the oil inside the boat went into the water; this oil was thoroughly mixed with the water' (Harold IV 8)

In (7) the postpositional phrase is *shichim áakeen* 'on a hill':

- (7) *Pharisee koot-dák* [[[*shichi-m áakee-n*]
 P.-DET like.that-DET hill-DET top-LOC
ala-chiwakáa-u-ash-isee]-*sh*] *kuss-dáa-(a)k*
 REL-pray-PL.-building-large-DET GOAL-go-SS
 'a Pharisee went to the temple [building where they pray] on a hill' (Lk 18:10)

In (8) *diihéeluua* 'among you' is a postpositional phrase modifying *ham* 'some'. The head nominal *ham* is incorporated, and the determiner is zero.

- (8) [[*dii-héel-uua*] *ham*]-*dappii-o-lahtaa*
 2B-among-PL some-kill-PL-even.if
 'even if they kill some of you' (Lk 21:16)

In all three examples the postpositional phrases are N' adjuncts.

10.2.4. Quantifier phrases

Phrase structure rule (1c) is repeated here for reference:

- (1) c. QP → DP Q

There are two classes of quantifiers in Crow that are quite different syntactically.³ The first class consists of a single member, *xaxúá*, which

³ Williamson (1987:175) distinguishes two classes of expressions in Lakota on the basis of their syntactic behavior. The first class ("cardinality expressions") includes expressions corresponding to English *a*, *some*, *many*, *few*, and the cardinal numbers,

heads a quantifier phrase that takes a demonstrative phrases—or in the absence of a demonstrative, a noun phrase—as its complement, as illustrated in (9) and (10):

- (9) *hinne bía-sh* [[[*hileen* [*bachée-sh*]]] *xaxúa*] *áxpá-m*
 this woman-DET these men-DET all marry-DS
 'this woman married all these men' (Lk 20:33)
- (10) *hinne taláashpítee-sh* [[*bimmuá* *baa-apáalee-sh*] *xaxúa*]
 this oil-DET in.water INDEF-grow-DET everything
dappéé-k
 kill-DECL
 'this oil has killed everything growing in the water' (Harold IV 9)

There are several indications that *xaxúa* is not a constituent of NP, but rather the head of a phrase with a DP or NP complement (i.e., it is Q in rule (1c) above): the complement of *xaxúa* ends in a determiner, an indicator of NP status; *xaxúa* is never followed by a suffixed determiner, i.e., **xaxúa-sh* is not acceptable; and, unlike the other quantifiers, *xaxúa* does not function as a stative verb.

There is no real evidence that the demonstrative is lower than the quantifier; I assume this structure for ease of exposition.

The second class of quantifiers are best viewed as stative verbs that may function as nominal modifiers. This class includes *ahú* 'many, much', *hawa* 'some', *kooshtá* 'few', *sáawi* 'how many, so many, some', and the numerals (*hawáta* 'one', *dúupa* 'two', *dáawii* 'three', etc.).

Quantifiers of this type occurring as nominal modifiers, are shown in (11)–(14):

- (11) *iiluh* [*aktáa-u* *ahú-m*] *ih-uu-k*
 3PRO.PL their.mount-PL many-DET bet-PL-DECL
 'as for them, they bet a large number of their mounts' (Isahkáa 21)
- (12) [*áachiwile ham*] *hinne* *iishbiiwishkee-sh* *kuss-dúchkichí-k*
 milk some this cat-DET GOAL-squirt-DECL
 'he squirted some milk toward this cat' (Sees 16)
- (13) *Awé Kúa-l-awaachi-sh* [*bacheeitche shuhpáa-pilaka-m*]
 land middle-LOC-sit-DET chiefs four.times-ten-DET

while the second includes the definite determiners, proper names, definite pronouns, and quantifiers such as *iyuha* 'all, every', *iyohila* 'each', and *ota hda* 'most'. Only members of the first class may serve as internal heads of relative clauses. These classes appear to correspond closely to the two classes of quantifiers in Crow.

áx-baahili-i-k
with-work-HAB-DECL

'Sits in the Middle of the Land worked with forty chiefs' (AB 39)

- (14) [*is-báalee axpíluupahpi-m*] *kan daákshe dit-ák*
3POS-year eighteen-DET already coup count-S
'when he was 18 he had already counted coup' (AB 66)

Quantifiers of this second class may be followed by a determiner, as in (11), (13), and (14). This is evidence that they are constituents of NP. It should be emphasized that this class of quantifiers are not Q in the sense of the QP rule (1c) above.

As stative verbs, members of this class may function as clausal predicates, as in (15) and (16):

- (15) *kalakoon kan úuxa-lak iichiilikaashi-lak ko dappé-m*
then then deer-and elk-and PRO kill-DS
isdúk-uua ahú-k
their.meat-PL much-DECL
'then he killed deer and elk; they had a lot of meat' (lit., 'their meat was much') (Isahkáa 5)
- (16) *hee-lee-m iisaxpúatahchee it-sáhpu-o-k*
notice-!-DS mountain.sheep PREF-seven-PL-DECL
'he was surprised to see that there were seven mountain sheep' (Uuwat 7)

Although the members of this class of quantifiers function syntactically as stative verbs both attributively and predicatively, there are several peculiarities connected with their use, indicating that they form a distinct subclass of stative verbs. First *hawa*, *ahú*, and *sáawi* may occur as morphological prefixes to the following word (see §12.6). Second, these quantifiers may occur with *t* as a determiner, as in (17) and (18):

- (17) *éehk iichiia shoopé huchalahúua shoopá-t koó-u-k*
those main.poles four directions four-DET COP-PL-DECL
'those four teepee poles are the four directions' (Isshii 22)
- (18) *awé shiishiahe shoopá-t kúh koolá-k*
season different four-DET PRO be.there-DECL
'the four different seasons are there as well' (Isshii 22)

With quantifiers *t* marks the totality of a class (see §10.3.5).

Third, all the quantifiers, including *xaxúa*, may occur with the prefix *ii*, as in (16) and in (19)–(21):⁴

- (19) *baapée-sh baapúxte ii-láp-uu-m iiwaanni-o-m aw-ákaa-k*
 day-DET otter PREF-TWO-PL-DET play-PL-COMP 1A-see-DECL
 'today I saw two otters playing' (Harold III 5)
- (20) *ii-xaxúa bii-chichiil-uu-m bii-chiweé-k*
 PREF-everyone 1B-look.for-PL-COMP 1B-tell-DECL
 'he told me that everyone had been looking for me' (Harold III 17)
- (21) *iichiile kal-ii-sáaw-uu-?*
 horses now-PREF-how.many-PL-INTERR
 'now how many horses are there?'

The Crow speakers that I have consulted are not aware of any consistent difference in meaning between forms with and without *ii*.

There is another quantifier, *tatchée* or *tatchia* 'each, every', that occurs as a noun phrase modifier. *Tatchée* is not a stative verb, and it is usually suffixed to a preceding noun: e.g., *baap-tatchée* 'every day'.

10.2.5. Demonstrative phrases

As indicated by phrase structure rule (1d) (repeated below for reference), the demonstratives (DEM) occur phrase-initially.

- (1) d. DP → DEM NP

Examples are seen in (22):

- (22) a. [*hileen* [*baakáatee-sh*]]
 these children-DET
 'these children'
- b. [*flawe* [*iisáakshe*]]
 that.going.by young.man
 'that young man going by'
- c. [*ákian* [*iichiile shoop-úu-m ataalée-sh*]]
 those horses four-PL-DET steal-DET
 'those four horses that he stole'

⁴ When prefixed with *ii*, the form of the stem for 'two' is *dápa* rather than *diupa*; likewise the form for 'three' in this context is *dáwii* rather than *dáawii*.

- d. *ko báalee*
that winter
'that winter'

Demonstratives cooccur with determiners rather than contrast with them in the same paradigmatic slot, as is the case in English, as illustrated in (23):

- (23) a. *iichiilee-sh*
horse-DET
'the horse'
- b. *hinne iichiile*
this horse
'this horse'
- c. *hinne iichiilee-sh*
this horse-DET
'this horse' (lit., *'this the horse')

The combination of demonstrative and determiner, though not grammatical in English, is perfectly acceptable in Crow. This pattern suggests that in Crow a demonstrative combines with a noun phrase complement to form a demonstrative phrase. However, determiners are not required in the context of a demonstrative.

Furthermore, demonstratives without an accompanying noun phrase can function as noun phrases, constituting a complete referring expression, as in (24)–(26):

- (24) *ákián ak-shéé-sh koó-u-m*
those REL-die-DET COP-PL-DS
'those are the ones who died' (Isahkáa 37)
- (25) *áa óoppii-k bileeli-ssa(a)-áh-ah*
that.one smoke-DECL enter-NEG-PUNCT-IMPER
'that one is smoking, don't go in' (Uuwat 19)
- (26) *hinné ikaa-kawe-h*
this look.at-POL-IMPER
'look at this'

There are several other plausible syntactic treatments of demonstratives. One would be to consider demonstratives as appositives to NP; this is the analysis that Williamson (1987) adopts for Lakhota, where demonstratives also cooccur with determiners.

Another possibility would be to treat demonstratives as constituents of NP, so that the basic expansion of NP would be DEM N' DET. At

present I am not aware of any evidence that would conclusively decide for one of these three analyses.

In any case, since demonstrative phrases function syntactically exactly as noun phrases with respect to the slots that they may fill within the clause, I include DPs within the general category of NP, and unless otherwise noted, references to NP should be understood as including DP.

10.2.6. Appositives

Appositive noun phrases have the structure NP NP, as indicated by phrase structure rule (1e), repeated below for reference.

- (1) e. NP → NP NP

When the discourse-referential deictic *ko(n)* 'that' occurs finally in a noun phrase as a focus marker, it can be treated as an appositive NP rather than a constituent of DP, as in (27):

- (27) [[*ééhk Isshiióoshe*] [*ko*] *bii-kúnnaa-lee-hk-uu-m*
 that Red.Hair PRO 1B-fetch-go-CAUS-PL-DS
 'they made me go after that Red Hair' (Isshii 11)

Also, the fact that *ko* (demonstrative) and *ko(n)* (appositive) may cooccur in the same construction is evidence that they differ syntactically:

- (28) [*ko bachée-sh*] [*kon*] *dia-k*
 that man-DET PRO do-DECL
 'that man is the one who did it'

Ko is the form that appears in the appositive construction with all noun phrases except subjects of active verbs. Thus the *n* of *kon* functions as an agent case-marker.⁵

The opposition between *ko* and *kon* serves a disambiguating function, as illustrated in (29):

- (29) a. *Joe-sh kon dichik* 'it's Joe who hit her'
 b. *Joe-sh ko dichik* 'it's Joe that she hit'

The same opposition holds with interrogative *sapée* 'who':

- (30) a. *sapée-n dichí?* 'who hit her?'

⁵ The *n* of *kon* and *sapéen* may be related to the Hidatsa topic marker *ri*.

b. *sapée dichi?* 'whom did she hit?'

A second type of appositive construction consists of two independent juxtaposed noun phrases, as in (31)–(33). In (31) *shikáakkaatam* 'a little boy' is in apposition to *isbaapíte* 'her grandchild'; these two noun phrases are the second conjunct of a coordinate noun phrase:

- (31) *káli-m-nak* [[*isbaapíte*] [*shikáak-kaata-m*]-*nak*]
 old.woman-DET-and her.grandchild boy-DIMIN-DET-and
hawass-iaxú-o aa il-úu-k
 around-hide-PL until escape-PL-DECL
 'an old woman and her grandson, a little boy, hid here and there until they escaped' (Isahkkaa 1)
- (32) [[*Pierre Chene huua*] [*French Canadian kootá-m*]
 P. C. say.PL F. C. like.that-DET
Apsáalook-bia-m áxpa-m] *is-ak-iláa-u koó-k*
 Crow-woman-DET wife-DET 3POS-REL-speak-PL COP-DECL
 'Pierre Chene, a French Canadian whose wife was a Crow woman, was their interpreter' (AB 39)

In (33) the appositive construction is discontinuous, with the second noun phrase right-extrapolated:

- (33) [*ammaa-wuus-úua*] *ahú-k* [*sáaka-lak bua-káata-lak*
 REL-1A.eat-PL much-DECL frogs-and fish-DIMIN-and
bisheechi-lak baapúxta-lak bikkáa-lak baaawuú-lak]
 worms-and insects-and grass-and seeds-and
 'there is plenty to eat—frogs, little fish, worms, insects, grass, and seeds'
 (Harold I 13)

10.2.7. Nominalizations

Phrase structure rule (1f), repeated below for reference, represents the structure of nominal complements, which will be discussed in further detail in §10.5. Such complements consist of a clause (S) followed by a complementizer (COMP).

- (1) f. NP → S (COMP)

10.2.8. Coordinate noun phrases

As is indicated by phrase structure rule (1g), repeated below, coordinate noun phrases consist of a series of NPs or N's with each conjunct

followed by a clitic conjunction (CONJ), with *dak* 'and' conjoining NPs, and *xo* 'or' conjoining N's.

- (1) g. i. NP → (NP CONJ)ⁿ (coordinate NP with *dak*)
 ii. NP → (N' CONJ)ⁿ DET (coordinate N' with *xo*)

With *dak* the conjunction may be omitted after the final conjunct, while with *xo* it is always omitted.

Examples of coordinate noun phrases with *dak* 'and' are seen in (34)–(37):

- (34) [*Awashée-lak Apsáalooke-lak*] *dúat-ak ammiliiwaxpe*
 Hidatsa-and Crow-and break.camp-SS west
alápasshi-ss-daa-u-k
 direction-GOAL-go-PL-DECL
 'the Hidatsa and the Crow broke camp and went westward' (AB 3)
- (35) [*íaxuhka-lak issaxchí-lak íaxassaa-lak*] *iisuukaate duus-iu-m*
 foxes-and hawks-and snakes-and mice eat-PL-DS
 'foxes, hawks, and snakes eat mice' (Animals 31)
- (36) *an-née [bichilii-lak bíi-lak] ah-nák háakse iché*
 REL-go cactus-and rocks-and much-DS finally his.feet
dappús-ak
 swollen-SS
 'where he went there was a lot of cactus and rocks; finally his feet were swollen' (Baapaalissúua 5)
- (37) [*baashiali-lak ammaan-nia-sh*] *itt-uu-htaa it*
 dreams-and REL-do-DET good-PL-although still
itchia-lichi-ssaa-k
 powerful-APPROX-NEG-DECL
 'although his dreams and his deeds were good, they were still not powerful enough' (AB 66)

(In (37) *dak* is omitted after the final conjunct.)

In (34)–(36), the noun phrase conjuncts lack final determiners. In (38) and (39), however, each conjunct terminates in a determiner, evidence that full noun phrases are conjoined:

- (38) *Isahkáalaxpe [alúute shúa-kaatee-m-nak shiili-kaatee-m-nak*
 I. arrows blue-DIMIN-DET-and yellow-DIMIN-DET-and
bimmaáhchii-kaatee-m-nak hisshi-kaatee-m-nak] dia-h
 green-DIMIN-DET-and red-DIMIN-DET-and make-IMPER

'Grandmother's Companion, make some blue and yellow and green and red arrows' (Isahkáa 9)

- (39) *hileen ammaan-nia-sh ko baatchaat-áa-(a)k*
 these REL-do-DET PRO great-PUNCT-SS
 [*Peelatchiwaaxpáa-sh-dak Chiilapxiili-sh-dak*
 Medicine.Crow-DET-and Grey.Bull-DET-and
Alaxchiiahu-sh-dak] *ammaa-li-o ko baheeláa-u-k*
 Plenty.Coups-DET-and REL-do-PL PRO less-PL-DECL
 'his accomplishments were greater than those of Medicine Crow, Grey Bull, and Plenty Coups' (AB 75)

The plural morpheme *uu/u/o* does not occur in coordinate noun phrases with *dak*. Instead, the singular-plural opposition is marked by an alternation between the citation and the stem forms of the nominal. If the noun phrase is plural in number, the stem form occurs (without a determiner), as in (35)–(37). If the noun phrase is singular, the citation form occurs, as in (34).

The following are examples of coordinate N's with *xxo* 'or':

- (40) *ashammaliaxxiia* [*Ashiiiooshi-xxo Uuwuutasshi-xxo*
 clan Sore.Lip-or Greasy.Mouth-or
Bilikóosh-dak] *alaaxt-úu-k*
 Whistling.Water-COMP not.know-PL-DECL
 'they don't know if he belonged to the Sore Lip, the Greasy Mouth, or the Whistling Water clan' (AB 78)
- (41) *bah-úu-t* [*ashbaaiháa-xxo baá*]-*m áhta-lak*
 bark-PL-TEMP enemy-or INDEF-DET near-DET
ii-éhche-i-lu-k
 INSTR-know-HAB-PL-DECL
 'when they would bark, that is how they knew that an enemy or something was nearby' (Animals 2)
- (42) *hinne bachée-sh* [*iiká-xxo ichuuk*]-*éem kon hinne*
 this man-DET older.brother-or younger.brother-DET PRO this
ak-koolá-ssee-sh uá dútt-ak áxpi-ihmaachi-k
 REL-be.there-NEG-DET his.wife take-SS marry-will-DECL
 'one of the older or younger brothers of this man will take and marry the wife of this one who is no longer there' (Lk 20:28)

In (40)–(42) the determiner appears only on the last member of the conjunct, evidence that N's rather than NPs are conjoined.

Unlike coordinate constructions with *dak*, *xo* may cooccur with the plural morpheme, as in (43):

- (43) *aaáakian* [*úux-uu-xo iichilikaas-uu*]-?
 those deer-PL-or elk-PL-INTERR
 'are those deer or elk?'

Also unlike *dak*, *xo* may conjoin clauses as well as N's, as in (44) and (45). In (44), *xo* is conjoining subordinate conditional clauses:

- (44) [*iichil-al-aakinnee-xo dáa-wachia-xo sáapee-m díá-laa*]-*lak*
 horse-2A-ride-or 2A-fight-or what-DET do-2A-COND
dii-aweilichi-ssaa-immaachi-k
 2B-fall.down-NEG-will-DECL
 'whether you are riding horseback or engaging in battle, or whatever you are doing, you will not fall down' (Uuwat 10)

In (45) *xo* conjoins object complements of the verb *huu* 'they say':

- (45) [*iílaa ak-iaxpáalii-wishe hawa-kuss-xapáalia-m*
 3.PRO REL-his.medicine-exist some-GOAL-medicine-DET
íaschili-xo baashiam-mish-bia]-*lak* ... *huu-k*
 purchase-or dream-exist-should-DET say.PL-DECL
 'they said that he himself should purchase a medicine from someone who has one, or else he should have a dream' (AB 66)

10.3. Determiners

Determiners serve to code the information status of noun phrases as referring expressions. Table 10.1 lists the determiners that occur in Crow.

The form for both the specific and the nonspecific indefinite determiner is *m*: they differ in that the specific is suffixed to the stem, and the nonspecific to the citation form. I write *(ee)m* for the nonspecific to indicate the difference. (All determiners except *sh* and *(ee)m* are added to the stem form.)

Sentences (46)–(50) contain examples of each of the determiners:

- (46) *kalakoón John úuxee-sh oóxpí-k* (definite)
 then J. deer-DET shoot-DECL
 'then John shot the deer'

TABLE 10.1. DETERMINERS

	<i>sh</i>	definite	
	<i>m</i>	indefinite specific	
	<i>(ee)m</i>	indefinite nonspecific	
	<i>dak</i>	conditional, irrealis	
	<i>t</i>	habitual, totalizer	
(47)	<i>húuleesh John úuxa-m ikaa-k</i>		(indefinite specific)
	yesterday J. deer-DET see-DECL		
	'John saw a deer yesterday'		
(48)	<i>bilée-m húu-hkaa-h</i>		(indefinite nonspecific)
	water-DET come-CAUS-IMPER		
	'bring me some water'		
(49)	<i>úux-dak al-ákaa-wishi-?</i>		(conditional)
	deer-DET 2A-see-exist-INTERR		
	'have you seen any deer?'		
(50)	<i>báalaa-t sas-chihpashi-i-k</i>		(habitual)
	winter-DET early-dark-HAB-DECL		
	'in winter it gets dark early'		

Below, each of these determiners is discussed in turn.

10.3.1. Definite determiner *sh*

Sh is added to the citation form rather than to the stem: e.g., *ashée-sh* < *ashí* + *sh*; *bachée-sh* < *bacheé* + *sh* (see §2.5.12 for a discussion of the citation form). The plural morpheme does not occur with the definite determiner. Thus, when the definite determiner is suffixed to a nominal, the singular-plural opposition is neutralized: *bachée-sh* may be translated either 'the man' or 'the men', depending upon context.

When a speaker uses a referring expression marked with *sh*, he or she assumes that the referent is uniquely identifiable by the addressee, usually by reason of previous introduction into the discourse. As noted above, when used to refer to a previously introduced entity, the definite determiner often cooccurs with the proximal demonstrative: *hinne bachée-sh* 'this man'. Demonstrative phrases may also occur without a determiner, as in (51):

- (51) *éehk ak-balee-haaw-ée*
 those REL-1B.PL-finished-CAUS
 'those ones who destroyed us' (Isahkáa 2)

There are several contexts where the determiner is regularly omitted, even though the referent is uniquely identifiable by both speaker and addressee:

- in a genitive construction, where the referent is possessed, as in (52):

- (52) *hinne káalee-sh isbaapfte*
 this old.woman-DET 3POS.grandchild
 'this old woman's grandchild' (Isahkáa 3)

- when the referent is part of the "permanent file" of human or culturally shared knowledge, e.g., the sun, the moon, the stars, the earth, the Crow tribe, etc:

- (53) *áxxaashe it asii-ssaa-k*
 sun yet emerge-NEG-DECL
 'the sun hasn't come up yet'

- when referring to generic entities:

- (54) *bishké bahú-i-lu-k*
 dog bark-IIAB-PL-DECL
 'dogs bark'

10.3.2. Indefinite specific determiner *m*

The indefinite specific determiner is used when the speaker introduces a new, uniquely identifiable referent into the discourse, as in (55) and (56).

- (55) *dakáak-kaata-m húu-laa hii-k*
 bird-DIMIN-DET come-SS reach-DECL
 'a bird came, it reached him' (Isahkáa 8)

When the bird is next mentioned in the text from which (55) is taken, it is referred to with the definite determiner: *dakáakkaatee-sh* (Isahkáa 10).

- (56) [*bachéé-m iaxpáaliia baapúxte koó-m*] [*baapúxte-taali-m*]
 man-DET his.medicine otter PRO-DET otter-real-DET
aasúua ashkawúua-n dúushii-k hinne baapúxtee-sh ...
 his.house inside-LOC put.down-DECL this otter-DET

'a man whose medicine was the otter set a live otter down inside his lodge; this otter . . .' (Uuwat 19)

In (56) both the man and the otter are introduced with the indefinite specific determiner *m* (respectively, *bacheém iaxpáaliia baapúxte koó-m* and *baapúxtataali-m*). In the sentence that follows (56) in the text, the otter is referred to as *hinne baapúxtee-sh*, with both a demonstrative and the definite determiner.

The indefinite specific determiner may cooccur with the plural suffix, as in (57):

- (57) *baakáat-uu-m ammaachimmúua biléel-uu-k*
 child-PL-DET school enter-PL-DECL
 'some children entered the school'

The determiner *m* may also cooccur with a demonstrative, as in (58) and (59):

- (58) *hinne iichiil-itchi-kaashi-m iiwaa-aw-iaschim-mia-waa-k*
 this horse-good-AUG-DET STEM-1A-sell-want.to-1A-DECL
 'I want to sell this good horse' (Sees 4)
- (59) *hinne bacheé-m dii-ikaa-wia-k*
 this man-DET 2B-see-want.to-DECL
 'this man wants to see you' (Sees 4)

In examples like (58) and (59) there is an apparent conflict between the givenness and immediacy conveyed by the deictic and the indefiniteness of the determiner. In examples like these, the referent is being pointed to and introduced into the discourse as a member of a class, without emphasizing the individual identity of that token. The deictic further emphasizes that the referent is immediately available to both speaker and addressee.

10.3.3. Indefinite nonspecific determiner (*ee*)*m*

The indefinite nonspecific determiner (*ee*)*m*, like the definite determiner, is added to the citation form of the stem; hence the form (*ee*)*m* should be viewed as a cover symbol for other realizations of citation form plus *m* (see §2.5.12). This determiner is used when the existence or reality of the entity under discussion is doubtful or not yet realized. (*Ee*)*m* is always under the scope of irrealis modality; that is, it cooccurs with imperatives, interrogatives, modal verbs, etc.

Examples (60)–(62) illustrate the use of the indefinite nonspecific determiner:

- (60) *axée baláxxiikaashe dúupee-m alíutkaashe áappaa*
 father bow two-DET arrow along.with
día-(a)-wa-ku-hee-?
 make-CONT-1B-give-AFFIRM-INTERR
 'father, will you please make me two bows as well as [some] arrows?'
 (Bitáa 5)
- (61) *ihée-m baliat-bia-waa-t baaliú-i-k*
 other-DET 1A.think-try.to-1A-TEMP hard-HAB-DECL
 'whenever I try to think about another [dog], it's hard' (Sees 10)
- (62) *cheéte ah-kaáshee-m Apsáalooke al-iishshii-o díi-ak*
 wolves many-AUG-DET Crow REL-camp-PL reach-SS
al-ikaa-taal-uua-n isaashk-úua duushi-o-mmaachi-k haa-(a)k
 REL-see-truly-PL-LOC their.horse-PL eat-PL-would-DECL say-SS
 'he said that a lot of wolves would reach the Crow camp and eat their
 horses before their very eyes' (AB 19)

10.3.4. Indefinite nonspecific or conditional determiner *dak*

Dak is another indefinite nonspecific determiner; it is homophonous with the conditional and temporal conjunction *dak*.⁶ There is no apparent contrast in meaning between (*ee*)*m* and *dak*. Examples are seen in (63) and (64):

- (63) *áhpee ashé hii-ák dáakbachee kuss "shikáak-dak*
 evening home reach-SS his.son GOAL boy-DET
hileelá-?" he-m
 be.here-INTERR say-DS

⁶ It should be noted that the *dak* that functions as a determiner or as a temporal or conditional marker differs from the coordinate conjunction *dak* 'and' in its effect on word accent: coordinate *dak* never attracts the word accent, while conditional-temporal *dak* may bear the accent. This difference is illustrated in (i) and (ii):

- (i) *bachee-lák baa-aash-dée-k*
 man-DET INDEF-hunt-go-DECL
 'a man went hunting'
- (ii) *bacheé-lak bia-lak*
 men-and women-and
 'men and women'

'that evening he reached the lodge and said to his son, "is there a boy here?"' (Bitáa 5)

- (64) *ééhk bal-héeele-n iisashpit-dak baappeé-k*
 that wood-among-LOC rabbit-DET 1A.kill-DECL

b-aliat-bee-m isáa-kaashi-k
 1A-think-1A.!-DS large-AUG-DECL

'there in the woods I thought I killed a rabbit, but to my surprise, it was something very large' (Isahkáa 13)

Dak occurs relatively rarely as a determiner. It is best treated as a generic irrealis marker that functions both as a determiner and as a complementizer.

10.3.5. Habitual or totalizer determiner *t*

The element *t* is used as a determiner with two distinct but related senses. First, determiner *t* on a noun phrase may cooccur with the suffix *i* 'habitual' on the predicate as a marker of habitual aspect, as seen in (65)–(67).

- (65) *baaxuawishée-t ikaa-t hinne iitwaalichituu-sh*
 animal-DET see-TEMP this cooking.pot-DET
kuss-chóowitchee-t dáachilee-lit-ak awúua-ko-laa-(a)k
 goal-point-TEMP draw.toward-APPROX-SS inside-GOAL-go-SS
óos-uu-t duushi-i-k
 cooked-PL-TEMP eat-HAB-DECL

'when she sees an animal she points this cooking pot towards it and attracts the animal; it goes inside [the pot], and when it is cooked, she eats it' (Bitáa 11)

- (66) *baapí-t hinne bachée-sh baa-aash-dée-t shikáakee-sh*
 day-DET this man-DET INDEF-hunt-go-TEMP boy-DET

ashee-n-naachi-i-k
 home-LOC-remain-HAB-DECL

'during the day, when this man went hunting, the boy would stay at home' (Bitáa 3)

- (67) *úuxkaashe baa-luus-úu-t hawátee-t baa-lassee-i-k*
 antelope INDEF-eat-PL-TEMP one-DET INDEF-watch-HAB-DECL

'when antelope eat, one of them keeps watch' (Animals 14)

In these examples, *t* can also be seen acting as a mark of subordination, which, when used in combination with the habitual marker *i* on the

main-clause predicate, may be glossed 'when' or 'whenever'. In other words *t*, like *dak*, is a form with dual category membership—as a subordinator on clauses and as a determiner on noun phrases. Typically noun phrases marked with determiner *t* are within a *t*-marked subordinate clause, as in (65) and (66).

It should be noted, however, that not all noun phrases within the subordinate clause are marked with *t*, and in (67) it is a noun phrase within the matrix clause (*hawáteet*) that is marked with *t*.

There is a second context in which *t* serves as a determiner. With quantifiers *t* is a marker of totality: it signals that the set to which the noun phrase refers is exhaustive—i.e., all possible members are included.⁷ Examples are seen in (68) and (69):

- (68) *Chiilapxiili-sh ashkápe shoopá-t imm-ee*
 Grey.Bull-DET war.deeds four-DET completed-CAUS
dámnia-k
 three.times-DECL
 'Grey Bull completed the four chiefly war deeds three times each' (AB 56)
- (69) *éehk huchalahúua shoopá-t kuss-chisshii-wa-hche-k*
 those directions four-DET GOAL-go.back-1A-CAUS-DECL
awé shiishiahe shoopá-t kúh koolá-k
 season different four-DET also be.there-DECL
 'I made them go back to those four directions; the four different seasons are there as well' (Isshii 22)

Example (68) conveys the sense that there were four war deeds, no more, no less, that a Crow had to perform in order to be recognized as a chief, while in (69) *t* indicates that four is the sum total of both seasons and directions.

As a determiner, *t* marks the totality of a class, while as a subordinator in connection with habitual *i*, *t* marks an event or situation as total or exhaustive, in the sense that whenever a particular situation holds true or a particular event takes place, a certain consequence follows. In both contexts *t* conveys the sense 'exhaustive'.

⁷ Lowie describes the meaning of *t* as follows: "This suffix seems to be a collective indicator of a class as such. With numerals it indicates the total number of a class" (1960b:391).

10.3.6. Determiners in elevated discourse

There is an elevated genre in Crow, employed primarily in traditional narratives, where *dak* replaces both *m* and *(ee)m*, thus neutralizing the opposition between indefinite specific and nonspecific determiners. In this genre, *dak* also replaces *m* as the different-subject marker. (See §16.4 for further discussion of the elevated genre.) Examples of the use of *dak* as a determiner in the elevated genre are given in (70)–(72):

- (70) [*iischi-lák*] *dúushilu-ak áakee-n dúusaa-(a)k*
 rabbit-DET skin-SS top-LOC lay.down-SS
 'he skinned a rabbit and laid it down on top' (Issii 3)
- (71) [*bishka-lák puux-aach-káat-dak*] *awaasúua*
 dog-DET spotted-APPROX-DIMIN-DET house
am-miléel-aat-uua koon [bale-al-awáach-xachii-o-lak] áakee-n
 REL-enter-APPROX-PL LOC DEPOS-REL-sit-move-PL-DET top-LOC
awáat-ak bah-ák ilúu-k
 sit-SS bark-SS continue-DECL
 'a spotted dog was sitting at the entrance of the house on a rocking chair;
 he kept barking' (Sees 14)
- (72) *dúxii-laa-u-lak xaxúa dappii-o-lak [iisáakshi-kaat-dak]*
 war.party-go-PL-DS everyone kill-PL-DS young.man-DIMIN-DET
ittách ilí-k
 alone survive-DECL
 'they went on a war party, they [the enemy] killed everyone, only one
 young man survived' (Baapaalissúua 1)

Example (72) contains tokens of *dak* used both as a different-subject marker and as a determiner in the elevated genre.

10.4. Possessive (genitive) constructions

Possessive or genitive constructions in Crow have the structure NP N', with the possessor NP preceding the possessum. The person and number of the possessor are marked on the head of the phrase, the possessed nominal, by prefixes for person and a suffix for plural number.

10.4.1. Inalienable and alienable possession

There is a formal opposition in Crow between inalienable and alienable possession. The distinction lies in the shape of the possessor prefixes on

the possessed nominal head. Alienability is a lexical category in Crow, since there is not a perfect correlation between the semantics of a noun and its membership in the alienable or inalienable class. Inalienable nouns are a closed class that includes kin terms, body parts, some items of clothing, and a few culturally salient possessed nouns.⁸ The morphology of the alienable and inalienable possessive prefixes is treated in §3.2.

If the semantics allow, it is possible for both alienable and inalienable prefixes to occur with the same noun stem. Thus, *báale* 'my arm (part of my body)', is opposed to *bas-áale* 'my arm (the arm I have in my possession, e.g., the forequarter of a deer or elk)'.

When an inalienable body part noun occurs without a possessor noun phrase, *bale* 'someone's' (depossessivizer) is prefixed, as in (73) and (74):

(73) *óotchia-m baa-waa-shial-ak bale-áapchi-m b-iikukkú-k*
 night-DET STEM-1A-dream-SS DEPOS-voice-DET 1A-hear-DECL
 'one night I was dreaming, I heard a voice' (Baapiiháake 1)

(74) *hinne bale-isshiia-sh alaxchiiaahu-sh ko kuk-úu-m*
 this DEPOS-hair-DET Plenty.Coups-DET PRO give.back-PL-DS
 'they gave this hair back to Plenty Coups' (AB 18)

It can be said, then, that nouns of the inalienable class are obligatorily bound stems, since they occur either with a possessive prefix or with a depossessivizing prefix. Kin terms do not occur with the depossessivizer.

10.4.2. Syntax of possessive noun phrases

Possessed nominals may occur either with or without an overt lexical possessor, as in (75) (inalienable) and (76) (alienable):

- (75) a. *Charlie-sh Ø-iilápxe*
 C.-DET 3POS-father
 'Charlie's father'
- b. *Ø-iilápxe*
 'his father'

⁸ These include *aasíu* 'his/her house', *isaá* 'his arrow', *isaashká* 'his/her horse', *isaashkakaáshi* 'his/her dog', *ishuú* 'his/her song', and *iláaxaxxee* 'his/her shadow'.

- (76) a. *Apsáalooke is-bacheeitt-uua*
 Crows 3POS-chief-PL
 'the chief of the Crows'
- b. *is-bacheeitt-uua*
 'their chief'

I treat the possessives as syntactically parallel to the pronominal prefixes in verbs: the first and second person possessive prefixes are syntactic noun phrases, while the third person prefix has optional syntax (see §9.4). That is, in the absence of a lexical possessor noun phrase, the third person prefix has the syntax of a noun phrase; otherwise, it is an agreement marker coindexing the person of the possessor.

It is possible for inalienable possessive prefixes to cooccur with bound emphatic-contrastive pronouns, as in table 10.2. I treat the emphatic-contrastive pronominals in such expressions as noun phrases in apposition to the possessor noun phrases.

TABLE 10.2. EMPHATIC-CONTRASTIVE PRONOMINALS COMBINED WITH INALIENABLE PREFIXES

1SG	<i>bii-w-achuuké</i> 'my younger brother'
2SG	<i>dii-l-ichúuke</i> 'your younger brother'
3SG	<i>ko Ø-ichuuké</i> 'his/her younger brother'
1PL	<i>biim-m-achuuk-úua</i> 'our younger brother(s)'
2PL	<i>diin-n-ichúuk-uua</i> 'your (pl.) younger brother(s)'
3PL	<i>ko Ø-ichuuk-úua</i> 'their younger brother(s)'

There are also textual examples of bound pronouns occurring as appositives to pronominal arguments of verbs, exactly parallel to the possessive paradigm illustrated in table 10.2, as in (77):

- (77) *Emily Pretty Raven huua biakaat-kaata-m*
 E. P. R. they.say girl-DIMIN-DET
dii-lii-ikuxx-aachi-k
 2PRO-2B-like-APPROX-DECL
 'Emily is a little girl pretty much like you' (Emilysh 1)

Although *dii* is a bound form here, it is best viewed as an "independent" pronoun in apposition to *lii*, an argument of the two-place stative verb *ikuxxa*.

Examples (78)–(80) show genitive noun phrases with alienably possessed nouns:

- (78) [[*Iishdúuptassee*] *is-bacheeitt-uua*] *kon shii-ák*
 Two.Faces 3POS-chief-PL PRO say-SS
 'the chief of the Two Faces said' (Isahkaa 25)
- (79) [[*is-uhp-atté*] *aák awé dúukaax-ak áash-dia-k*
 3POS-point-sharp with earth scratch-SS river-make-DECL
 'she scratched the earth with her pointed stick and made rivers'
 (Isáahkawuattee 14)
- (80) [[*bas*]-*baatcháat-uua*] *bassáa-n-nee-k*
 1POS-outstanding-PL first-LOC-go-DECL
 'our most outstanding one [leader] goes first' (Harold II 5)

Examples (81)–(83) show possessive constructions with inalienably possessed nouns:

- (81) [[*ba*]-*laakbachee-káate*] *kak-aw-ákaa-wia-waa-k*
 1POS-son-DIMIN again-1A-see-want.to-1A-DECL
 'I want to see my son again' (Uuwat 4)
- (82) [[*Uuwatisaa-sh*] *Ø-iilápx-aachee-sh*] *is-baaaxúassee*
 Big.Metal-DET 3POS-father-APPROX-DET 3POS-clothes
ilúxeexaw-ak kaá-u-m
 torn.up-SS remain-PL-DS
 'Big Metal's stepfather's clothes were lying there all torn up' (Uuwat 17)
- (83) *éehk* [[*d*]-*isáhkaal-uua*] *baalappiiá-m-nak*
 that 2POS-grandmother-PL pudding-DET-and
baaxawuatámmishee-m-nak díá-lak hilaá
 fry.bread-DET-and do-COND right.away
b-iichiweé-w-immaachi-k
 1A-tell.stories-1A-will-DECL
 'if that grandmother of yours makes some pudding and fry bread, I'll tell stories right away' (Bachee 2)

The structure of possessive NPs—viz., ${}_{NP}[NP N']$, as in phrase structure rule (1b.iii)—allows for recursion, and (84)–(85) are examples of nested possessor noun phrases:

- (84) *úuxbishke chíis-uua iía kúh iilia-i-lu-k*
 white.tailed.deer tail-PL hair also use-HAB-PL-DECL
 'they would also use the hair from the tail of the white-tail deer'
 (Baapaalissúua 39)

In (84) the structure of the possessive noun phrase is:

[_{NP}[_{NP}úuxbshke] [_Nchiisuu]] [_Nia]

- (85) *ko awaasúu-ala-kuluua áaxxa-winnaxche bilia Jesus*
 that house-REL-piled.up around-wall gate J.

kala-koosáhta huu-lák
 now-close.to come-COND

'when Jesus came close to the gate of the town's wall' (Lk 7:12)

The structure of the genitive noun phrase in (85) is:

[_{NP}[_{NP}awaasúualakuluua] [_Náaxxaawinnaxche]] [_Nbilia]

Genitive (possessive) constructions are the source of a large number of noun-noun compounds in Crow, as illustrated in (86):

- (86) *áachi-wili* 'mother's milk' (*áachi* 'breast' + *bili* 'water')
áal-isshi 'sleeve' (*áli* 'arm' + *isshi* 'container')
úux-daaka 'fawn' (*úuxa* 'deer' + *dáaka* 'child')
iichiil-aasuu 'barn' (*iichiili* 'horse' + *aasúu* 'its house')
dakáak-is-bala 'diamond willow' (*dakáaka* 'bird' + *is* 3POS + *balá*
 'wood')

(In *dakáakisbala* the alienable possessive prefix *is* is part of the compound.)

10.5. Nominalizations

There are several different types of nominalization in Crow. Nominalizations are constructions where more or less reduced clauses fill a noun phrase argument role within a matrix clause. The nominalizations discussed in this section differ from relative clauses in that they lack a head nominal.

10.5.1. Action nominalizations

The term "action nominalization" refers to constructions in which clauses are used as nominals in the sense that they name an event or activity; these constructions often correspond to gerunds or participial constructions in Indo-European languages. An example is seen in (87):

- (87) [*baá-u*] *héelap-ko baa-wasshiht-a-waa-lichi-k*
 1A.PL.go-PL middle-area INDEF-1A.think-CONT-1A-continue-DECL
 'during our going [while we were going] I kept thinking things over'
 (Harold II 17)

In (87) the nominalized clause *baáu* 'we were going, our going' is the object of the postposition *héelapko* 'while'. The fact that *baáu* occurs in the citation form provides evidence that it is nominalized. In (88) and (94) below, the nominalizations occur with both demonstratives and determiners, further evidence that the clauses are nominalized.

Action nominalizations may fill several different grammatical roles within the clause. First, they may appear as subjects of active verbs, as in (88):

- (88) [*hinne kuss-bassée-sh*] *Dakkoótee dúhpapee-a-k*
 this GOAL-run-DET Sioux frightened-CAUS-DECL
 'this "running-to" of his frightened the Sioux' (AB 60)

In (88) the action nominalization *hinne kussbasséesh* 'his running to' is the subject of *dúhpapee* 'frighten'.

Action nominalizations may be subjects of stative verbs, as in (89)–(91):

- (89) [*iskoochiia dútchi-taale*] *kúh baatcháachi-k*
 his.enemy grab-truly PRO outstanding-DECL
 'his grabbing his enemy was outstanding' (i.e., 'he was outstanding at hand-to-hand combat') (AB 59)
- (90) [*ammilasiia alápasshi-ss-da-lee*] *shuhpáa-immaachi-k*
 east direction-GOAL-2A-go four.times-will-DECL
 'your going toward the east will be four times' (i.e., 'you will go toward the east four times') (AB 59)
- (91) *koót-d-aa-lak hilám-nak [hiláwe] satchi-immaachi-k*
 like.that-2A-CAUS-COND sleep-COND sleep thick-will.be-DECL
 'if you do that, when he goes to sleep, his sleeping will be thick' (i.e., '... he will sleep soundly') (Issii 14)

Action nominalizations may occur as direct objects, as in (92) and (93):

- (92) *Akbaatatdia [hinne baa-wili-hpi-wa-hche] ak-bii-lía-hche*
 God this INDEF-water-enter-1A-CAUS REL-1B-do-CAUS

kon bii-chiwaa-(á)k

PRO 1B-tell-SS

'God, who had me do this baptizing, told me' (Jn 1:33)

- (93) *Peelatchiwaaxpáa-sh bachee-waatcháat-ak liiwahkoota-htaa*
 Medicine.Crow-DET man-outstanding-SS like.that-although

[*baa-wilikkáa-liche*] *isitche-k*

INDEF-tease-APPROX like-DECL

'Medicine Crow was a great man, even though he was like that, he liked teasing people' (AB 60)

Finally, action nominalizations occur as objects of postpositions, as in (87) above and in (94)–(96):

- (94) [*hinne Peter illiia-sh*] *héelap-ko*
 this P. speak-DET middle-area

'while Peter was speaking' (Lk 9:34)

- (95) [*Apsáalooke iichiile dútt-uua*] *kukaá kal-ee-kaás-uu-k*
 Crows horses get-PL SOURCE PREF-own-AUG-PL-DECL
 'from [the time that] the Crows got horses, they have owned something really great' (Animals 5)

- (96) [*dáakua*] *piish-chiisáa ammaal-ikee axuawaalaáchi-m*
 go.home after-PUNCT.PUNCT REL-see draw.picture-DS
 'after he returned home he drew pictures of whatever he had seen' (AB 60)

10.5.2. Objects of verbs of saying and thinking

10.5.2.1. Objects of *he* 'say' and *hiliachi* 'think'

Direct discourse complements of the verbs *he* 'say' and *hiliachi* 'think' can be viewed as syntactic objects. These complements differ, however, from other nominalized clauses in that they have the form of independent sentences with final speech act markers, as illustrated in (97)–(99):

- (97) *káalee-sh* ["*dáawi-kawe-h*"] *he-m*
 old.woman-DET go.on-POL-IMPER say-DS
 'the old woman said, "go on"' (Isahkaa 14)

- (98) ["*hinné kúk sáapa-?*"] *he-m*
 this PRO what-INTERR say-DS
 "'as for this, what is it?' he said' (Bitáa 13)

- (99) [*b-apásšhe-ak b-aliishi-k-bah saapii*
 1B-tired-SS 1B-hungry-DECL-obviously why
bii-láa-likkaa-?] *haa-(a)k*
 1B-2A-laugh.at-INTERR say-SS
 ‘‘I am obviously tired and hungry; why are you laughing at me?’’ he
 said’ (Bitaa 1)

In (97) the quotation is an imperative, marked with the sentence-final imperative clitic *h*, while in (98) the quotation is an interrogative. In (99) the complement consists of two sentences, a declarative followed by an interrogative.

Examples of direct discourse complements with *hiliachi* ‘think’ are seen in (100) and (101):

- (100) [*Aashúchoosalaho kuhtaa-liché koon dappéé-k*] *hiliat-uu-k*
 Dry.Head LOC-APPROX LOC kill-DECL think-PL-DECL
 ‘they thought that he killed it around Dryhead’ (Uuwat 4)
- (101) [*dii-wachee-waatcháat-uu-k*] *b-aliachee-sh*⁹
 2B-man-outstanding-PL-DECL 1A-think-DECL
 ‘I thought that you were outstanding men’ (AB 80)

There are other examples where the object complement of *hiliachi* requires that it be interpreted as indirect rather than direct discourse, as in (102) and (103).

- (102) *shikáakee-sh chilli-htaa kal-ii-iikusché kuttáchi-k*
 boy-DET afraid-although PREF-INSTR-get.out PRO.alone-DECL
hiliat-ak
 think-SS
 ‘although the boy, was afraid, he, thought that this was the only way for
 him, to get out’ (Uuwat 8)

If (102) were a direct discourse complement, we would expect a first person form, *kaliwiikusché kuttáchik* ‘this is the only way for *me* to get out’.

- (103) *baa-lée-lak kalatchi bakkú-ssaa-w-ihmaachi-k hiliachi-ih*
 1A-go-COND afraid again 1A.return-NEG-1A-will-DECL think-OPT
 ‘if I go, he might think that I’m not coming back again’ (Sees 24)

⁹ This is an example of the definite determiner functioning as a declarative sentence-final marker (cf. §16.2.1.5).

If (103) were a direct discourse complement, we would expect the form to be *kuússaaihmaachik hiliachi* 'he might think "he's not coming back again"'.¹⁰

In still other examples, the complements of *hiliachi* have the same form as complements of verbs of perception and knowledge, with determiners *m* and *dak* acting as complementizers:

(104) [xapáalii-m kuu-lák] hiliat-dee-m dia-ssaa-k
 medicine-DET give-DET think-!-DS do-NEG-DECL
 'he thought that [Sees the Living Bull] would give him a medicine, but to his surprise he didn't do it' (AB 67)

(105) [Jeffrey-sh isahkáate dii-m] d-iliachi-?
 J.-DET his.older.sister hit-DET 2A-think-INTERR
 'do you think that Jeffrey hit his older sister?' (Emilysh 10)

Examples (102)–(105) suggest that *hiliachi* is in the process of evolving from a verb that requires a direct discourse complement to one that takes an indirect discourse complement.

10.5.2.2. Quotation frames

There are a number of different strategies for framing quotations in Crow. The first type follows standard SOV order with the object complement preceded by the subject and followed by the verb *he* or *hiliachi*, as discussed in the previous section:

(106) hawáta-m "bii-wacheé-x"¹⁰ shóotdak baa-laaxtá-k" he-k
 one-DET 1B-man-or whatever 1A-not.know-DECL say-DECL
 'one [of them] said, "I don't know if I am a man or what"' (Bachee 10)

The quotation may also be preceded by a goal postpositional phrase whose object refers to the addressee, as in (107):

(107) isahké kuss "d-iíwi-ssaa-h kam-ma-kkú-k"
 his.mother GOAL 2A-cry-NEG-IMPER now-1A-return-DECL
 he-k
 say-DECL
 'he said to his mother, "don't cry; I've come back"' (Uuwat 16)

In this construction *kuss*, ordinarily an incorporated form, appears instead of the expected unincorporated form *kusseé*.

¹⁰ In this word, *x* is a phonologically reduced form of the coordinate conjunction *xxo*.

Quotation frames may also be introduced by the discourse-cataphoric verb *hiliashée* 'say this', as in (108):

- (108) *bilaxpáake ahóo-m dii-líi-ák hiliashée-o-hmaachi-k*
 people many-DET 2B-reach-SS say.this-PL-will-DECL
 "al-ikuxxee-sh kala-híi-k" haa-(a)k
 REL-equal-DET now-arrive-DECL say-SS
 'many people will meet you and will say this: "the time has come" they will say' (Lk 21:8)

Another verb that serves to introduce quotations is *koolá* 'be there':

- (109) *hinne bíá-kalishtee-sh koolá-(a)k "hileén chia xawáa-u-m*
 this woman-young-DET be.there-SS these too bad-PL-DS
baa-kulushpia-lichi-wa-h" he-lak
 INDEF-fix-APPROX-EMPH-IMPER say-DS
 'this woman was there [said]: "these are too bad; fix things up" she said' (Isshii 28)

It is also possible to find examples of direct quotations without *he*, as in (110a-c), a sequence of three quotations (question, response, question), none of which are framed with *he*:

- (110) a. "shóon-aa-wa-hku-w-ii-lu? bíiluk"
 where-STEM-1A-remain-1A-shall-PL-INTERR 1PRO.PL
 'and us, where shall we stay?'
 b. "xachíi-ssaa-(aa)la-h baa-m bah-chiwakii-woo-k"
 move-NEG-PL-IMPER INDEF-DET 1A-ask.for-INCL-DECL
 'wait, we'll ask for something'
 c. "sáap-dah-chiwakii-wia-laa-?"
 what-2A-ask.for-want.to-2A-INTERR
 'what do you want to ask for?' (Isáahkawattee 13)

In examples of this sort the omission of the verb of saying is a stylistic device that adds a sense of immediacy to the narrative. It is likely that the narrator would use a change of tone or body position to indicate to his audience that there is more than one speaker.

It is also possible to embed a quotation within a quotation, as in (111) and (112):

- (111) *bachée-sh "dáa-(a)k 'b-iilápxe kan-née-k' d-aa-lak*
 man-DET go-SS 1POS-father now-go-DECL 2A-say-COND

ashtáale ashkawúua-n b-iaxuá-w-ii-k" he-k
teepee inside-LOC 1A-hide-1A-will-DECL say-DECL

'the man said, "if you go and say, 'my father has gone now', I will hide inside the teepee"' (Bitáa 7)

(In (111) the quotation *biilápxe kannéek*, followed by *daa*, the second person form of *he* 'say', is embedded within the higher quotation, which is followed by *he*.)

- (112) *dúxxii-la-lee-wia-l-uu-lak* 'hinne baapé itchi-k
war.party-2A-go-want.to-2A-PL-COND this day good-DECL
balee-waaáatchili-ihmaachi-k' d-uu-lak kooti-immaachi-k
1B.PL-fortunate-will-DECL 2A-say.PL-COND like.that-will-DECL
kalaaxtá-ssaa-h" he-k
forget-NEG-IMPER say-DECL

"when you want to go on a war party, if you say 'today is a good day; we will have good luck', that is the way it will be; don't forget", he said' (Uuwat 12)

A quotation may also be embedded as the object of a relative clause, with *he* functioning as the main verb of the relative clause, as in (113), with the relative clause in brackets:

- (113) *hinne [hawáta-m ak-"bii-wachéé-x shóotdak baa-laaxtá-k"*
this one-DET REL-1B-man-or whatever 1A-not.know-DECL
hee-sh] ittáche kaláa-ssaa-k
say-DET alone run.away-NEG-DECL

'this one who had said, "I don't know whether I am a man or what" was the only one who didn't run away' (Bachee 10)

10.5.2.3. Reportative *huuk*

There is another construction, the reportative with *huuk* 'they say', that closely resembles the direct discourse complement. *Huuk* is found in the elevated discourse genre, where it indicates that the narrator does not possess first-hand knowledge of the events he is recounting, but is simply handing on the story as it has been told to him. Examples (114) and (115) illustrate this usage of *huuk*:

- (114) *dúxxii-laa-u-lak xaxúa dappii-o-lak iisáakshi-kaat-dak*
war.party-go-PL-DS everyone kill-PL-DS young.man-DIMIN-DET
ittách ili-k huu-k
alone survive-DECL say.PL-DECL

'they went on a war party, everyone was killed, only one young man survived, they say' (Baapaalissúua 1)

- (115) *baa-m óoss-aa-(a)-kuu-h" he-k huu-k*
 INDEF-DET cooked-CAUS-CONT-give-IMPER say-DECL say.PL-DECL
 "cook something for him" he said, they say' (Isshii 5)

While it is possible in these examples to view whatever precedes *huuk* as a syntactic object complement, there are several pieces of evidence that suggest that *huuk* should rather be treated as a sentence-final evidential.

First, *huuk* alternates freely in some texts with *hcheiluk*, with no obvious difference in meaning. Since *hcheiluk* is a bound evidential marker rather than a complement-taking verb (§16.2.1.8), it is plausible to view the form with which it freely alternates as fulfilling the same discourse function. Second, even in traditional narratives there are sentences that are not marked with either *huuk* or *hcheiluk*, which suggests that these markers are optional. Finally, it is not uncommon to find sentences in texts where an extraposed noun phrase occurs to the right of *huuk*, as in (116):

- (116) *éhk-uu-k huu-k [hileen is-ak-baa-iassee-sh]*
 know-PL-DECL say.PL-DECL these 3POS-REL-INDEF-watch-DET
 'they knew it, these watchmen of his, they say' (Isshii 7)

If *hileen isakbaaiasseesh éhkuuk* 'these watchmen of his' were a syntactic object complement of *huuk*, we would not expect the subject noun phrase to be extraposed out of the embedded clause and placed at the end of the matrix clause. If, however, this is a monoclausal structure, with *huuk* functioning as a sentence-final evidential, this pattern of extraposition is more easily accounted for.

In a related construction, *huu* is used when proper names are first introduced into the discourse:

- (117) *ba-láshe Randolph huu-k*
 1POS-name R. say.PL-DECL
 'my name is Randolph'
- (118) *iilápxe Dakáak-baaxpaa-sh huua koó-m Alaxchii-ahu-sh*
 3POS.father bird-medicine-DET say.PL COP-DS coup-many-DET
it baa-ia-káata-m kon shée-k
 still INDEF-little-DIMIN-SIMULT PRO die-DECL
 'his father was Medicine Bird; he died while Plenty Coups was still young' (AB 78)

10.5.3. Subject and object complements

Nominalized clauses may occur as subject or object complements within the matrix clause. There is no final speech-act suffix, except for direct quote complements. Subsets of complementizers selected from the determiner paradigm serve to mark various types of complements: for action nominalizations, the marker is zero or *sh*, for subject complements, the marker is zero or *m*, and for object complements the marker is either *m* (realis) or *dak* (irrealis). Apart from the complementizers, there is no specific nominalizing morphology and nothing specifically nounlike about the structure of these clauses.

10.5.3.1. Clausal subjects

Clauses are often found as subjects of stative verbs such as *ítchi* 'be good', *xawii* 'be bad', *xiassaa* 'be evident, obvious', and *shía* 'be long (in temporal duration)'. In this construction the head of the nominalized clause is often marked with the final determiner *m*, here functioning as a complementizer, as in (119)–(121):

- (119) *aw-ákaa-t* [*daás-itt-uu-m*] *xiassaa-i-k*
 1A-see-TEMP heart-good-PL-COMP obvious-HAB-DECL
 'whenever I see them, it is obvious that they are happy' (Harold I 11)
- (120) [*b-ihchisshi-m*] *ítchi-k* [*apashpia-sh hileelá-m*] *ítchi-k*
 1A-rest-COMP good-DECL moose-DET be.here-COMP good-DECL
 [*baláxxii-leeta-m*] *kúh* *ítchi-k*
 gun-not.exist-COMP PRO good-DECL
 'it's good to rest; it's good that the moose is here; it's good that there are no guns' (Harold II 11)

(Example (120) consists of three independent sentences; in each *ítchi* occurs with a clausal subject.)

- (121) [*Mr. Latch iak chóose isítche-m*] *xiassaa-k*
 Mr. L. that grey like-COMP obvious-DECL
 'it is obvious that Mr. Latch likes that grey [horse]' (Sees 9)

In other examples the clausal subject lacks an overt complementizer, as in (122):

- (122) [*bilé iilaa dúuxaas-aat-uua*] *shía-i-lu-k*
 water themselves hang.on-APPROX-PL long-HAB-PL-DECL
 'they hang on to the water by themselves for a long time' (Harold IV 12)

In (122) the verb of the clausal subject appears in the citation form, an indication of nominalization.

10.5.3.2. *baatcháachi* and *iishée*

There are two stative verbs, *baatcháachi* and *iishée*, that occur in several different syntactic environments. These verbs often have the semantics of adverbial manner adjuncts: they may be glossed 'very, very much, really, to a great degree'.

The first, *baatcháachi* 'outstanding, excellent, great', is a stative verb that may take a lexical noun phrase subject, as in (123):

- (123) *d-isáashkakaashe baatcháachi-wi-k*
 2POS-dog outstanding-EXCL-DECL
 'your dog is really outstanding' (Sees 7)

Like the stative verbs discussed above, *baatcháachi* may also take a clausal subject complement, as in (124) and (125):

- (124) *Isahkáalaxpe [balee-l-áxshee-m] baatcháachi-k*
 I. 1B.PL-2A-beat-COMP really-DECL
 'Isahkáalaxpe,¹¹ you really beat us' (Isahkáa 12)
- (125) [*ak-balee-haaw-ée ditchiláat-uu-m*] *baatcháachi-k*
 REL-1B.PL-destroyed-CAUS dangerous-PL-COMP very-DECL
 'the ones who annihilated us are very dangerous' (Isahkáa 2)

In (124) and (125) *baatcháachi* is best translated as a manner adverbial, e.g., 'very' or 'really', although it has the syntax of a verb.

In other examples *baatcháachi* is a morphological suffix, similar to other adverbial derivational suffixes such as *káata* 'diminutive' and *aachi* 'approximative'.

- (126) *bíim-maatchaat-uu-k hileen íisuukaate*
 swim-very.well-PL-DECL these mice
 'these mice are great swimmers' (Animals 31)
- (127) *dít-baatchaat-uu-k*
 make.noise-very.much-PL-DECL
 'they make a lot of noise' (Animals 27)

Examples (123)–(127) show that *baatcháachi* may appear in several different morphosyntactic frames. In (123) it is a typical stative verb with a simple noun phrase subject, while in (124) and (125) it has the syntax of a stative verb with a clausal subject. Finally, in (126) and (127) *baatcháachi* occurs as a bound suffix.

¹¹ In the English translation appended to the text from which this example is drawn, the name *Isahkáalaxpe* is left untranslated; it means 'his grandmother's companion'.

iishée may also occur with a clausal subject, as in (128) and (129). Like *baatcháachi*, *iishée* has the semantics of a manner adverbial: it may be translated 'very, really, very much'.

- (128) *hinne hawát-kaatee-sh aa-lée-laa* [*aashúua baáhpa-m*
 this one-DIMIN-DET PORT-go-SS his.head rock-DET
áxxaxx-uua] *iishée-hil-uu-m*
 rub.ON-PL very.much-very-PL-DS
 'this one [snake] they took, they really rubbed his head on a rock' (Bitáa 15)
- (129) [*chilée-sh ihkammáache*] *iishée-hcheilu-k*
 her.husband-DET rejoice very.much-REPORT-DECL
 'her husband was very glad' (Lowie 1960a:130, line 46)

The clausal subject of *iishée* terminates in the citation form rather than a determiner. In other examples *iishée* occurs as a suffix:

- (130) *koon d-iiwaa-(a)-laakaa-lak daáshbahta-lee-iishee-k*
 LOC 2A-cry-CONT-2A.continue-COND upset-become-very-DECL
 'if you keep crying there, he will become very upset' (Isshii 7)
- (131) *hawass-aláhpee-iishee-hili-k*
 all.over-stab-very.much-very-DECL
 'he really stabbed him all over' (AB 7)

The above data on *baatcháachi* and *iishée* suggest a similar analysis. It is noteworthy that both can occur either as independent verbs or as bound forms. Syntactically, they are stative verbs that can take either simple noun phrases or clauses as subjects. Morphologically, they may be realized either as bound suffixes or as independent verbs.

10.5.3.3. Objects of verbs of perception and knowledge

This category includes complements of verbs like *ikaa* 'see', *iassee* 'watch', *iikukkú* 'hear', and *éhche* 'know', as well as indirect discourse complements of *chiweé* 'tell'. This construction is also used for indirect questions. These nominalized clauses are marked with final complementizers from the determiner paradigm, with *m* marking realis complements, and *dak* irrealis.¹²

Examples of verbs of perception and knowledge with realis complements are seen in (132)–(135):

¹² In the elevated genre this opposition is neutralized, with *dak* marking all complements.

- (132) *shichi-m alitchia-n iaxú-(a)k [shikáakee-sh*
 hill-DET behind-LOC hide-SS boy-DET
alúut-dee-hk-uu-m] ikaa-k
 arrow-go-CAUS-PL-COMP see-DECL
 'he hid behind a hill and saw the boys throwing arrows' (Bitaa 5)
- (133) [*Híshshishtawia kon dappéé-m ehka(a)-áhi-k*
 H. PRO kill-COMP know-PUNCT-DECL
 'he realized that it was Híshshishtawia who had killed her' (Bitaa 1)
- (134) [*sapée-o-lak iláa-(a)-watt-uu-m] iikukkú-k*
 someone-PL-DET talk-CONT-continue-PL-COMP hear-DECL
 'he heard some people talking' (Uuwat 5)
- (135) *Jeffrey-sh [iilápxe iichiin-maachimmi-hche-m] iassee-k*
 J.-DET his.father horse-learn-CAUS-COMP watch-DECL
 'Jeffrey watched his father train horses' (Emilysh 3)

Examples with irrealis complements are seen in (136)–(138):

- (136) [*Jesus kuhtáa dée-lak] ikaa-wia-k*
 J. PATH go-COMP see-want.to-DECL
 'he wanted to see Jesus going that way' (Lk 19:4)
- (137) [*sáap-ii da-láakku-ssaa-lak] balee-alaaxtá-m*
 what-INSTR 2A-come.back-NEG-COMP 1B.PL-not.know-DS
 'we didn't know why you didn't come back' (Sees 23)
- (138) [*sapéen bilaxshée-lak] kal-é-wa-hche-woo-k*
 who win-COMP now-STEM-1A-know-INCL-DECL
 'let's find out now who the winner is' (Isahkáa 35)

Chiweé 'tell' is a ditransitive verb that is subcategorized for a goal object and an indirect discourse complement clause, as illustrated in (139) and (140):

- (139) [*baaxuawishé shóol-uu-lak] chiweé-i-k*
 animal be.where-PL-COMP tell-HAB-DECL
 'he would tell him where the animals would be' (Uuwat 18)
- (140) [*iixaxúa bii-chichiil-uu-m] bii-chiweé-k*
 everyone 1B-look.for-PL-COMP 1B-tell-DECL
 'he told me that everyone had been looking for me' (Harold III 17)

As is the case with other verbs of perception and knowledge, the choice of complementizer is determined by the realis-irrealis opposition.

10.6. Plural marking

Plural marking is not obligatory in Crow noun phrases; in fact, it is omitted more often than not. Ordinarily, it is the plural marker on the verb that marks a subject noun phrase as plural:

- (141) *cheéte bishka-chichée-lit-uu-k*
 wolf dog-resemble-APPROX-PL-DECL
 'wolves resemble dogs' (Animals 21)
- (142) *iichilikaashe awé am-máako ko kool-uu-k*
 elk land REL-high PRO be.there-PL-DECL
 'elk live in the high country' (Animals 13)

Lexical noun phrases are marked for plural number with the suffix *uu/o/u* only when the indefinite specific determiner *m* occurs:

- (143) *bachée-o-m baa-aash-dáa-u-k*
 man-PL-DET INDEF-hunt-go-PL-DECL
 'some men went hunting'
- (144) *bikkée háchki-t-uu-m héelee-taa b-iaxuá-(a)k*
 grass tall-DISTR.PL-PL-DET among-PATH 1A-hide-SS
iiwaam-m-ía-i-lu-k
 STEM-1A-play-HAB-PL-DECL
 'we hide among the tall grasses and play' (Harold I 7)

Noun phrases with the indefinite nonspecific determiner are not marked for plural:

- (145) *it beé-ssuua bas-báashu-o shit-ák ih-éem*
 still 1A.PL.go-NEG 1POS-feather-PL shed-SS other-DET
apáli-o-mmaachi-k
 grow-PL-will-DECL
 'before we go we shed our feathers; other ones will grow' (Harold I 19)

In (145) *ihéem* 'other' is clearly plural, yet it is not formally marked as such.

Noun phrases with the definite determiner *sh* are not marked for plural number:

- (146) *bachée-sh baa-aash-dée-k*
 man-DET INDEF-hunt-go-DECL
 'the man went hunting'

- (147) *bachée-sh baa-aash-dáa-u-k*
 man-DET INDEF-hunt-go-PL-DECL
 'the men went hunting'
- (148) *kalatchii shikáakee-sh alilás-ak*
 again boy-DET scold-SS
 'again he scolded the boys (Bitáa 15)'

A plural demonstrative such as *hileen* 'these' may occur in a definite noun phrase, as in (149):

- (149) *hileen bacheéltchee-sh kam-maashíal-uu-lasshen Awashée-lak*
 these chief-DET now-dream-PL-because Hidatsa-and
Apsáalooke-lak dúatak ammiliiwaxpe
 Crows-and move.camp west
alápasshi-ss-daa-u-k
 toward-GOAL-go-PL-DECL
 'because of the dreams of these chiefs the Hidatsas and Crows moved west' (AB 3)

When a possessor noun phrase is plural in number, the plural marking on the possessum marks the possessor as plural:

- (150) *Apsáalooke is-bacheélt-uua bassée Shiip-deeta-sh*
 Crows 3POS-chief-PL first intestines-not.exist-DET
húa kó-k
 say.PL COP-DECL
 'the first chief of the Crows was No Vitals' (AB 3)

With nouns referring to humans, *ammishe* (citation form of *ammishi*, from *ala* 'where' + *bishi* 'exist') may be suffixed to a noun to form the plural:

- (151) *Samuel-sh dáakbi(a)-ammishe xaxúa kool-úu-k*
 S.-DET daughter-PL all be.there-PL-DECL
 'all of Samuel's daughters were there'
- (152) *bachee-ammishé kala-héele is-baatcháat-uua chiaxxú-m*
 man-PL PREF-among 3POS-outstanding-PL five-DET
baa-aash-dée-hk-uu-k
 INDEF-hunt-go-CAUS-PL-DECL
 'they sent five of their outstanding men hunting' (Cleorash 3)

In noun phrases conjoined by the coordinate conjunction *dak*, plural number is marked by the occurrence of the stem form of the noun rather than the citation form:

- (153) *kalakoon kan úuxa-lak iichiilikaashi-lak ko dappeé-m*
 then then deer-and elk-and PRO kill-DS
is-dúk-uua ahú-k
 3POS-meat-PL much-DECL

'then he killed deer and elk; there was a lot of meat' (Isahkáa 15)

- (154) *áash-kaata-lak bilichká-lak ahú-k*
 rivers-DIMIN-and lakes-and many-DECL
 'there are many streams and lakes' (Harold I 7)

Noun phrases modified by quantifiers are ordinarily not formally marked for plural, as in (155) and (156):

- (155) *balé dúupahpi-m ii-wiláa-aapt-uu-k*
 wood eight-DET INSTR-fire-light-PL-DECL
 'they made a fire with eight pieces of wood' (Hawáte aá 15)

- (156) *Awé Kúa-l-awaachi-sh bacheéitche shuhpáapilaka-m*
 land middle-LOC-sit-DET chief forty-DET
áx-baahili-i-k
 be.with-work-HAB-DECL

'Sits in the Middle of the Land worked with forty chiefs' (AB 39)

However, when a quantifier occurs in an indefinite specific noun phrase, *ii* may be prefixed to the quantifier and plural number is formally marked, as in (157) and (158):

- (157) *baapée-sh baapúxte illáp-uu-m iiwaanni-o-m aw-ákaa-k*
 day-DET beaver two-PL-DET play-PL-COMP 1A-see-DECL
 'today I saw two otters playing' (Harold III 5)

- (158) *hileen hawáttaa bacheé ii-sáaw-aat-uu-m*
 once.upon.a.time man PREF-some-APPROX-PL-DET
dúxxii-laa-u-m
 war.party-go-PL-DS

'once upon a time some men went on a war party' (Bachee 4)

11 Relative clauses

11.1. Introduction

The discussion of relative clauses in this chapter proceeds from description to analysis. In §§11.2–11.4 I treat relative clause heads, relativizers, and determiners in relative clauses. In §11.5 I discuss the various grammatical roles within the relative clause that are accessible to relativization, and §11.6 treats linkage of relative clauses.

Section 11.7 discusses several theoretical issues: are relative clauses internally or externally headed? What is the syntactic status of the relativizers? Why is the head noun marked with the indefinite specific determiner? And finally, are Crow relative clauses actually relative clauses, or are they clauses and appositive noun phrases?

11.2. Relative clause heads

Based on considerations of form, there are two basic types of relative clauses in Crow: lexically headed and nonlexically headed.

11.2.1. Relative clauses with lexical heads

Examples (1)–(3) are examples of lexically headed relative clauses. In (1) *bacheém* ‘man’ is the head noun, marked as such by the indefinite specific determiner *m*. *Ak* is a relativizer that simultaneously conveys that the head nominal is the subject of the lower clause, and that the subject is animate, and in most cases, an agent. The demonstrative *hinne* ‘this’ and the final definite determiner *sh* are typical noun phrase constituents. The noun phrase *hinne bacheém akóoppiash* ‘this man who was smoking’ functions in the matrix clause as the possessor of *isbilée* ‘his fire’:

- (1) [*hinne bacheé-m ak-óoppiia-sh*] *is-bilée awá-ss-dee-m*
 this man-DET REL-smoke-DET 3POS-fire earth-GOAL-go-DS
 'this man who was smoking's fire was burning down' (Uuwat 19)

In (2) the head noun is *awé* 'land', and the relativizer *ala* here marks the head noun as a locative expression. In this example neither the head noun nor the noun phrase as a whole is marked by a determiner; the citation form of the verb *duúo* 'come (pl.)' is the sign of nominalization:

- (2) *hileen bilaxpáak-shiishiaahe awé ala-kukaá-duúo*
 these people-different land REL-SOURCE-come.PL
 'the lands from which these different people came' (Acts 2:9)

In (3) *hawátam* 'one', marked with the determiner *m*, is the head noun, and there is no relativizer. The relative clause is object-headed, and functions in the matrix clause as one of the noun phrases in an equational clause:

- (3) [*hawáta-m Akbaatatdía*
 one-DET God
balee-héela-ss-huu-hche-wia-sh] *dii-k*
 1B.PL-midst-GOAL-come-CAUS-intend.to-DET 2B-DECL
 'you are the one God intended to send into our midst' (Lk 9:20)

11.2.2. Relative clauses without lexical heads

Examples of relative clauses without lexical heads are seen in (4) and (5). In example (4), *ak*, the relativizer, is the subject of the relative clause. Note also that *ak* is prefixed to *kukaa* 'from', thus separating this postposition from its object, *Baáhpúuo* 'Pryor':

- (4) [*Baáhpúuo ak-kukaa-húua-sh*]
 Pryor REL-SOURCE-come-DET
 'the one who came from Pryor'

In (5) the relativizer *ala*, here glossed 'the place where', is a locative expression (syntactically equivalent to a postpositional phrase or an independent adverb) within the relative clause, and the noun phrase containing the relative clause is the subject of the matrix clause:

- (5) [*hinne óotchia al-iishii-wi-o*] *awateé-ssaa-k*
 this night REL-camp-will-PL far-NEG-DECL
 'the place where they will camp this evening is not far' (Uuwat 15)

11.3. Relativizers

There are two basic relativizers, *ak* and *ala*, and several composite forms based on *ala* plus *baa* 'indefinite pronoun': *am-maa*, *baa-ala*, and *am-maa-ala*. There are other examples where there is no relativizer, discussed in §11.5 and §11.7.2. We will consider each of these in turn.

11.3.1. *ak*

As mentioned above, *ak* conveys two pieces of information: it indicates that the subject of the relative clause is relativized; and it marks the subject as animate, and in the vast majority of cases, agentive. *Ak* may occur with or without a lexical head, as illustrated in (6) (where the head is *bacheé-o-m* 'men') and (7) (headless).

- (6) *hileen* [*bacheé-o-m* *Jesus ak-áxp-ak* *ilíia-sh*] *kan*
 these man-PL-DET J. REL-be.with-SS speak-DET then
daá-u-lak
 go-PL-COND
 'when these men who were speaking with Jesus were leaving' (Lk 9:33)
- (7) *hileen* [*ak-issíi-ss-aa-lee-sh*] *awée-taa* *xémm-ak*
 these REL-top-GOAL-PORT-go-DET ground-PATH lie-SS
dúupesaa-(a)-ahk-uu-k
 pant-CONT-remain-PL-DECL
 'these ones who had brought him to the top were lying on the ground panting' (Uuwat 9)

There are a number of examples in the data where *ak* cooccurs with a stative verb, and thus cannot be referring to an agent, as in (8) and (9):

- (8) [*kal-ak-baatcháach-kaashe*] *duu-ák* *dii-kuxshi-wi-o-k*
 PREF-REL-powerful-AUG come.PL-SS 2B-help-will-PL-DECL
 'very powerful ones will come and help you' (Uuwat 6)
- (9) *isahké* [*ak-xawii-kaashe*] *koó-k*
 his.mother REL-bad-AUG COP-DECL
 'his mother is the one who is really bad' (Issíii 11)

In both (8) and (9) *ak* is the subject of a stative verb in the relative clause, and in both examples the subject is animate.

11.3.2. *ala*

Like *ak*, *ala* may occur with or without a lexical head. This relativizer may fill several different syntactic roles within the relative clause. First, it may indicate that a locative, temporal, or manner adverbial is the head of the relative clause, as illustrated in (10)–(12). In (10) *ala*, which is best interpreted as the head of the relative clause, since there is no lexical head, follows the subject and is prefixed to the verb of the relative clause. The relative clause functions as a noun phrase in apposition to the pronoun *ko*, the object of the postposition *kukaa* ‘from’:

- (10) *púae [balé ala-satché] ko kukaa húu-ssaa-k*
 smoke wood REL-thick PRO SOURCE come-NEG-DECL
 ‘the smoke isn’t coming from where the trees are thick [the forest]’
 (Harold II 19)

In (11) *ala* marks a temporal adverbial as head of the relative clause, which fills the subject role in the matrix clause:

- (11) [*kal-am-máakaa-u*] *hii-k*
 now-REL-1A.go.home-PL arrive-DECL
 ‘the time for us to go home has now arrived’ (Harold IV 22)

In (12) a manner adverbial is relativized upon with *ala*, and the relative clause is a noun phrase in an equational clause with *kootá* ‘be like that’:

- (12) [*bíaxaake am-ma-lásit-uua ko*] *kala-koot-úu-k*
 ducks REL-1B-happy-PL PRO PREF-like.that-PL-DECL
 ‘the way that we ducks are happy is like that [that is how we ducks enjoy ourselves]’ (Harold I 11)

There are other examples where *ala* marks the object of the relative clause, rather than an adverbial, as relativized upon, as in (13) and (14). In (13), the head *baaxuawishé* ‘animals’ is the object of the verbs *kalannáhchikitché* ‘respect’ and *kalannáhalatché* ‘believe in’, and the relative clause is one of the noun phrases in an equational construction. *Ala* follows the object and is prefixed to the inflected verbs of the compound relative clause.

- (13) [*baaxuawishé kal-an-náh-chikitché kal-an-náh-kalatché*]
 animals PREF-REL-2A-respect PREF-REL-2A-believe.in
íiliia koó-u-hcheilu-k
 teepee.poles COP-PL-REPORT-DECL
 ‘the animals that you respect and believe in are the teepee poles’ (Isshi 30)

In (14), *hinne* 'this' is the object within the relative clause, and the relative clause is the object of the matrix clause:

- (14) [*hinne an-nii-iiwish-dia-wee*] *aa-l-áaship-dak*
 this REL-2B-price-do-1A PORT-2A-go.beyond-COND
 'if you should go beyond this (amount) that I am paying you' (Lk 10:30)

In still other examples *ala* can be plausibly interpreted either as a manner adverbial or as an object, as in (15) and (16):

- (15) [*dakáak-kaata-m an-nia-hchee-sh*] *kootáa-(a)k*
 bird-DIMIN-DET REL-do-CAUS-DET do.like.that-SS
 'he did what the bird had him do' or 'he did it the way the bird had him do it' (Isahkáa 11)
- (16) [*hinne bia am-mii-lia-sh*] *al-ákaa-?*
 this woman REL-1B-do-DET 2A-see-INTERR
 'did you see what this woman did to me' or 'did you see how this woman did it to me?' (Lk 7:44)

If *ala* is treated in (15) and (16) as a manner adverbial, then these sentences would have null anaphoric objects, which is always a possibility in Crow.

11.3.3. *ammaa*

The form *ammaa* is composed of *ala* 'locative, temporal, or manner relativizer' plus *baa* 'indefinite'. It marks the object as relativized on. *Ammaa* never cooccurs with a lexical head, and consequently can be interpreted as itself the head of the relative clause (§11.7.2); it is best translated 'what' or 'the things that'. Examples are seen in (17)–(19). In (17), *ammaawiiukkó* 'my hearing' (lit., 'what I hear') and *ammaawasshihché* 'my mental powers' (lit., 'what I think') are both relative clauses headed by *ammaa*:

- (17) *b-ashté itt-ak [ammaa-w-iikukkó] itt-ak*
 IPOS-eyes good-SS REL-1A-hear good-SS
[ammaa-wasshihché-htaa] baatcháachi-k
 REL-1A.think-even outstanding-DECL
 'my eyesight and my hearing are good; even my mental powers are outstanding' (Uuwat 11)

In (18) *ammaa* is the object of the relative clause, which functions as the second object of the ditransitive verb *chiweé* 'tell':

- (18) *hileen bachée-sh [ammaa-iikukk-úua-sh] Jesus chiwaá-u-k*
 these men-DET REL-hear-PL-DET J. tell-PL-DECL
 'these men told Jesus what they had heard' (Lk 9:19)

In (19) the relative clause is the subject of the existential verb *deeta* 'not exist':

- (19) [*ammaa-ishóochi-ssaa-w-aa*]-*leeta-k*
 REL-before-GOAL-1A-CAUS-not.exist-DECL
 'I don't have anything to set before him' (lit., 'what I set before him doesn't exist') (Lk 11:6)

11.3.4. *baaala, ammaaala*

Ammaa, *baaala*, and *ammaaala* are alike in three respects: they are composed of *ala* plus *baa*; they are heads of relative clauses that lack independent lexical heads; and they mark the object as relativized upon. They differ in that *ammaa* is specific in reference, while *baaala* and *ammaaala* are nonspecific.¹

The contrast between *baaala* and *ammaa* is illustrated in the following pair of examples:

- (20) *baaala-sheé d-iikukk-aala-h*
 REL-tell 2A-listen.to-PL-IMPER
 'listen to whatever he tells you' (Lk 9:35)
- (21) *ammaa-sheé d-iikukk-aala-h*
 REL-tell 2A-listen.to-PL-IMPER
 'listen to what he told you'

Baaala can be viewed as composed of *baa* 'indefinite object' and *ala*, here functioning as an indicator that the object of the relative clause is relativized upon (cf. (13)–(14) above). *Baaala* and *ammaaala*, where the relativizer is doubled, are nonspecific in reference. Both can be translated 'whatever'. Examples are seen in (22) and (23):

- (22) *xusshi-hil-ak ilápitchi-hil-ak [baa-an-nía] xaxúa*
 swift-very-SS good.shot-very-SS INDEF-REL-do everything
baatcháachi-k huu-k
 outstanding-DECL say.PL-DECL
 'he was a very swift runner and an excellent shot; everything he did was outstanding' (Isshii 1)

¹ Thanks to Hu Matthews (p.c. 1997) for sharing his analysis of relative clauses with *ammaa*, *baaala*, and *ammaaala*.

(In (22) *baa* is the object of *día* 'do', and *ala* marks the object as relativized upon. The noun phrase containing the relative clause is the subject of the stative verb *baatcháachi* 'be outstanding'.)

- (23) [*am-maa-ala-sheé*] *xaxúa* *xawii-i-lu-k*
 REL-INDEF-REL-say everything bad-HAB-PL-DECL
 'everything she says is bad' or 'whatever she says is bad' (Uuwat 19)

Both *baaala* and *ammaaala* can usually be translated 'whatever', and it is not clear to me what the difference of meaning is, if any.

11.3.5. *baa*

There are also examples of relative clauses with just *baa*, as in (24) and (25):

- (24) *iilak baa-wa-lá-ko* *koó-k*
 that INDEF-1A-2B-give COP-DECL
 'that is what I'm giving you' (Uuwat 10)
- (25) *hinne bia-sh* *kúh baa-oo-liché* *baashial-uua*
 this woman-DET PRO INDEF-bring-APPROX dream-PL
koó-k
 COP-DECL
 'what this woman brought was dreams' (Isshii 32)

In examples like these *baa* is functioning as an object rather than a relativizer. Thus these examples translate as object-headed relative clauses which have no overt relativizer.

11.3.6. Position of relativizers

As is evident from the above examples, *ak*, *ala*, and the various combinations of *baa* and *ala* are bound forms. Although there are several exceptions to be discussed below, the general rule for both *ak* and *ala* is that they are prefixed to the word that contains the verb of the relative clause. A similar rule is needed to account for the incorporation of the postposition *kuss* (see §15.9).

We will discuss *ak* first. It is clear that *ak* does not necessarily occur in initial position in the relative clause, as exemplified in (26):

- (26) *Pharisee kootá-m* *Jesus ak-kussée-sh*
 P. like.that-DET J. REL-invite-DET
 'the Pharisee who invited Jesus' (Lk 7:39)

Here the subject of the relative clause is *Pharisee kootám*, which is separated from *ak* by the object noun phrase *Jesus*.

ak is ordinarily initial in the verb complex, though it may be preceded by an adverbial proclitic, as in (27). It precedes B-set pronominals, as in (27), incorporated postpositions, as in (28), and incorporated nouns, as in (29):

- (27) *da-láa-lak* [kal-ak-dii-kuxshé] *koó-immaachi-k*
 2A-reach-COND then-REL-2B-help COP-will.be-DECL
 'if you meet him, he will be the one who will help you' (Ishii 7)

- (28) 1872 *kootée-sh* [Baaiilápxisaahkuua *ak-kuss-dée-wassee*]
 1872 like.that-DET Washington REL-GOAL-go-first

haw-úu-k
 some-PL-DECL

'they were among the ones who first went (as members of a Crow delegation) to Washington (D.C.) in 1872' (AB 47)

In (28), *ak* in initial position in the verb complex isolates the postposition *kuss* from its object.

- (29) [*ak-awaasúu-koolée*] *bassée hawá-k*
 REL-house-live.in first one-DECL
 'he was one of the first to live in a house' (AB 47)

In (29) the noun *awaasúu* 'house' is incorporated by *koolée* 'live in', and *ak* precedes the incorporated noun.

I have come across several exceptions to the generalization that *ak* is initial in the verb complex. In (30), *ak* is prefixed to the first word of a direct discourse clausal complement of *he* 'say':

- (30) *hinne hawáta-m* [*ak-"bii-wacheé-x shóot-dak baa-(a)laaxta-k"*
 this one-DET REL-1B-man-or what-DET 1A-not.know-DECL
hee-sh] *ittáche kaláa-ssaa-k*
 say-DET alone run.away-NEG-DECL
 'this one who had said "I don't know whether I am a man or not" was the only one who didn't run away' (Bachee 10)

Here *ak* is not incorporated by *he*, the matrix verb of the relative clause. Rather it occurs as a prefix to the first word of the clausal object of *he*. Note, however, that *bii* is a pronominal prefix, an element that often follows *ak* in relative clauses.

In several elicited sentences cited in Broadwell and Cornell (1988), *ak* occurs in initial position in the relative clause, prefixed either to the object, as in (31), or to the object of a postpositional phrase, as in (32):

- (31) *bacheé-m ak-Roger-sh dichée-sh*
 man-DET REL-R.-DET hit-DET
 'the man who hit Roger' (Broadwell and Cornell 1988:3)
- (32) *bacheé-m ak-Pool Palace koon disshée-sh*
 man-DET REL-P. P. LOC dance-DET
 'the man who danced at Pool Palace' (Broadwell and Cornell 1988:3)

Both (31) and (32) were initially elicited from a younger speaker in her twenties, and both were rejected by an older Crow speaker, who gave (33) and (34) as the "correct" versions of (31) and (32):

- (33) *bacheé-m Roger-sh ak-dichée-sh*
- (34) *bacheé-m Pool Palace koon ak-disshée-sh*

I would suggest that the pattern exhibited in (31) and (32) is the result of interference from English: the younger speaker has apparently reanalyzed Crow relative clauses as analogous to English relatives, with the relativizer occurring in initial position in the relative clause.

Ala, like *ak*, is prefixed to the word that contains the matrix verb of the clause. It may be separated from the verb stem by a bound pronominal, as in (35), by a postposition, as in (36), or by an incorporated noun, as in (37):

- (35) [*hinne bíá-sh am-mii-líá-sh*] *al-ákaa-?*
 this woman-DET REL-1B-do-DET 2A-see-INTERR
 'did you see how this woman treated me?' (Lk 7:44)
- (36) *sáapíi díiluk Jews kooté ala-shee-lúua* [*Akbaatatdía*
 why 2PRO.PL J. like.that REL-say-2A.PL God
ala-kuss-bah-chiwakáa-u] *Jerusalem koon*
 REL-GOAL-1A-pray-PL J. LOC
ala-chiwakáa-u-ashee-sh kuttách-kaata-k duu-?
 REL-pray-PL-building-DET only-DIMIN-DECL 2PL.say-INTERR
 'why do you Jews say that the only place where we should pray to God is at the temple in Jerusalem?' (Jn 4:19)
- (37) *am-maat-dúusaa-u*
 REL-dishes-set.down-PL
 'cupboard'

There are a number of lexicalized derived nouns where *ala* occurs between the noun (incorporated object of active verb or subject of stative) and the verb. These include:

- (38) a. *ash-ala-kuluuá*
 lodge-REL-piled.up
 'city' (lit., 'place where buildings are piled up')
- b. *dakáak-an-duus-uua*
 bird-REL-eat-PL
 'Thanksgiving' (lit., 'when they eat birds')
- c. *bil-an-dée-hk-uua*
 water-REL-go-CAUS-PL
 'canal, irrigation ditch' (lit., 'where they cause water to go')
- d. *isht-ala-papáshe*
 eye-REL-spherical
 'eyeball'

Although these examples are lexicalized, they suggest, at least, that this pattern was once a productive process of word formation.

In one example in my data *ala* is prefixed to an unincorporated object noun:

- (39) *hiliilak [an-naákshe dichi-ishtaache] koon dúushii-k*
 purposely REL-coup strike-should LOC set.down-DECL
 'he purposely left him in a place where he would have a chance to count coup' (AB 47)

This rare example of *ala* prefixed to a noun might be explained by noting that although *dáakshe* is not morphologically incorporated, it has the semantics of a potentially incorporable noun, since *dáakshe dichi* 'count coup' refers to what was a customary or habitual activity in pre-reservation Crow culture.

There are other examples where *ala* occurs in second position in the verb complex following a pronominal, as in (40) and (41):

- (40) [*Akbaatatdia bii-al-ikee*]-n *baa-kxawii-lia-waa-k*
 God 1B-REL-see-LOC INDEF-bad-do-1A-DECL
 'I have done wrong in the sight of God' (lit., 'where God sees me') (Lk 15:21)

- (41) [bii-an-náh-kuxshí]-wish-dak b-aliat-ak b-oó-k
 1B-REL-2A-help-exist-DET 1A-think-SS 1A-come-DECL
 'I thought that there might be a way for you to help me, [and so] I came'
 (Isshii 14)

A relative clause almost identical to (41) occurs a few lines later in the same text, with *ala* initial in the verb complex:

- (42) kan-na-kálaa-lak [an-nii-wah-kuxshé] koó-k
 PREF-2A-flee-COND REL-2B-1A-help COP-DECL
 'when you make your escape, this is how I can help you' (Isshii 15)

On the basis of the above evidence I conclude, then, that *ala* may occur in either first or second position in the verb complex.

11.4. Determiners in relative clauses

Two separate issues are involved here: the marking of the noun phrase containing the relative clause with a phrase-final determiner, and the marking of the head noun with *m*.

11.4.1. Relative clause-final determiners

First, relative clauses, like other noun phrases, are marked with final determiners. According to one common definition (Comrie 1981:136), the function of a relative clause is to restrict the range of potential referents of a referring expression. If the actual referent of the relative clause has been previously encountered in the discourse or is otherwise familiar to the addressee, the relative clause is coded as definite with a final *sh*, as in (43):

- (43) [shikáaka-m xapii-o-sh] kuú-k
 boy-DET lost-CAUS.PL-DET come.back-DECL
 'the boy that they lost has come back' (Uuwat 16)

In (43) the relative clause enables the addressee to uniquely identify which boy is being referred to—i.e., the one who was lost earlier in the story.

Not all noun phrases containing relative clauses are coded as definite. As in (44), some relative clauses are marked with the indefinite specific determiner *m*:

- (44) [*batcheé-m uá eél-isaá-m*] *ihchiss baa-aash-dée-lee-m*
 man-DET his.wife belly-big-DET without.her INDEF-hunt-go!-DS
 'a man whose wife was pregnant went hunting without her' (Bitáa 1)

Here the relative clause functions to narrow the range of potential referents of the head (*batcheém* 'a man' in (44)) to the class of men with pregnant wives. Unlike a relative clause ending in *sh*, however, it implies that this particular man is being introduced into the discourse for the first time.

In other cases the relative clause occurs without a determiner, as in (45) and (46):

- (45) [*ammaa-íkaa-hk-uua*] *xaxúa chiweé-k*
 REL-see-CAUS-PL everything tell-DECL
 'he told them everything they had let him see' (Baapaalissúua 35)
- (46) [*bilaxpáake ala-chikitt-úua*] *ko koon awáachi-i-lu-k*
 people REL-respect-PL PRO LOC sit-HAB-PL-DECL
 'people that they respect always sit there' (Isshii 23)

In (45) the quantifier *xaxúa* 'all' codes the noun phrase as definite, so that no further marking is needed, while in (46) the relative clause is generic in reference, a type of noun phrase that may be coded with a null determiner in Crow.

11.4.2. Marking of the head with *m*

We now turn our attention to the marking of the head nominal. Most commonly, the head is marked with the indefinite specific determiner *m* (or, in elevated discourse, *dak*), while the relative clause as a whole is marked definite or indefinite by the final determiner.² This pattern of head noun marking is illustrated in (47):

- (47) [*bikkaa-chóos-uu-m áakee-l-uua-sh*] *ko dushkúá-k*
 grass-dry-PL-DET top-be.at-PL-DET PRO yank-DECL
 'he yanked the dried grass that was on top of their heads' (Bitáa 17)

If the head noun is modified by a stative verb, both head and modifier are marked with *m*:

- (48) [*hinne [baa-m baatcháachi-m] díá-sh*] *ii*
 this INDEF-DET outstanding-DET do-DET INSTR

² A similar pattern of marking the head noun with the indefinite specific determiner is found in Lakota: see Van Valin (1977:47) and Williamson (1987:171).

ishuú-hil-uu-k

his.song-make-PL-DECL

'because of this outstanding thing that he did they made a song for him'
(AB 60)

In (48) *baam baatcháachim* 'outstanding thing' is the head of the relative clause, with both *baam* and *baatcháachim* marked with final *m*.

- (49) [*bacheé-m dahíssaam*] *dáashe Awachiilapi-sh huum-m*
man-DET wealthy-DET his.name Ground.Bull-DET say.PL-DET

Chiisapua-sh báaht-ak

Twines.His.Tail-DET insult-SS

'a wealthy man named Ground Bull insulted Twines His Tail' (AB 24)

Here the head noun and its modifier, *bacheém dahíssaam* 'wealthy man', are both marked with *m*, and the relative clause itself is coded as indefinite by the final *m* of *huum*. Examples (48) and (49) provide evidence that the head of a relative clause may be a nominal expression (N') as well as a simple noun.

This pattern of marking, where a noun and a following stative verb are both marked with *m*, suggests that such combinations are themselves relative clauses. *Baacheém dahíssaam* can be viewed as a relative clause consisting of a subject, *bacheé* (the head noun marked with *m*), and a stative verb, *dahíssaa*, with the relative clause coded as indefinite with the final *m*.

If, however, the stative modifier is a quantifier other than *xaxúa*, the head noun is not marked with *m*. Examples are seen in (50) and (51):

- (50) *hileen bacheé axpiluupa-m chilakappée-sh*
these men twelve-DET pick.out-DET
'these twelve men that he picked out' (Acts 1:2)

(In (50) the nominal that is the head of the relative clause, *bacheé axpiluupam*, is marked with *m*; however, *bacheé* is unmarked.)

- (51) [*iichiile dúupa-m aw-iaschilee-sh*] *xusshi-kaás-uu-k*
horse two-DET 1A-buy-DET swift-AUG-PL-DECL
'the two horses I bought are good runners'

There are also examples of relative clauses where the head noun is a proper name, given in the discourse and definite in reference, as in (52) and (53):

- (52) [*hinne Jesus dii-héel-uua-n kulutt-ák awá-m*
this J. 2B-midst-PL-SOURCE get.back-SS land-DET

iiwaakoohihtá-m kuss-aa-laá-u-sh) chishshii-lak
 everlasting-DET GOAL-PORT-go-PL-DET return-COND

'when this Jesus whom they took back from your midst and took to an everlasting land returns' (Acts 1:11)

- (53) [*Akbaatatdía hinne baa-wilihpi-wa-hche ak-bii-lia-hche*]
 God this INDEF-enter.water-1A-CAUS REL-1B-do-CAUS
kon bii-chiwa(a)-ák
 PRO 1B-tell-SS

'God, who had me do this baptizing, told me' (Jn 1:33)

In both (52) and (53) the head nouns are not marked with *m*. Both head nouns are proper names, which refer to unique individuals who cannot be further specified by a restrictive relative clause. Therefore (52) and (53) can be treated as nonrestrictive relative clauses, which differ from restrictive relatives in allowing definite noun phrases as heads.

11.5. Accessibility to relativization

As is evident from the discussion so far, Crow permits a variety of grammatical roles to be relativized. (Recall that in discussing these grammatical roles we are referring to the syntactic role of the head noun within the relative clause, and not the syntactic role of the relative clause in the matrix clause; see Keenan and Comrie [1977].) In fact, all the possible grammatical roles that can be filled by a noun phrase within a clause can be relativized: subject of active, stative, and locative verbs, objects of transitive and ditransitive verbs, objects of postpositions, and possessor noun phrases.

In this section we will discuss these various types of relative clauses.

11.5.1. Subject of active verb

As discussed above, *ak* indicates that it is the subject of the relative clause (always animate and usually active) that is the head of the relative clause, as in (54):

- (54) [*uilápaachi-m ak-baa-iiwaaiaschili-m*] *lichilikaash-aashe ko*
 his.friend-DET REL-INDEF-sell-DET elk-river PRO
kool-ée-k
 be.at-CAUS-DECL

'a friend of his who was a trader had a place on the Yellowstone River'
(AB 60)

In several examples in my data the head noun is the subject of an active verb, yet *ak* does not appear, as in (55) and (56):

- (55) [*d-isáashkakaashi-m shée-sh*]³ *annaachissat-da-hche-lak*
 2POS-dog-DET die-DET take.place.of-2A-CAUS-COND
itchi-ihmaachi-k
 good-will.be-DECL
 'if you let him take the place of the dog of yours who died, it will be good' (Sees 2)
- (56) [*hinne hawáta-m úake dútt-ak áxpee-sh*] *kalakoon*
 this one-DET his.sister-in-law take-SS marry-DET then
dáak-uu-wish-dak
 child-PL-exist-COND
 'if this one who took his sister-in-law and married her then has children'
 (Lk 19:10)

In (55), it may be the fact that *shée* 'die' has a nonagentive subject that accounts for the absence of *ak*; that is, the semantics is taking precedence over the lexical class membership of the verb.

11.5.2. Subject of stative verb

Relative clauses in which the subject of a stative is relativized pattern much like subjects of active verbs. As discussed earlier in this chapter, there are a few examples where *ak* cooccurs with a stative verb, as in (8) and (9). In most cases, however, *ak* is not found with statives, as in (57) and (58):

- (57) *baap-bassée biláa-aapt-ak baa-luush-bia-lee-lak*
 day-first fire-light-SS INDEF-eat-going.to-!-DS
 [*bia-kalishita-lak itchi-kaat-dak*] *húu-k húu-k*
 woman-young-DET pretty-DIMIN-DET come-DECL say.PL-DECL
 'the first day he built a fire, he was going to eat, and to his surprise a beautiful young woman came, they say' (Issii 25)
- (58) *d-iilapxe [bishéechiili-m iláp-kaashee-sh] balee-lappeé-hche-m*
 2POS-father cow-DET fat-AUG-DET 1B.PL-kill-CAUS-DS
 'your father had us kill the really fat cow' (Lk 15:27)

³ *Shée* 'die' is an active verb in Crow.

These relative clauses follow the regular pattern of marking the head noun with *m*, or, in elevated discourse, *dak* (as in (57)).

There are also examples where the head noun has zero marking, and the relative clause as a whole is marked with the indefinite nonspecific determiner, as in (59):

- (59) *dáa-h d-ihkammissaa-(a)k [bacheeitch-is-baaaxuassee-o*
 go-IMPER 2A-hurry-SS chief-3POS-clothes-PL
itchi-kaashee-m] aa-luú-ak iilia-hkaa-(aa)la-h
 good-AUG-DET PORT-come-SS use-CAUS-PL-IMPER
 'go, hurry, bring really good chief's clothes and let him use them' (Lk 15:22)

I suggest that the reason that the head noun is marked with a zero determiner in examples like this is that there is a referentiality hierarchy that constrains a part of a relative clause, the head, from being coded as higher in referentiality than the relative clause as a whole. If the head noun were marked with the indefinite specific determiner, it would be coded as higher on the scale of referentiality than the relative clause as a whole, which is marked with the indefinite nonspecific determiner.

As seen in (48) and (49) above, a relative clause consisting of a head noun and a stative can function as the head nominal in a higher relative clause. Additional examples are seen in (60) and (61):

- (60) [[*baapúxta-m háchka-m*] *éehk bimmúua-la-m*] *ko*
 otter-DET long-DET there water.inside-be.at-DET PRO
dii-lappeé-wa-hche-wia-wuu-k
 2B-kill-1A-CAUS-going.to-1PL-DECL
 'we are going to have you kill a long otter that lives there in the water'
 (Bitáa 21)
- (61) *baa-waa-l-ilishe éehk [[bia-axu-o-m*
 INDEF-STEM-2A-care.about those woman-body-PL-DET
xiip-ák xawii-m] iilia-lee-sh] koó-k
 wrinkled-SS bad-DET use-2A-DET COP-DECL
 'all you care about are those wrinkled and bad women's bodies that you use' (Uuwat 20)

In (61) *biaaxuom xiipák xawiiim* 'wrinkled and bad women's bodies' is a relative clause consisting of a head noun, *biaaxuom* 'women's bodies', and two stative verbs linked by the same-subject marker. This embedded relative is the head nominal in the higher relative, which functions as one of the noun phrases in an equational clause.

Example (61) also provides evidence that relative clauses with stative verbs are actually clauses and not simply adjectivelike modifiers, since the two stative verbs *xiipi* and *xawii* are conjoined with the same-subject marker *ak*, which links clauses, not noun phrases.

11.5.3. Noun phrase in locative clause

A noun phrase in a clause with a locative verb can also be relativized upon, as in (62) and (63). (Locative verbs, such as *koolá* ‘be there, be at’ in (62), are formed by combining deictics or postpositions with *la* ‘be at’; see §4.9 and §9.3.2.3.)

- (62) [*bal-apáan-nak koon-nák*] *áachiw-ak*
 wood-grow-DET be.there-DET climb-SS
 ‘he climbed a tree that was there’ (Lk 19:4)
- (63) [*bia-m huupá-m awúualee-sh*] *ko*
 woman-DET shoe-DET be.inside-DET PRO
kam-mii-kala-kootá-k
 PREF-1B-PREF-be.like-DECL
 ‘I’m like the woman who lived in a shoe’ (Hinne Káal 1)

11.5.4. Object of transitive verb

We have already seen a number of examples where the head noun is a direct object within the relative clause. It should be noted that when the object is relativized upon, the head noun is not necessarily initial in the relative clause (64), though it may be (65):

- (64) [*John iichiili-m íaschilee-sh*] *aw-ákaa-k*
 J. horse-DET buy-DET 1A-see-DECL
 ‘I saw the horse that John bought’
- (65) [*iichiili-m John íaschilee-sh*] *xusshi-k*
 horse-DET J. buy-DET fast-DECL
 ‘the horse that John bought is fast’

I take this variability in word order as simply a reflection of the fact that while the most common word order pattern in finite clauses is SOV, it is also possible for the object to precede the subject (see §9.5.1). It should also be noted that when the object is relativized upon, the verb of the relative clause is not marked with *ak*.

11.5.5. Possessor noun phrase

A possessor noun phrase can be relativized upon, as in (66) and (67):

- (66) [*iahk bacheé-m isaashké chóosee-sh*] *hilih-táa-huua*
 that man-DET his.horse white-DET here-PATH-come
al-ákaa-?
 2A-see-INTERR
 'did you see that man whose horse is white coming this way?' (Sees 15)
- (67) [*bacheé-m iilápxe bishée dappée-sh*] *iishpuu-luushi-k*
 man-DET his.father buffalo kill-DET tripe-eat-DECL
 'the man whose father killed the buffalo is a tripe-eater' (Broadwell and Cornell 1988)

In both examples, *bacheém* is the possessor and the head of the relative clause. Note that there is no overt relativizer in this type of relative clause.

11.5.6. Object of postposition

In example (2), repeated here as (68), the head noun is the object of a postposition:

- (68) *hileen bilaxpáak-shiishiahe awe ala-kukaá duú-o*
 these people-different land REL-from come-PL
 'the land these different people come from' (Acts 2:9)

Awé 'land', the object of the postposition *kukaá* 'from', is the head nominal in (68). In sentences like this, *ala* has no syntactic reality as an argument or adjunct within the relative clause; it is simply a marker of relativization.

Where there is no lexical head, however, *ala* is a syntactic formative—a locative, temporal, or manner adverbial, as in (69) and (70). In (69) the relative clause *Jesus alakooté* 'how Jesus was' is the second noun phrase in an equational clause, and *ala* is a manner adverbial within the relative clause:

- (69) *hileen bachée-sh kúh [Jesus ala-kooté] koot-úu-k*
 these men-DET PRO J. REL-be.like be.like-PL-DECL
 'as for these men, the way that Jesus was, they were like that' (Lk 9:29)

In (70) the relative clause is the object of the postposition *kussaaliché*. Within the relative clause *ala*, the head, represents a full locative expression: 'at which place, the place at which':

- (70) [*hinne biláx-dit-uua-sh al-ikukkó*] *kussaa-liché*
 this drum-beat-PL-DET REL-hear GOAL-APPROX
dáa-lawe aa
 go-continue until
 'he kept going in the general direction of where he heard this drumming'
 (Cleorash 9)

11.6. Coordination of relative clauses

Ordinarily, the equivalent of coordination of relative clauses is achieved by linking them with the same-subject (*ak*) and different-subject (*m*) markers (see §§16.3–16.4), as in (71) and (72). Linkage by these switch-reference markers is characteristic of clauses, and distinct from the coordination of noun phrases (§10.2.8).

- (71) *Peelatchiwaaxpáa-sh baashial-ak* [*sáapdak shipít-ak iihulé*
 Medicine.Crow-DET dream-SS something black-SS its.legs
chichiáx-uu-m] *Iisaxpúatahche-aashe Al-ia-káate*
 round-PL-DET Big.Horn-valley REL-little-DIMIN
bulúaka-ssaa-lee-m ikaa-k
 downstream-GOAL-go-COMP see-DECL
 'Medicine Crow had a dream, he saw something that was black and had round wheels going down the Little Big Horn valley' (AB 59)

In (71), *sáapdak* 'something' is the head of the relative clause. It is the subject of *shipíta* 'be black' in the first clause, and the possessor of *iihulé* 'legs' in the second. The two clauses are linked by the same-subject marker *ak*.

- (72) [*Akbaatatdía bilaxpáaka-m dii-héela-ss-huu-hche-wia-m*
 God person-DET 2B-midst-GOAL-come-CAUS-intend.to-DS
al-óon-na-kaa-u-sh] *bii-k*
 2A-wait.for-2A-continue-PL-DET 1PRO-DECL
 'I am the person God intended to send into your midst and that you have been waiting for' (Lk 21:8)

In (72), *bilaxpáakam* 'person' is the head noun; it is the object of *huuhche* 'send' in the first clause and *alóonnakaau* 'you have been waiting for' in the second. Since the subjects of the two clauses are different, they are linked by the different-subject marker *m*.

Another strategy for coordinating relative clauses is simple juxtaposition:

- (73) [*baaxuawishé kal-an-náh-chikitche kal-an-náh-kalatche*]
 animals PREF-REL-2A-respect PREF-REL-2A-believe.in
illia koó-u-k
 teepee.poles COP-PL-DECL
 'the animals that you respect and believe in are the teepee poles' (Isshii 30)

11.7. Analysis of relative clauses

The general features of Crow relative clauses that emerge from the above discussion may be summarized as follows:

- relative clauses may be lexically or nonlexically headed;
- they may be marked with the relativizers *ak* or *ala*, or they may lack an overt relativizer;
- a lexical head nominal is ordinarily marked with the indefinite specific determiner;
- the head nominal is usually initial in the relative clause;
- the noun phrase that contains the relative clause may be framed by a phrase-initial demonstrative and a phrase-final determiner;
- the head may fill any nominal syntactic role within the relative clause;
- relatives are not coordinated like noun phrases.

In the remainder of this section, we propose analyses to account for these properties.

11.7.1. Syntactic position of the head nominal

There are two possible analyses that could account for the data presented above on Crow relative clauses: they are externally headed, with a null noun phrase in the relative clause coreferential with the head, or in the case of relatives without lexical heads, a null discourse anaphor as head; or they are internally headed, and the head may be either lexical or pronominal (i.e., a relativizer).

Given that all nominal modifiers except demonstratives follow their heads, I assume that under the first option relative clauses would follow their heads. However, examples like (74) present a problem for this analysis:

- (74) [*Mary-sh iilaalee-m iaschilee-sh*] *itchi-shta-k*
 M.-DET car-DET buy-DET good-very-DECL
 'the car that Mary bought runs very well'

Since the head noun *iilaaleem* 'car' is not initial in the relative clause, it is difficult to see how it can be viewed as external to the relative clause. One might claim that in examples like this it is the external head that is deleted; however, this would be an ad hoc solution.

Another option would be to claim that *Marysh iilaaleem iaschileeesh* 'the car that Mary bought' is not a relative clause at all, and that what we have in (74) is a sequence of two independent clauses that should be translated 'Mary bought a car; it runs well'. This possibility will be pursued later in the discussion (§11.7.4).

In the light of the difficulties that the external head analysis poses, I will treat Crow relatives as internally headed, with the following structure:

[_{NP} [_S ... N'_{head} ...] DET]

11.7.2. Syntactic status of relativizers

We turn now to a discussion of the syntactic status of the relativizers: *ak*, *ala*, *ammaa*, *baaala*, and *ammaaala*. It is the presence or absence of a relativizer, and the form of the relativizer, if present, that indicates the grammatical role of the head in the relative clause, or at least limits the range of possible grammatical roles, according to the following pattern:

- if there is no overt relativizer, the head noun is either an object, a possessor, or the subject of a stative verb;
- if the relativizer is *ak*, the head noun is a subject, usually of an active verb;
- if the relativizer is *ala*, the head is the object of the verb, the object of a postposition, or (in the absence of a lexical head) a locative, temporal, or manner adverbial;
- if the relativizer is *ammaa*, the head is the specific object of the verb of the clause;
- if the relativizer is *baaala* or *ammaaala*, the head is the nonspecific object of the verb of the clause.

Ammaa is best treated as a synchronically nonsegmentable unit, while *baaala* and *ammaaala* can be viewed as composed of the indefi-

nite object *baa* and the relativizer *ala*, with the relativizer doubled in the case of *ammaaala*.

We have noted that *ak* and *ala* occur in both lexically headed and nonlexically headed relative clauses, while *ammaa*, *baaala* and *ammaaala* do not cooccur with lexical heads.

In the absence of a lexical head, *ak* and *ala* are noun phrases functioning as heads of relative clauses and filling argument slots within the relative clause. If, however, they cooccur with lexical heads, they simply function as markers that indicate the grammatical role—or range of possible grammatical roles—of the head noun within the relative clause.

The distribution of *ak* and *ala* reflects the active-stative patterning found in other areas of Crow grammar. Although a few exceptions have been noted, it is in general true to say that *ak* marks the head noun as an active subject, while *ala* indicates that the head noun bears a grammatical role other than that of active subject.

Since *ammaa*, *baaala*, and *ammaaala* never cooccur with lexical heads, they may be viewed as incorporated objects. *Baaala* and *ammaaala* are composed of an incorporated object (*baa*) and a syntactically inert relativizer (*ala*).

Ak and *ala* ordinarily occur as prefixes to the verb complex. It should also be noted that *ak* and *ala* occur in the same relative positions in the verb complex in which independent constituents occur in the clause. *Ak*, a subject marker, is initial in the verb complex, while *ala*, which corresponds to a free adverb or postpositional phrase, either precedes or follows a bound pronominal object, just as an independent object noun phrase may occur either before or after an independent adverb or postpositional phrase.

11.7.3. Marking of the head nominal

We turn now to the marking of the head nominal. We have seen that, with few exceptions, the head nominal is marked with the indefinite specific determiner *m*, and never with the definite determiner *sh*. In a relative clause the head noun marked with *m* does not have independent reference; it is a constituent of a larger referring expression. It is the relative clause as a whole that is either definite or indefinite.

The discourse function of the indefinite determiner in a relative clause is to identify the head noun, thus significantly reducing the possibility of ambiguity in the interpretation of relative clauses.

Consider the following hypothetical example, where both the subject and the object of the relative clause are marked with the definite determiner:

- (75) **[shikáakee-sh iichiilee-sh alapée-sh] aw-ákaa-k*
 boy-DET horse-DET kick-DET 1A-see-DECL
 ('I saw the boy who kicked the horse' or 'I saw the horse who kicked the boy')

With both noun phrases marked definite, this sentence would be ambiguous—apart from discourse context—as to which noun phrase is the head of the relative clause. The actual Crow sentences corresponding to (75) are given in (76) and (77):

- (76) *[shikáaka-m iichiilee-sh alapée-sh] aw-ákaa-k*
 'I saw the boy who kicked the horse'
 (77) *[shikáakee-sh iichiili-m alapée-sh] aw-ákaa-k*
 'I saw the horse who kicked the boy'

Sentences (76) and (77) differ only with respect to which noun is identified as head by being marked with *m*, and their meanings are unambiguous.

The possibility of ambiguity in internally headed relative clauses is attested in other native American languages. The following example is from Navajo:

- (78) *'at'ééd diné bizts'qséę yiyiitsá*
 girl man kissed saw
 'the girl saw the one the man kissed' or 'the girl saw the man who kissed her' or 'someone saw the girl the man kissed' (Willie 1989:426)

This kind of ambiguity is avoided in Crow by marking the head noun with *m*.

11.7.4. Alternative analyses of relative clause structure

As I have hinted above, there is some evidence that Crow relative clauses may actually represent a looser type of syntactic juncture: in many cases they may be viewed as noun phrases in apposition to a preceding noun phrase, while in other cases they may be interpreted as independent clauses loosely connected with the following clause. These two alternatives represent possible analyses of different subsets of Crow relative clauses.

Let us take another look at (74), repeated here as (79) as it would appear under the two alternative analyses:

- (79) a. [*Mary-sh iilaalee-m iaschilee-sh*] *itchi-shta-k*
 M.-DET car-DET buy-DET good-very-DECL
 'the car that Mary bought runs very well'
- b. *Mary-sh iilaalee-m iaschilee-sh itchi-shta-k*
 M.-DET car-DET buy-DECL good-very-DECL
 'Mary bought a car; it runs well'

In (79a) *Marysh iilaaleem iaschileeesh* is analyzed as a relative clause, while in (79b) it is treated as an independent sentence. Since the definite determiner *sh* may also function as a sentence-final declarative speech act marker, the independent clause analysis is perfectly plausible here.

There are other examples where a sequence may be interpreted either as a relative clause or as a sequence of clauses linked with the different-subject marker *m*. The two different interpretations are illustrated in (80); it should also be noted that there is no difference in intonation between (80a) and (80b):

- (80) a. [*bacheé-m uá éel-isaam*] *ihchiss*
 man-DET his.wife belly-big-DET without.her
baa-aash-dée-lee-m
 INDEF-hunt-go-!-DS
 'a man whose wife was pregnant went hunting without her' (Bitáa 1)
- b. *bachee-m uá éel-isaam ihchiss*
 man-DS his.wife belly-big-DS without.her
baa-aash-dée-lee-m
 INDEF-hunt-go-!-DS
 'there was a man, his wife was pregnant, he went hunting without her'

In (80a) *bacheém uá éelisaam* is treated as a relative clause with a possessor noun phrase (*bacheém*) as its head, while in (80b) the sequence is viewed as three separate clauses connected by the different-subject marker (*m*).

In (79) and (80) the two different interpretations are made possible by the fact that *m* and *sh* function both as determiners and as clause-final markers. Also, since nouns can function as clausal predicates in Crow, there is no reason why *bacheém* cannot be treated as a predicate. In examples like these I know of no syntactic evidence for preferring one analysis over the other.

In still other examples it is possible to analyze the construction either as a relative clause or as a sequence of two noun phrases—i.e., an

indefinite noun phrase followed by a headless relative in apposition to it. The two possibilities are illustrated in (81) and (82):

- (81) a. [*Pharisee kootá-m* *Jesus ak-kussée-sh*]
 P. like.that-DET J. REL-invite-DET
 'the Pharisee who invited Jesus' (Lk 7:39)
- b. [*Pharisee kootá-m*] [*Jesus ak-kussée-sh*]
 P. like.that-DET J. REL-invite-DET
 'a Pharisee—the one who invited Jesus'
- (82) a. [*hinne awé ala-kuss-kashée-sh*]
 this land REL-GOAL-move.to-DET
 'this land that he had moved to' (Lk 15:14)
- b. [*hinne awé*] [*ala-kuss-kashée-sh*]
 this land REL-GOAL-move.to-DET
 'this land—the one that he had moved to'

When we leave out *hinne awé* 'this land' in (82b), it appears that we still have a relative clause.

Combining the clausal analyses of (79) and (80) with the appositive analysis of (81) and (82) would, in effect, amount to a claim that all relative clauses in Crow are headless, with the lexical heads treated as other types of constructions, either clauses or noun phrases.

However, the multiclausal or appositive interpretation of relative clauses forces us to treat *sh* as a sentence-final declarative marker precisely in those contexts where it is preceded by a clause or a noun phrase ending in *m*. This is a significant regularity that we are forced to ignore if we accept the multiclausal or appositive analysis. Moreover, *sh* is otherwise relatively rare as a sentence-final. For these reasons I consider this interpretation to be somewhat forced.

I conclude, then, that while it is possible in many cases to analyze Crow relative clauses as either full, nonnominalized clauses or as appositive noun phrases, it is an unsatisfactory analysis. It is likely that Crow relatives have developed historically from looser paratactic constructions that have become grammaticalized as relative clauses. As a result of this grammaticalization, both the indefinite determiner *m* and the clause-final different-subject marker *m* have been reinterpreted as head-noun markers.

12 Nominal incorporation

12.1. Introduction

I use the term “nominal” to include the various types of lexemes that can occur as heads of noun phrases or that themselves constitute complete noun phrases. After discussing incorporation of various types of nominals, including pronouns, nouns, interrogative-indefinites, *baa* ‘indefinite’, and quantifiers, I turn in §§12.7–12.8 to the semantics and syntax of nominal incorporation.

12.2. Incorporation of pronouns

The discussion in this section assumes that the pronominal prefixes are syntactically pronouns rather than mere agreement markers (see §9.4 for further discussion).

Object (B-set) pronominals precede subject (A-set) pronominals in Crow, as exemplified in (1):

- (1) *dii-aw-óoli-k*
2B-1A-wait.for-DECL
'I am waiting for you'

There is good phonological evidence that the A-set pronominals are more closely bound to the stem than the B-set forms. First, there is considerable irregularity in the shape of the A-set forms, and in many paradigms they have fused with the instrumental prefix to such an extent that it is no longer possible to segment the instrumental prefix from the pronominal prefix (cf. chapter 6). Consider, for example the inflectional paradigm for verbs with the *ala* ‘by foot’ instrumental prefix:

- (2) *alashí* ‘slip’: 1S *baatshí* (*ba + ala > baa*), 2S *dáatshi* (*dá + ala > dáa*),
3S *alatshí*

In this paradigm the first and second person prefixes have merged with the instrumental prefix.

There are also verb stems where the A-set pronominals are infixes rather than prefixes, as in (3):

- (3) *awáachi* 'sit': 1S *ám-m-aachi*, 2S *ám-n-aachi*, 3S *awáachi*

In this paradigm *m* and *n* are the infixed person markers. It is likely that these verbs are historically composed of two stems or a prefix and a stem, with only the second element inflected.

The B-set pronominals, on the other hand, are with few exceptions¹ invariant in form and have no effect on the stems with which they combine. Furthermore, there is evidence of a looser phonological juncture between the B-set pronominals and the stem. Intervocalic obstruents in Crow are lax, often voiced, and unaspirated. When an A-set pronominal combines with an obstruent-initial stem, intervocalic laxing is triggered. However, when a B-set form combines with the stem, the stem-initial obstruent may, at least for some speakers, be voiceless, tense and aspirated, as it would be if it were word-initial. This is illustrated in (4):

- (4) a. [baa-kaalf-k]
 1A-ask.for-DECL
 'I asked for it'
- b. [bii-k^haalf-k], [bii-k^haali-k]
 1B-ask.for-DECL
 'she asked for me'

These facts suggest that the A-set pronominals have a longer history of being linked to the verb stem.

12.3. Incorporation of lexical nouns

12.3.1. Incorporation of objects

Nouns that are objects² of the verb may incorporate, as in (5)–(8):

¹ There are a few stative verbs where the B-set pronouns are reduced from 1 *bii* and 2 *dii* to *b* and *d*, as in the following paradigm: 1 *b-aliishi*, 2 *d-aliishi*, 3 *aliishi* 'be hungry'. The B-set pronouns also reduce before the goal postposition *ss*: 1 *bi-ss*, 2 *di-ss*.

² I avoid using the term "direct object", since it is not clear that Crow distinguishes syntactically between direct objects and other types of objects. If a verb is subcategorized for two objects, e.g., a theme and a goal, the objects may occur in either order, as is discussed in §9.5.1.

- (5) *b-achuu ké alápee-chia-(a)-lee-k*
 I POS-younger.brother fire-extinguished-CAUS-go-DECL
 'my younger brother went fire-fighting'
- (6) *shóotdak Mr. Latch bishka-lúupla-i-k*
 perhaps Mr. L. dog-dislike-HAB-DECL
 'perhaps Mr. Latch doesn't like dogs' (Sees 17)
- (7) *Tom-nak iiláp xe-lak íllii-laxxox-x-uu-k*
 T.-and his.father-and teepee.pole-peel-PL-DECL
 'Tom and his father are peeling teepee poles' (Emilysh 7)
- (8) *is-uhpatté aák awé dúukaax-ak áash-dia-k*
 3POS-digging.stick with earth scratch-SS river-make-DECL
 'she scratched the earth with her digging stick and made rivers'
 (Isáahkawuatte 14)

If the subject is first or second person, the incorporated nominal precedes the A-set pronominal prefix, occupying the slot of the B-set pronouns, as illustrated in the following paradigm:

- (9) a. *ilúk-baa-kaali-k*
 meat-1A-ask.for-DECL
 'I asked for meat'
- b. *ilúk-da-kaali-k*
 meat-2A-ask.for-DECL
 'you asked for meat'
- c. *ilúk-Ø-kaali-k*
 meat-3A-ask.for-DECL
 'she/he asked for meat'

Examples of incorporated nominals with non-third-person subjects are seen in (10) and (11):

- (10) *húu-laa bii-hii-m ee-wa-k(u)-biá-waa-ht*
 come-SS 1B-reach-DS food-1A-give-want.to-1A-although
 'he came, he reached me, and although I wanted to give him food' (Lk 11:6)
- (11) *bik hilaakée iichíim-maa-chiil-aachi-ssaa-ht*
 I PRO now horse-1A-look.for-APPROX-NEG-although
 'as for me, although I'm not looking for horses now' (Sees 4)

There is strong phonological evidence that the nominals in (5)–(8) and (10)–(11) are, in fact, incorporated: either the object or the verb stem loses its lexical accent, in accord with the regular rules for accent

placement in compounds, and the object-plus-verb-stem is pronounced as a single phonological word, with no possibility of a break in the stream of speech between the nominal and the verb. In (6) the first member of the compound, *bishká*, loses its accent, while in (5), (7), (8), and (11), the second member, the verb stem, loses its accent. In (10) the modal auxiliary bears the principal accent.³

Also, the regular process of stem-final short vowel deletion at a morpheme boundary applies to incorporated nouns: e.g., in (11), where the stem of the incorporated nominal is *iichiili*, the stem-final *i* is deleted (see §2.5.1). Moreover, in (11) the allophonic adjustment rules for sonorants apply at the morpheme boundary, so that *l-b* becomes *m-m* (see §2.2.1.3 and §2.5.2).

The combination of verb plus incorporated object conveys the notion that the subject is engaged in a customary, habitual, or repeated activity, as in (5), (7), (8), and (11), or a habitual mental state, as in (6). Incorporation can even occur when a single action is referred to, as in (10), as long as the object is nonspecific.

The contrast between incorporated and nonincorporated nouns is illustrated in (12) and (13):

- (12) *iisáakshe illiia daxxóxx-uu-k*
 young.men tipi-poles peel-PL-DECL
 'the young men peeled the tipi poles (e.g., the ones they cut in the mountains yesterday)'
- (13) *iisáakshe illii-daxxóxx-uu-k*
 young.men tipi.poles-peel-PL-DECL
 'the young men were peeling tipi poles (engaging in the activity of peeling poles)'

Other examples of verb-plus-incorporated-object constructions are given in table 12.1.

12.3.2. Incorporation of complex nominals

The process of object incorporation is not limited to lexical noun stems: in (14) and (15) the incorporated object is a relative clause, while in (16) it is part of a relative clause:

- (14) [*ala-húu*]-*alaaxta-k*
 REL-come-not.know-DECL
 'he didn't know where he came from' (Héettaa 7)

³ See §2.4 for the rules governing accent in multimorphemic words.

TABLE 12.1. EXAMPLES OF OBJECT INCORPORATION

bálaa-kaali 'ask for money'
Apsáalook-ilii 'speak Crow'
Apsáalook-duupia 'dislike Crows'
iichiil-aakinee 'ride horseback'
iichiil-ataali 'steal horses'
bil-issii 'drink water'
húppii-lia 'make soup'
alápee-chia 'fight fire'
baáchuu-issuwi 'wash berries'
bal-áachiwi 'climb trees'
bua-chilasshia 'catch fish'
baaxuawaalaátxachii-ikaa 'watch TV'
baaluúsh-chiili 'look for food'
awúsh-bileeli 'go in the sweat lodge'
baashian-chiivee 'tell a dream'
binnaxchi-lia 'fix fence'
ash-atchéé 'put up a tipi'

- (15) [*am-m-ihchiss-úu*]-*waa-chiil-uu-k*
 REL-1A-rest-PL-1A-look.for-PL-DECL
 'we're looking for a place to rest' (Harold II 17)
- (16) [*éehk d-ísáashke ak-dútch*]-*aw-oolap-boo-k*
 that 2POS-horse REL-take-1A-find-INCL-DECL
 'we'll find a buyer for that horse of yours' (Sees 15)

In (16) *éehk disáashke* 'that horse of yours' is the object of *dútch(i)* 'take' within the relative clause that is the object of *awóolap(i)* 'find', yet only *akdútch* is incorporated.

In another variety of object incorporation, the nominal object is a possessed noun phrase, as in (17)–(20):

- (17) *d-ásuu-lia-waa-(a)k baatách*
 2POS-house-make-1A-SS everything
itchi-kaash-b-aa-(a)-wa-la-k(u)-b-immaachi-k
 good-AUG-CONT-1A-CAUS-1A-2B-give-1A-will-DECL
 'I will make a house for you, I will make everything good for you' (Sees 22)

- (18) *hehtáa baattáche aák b-íittaashtee-lit-dia-laa-lak*
 but rawhide with 1POS-shirt-APPROX-make-2A-COND
 'but if you make a shirt for me out of rawhide' (Bitáa 5)
- (19) *iháahcheche is-awus-úu-lia-(a)k kuhchéé*
 different.places 3POS-den-PL-make-SS here.and.there
ee-kulusáa-(a)k
 their.food-put.away-SS
 'they make their dens in different places and store their food here and there' (Animals 31)
- (In (19) both *isawusúu* 'their dens' and *ee* 'their food' are possessed forms: the first is an example of alienable possession, the second of inalienable.)
- (20) *áappaa piakálaa-m dappii-ák aashúu-lutchi-k*
 also Piegan-DET kill-SS his.head-take-DECL
 'also, he killed a Piegan and scalped him' (AB 66)

12.3.3. Incorporation of subjects of statives

There are a few examples in my data that involve the incorporation of the subject of a stative verb, as in (21):

- (21) *ilúk-hilahp-ak*
 meat-scarce-SS
 'meat is scarce' (Héettaa 23)

More numerous are examples of incorporation of body part terms. These include *ishtá-xia* 'near-sighted' (from *ishtá* 'his eye' plus *xia* 'dim'), *ahkúx-alee* 'have an earache' (from *ahkúxa* 'her ear' plus *alée* 'ache'), *éel-isaá* 'pregnant' (from *éela* 'belly' plus *isáa* 'big'), and *iishpuu-xachii* 'have stomach cramps' (from *iishpuu* 'stomach' plus *xachii* 'move'). The inflectional paradigms of these verbs employ the possessive prefixes instead of the B-set pronominal prefixes (§6.2.2).

It is quite common for the stem *daasá* 'heart' to be compounded with stative verbs, as in (22) and (23):

- (22) *iichiil-ililishit-aakinn-uu-lak diss-úu-lak aw-ákuu-leete*
 horse-wild-ride-PL-and dance-PL-and 1A-see.PL-not.exist
ii ba-lás-xawii-k
 INSTR 1POS-heart-bad-DECL
 'I feel bad because we didn't see the rodeo and the dancing' (Harold II 15)

- (23) *am-m-ihchiss-úu-itchi-kaashi-m aw-óolap-uu-m*
REL-1A-rest-PL-good-AUG-DET 1A-find-PL-DS

balee-laás-itt-aachi-k

1B.PL-heart-good-APPROX-DECL

'we have found a very good place to rest, and we are happy' (Harold II 23)

The verb in (22) appears to be composed of an inalienably possessed noun (*balás* 'my heart') plus a stative verb. Example (23) provides evidence, however, that the compound has been lexicalized and is being reanalyzed as a stative verb: the first person plural B-set pronominal *balee* occurs as the prefix rather than *ba*, the possessive prefix (cf. §6.2.2). If this were actually an incorporated nominal subject, we would expect the form to be (24), since plurality is ordinarily marked only once in a clause:

- (24) **ba-lás-itt-aat-uu-k*

1 POS-heart-good-APPROX-PL-DECL

I conclude, then, that *daásitchi* has been reanalyzed as a stative verb meaning 'be happy, feel good'. Other compounds with *daásá* that follow this pattern include *daasxawii* 'be upset, be angry' from *xawii* 'bad', *daásduupa* 'be undecided, have mixed feelings' from *dúupa* 'two', and *daásbahta* 'quick tempered' from *báhta* 'fragile, easily broken'.

There are many other noun-plus-stative-verb compounds in Crow, but these are derived nouns rather than verbs, with the stative verb functioning as an attributive adjective, as exemplified in (25):

- (25) *bili-shpíta* 'coffee' (*bili* 'water' + *shipíta* 'black')
buluhpa-shiili 'orange' (*buluhpá* 'plum' + *shiili* 'yellow')
úuwat-chia 'silver' (*úuwata* 'metal' + *chia* 'white')
uuwat-satchi 'mattress' (*uuwachi* 'quilt' + *satchi* 'thick')

12.4. Incorporation of interrogative-indefinite stems

The interrogative-indefinite stem *sáapa* 'what' displays typical nominal behavior with respect to object incorporation. Example (26) shows *sáapa* unincorporated; in (27) and (28), *sáapa* is incorporated.

- (26) *hinné kúk sáapa-?*
this PRO what-INTERR
'what is this?' (Bitáa 13)

- (27) *sáap-díá-laa-lak bal-am-mishée-n-m-aa-k*
 what-do-2A-COND wood-REL-exist-be.at-1A-CAUS-DECL
dii-aw-áx-b-iichiwee-w-immaachi-k
 2B-1A-be.with-1A-instruct-1A-will-DECL
 'whatever you want to do, I will be located in a tree, and I will instruct you' (Isshii 25)
- (28) *sáap-dah-chiwakii-wia-laa-?*
 what-2A-ask.for-want.to-2A-INTERR
 'what do you want to ask for?' (Isáahkawattee 13)

Sáapa occurs unincorporated only when it is not an object in the clause.

12.5. Incorporation of *baa* 'indefinite'

The indefinite pronominal *baa* can occur unincorporated as an independent word, in which case the indefinite specific determiner *m* is suffixed to it, as in (29)–(31). In (29), *baám* is the head of the relative clause *baám dappéesh* 'this thing that he had killed':

- (29) *deé-laa dii-loo-m hinne baám dappée-sh úuxa-k*
 go-SS arrive-!.PL-DS this INDEF-DET kill-DET deer-DECL
 'they went, they arrived, and to their surprise, this thing that he had killed was a deer' (Isahkáa 14)

In (30), *baám* is the subject of the locative verb *koolá* 'be there':

- (30) *éehk shiché alíchia-n baám koolá-k*
 that hill behind-LOC INDEF-DET be.there-DECL
 'there is something there behind that hill' (Bitáa 13)

In (31) *baam* is the subject of active intransitive *dée* 'go':

- (31) *baám biaxsée-n dée-loo-t bach-kuxxáa*
 INDEF-DET under-LOC go-!.PL-TEMP RECIP-equal
awá-ss-daa-(a)k dappii-áhi-i-lu-k
 earth-GOAL-go-SS kill-PUNCT-HAB-PL-DECL
 'whenever something goes under them, together they move downward, they kill it right away' (Bitáa 15)

Baa can also be incorporated, as exemplified in (32)–(35). In these examples, the verb that incorporates *baa* (e.g., *óoli* 'wait for' in (32)) is a transitive verb subcategorized for an object, and incorporated *baa* fulfills this requirement. To put it another way, *baa* functions as a de-transitivizer that derives an intransitive from a transitive verb.

- (32) *baashiali-lak ammaan-nia-sh itt-uu-htaa it*
 dreams-and REL-do-DET good-PL-although still
itchia-lichi-ssaa-(a)k haa-(a)k [baa-óoll]-hk-uu-k
 strong-APPROX-NEG-SS say-SS INDEF-wait.for-CAUS-PL-DECL
 'although his dreams and his deeds were good, they were still not
 powerful enough, they said, they made him wait' (AB 66)
- (33) *bilaxpáakee-m dí-ss[-baa-kaan]-nak kuu-a-kuú-h*
 person-DET 2B-GOAL-INDEF-ask.for-COND give-CONT-give-IMPER
 'if a person asks for something from you, give it to him' (Mt 5:42)
- (34) *baa-wiawakshi-shia bilishhiissaanee aa [baa-fkaa]-k*
 INDEF-summer-long fast until INDEF-see-DECL
 'all summer long he fasted until he saw things [had a vision] (AB 24)
- (35) *dís-aw-uua [baa-awuússiia]-(a)k [baa-apdali-a]-(a)k*
 2POS-land-PL INDEF-put.in-SS INDEF-grow-CAUS-SS
 'plant things [crops] on your land, grow things' (AB 80)

Baa resembles B-set pronominals in that it can fill a variety of grammatical roles. Besides filling the object slot, it can also occur as the object of a postposition, as in (36) and (37), and as a possessor, as in (38):

- (36) *xaláa-t [baa-wiáxsée-n] baá-(a)k koon b-iháw-uu-t*
 rain-TEMP INDEF-under-LOC 1A.arrive-SS LOC 1A-sleep-PL-TEMP
itchi-i-lu-k
 good-HAB-PL-DECL
 'when it rains and we go underneath something and fall asleep there, it's
 good' (Bitáa 15)
- (37) *éehk [baa-kuss]-da-lée*
 that INDEF-GOAL-2A-go
 'that one whom you are going to' (Issii 11)
- (38) *baa-itshi-lashpi-wia-lit-doo-m baa-itshé ahó*
 INDEF-tracks-follow-try.to-APPROX-!.PL-DS INDEF-tracks many
ii baatúu-k
 INSTR difficult-DECL
 'they were trying to follow tracks, but to their surprise there were so
 many tracks that it was difficult' (Uuwat 4)

In (38), *baa* is the indefinite possessor of *itshí* 'tracks', an inalienably possessed noun. Here *baa* functions as a depossessivizer.

Only rarely is *baa* found as the the incorporated subject of an active verb. In (39), indefinite *baa* is the subject of two active transitive verbs, *hii* 'reach' and *dée* 'go':

- (39) *hut-bish-kaás-ak* *biichiliá ii-lappuul-ák*
 wind-exist-AUG-SS sand INSTR-storm-SS
ii-waa-ikuu-leetee-ht *baalíuulaxisshe* *apannoop-úua*
 INSTR-INDEF-see.PL-not.exist-even camels nostril-PL
chitchíp-ak isht-ii-o háchki-t(a)-kaas-uu-lak ii isht-úua
 close-SS eye-hair-PL long-DISTR.PL-AUG-PL-DS INSTR eye-PL
baa-híi-leeta-(a)k *baa-awuu-ss-dée-ssuu-k*
 INDEF-reach-not.exist-SS INDEF-inside-GOAL-go-NEG.PL-DECL
 'when because of strong winds and sandstorms it is impossible to see anything at all, camels close their nostrils; their eyelashes are very long; because of this, nothing can reach and penetrate their eyes' (Jesus Ammaáikee 8)

The two clauses could be more literally translated 'it is not the case that something reaches their eyes' and 'it is not the case that something goes inside their eyes', with each clause under the scope of a negative: *deetá* in the first, and *ssaa* (in its plural form *ssuu*) in the second.

Although the incorporation of subjects of active verbs is rare in Crow, in the case of *baa* it is possible because *baa* does not refer to an animate agent.

With respect to incorporation, *baa* exhibits properties common to both lexical nouns and B-set pronominals: like lexical nouns, it can occur both incorporated and nonincorporated; like B-set pronominals, it may fill a variety of grammatical roles. However, we have seen at least one example where *baa* occurs as the subject of an active verb, a grammatical role never filled by a B-set pronominal. It may be more correct, then, to view *baa* as a lexical noun stem that is able to fill any grammatical role open to lexical noun phrases. The frequency with which it is incorporated can be attributed to the fact that it is indefinite and often nonreferential.

There are a few examples of transitive stems with incorporated *baa* that have become lexicalized as derived intransitive verbs with corresponding semantic shifts. These include *baa-chimmi* 'study, go to school', from *chimmi* 'count', and *baa-hili* 'work', from *hili* 'do', a defective stem that does not appear as an independent verb.

Baa-chimmi exhibits the idiosyncratic behavior typical of lexicalizations. On the one hand, it behaves like an intransitive verb in

that its object (the subject studied) appears as the object of the post-position *kuss*, as in (40):

- (40) *Apsáalook-ílaa-u kuss-baachimmi-k*
 Crow-talk-PL GOAL-study-DECL
 'she is studying the Crow language'

On the other hand, the derived noun *ak-baa-waachimmi-hche* 'teacher' (lit., 'one who causes [people] to study things'), appears to be based on a transitive stem *baachimmi* with an incorporated indefinite object *baa*.

12.6. Incorporation of quantifiers

By "quantifier" I mean both numerals and the indefinite quantifiers *ahú* 'many, and *sáawi* 'how many, some'. In the quantifier incorporation construction, a quantifier that modifies a noun is prefixed to the following verb, as in (41)–(46) (with the noun phrases in brackets):

- (41) [*baláxii-uuwate kúh shoop*]-*dútschi-k*
 weapon-metal PRO four-take-DECL
 'he also took four guns' (AB 79)
- (42) *is-bikkáa-u* [*bálee pilak*]-*iiwaaiaschil-uu-k*
 3POS-hay-PL money ten-sell-PL-DECL
 'they sold their hay for ten dollars' (AB 50)

(In (42) *iiwaaiaschili* 'sell' is a ditransitive verb with two objects, *isbikkáau* 'their hay' and *bálee pilak(á)* 'ten dollars'; *pilak(á)*, the quantifier of the second object, is prefixed to the following verb.)

- (43) *Dakkoótee bachia-lee-m* [*áxpe dáawil*]-*lappii-o-m*
 Sioux fight-!-DS companions three-kill-PL-DS
 'he fought the Sioux, and to his surprise they killed three of his companions' (AB 67)
- (44) *Apsáalooke kala*-[*saaw-aat*]-*dappii-áh-uu-lak*
 Crows PREF-some-APPROX-kill-PUNCT-PL-COND
 'after they had killed several Crows' (AB 60)
- (45) *daá-laalii-o aa Aash-kaat-shipia dii-o-m*
 go-continue-PL until river-DIMIN-muddy reach-PL-SIMULT
 [*bishée ah*]-*fkuu-k*
 buffalo many-see.PL-DECL
 'they kept going until, when they reached Muddy Creek, they saw a lot of buffalo' (Uuwat 2)

- (46) *bale-anniile kala-sáam-nla-luu-?*
 DEPOS-hour how.many-work-2A.PL-INTERR
 'how many hours did you work?'

There are a number of similar examples where the quantifier *hawa* 'some' is prefixed to the verb it precedes, as in (47) and (48):

- (47) *Dakkoótee Apsáalooke [isaashk-úua haw]-ataal-úu-m*
 Sioux Crow their.horse-PL. some-steal-PL-DS
 'the Sioux stole some of the Crows' horses' (AB 68)
- (48) *áhpa-m hinne bachée-sh baa-luúsh-dee-m sapéelak "axée*
 evening-DET this man-DET INDEF-eat-!-DS someone father
[baa-li-lúshe ham]-ma-kú-h" he-m
 INDEF-2A-eat some-1B-give-IMPER say-DS
 'one night while this man was eating someone said, "Father, give me some of your food"' (Bitáa 3)

(In (48) *baalilúshe ham* 'some of your food' is one of the objects of the ditransitive verb *kuú*.) In other examples *hawa* appears as a morphological prefix to a constituent other than the verb, as in (49) and (50). In (49) *haw(a)*, the subject of the clause, is prefixed to *aashúua* 'her head', the object of a postposition:

- (49) *hilaá diili-kaatch-ee-m dakáak-kaate óoshtat-ak*
 then walk-DIMIN-CAUS-DS bird-DIMIN flock.together-SS
haw-aashúua áakee-n awáat-doo-m chilli-ssaa
 some-her.head top-LOC sit-!.PL-DS afraid-NEG
 'when she was just starting to walk some birds flocked around her and some of them sat on her head—surprisingly, she wasn't afraid' (Hinne Káal 2)

In (50) *hawa*, the subject of both clauses, occurs prefixed to the adverbial proclitics *kala* 'already' and *it* 'still':

- (50) *bilaxpáaka-lak baaaxuawishi-lak baa-ahú-k*
 people-and animals-and INDEF-many-DECL
hawa-kala-sáa-(a)k haw-it-shée-ssuu-k
 some-already-dead-SS some-still-dead-NEG.PL-DECL
 'there were many people and animals; some were already dead; some had not yet died' (Bitáa 13)

There are other examples where *hawa* apparently occurs as an independent word, although without an accent, as in (51) and (52):

- (51) *áachiwile ham hinne iishbiiwishkee-sh kuss-dúchkichi-k*
 milk some this cat-DET GOAL-squirt-DECL
 'he squirted some milk toward this cat' (Sees 16)
- (52) *ba-laaké ham ammalapáshkuua koolii-ak ham iishpia*
 IPOS-child some Billings be.there-SS some Lodge.Grass
kool-úu-k
 be.there-PL-DECL
 'some of my children live in Billings and some live in Lodge Grass'

If in (52) *hawá* were a prefix that combines with the following stem to form a single phonological word, we would expect the form to be *haw*, since in both clauses the following words (*ammalapáshkuua* and *iishpia*) begin with a vowel. Thus (52) provides evidence that *hawá* may occur as an independent, unaccented word, *ham*.

These data show that *hawá* is a proclitic that may occur prefixed not only to a following verb, but also to nouns and other clitics. It may also appear as an independent word. Although *hawá* is a noun-phrase-final constituent in the syntax, in the morphology it is a proclitic.

The unusual behavior of *hawá*, particularly the fact that it may cliticize to a constituent other than the verb, suggests that the quantifiers are not, in fact, incorporated. Rather, they are detached from the noun phrases of which they are constituents and procliticize to the following word.

There are also examples in the data where quantifiers in similar morphosyntactic contexts do not cliticize, as in (53)–(56):

- (53) *ash-táale ahú-m aw-ákaa-k*
 lodge-real many-DET 1A-see-DECL
 'I saw many teepees' (Harold II 14)
- (54) *iiluh aktáa-u ahú-m ih-uu-k*
 PRO.PL their.mount-PL many-DET bet-PL-DECL
 'as for them, they bet a large number of their horses' (Isahkaa 21)
- (55) *baapée-sh baapúxte iiláp-uu-m iawaanni-o-m aw-ákaa-k*
 day-DET otter two-PL-DET play-PL-DET 1A-see-DECL
 'today I saw two otters playing' (Harold III 5)
- (56) *úá shoopá-m dáawiia dée-hche-k*
 his.wives four-DS three go-CAUS-DECL
 'he had four wives, he divorced three of them' (AB 56)

These examples indicate that cliticization of quantifiers is not obligatory.

12.7. Conditions on nominal incorporation

Having surveyed the different varieties of nominal incorporation that are found in Crow, let us now look at the semantics of this construction. What are the conditions that allow (or perhaps even require) a nominal object or subject to be incorporated? Or is it even possible to specify syntactic and semantic conditions that will require incorporation?

Let us first review some of the suggestions that have appeared in the literature.

Mithun (1984) claims that incorporated nouns typically refer to institutionalized, unitary activities. The incorporated nouns qualify the verb, they do not refer, and they are not marked for definiteness and number. She also says that

[s]ince incorporated objects are non-referential, and thus non-individuated, these constructions are generally used to describe activities or events whose patients are neither specific nor countable—e.g., habitual, ongoing, or projected activities; those done by several people together; or those directed at a non-specific part of a mass. [1984:850]

Givón (1984:416) also considers nonreferentiality a condition for incorporation; he views incorporation as “an iconic expression of decreased referentiality”, and suggests the following as a coding principle:

The less referential and/or individuated an entity is, the less it is likely to be given *independent coding status* in the grammar.

Givón’s principle suggests that the likelihood that a particular noun phrase will be incorporated can be viewed as a scale of probability.

Both Givón and Mithun see the contrasts “referential/nonreferential” and “individuated/nonindividuated” as relevant for the expression of the conditions governing incorporation.

Sadock points out that “it is frequently the case that noun incorporation is accompanied by lack of semantic/pragmatic autonomy of the incorporated nominal,” but he is quick to add that this is not always the case, and concludes by saying that “there is only a weak relation in general between incorporation of nominals and loss of referentiality” (1991:86). So Sadock describes the contrast, where it exists, in terms of semantic-pragmatic autonomy vs. lack of autonomy, and referentiality vs. nonreferentiality. However, he also emphasizes that the relationship between incorporation and loss of referentiality is not a necessary one.

Hopper and Thompson (1980) claim that object incorporation is more likely in clauses low in "transitivity," in their sense of that term—i.e., when the object is indefinite or nonreferential.

All these authors describe the factors that govern incorporation in much the same terms: the object tends to be nonreferential, nonindividuated, nonspecific, nonautonomous, and noncountable, and the object-verb compound ordinarily expresses unitary, habitual, characteristic, typical, institutionalized activities.

Such a characterization fits the cases of noun incorporation in Crow where a single nominal stem is incorporated, such as (5)–(8) and (13). It is not so clear that the characterization "habitual activity" applies to the incorporated relative clauses in (14)–(16): it is difficult to consider 'finding a buyer for that horse of yours' as a habitual activity.

There is, however, another parameter that is relevant to the discussion of noun incorporation: the realis/irrealis opposition. According to Hopper and Thompson,

the somewhat vague linguistic parameter known as 'realis/irrealis' is a cover term for the opposition between indicative and such non-assertive forms as subjunctive, optative, hypothetical, imaginary, conditional etc. . . . Irrealis forms could be expected to occur in less Transitive environments. [1980:277]

In a number of the instances of noun incorporation in my data, the incorporated object is clearly within the scope of irrealis or negative modality, as in (14)–(16).

Irrealis or negative modality requires that an indefinite noun phrase under its scope be interpreted as nonspecific; e.g., compare *I saw a deer* and *I didn't see a deer*. In the negative sentence the speaker cannot be referring to an individual, autonomous, specific deer. Irrealis or negative modality disallows the possibility of an indefinite specific/nonspecific contrast.

However, irrealis or negative modality has no such effect on a definite noun phrase, as exemplified in (57):

- (57) *úuxee-sh aw-ákaa-ssaa-k*
 deer-DET 1A-see-NEG-DECL
 'I didn't see the deer [e.g., the one you shot yesterday]'

Thus irrealis or negative modality does not automatically license incorporation, although it does so if the potentially incorporated noun phrase is indefinite.

It can be said, then, that the conditions governing incorporation are identical to the conditions governing the choice of the indefinite

nonspecific noun phrase determiner (*ee*)*m* as opposed to the indefinite specific determiner *m*, discussed in §10.3. An incorporated object nominal is semantically equivalent to a noun phrase with an indefinite nonspecific determiner.

The examples of incorporation with quantifiers are problematic for any analysis that emphasizes the nonspecific or irrealis features of incorporated nominals. Many of the examples with quantifiers are clearly specific, as in (41)–(43). I have no satisfactory explanation for these.

Another body of examples that have not been accounted for so far are the cases where the incorporated object is a possessed noun phrase, as in (17)–(20). In (17) and (18) the objects are under the scope of irrealis modality, but in (19) and (20) they are not, and in (20) the reference is actually definite: *aashúu* ‘his scalp’.

One possible approach would be to treat these as examples of the raising of a possessor. For example, in sentences involving body parts like ‘I face-washed her’, ‘face’ would be incorporated into the verb and the possessor would be promoted to object.⁴ The Crow examples involving possessed objects appear to fit this pattern. On the semantic level, at least, the incorporated nominal plus verb is reinterpreted as a unitary activity, and the possessor is reinterpreted as an object, as illustrated in (18) and (20), repeated here (in part) as (58) and (59):

- (58) a. [*b-iittaashtee-lit*]-[*dia-laa*]-*lak*
 1POS-shirt-APPROX-make-2A-COND
 ‘if you make my shirt’
- b. [*b*]-[*iittaashtee-lit-dia-laa*]-*lak*
 1B-make.a.shirt.for-2A-COND
 ‘if you make a shirt for me’
- (59) a. [Ø-*aashúu*]-[*lutchi*]-*k*
 3POS-head-take-DECL
 ‘he took his head (scalp)’
- b. [Ø]-[*aashúu-lutchi*]-*k*
 3B-scalp-DECL
 ‘he scalped him’

In (58b) ‘you make my shirt’ is reanalyzed as ‘you make-a-shirt-for me’, and in (59b) ‘he took his scalp’ is reinterpreted as ‘he scalped

⁴ Mithun analyses this type of construction as Type II incorporation (1984:856).

him'. However, this semantic reanalysis is not reflected in the morphosyntactic form, which remains unchanged.

With an example like *aashúu-lutchi* 'scalp', it would be possible to argue that reanalysis has taken place morphosyntactically as well as semantically, since in this case both the possessor prefix and the third person object prefix are zero. However, the same form with a first person object is *b-aashúu-lutchi* rather than **bii-aashúu-lutchi*, with the possessor prefix rather than the pronominal prefix. Thus the first and second person forms resolve the ambiguity of the third person form.

There is some evidence that object nominal incorporation is not strictly obligatory. Consider (60) and (61).

- (60) *baa-apáale áap-kaate dútt-ak dii-an-nappús-uua*
 INDEF-grow leaf-DIMIN take-SS 2B-REL-swollen-PL.
áxxaxxi-kaatt-aa-la-h
 rub.on-DIMIN-CAUS-PL-IMPER

'take plant leaves and rub them on your swellings' (Isáahkawuatte 16)

In (60), taken from a version of the Crow creation story, a mythological culture hero is instructing the people in the use of plant leaves for medicinal purposes. In other words, the NP *baaapáale áapkaate* 'plant leaves' does not refer to any particular leaves. Also, *baaapáale áapkaate* is under the scope of an imperative, and is therefore in an irrealis context. So this NP is clearly indefinite nonspecific in reference, yet it is not incorporated. Note, however, that there is an anaphoric reference to *baaapáale áapkaate* in the second clause: 'rub *them* on your swellings'. There may be a restriction in Crow prohibiting incorporation if the nominal is to be an antecedent later.

In (61) a customary activity, splitting bones in order to extract the marrow, is clearly involved in both clauses, and the noun phrases in question are under the scope of an imperative and a conditional, respectively. Yet in the first clause *hulé* 'bones' is an independent word, while in the second it is incorporated.

- (61) *d-ásuua ashkawúua-n hulé dappaxf-ssa-h*
 2POS-house inside-LOC bone split-NEG-IMPER
hun-náappax-bia-laa-lak awéeele-n dia-h
 bone-2A.split-try.to-2A-COND outside-LOC do-IMPER

'don't try to split bones inside your lodge; if you want to split bones, do it outside' (Uuwat 13)

It appears that in (61) incorporation serves to background old information. In the first clause *hulé* 'bones' is introduced into the

discourse by an independent noun phrase. In the second clause *hulé* is old information, and so it can be backgrounded through incorporation.³

There are other examples, however, where an entity is introduced into the discourse with an incorporated nominal, as in (62), taken from the same creation myth as (60):

- (62) *is-uhpatté* *aák awé dúukaax-ak áash-díá-k*
 3POS-digging.stick with earth scratch-SS river-make-DECL
 'with her digging stick she scratched the earth; she made rivers'
 (Isáahkawuatte 14)

Here 'rivers' is introduced into the discourse for the first time by an incorporated nominal; moreover, specific rivers are being created.

These data suggest that the decision whether or not to incorporate a nominal object, and thereby to foreground or background the entity referred to by the noun phrase, is under the control of the speaker, although incorporation is still subject to the general restriction that only nouns referring to customary, habitual, or ongoing activities (or nouns referring to possessed body parts) are candidates for object incorporation.

12.8. Syntax of nominal incorporation

We turn now to the syntax of incorporation. Are the constructions described above produced by lexical derivation, or is incorporation a syntactic process?

Sadock (1991:89) points out several expectations that flow from the assumption that an incorporated nominal is a syntactic formative. An incorporated nominal that bears the grammatical role of object should be mutually exclusive with an external noun phrase bearing the same role; the incorporated object may leave behind or strand other constituents of its phrase, such as determiners, possessors, and relative clauses, and these elements should have the same morphosyntactic form as if the incorporated nominal were not incorporated; and incorporation may result in a syntactic configuration that would not otherwise exist—e.g., the part of the noun phrase that is not incorporated might have a form that is not otherwise a valid syntactic structure in the language.

How well do the data about incorporation in Crow correspond to these expectations? Regarding the first point, it is the case (with a few

³ Backgrounding of old information is Mithun's Type III incorporation (1984:859).

exceptions to be discussed below) that an incorporated nominal cannot cooccur with a nonincorporated object noun phrase. As is discussed in §9.3, transitive verbs are subcategorized for a single object, which may be either independent or incorporated, while ditransitives are subcategorized for two objects, one of which may be incorporated.

Possible exceptions are the incorporated possessed noun phrases discussed in §12.3.2 and §12.7, which might be viewed as having an object (the possessor, which may be an independent noun phrase) in addition to the incorporated nominal. However, I argue that although these possessor noun phrases have been reanalyzed in the semantics, morphologically and syntactically they are simple incorporated nominals: there is only a single argument, a possessed noun, and that is what is incorporated.

With respect to Sadock's second point, that the incorporated object may leave behind other constituents of its phrase, we see that in (16), repeated as (63) below, only the last word of the object noun phrase (the relative clause *éehk disáashke akdútch*- 'a buyer for that horse of yours') is incorporated: *éehk disáashke* is a constituent of the object that is stranded and retains its independent lexical status.

- (63) [*éehk d-isáashke ak-dútch*]-*aw-oolap-boo-k*
 that 2POS-horse REL-take-1A-find-INCL-DECL
 'we'll find a buyer for that horse of yours' (Sees 15)

Regarding Sadock's third point, that incorporation may result in a syntactic configuration that would not otherwise exist, there are several salient examples involving coordinate noun phrases where only one of the conjuncts incorporates, as in (64) and (65). In (64) the object of *dappeé* 'kill' is the coordinate noun phrase *iisashpita-lak baaik* 'rabbits and other small game (lit., "and stuff")'. Only the second conjunct, *baaik* 'things, stuff',⁶ is incorporated, and the first conjunct is left behind.

⁶ *Baaik* is an idomatic, semilexicalized form whose first member is evidently *baa* 'indefinite'. It can often be glossed 'things' or 'stuff'. It also occurs in expressions like (i) and (ii):

- (i) *baaik-dia-ssaa-h*
 things-do-NEG-IMPER
 'don't do things, don't fool around'
- (ii) *baaik-shee-ssaa-h*
 things-say-NEG-IMPER
 'don't say things, don't tease, don't speak flippantly'

- (64) [*iisashpíta-lak baafk*]-*dappee-t isahkáale-lak*
 rabbits-and stuff-kill-TEMP his.grandmother-and
duus-aat-ák
 eat-APPROX-SS
 'when he would kill rabbits and other small game he and his grandmother
 would eat them' (Isahkáa 4)

In (65), likewise, *baaík* is incorporated, while the other member of the conjunct, *ilúka-lak* 'meat and', remains an independent word.

- (65) [*ilúka-lak baafk*]-*aa-laa-(a)k baa-luushi-hk-uu-m iixaxúa*
 meat-and stuff-PORT-go-SS INDEF-eat-CAUS-PL-DS all
baaihkammáat-uu-k
 celebrate-PL-DECL
 'they took meat and stuff; they had them eat; everyone was happy'
 (Isahkáa 38)

In (64) and (65) the incorporation of the second member of the coordinate noun phrase has the effect of stranding a conjunct, and *iisashpítalak* and *ilúkalak* are no more acceptable as possible syntactic constituents in nonincorporating contexts in Crow than 'rabbits and' and 'meat and' are in English. This is evidence that the incorporated conjunct must be treated as a member of a coordinate noun phrase that is transparent to the syntax.

Consider also the following pair of elicited sentences:

- (66) [*ak-[ammalapáshkuua-ss]-[dii]-aa-lee*]-*waa-chiin-moo-k*
 REL-Billings-GOAL-2B-PORT-go-1A-look.for-INCL-DECL
 'we'll look for someone to take you to Billings'
- (67) [*ak-[dii]-[ammalapáshkuua-ss]-aa-lee*]-*waa-chiin-moo-k*
 (same gloss)

Examples (66) and (67), which both consist of a single phonological word with a single accent, have both been judged acceptable by several different Crow speakers. (It is possible, of course that there are subtle pragmatic differences between the two versions.) In both, the verb *chiili* 'look for' has an incorporated object which can be glossed 'someone to take you to Billings'. The two versions differ only in the placement of *dii*, the second person B-set pronominal: in (65) *dii* follows the incorporated postpositional phrase, while in (66) it precedes it. I take this variability in morpheme order as an indication that the incorporated elements are syntactic formatives, and therefore are not as constrained as lexical compounds.

Yet another argument for the syntactic status of incorporated nominals involves the transitive verb stem *chiili* 'look for'. This verb is subcategorized for a nonspecific object only, as in (68):

- (68) *Isáahkawuattee baa-luush-chiil-ak hawass-dáawi-k*
 Old.Man.Coyote INDEF-eat-look.for-SS around-travel-DECL
 'Old Man Coyote was looking for something to eat, he was traveling around' (Ishoóp 1)

Since *chiili* requires a nonspecific object, that object will be incorporated. If the object is specific, the derived stem *chichili* must be used, as in (69):

- (69) *hinne shikáakee-sh búupchi-m xapiia-sh chichili-k*
 this boy-DET ball-DET lose-DET look.for-DECL
 'this boy is looking for the ball he lost'

If we say that incorporated objects with *chiili* are not syntactic formatives but are lexically derived, we are forced to say that *chiili* is a transitive stem that never occurs in an underived form, since either it is in a derived object-verb compound, or else it takes the iterative prefix *chi*.

It may be that no single one of these arguments in and of itself is conclusive; yet taken together they strongly suggest that nominal incorporation is a syntactic process in Crow.

I have heard instances in natural conversation of incorporation of English borrowings. While these do not really prove that incorporation is syntactic, they do point to the extreme productivity of the process in Crow. Examples are seen in (70) and (71):

- (70) *ak-ice-iwaaiaschilee-sh kala-hii-k*
 REL-ice-sell-DET now-arrive-DECL
 'the man who's selling ice has arrived'

- (71) *wine-isshil-ak*
 wine-drink-SS
 'he's drinking wine'

To claim that noun incorporation is a syntactic process is not to deny that there are noun-verb compounds in Crow that are lexically derived. There is one example in my data of a transitive verb with two incorporated lexical noun stems:

- (72) *húulee-sh huup-baam-maschf-k*
 yesterday-DET moccasin-bead-1A.string-DECL
 'yesterday I was beading moccasins'

In this example, *baam-maschi* 'I tie beads, I do bead work' is a typical noun-verb incorporation that denotes an institutionalized activity. However, the scope of the activity is further restricted by the incorporation of *huupá* 'moccasins'. I interpret this to mean that *baammaschi* has been lexically reanalyzed as a transitive verb that may incorporate its object. Example (73) supports this analysis:

- (73) *bas-ahpa-waan-náasta-wii-la-koo-sh*
 I POS-moccasin-bead-2A.string-1B-2A-give-DET
itchi-kiss-uu-k
 good-SPORT-PL-DECL
 'the moccasins that you beaded for me are pretty'

If *waannáasta* 'to string beads' is treated as a lexicalized transitive verb, then *basahpa* 'my moccasins', a possessed noun phrase, is its object, and this is an unexceptional example of possessed noun incorporation.

A second example of lexical, nonsyntactic incorporation involves the pronominal prefix *bili(h)*, which characterizes its referent as indefinite, nonspecific, and human.⁷ There is a small set of transitive verbs in Crow that occur with this prefix. The set includes those verbs in table 12.2.

TABLE 12.2. VERBS WITH PREFIX *bili(h)*

FORM WITH <i>bili(h)</i>	STEM
<i>bili-tchilaschi</i> 'comfort people'	<i>chilaschi</i> 'console, comfort'
<i>bili-kkussáa</i> 'invite to a meal'	<i>kussáa</i> 'invite'
<i>bili-tchilappéé*</i> 'murder'	<i>dappéé</i> 'kill'
<i>bili-kkuxshi</i> 'help people'	<i>kuxshi</i> 'help'
<i>bil(i)-íaxua</i> 'overwhelm, overpower'	<i>íaxua</i> 'cover'

*In addition to *bili(h)*, this form contains the derivational prefix *chi*.

Examples are seen in (74) and (75):

- (74) *is-báalee axpishoopa-m koon ak-dúxxii-lee héelee-n*
 3POS-year fourteen-SIMULT then REL-war.party-go among-LOC
dáa-(a)k bili-kkuxshí-k
 go-SS people-help-DECL

⁷ The fact that this prefix triggers gemination of the following obstruent suggests that its underlying form is *bilih*.

'when he was fourteen he went on a war party and helped people (helped out)' (AB 66)

- (75) *ammilasiia alápasshi-ko sáapdak Apsáalooke*
 east direction-area something Crows

bil-laxua-taahim-mia-m
 people-cover-truly-would-DS

'something from the east would cover [overwhelm] the Crows' (AB 35)

In (74), *bili(h)* occupies the syntactic slot of an incorporated object, and there is no independent lexical object. In (75), however, there is an additional referential object, *Apsáalooke* 'the Crows'. This suggests that *bilíaxua* has been reanalyzed as a transitive verb. Thus in (75) *bili(h)* is actually functioning as a classifier that limits the scope of the object to the class of humans.

The difference in syntactic behavior between *bilikkuxshí* and *bilíaxua*, as well as the fact that *bili(h)* occurs only with a very small set of stems and has unusual phonology, indicate that compounds with this prefix are lexicalized.

13 Verb incorporation

13.1. Introduction

The bulk of this chapter presents a wide variety of morphological, syntactic, and semantic data concerning verb incorporation in Crow; an analysis is presented in the concluding section (§13.11).

In most of this chapter, I use the term “verb incorporation” in a purely descriptive sense to include all constructions where two or more verb stems are realized in the morphology as parts of a single phonological word under the scope of a single accent. From the viewpoint of the syntax, this definition encompasses a variety of different construction types: modal auxiliaries, aspectuals (continuatives and completives), benefactives, purpose complements, verbal adverbs, comitatives, impersonal verbs, causatives, and the surprise marker. As is seen in §13.11, not all these types turn out to involve syntactic incorporation.

13.2. Modal auxiliaries

Person marking in modal auxiliary constructions differs depending on whether the complement of the auxiliary is an active or a stative verb. If the complement is active, both verbs are inflected for person of subject, but if the complement is stative, the auxiliary is not inflected. Modal auxiliaries combine with their complements to form a single phonological stem. We will consider each of the modal auxiliaries in turn. (For inflectional paradigms of modal verbs, see §6.3.2.2.)

13.2.1. *ih* optative (‘may, might, I wish that’)

Strictly speaking, the optative modal auxiliary is *i* (pl. *o*), and the *h* is a sentence-final imperative or optative clitic. I write *i* and *h* without hyphen here, however, since it is the combination of *i* and *h* that con-

veys the meaning of the optative, and also to avoid confusion with another modal auxiliary that is written *ii*.

- (1) *aaláa akú-kaa bah-chissáa-u-lak aw-óochia-w-oh*
 perhaps beyond-SOURCE 1A-return-PL-COND 1A-stop-1A-PL.OPT
 'maybe we'll stop on the way back' (Harold II 15)
- (2) *aaláa hawattan al-íaxxo-wis-ak íhchaliinneet-ak daachi-ih¹*
 perhaps somewhere REL-hurt-exist-SS helpless-SS remain-OPT
 'perhaps he is lying wounded and helpless somewhere' (Uuwat 4)

Aaláa 'maybe, perhaps' often cooccurs with the optative auxiliary. An example of *ih* with a stative stem may be seen in (3):

- (3) *hileen baaaxuawaalaáche al-ákaa-(aa)h-aat-dak aaláa*
 these pictures 2A-see-DISTR-APPROX-COND perhaps
dii-itt-ée-ih
 2B-good-PUNCT-OPT
 'if you look at these pictures, you might feel better' (Emilysh 1)

In (3) the stative stem *ittée* 'be better' is inflected for person, while the modal is unmarked for person.

One sentence in my data is a counterexample to my claims about person agreement with modal auxiliaries:

- (4) *dii-aa-waa-lée-lak aaláa an-nii-wah-kuxshí-wish-b-oh*
 2B-PORT-1A-go-COND perhaps REL-2B-1A-help-exist-1A-PL.OPT
 'if I take you, perhaps there may be a way for us to help you' (Bachee 8)

In (4) the subject of the optative auxiliary is coreferential with *wah*, the subject of an embedded relative clause. I would have expected the form to be as in (5), with null person-agreement marking on the modal:

- (5) *?an-nii-wah-kuxs-úu-wishi-ih*
 REL-2B-1A-help-PL-exist-OPT
 (lit., 'how we help you may exist')

One possible explanation is that the speaker of (4) is focusing on the 'help' aspect of the construction rather than the 'exist' part. What we have here is a form of "subject spreading," with the subject of the lower clause agreeing with the subject of the higher clause for purposes of person agreement.

¹ Although *íaxxo* 'be hurt' and *íhchaliinneeta* 'be helpless' are stative verbs, the continuative auxiliary *daachi* 'remain' is inflected as an active verb.

13.2.2. *ii* 'will, intend to'

Ii is a defective verb that lacks third person singular and plural forms. The third person forms are suppletive: *bía* is the third person form of both *ii* 'will, intend to' and *bía* 'want to, try to, be going to'. (The two verbs are quite similar in meaning.) Examples are seen in (6) and (7):

- (6) *binnaxché kuseé bii-piisshe da-lóo-l-ii-?*
 fence GOAL 1B-after 2A-come-2A-will-INTERR
 'will you come behind me [follow me] in the direction of the fence?'
 (Sees 3)
- (7) *ammaa-w-ée-sh xaxúa chíussaa baa-waatcheesh-káate*
 REL-1A-own-DET all half INDEF-poor-DIMIN
bá-k(u)-b-ii-k
 1A-give-1A-intend.to-DECL
 'I intend to give half of everything I own to the poor' (Lk 19:8)

13.2.3. *bía* 'want to, try to, be going to'

The auxiliary *bía* 'want to, try to, be going to' differs from the others in that the inflectional affixes follow rather than precede the stem.

- (8) *b-ittách-kaat bu-lutchi-wía-waa-lak baleanniile*
 1-alone-DIMIN 1A-get-try.to-1A-COND hour
hawát-aachi-immaachi-k
 one-APPROX-will.be-DECL
 'if I try to get them by myself, it will take about an hour' (Sees 13)
- (9) *baasshússuua ii ihchi-láak-ee-hche-wía-k*
 Tobacco.Society INSTR REFL-child-CAUS-CAUS-try.to-DECL
 'he was trying to get [Sees the Living Bull] to adopt him through the Tobacco Society' (AB 67)

13.2.4. *ihmaachi* 'will, would'

The auxiliary *ihmaachi* 'will, would' has several variant forms: *immaachi*, *immah*, and *imma*. In the case of *imma(h)*, there is no sentence-final clitic. Semantically, *ihmaachi* is close to being a pure future form.

- (10) *baakáate kúh ikuu-lak isítche-ommaachi-k*
 children PRO see.PL-COND like-PL.will-DECL
 'if the children see it, they will like it, too' (Emilysh 15)

- (11) *hinne baapé di-ss-ash-bi-m-maam-m-immaachi-k*
 this day 2B-GOAL-house-STEM-1A-enter-1A-will-DECL
 'I'm going to enter your house today' (Lk 19:5)

In (11) the verb *bimmaali* 'I enter' has both an incorporated object (*ashi* 'house') and an incorporated goal postpositional phrase (*diss* 'to you'). Literally it might be translated 'I'm going to house-enter to you'. An example of *immaachi* with a stative verb can be seen in (12):

- (12) *ilúk-pua-sh di-lúsh-dak baaleetdák dii-waakuhpáa-Immah*
 meat-rotten-DET 2A-eat-COND if 2B-sick-would.be
 'if you had eaten the rotten meat, you would have gotten sick'

13.2.5. *ishdaachi* 'should, would, ought to, need to'

Ishdaachi 'should, would, ought to, need to' is a composite form consisting of the auxiliary *ii* plus a suffix.²

- (13) *hinne baapé ammaa-wuúsh-b-i-lu-shdaache bili-kkú-h*
 this day REL-1A.eat-1A-STEM-PL-should 1B.PL-give-IMPER
 'give us this day the food we need' (Mt 6:11)
- (14) *hiliilak an-náakshe dichí-ishdaache koon dúushii-k*
 purposely REL-coup strike-would there set.down-DECL
 'he purposely left him in a place where he would count coup' (AB 47)

13.2.6. *isshi* 'be ready to, be anxious to, need to'

Examples (15) and (16) are sentences containing the auxiliary *isshi* 'be ready to, be anxious to, need to':

- (15) *hinne awá-m itchi-kaashee-sh aw-ihchiss*
 this land-DET good-AUG-DET 1A-without
baa-lée-w-isshi-ssaa-k
 1A-go-1A-ready.to-NEG-DECL
 'I'm not ready to leave behind this beautiful land' (Harold II 7)
- (16) *b-eeláx-b-isshi-k*
 1A-urinate-1A-need.to-DECL
 'I need to urinate'

² G. H. Matthews (p.c. 1989) suggests that *daachi* in this form is derived from the continuative verb *daachi* (see §6.3.2.3).

13.2.7. *dee* 'become'

The auxiliary *dee* 'become' occurs only after stative verbs, as in examples (17)–(19):³

- (17) *háchka-wee-wia-waa-k*
tall-1A.become-want.to-1A-DECL
'I want to be tall' (Wallace 1993:139)
- (18) *kuhtáa-(aa)h-aache kalakoon bala-xíssh-alaxxuahche*
then-DISTR-APPROX then wood-knobby-society
át-dee-k
belong.to-become-DECL
'around that time he became a member of the Lumpwood Society' (AB 66)
- (19) *hinne bishké kúk ilúsship-dee-wia-k*
this dog PRO untied-become-want.to-DECL
'this dog wanted to get loose [become untied]' (Sees 30)

13.2.8. *deele* 'pretend to'

Examples of *deele* 'pretend to' are seen in (20) and (21):

- (20) "*kuú-wa-hche-m híu-k*" *hee-lit-deele-k*
return-1A-CAUS-DS come-DECL say-APPROX-pretend-DECL
'"I made him come back, he came," he said, lying' (Uuwat 4)
- (21) *Senator L. J. Walsh huua kal-axs-úu-m Alaxchiiahu-sh*
Senator L. J. W. say.PL then-defeat-PL-DS Plenty.Coups-DET
iitché aák daákshé dit-aát-deele-m
cane with coup strike-APPROX-pretend-DS
baishtashiil-ahkaashi-m ikuu-k
white.man-many-DET see.PL-DECL
'when they defeated Senator L. J. Walsh, Plenty Coups pretended to count coup with his cane; many white people saw it' (AB 82)

Occasionally a third *dee* is added to this form, as in (22):

³ See Wallace (1993:139–43) for further discussion of *dee*, which she calls an "intervening predicate." Note, however, that in examples like (18), *dee* occurs finally in the verb complex; it is not always a medial or "intervening" verb.

- (22) *kalakoon ak-diss-aát-deeleelaa-(a)k*
 then REL-dance-APPROX-pretend-SS
 'then he pretended to dance' (Isshii 28)

13.2.9. *isítchee* 'like'

Isítchee 'like' is a marginal member of the modal category, since it may also occur as an independent verb without an incorporated complement, as in (23):

- (23) *baakáate baachikua isítchii-i-lu-k*
 children candy like-HAB-PL-DECL
 'children like candy'

However, since it may incorporate a complement in exactly the same way as the other auxiliaries we are discussing, there is reason to include it in the auxiliary category. Examples of *isítchee* with incorporated complements are seen in (24) and (25):

- (24) *baawaalaát-shoote ko dáam-naa-I-isítchi-laa-?*
 book-what.kind PRO read-2A-2A-like-2A-INTERR
 'what kind of books do you like to read?'
- (25) *báchhii-uhpa-lak baaláhchittuu-lak duúsh-isítchii-o-k*
 pine-tip-and nuts-and eat-like-PL-DECL
 'they like to eat the tips of pine branches and nuts' (Animals 27)

Isítchee is irregular in that it is doubly inflected for person of subject, as seen in (24) (cf. table 6.29).

13.3. Aspectuals

For most aspectuals, unlike modal auxiliaries, incorporation is not obligatory. If the verb preceding the aspectual is not incorporated, it is followed by the same-subject marker (§16.4). The aspectual verbs share with the modals the requirement that their subjects be coreferential with the subjects of the verbs they are in construction with.

13.3.1. Continuatives

The first group of aspectuals, which I call "continuatives," mark a continuing or repeated action or state. These verbs share another feature: when they are incorporators, they are preceded by the continuative

marker *a*, a suffix to the matrix verb.⁴ This suffix triggers exactly the same phonological effects on the stem of the matrix verb as *ak* and other *a*-initial suffixes. The inflectional paradigms for the continuative verbs are given in §6.3.2.3.

13.3.1.1. *datchí* ‘continue (by mouth)’

Datchí can only cooccur with verbs that denote activities performed with the mouth: speaking, crying, shouting, etc., as well as noises of animals. It is analogous in meaning to *daachi* (§13.3.1.4). I have only one example in my corpus where *datchí* does not incorporate:

- (26) *baa-áxp-iliia iis-ikaak iliia dakshipeett-aa-(a)k*
 INDEF-with-speak face-look his.speech slow-CAUS-SS
áxp-ilaa-(a)k datchí-i-k
 with-speak-SS continue-HAB-DECL
 ‘when talking to people he would look them in the eye and speak slowly;
 he would keep talking to them’ (AB 28)

Examples of *datchí* as an incorporator preceded by *a* are seen in (27) and (28):

- (27) *iichiilikaashee-sh daasé shishitt-a-latchi-lák*
 elk-DET its.heart pound-CONT-continue-COMP
iikukk-úu-k
 hear-PL-DECL
 ‘they heard the continuing beating of the elk’s heart’ (Isshii 9)
- (28) *koon d-iiwaa-(a)-laakaa-lak⁵*
 there 2A-cry-CONT-2A.continue-COND
daásh-bahta-lee-iishee-k
 heart-fragile-become-really-DECL
 ‘if you keep on crying there, he will become very upset’ (Isshii 7)

13.3.1.2. *dawí* ‘continue in motion; begin to’

Dawí is a continuative verb that ordinarily, though not always, cooccurs with motion verbs. *Dawí* obligatorily incorporates its complement.

- (29) *baa-láa-(a)-waa-lawe aa b-asaashké iiwaa-aw-iaschin-nak*
 1A-go-CONT-1A-continue until 1POS-horse STEM-1A-sell-COND

⁴ Hidatsa has a suffix (*h*)*aa* that also precedes continuative auxiliaries; in Crow this suffix has been reduced to a single short vowel.

⁵ *Daakaa* is the second person singular form of *datchí*.

hilaá uhpá-ss-bah-chisshii-w-ihmaachi-k

then south-GOAL-1A-return-1A-will-DECL

'I'll keep traveling around until I sell my horse; then I'll go back south'
(Sees 6)

- (30) *baapi-m diin-naalii-ak⁶ dée-loo-m*

day-DET walk-continue.PL-SS go-!.PL-DS

'one day they kept walking along, they went, and to their surprise . . .'
(Bitáa 21)

When combined with a stative verb, *dawí* has the semantics of an inchoative or inceptive glossed 'begin to' or 'start to', as in (31) and (32):

- (31) *áape hawa hissa-a-law-ak hawa shiin-naw-ak*

leaves some red-CONT-become-SS some yellow-become-SS

kalakoon shiiloos-aat-uu-t kala-xapi-i-lu-k

then brown-APPROX-PL-TEMP then-fall-HAB-PL-DECL

'some of the leaves begin to turn red and some turn yellow; then when they are brownish, they fall' (Harold II 1)

- (32) *baaishtashiil-ah-kaashee-m dii-iaxu-o-lak*

white.men-many-AUG-DET 2B-cover-PL-COND

an-nii-waatcháatuua-sh haam-nawf-immaachi-k

REL-2B-powerful-DET gone-begin-will-DECL

'when a great number of whitemen overwhelm you, your power will begin to ebb away' (AB 19)

13.3.1.3. *dahkú* 'continue in an activity; remain, dwell'

Dahkú suggests more of an iterative activity than does *daachi* (§13.3.1.4). It occurs both as an incorporator, as in (33)–(35), and as an independent verb, as in (36):

- (33) *hinne shikáak-kaatee-sh baap-tatchée isé ii*

this boy-DIMIN-DET day-every his.arrows INSTR

ihchilasshihk-a-lahkú-k

practice-CONT-continue-DECL

'every day this boy kept practicing with his arrows' (Isahkáa 8)

- (34) *Apsáalooke is-aw-úua baaishtashiile dahpi-wf-o-m*

Crows 3POS-land-PL whites enter-want.to-PL-DS

ii-waa-iláa-(a)-ahkuu-k

INSTR-INDEF-discuss-CONT-continue.PL-DECL

⁶ *Daalii* is the third person plural stem of *dawí*.

'the whites wanted to enter the Crows' land, that is why they kept discussing it' (AB 79)

- (35) *“baa-kxawliia dáappii-(a)-(a)a-la-hkuua háakse baá-m*
 INDEF-bad 2A.kill-CONT-STEM-2A-continue finally INDEF-DET
día-laa-l-oo-mmaachi-k” he-k iilápx-uua
 do-2A-2A-PL-will-DECL say-DECL 3POS.father-PL
 “if you keep killing bad things, in the end you will do something,” said
 their father' (Bitaa 21)
- (36) *ichuuké bat-dútt-ak áakee-ko-lee-loo-m alaaxt-ák*
 her.brothers RECIP-grab-SS top-GOAL-go-!.PL-DS not.know-SS
kootáa baa-láawii-ak dahkú-k
 right.ahead INDEF-read-SS continue-DECL
 'her brothers would fight each other and go right over her; she didn't
 realize it; she kept right on reading' (Hinne Káal 5)

13.3.1.4. *daachi* 'remain voluntarily'

Like *dahkú*, *daachi* can occur both as an incorporator, as in (37) and (38), and as an independent verb, as in (39) and (40). As an independent verb *daachi* means 'remain'; as an incorporator it means 'continue in a position or activity voluntarily'.

- (37) *iahk is-ak-baa-iassee-sh óotchia-lak baapi-lak*
 those 3POS-REL-INDEF-watch-DET night-and day-and
kam-maa-iassii-a-kaa-u-k⁷
 then-INDEF-watch-CONT-continue-PL-DECL
 'those watchmen of his kept watching night and day' (Issihii 7)
- (38) *Dakkoótee-lak baaishtashiile-lak baashitchi-a(a)-(a)k*
 Sioux-and white.man-and busy-CAUS-SS
ihchi-kuxshi-hche-wia-(a)-kaa-u-htaa
 RECIP-help-CAUS-try-CONT-continue-PL-although
 'although both the Sioux and the whites pressed [the Crows] and kept
 trying to get them to help them' (AB 39)
- (39) *baakoón Mr. Latch koon aw-óol-ak baa-lít-b-ii-k*
 just Mr. L. there 1A-wait.for-SS 1A-remain-1A-will-DECL
 'I'll just stay there and wait for Mr. Latch' (Sees 18)
- (40) *baapi-m shikáakee-sh hinne káalee-sh ikaa-lee-loo-m*
 day-DET boy-DET this old.woman-DET see-go-!.PL-DS

⁷ *Kaá* is the suppletive plural stem of *daachi*.

iháw-ak dádt-dee-m
 sleep-SS remain-!-DS

'one day the boys went to see this old woman, and to their surprise she lay there sleeping' (Bitáa 11)

13.3.1.5. *baachí* 'lie, remain involuntarily'

In contrast to *daachí*, *baachí* conveys the notion that the subject is remaining in a position involuntarily; it cooccurs with verbs like *shéé* 'die' or *iháwi* 'sleep'. In all the examples I have of *baachí* it is an independent, nonincorporating verb.

- (41) *awé ilichi-m iishpua ilúpat-ak shiipe*
 ground hit-DS his.stomach burst.open-SS his.guts
shika-áh-ak saá-(a)k baachí-k
 spill.out-PUNCT-SS die-SS remain-DECL

'he hit the ground, his stomach burst open, and his guts spilled out; he lay there dead' (Acts 1:18)

13.3.1.6. *ilúu* 'do repeatedly, continue'

Although *ilúu* occurs only as an independent nonincorporating verb, it conveys the same continuative meaning as the other verbs in this set. The following are examples:

- (42) *Pepsi isshii-ák d-ilúu-ssaa-h*
 P. drink-SS 2A-continue-NEG-IMPER
 'don't keep drinking Pepsi'
- (43) *hawáte bah-ák ilúu-lak hawáte puluppúluatt-aa-(a)k*
 one bark-SS continue-DS the.other hooting-CAUS-SS
 'one kept barking; the other was hooting' (Isshii 7)

13.3.1.7. Summary

The continuative verbs display a considerable range of behavior with regard to incorporation. On one end of the scale, *dawí* is always an incorporator, and *datchí* almost always is. On the other hand, *ilúu* and *baachí* are never incorporators, at least in my data. The other verbs in this set, *dahkú* and *daachí*, occur both as incorporators and in nonincorporating constructions.

Since *baachí* and *ilúu* are never incorporators, one might wonder whether it is justified to include them in the class of continuative verbs. Although *ilúu* has the semantics of a continuative verb ('continue in an activity'), *baachí*, at least in my data, means only 'to lie', possibly with continuative overtones as a secondary meaning. However, *baachí* resembles the other continuative verbs in having a highly irregular, sup-

pletive inflectional paradigm. It shares its plural paradigm with *daachi*; these two verbs have distinct forms only in the singular. I take these facts as sufficient justification for treating these verbs as members of the continuative class.

It may make sense to view these verbs as situated at various stages in a diachronic process of change from fully independent verbs to aspectual suffixes. The verbs that are always or nearly always incorporators are further along in the process, while the verbs that are never incorporators are at an earlier stage.

We may posit a guess that at a later stage in this process the incorporating verbs will lose their personal inflections and become simple aspectual suffixes. Such a development may account for two other aspectual markers in Crow: *áhi* 'punctual' and *i* 'habitual'. While there is no conclusive evidence that these forms are verbal in origin, the fact that *i* has an irregular plural (*ilu*) suggests that it may be derived from a verb, since plural marking is very much a verbal feature in Crow.

What are the conditions that determine whether or not a continuative verb is an incorporator or not? G. H. Matthews (p.c. 1989) has suggested that there may be a difference in meaning between the incorporating and nonincorporating constructions for the verbs that allow both possibilities. This is a matter that needs further investigation.

Also, it seems to be the case that certain continuatives tend to occur with certain stems: *dawí* most commonly occurs with motion verbs, and *datchí* with verbs of speaking, crying, etc. These tendencies are not absolute, however: in my data *ilii* 'speak', for example, occurs with both *datchí* and *dahkú*.

13.3.2. Completive *koowée* 'finish'

Another verb with aspectual meaning that can be an incorporator is *koowée* 'finish, stop an activity', which is derived from stative *koowí* 'be finished' plus the direct causative verb *ee/a(a)*. (See table 6.25 in §6.3.2.4 for the inflection of the direct causative.)

As is the case with the progressives, the subjects of both verbs must be coreferential. Examples of incorporation with *koowée* are seen in (44)–(46):

- (44) *hileen iisaxpúatahchee-sh ihchisshi-koow-aatt-aa-(a)k⁸*
 these sheep-DET rest-finished-APPROX-CAUS-SS

⁸ Note that a derivational adverbial suffix, in this case *aachi* 'approximative', may intervene between *koowí* and the causative.

duú-laa dii-ák
 come.PL-SS reach.PL-SS

'these sheep finished resting, they came, they reached him' (Uuwat 9)

- (45) *Emily-sh baaaxuawaalaáche ikaa-koow-ii-ak chitchip-ak*
 E.-DET pictures look.at-finished-CAUS-SS close-SS
 'Emily finished looking at the pictures and closed [the album]' (Emilysh 15)
- (46) *iilápx-uua-sh alilásh-koow-aatt-aa-(a)k*
 their.father-PL-DET scold-finished-APPROX-CAUS-SS
 'after their father finished scolding them' (Bitáa 13)

When *koowée* is not an incorporator, it may take a nominalized clause as its object, as in (47) and (48):

- (47) *d-iíwee koow-ii-ah*
 2A-cry finished-CAUS-IMPER
 'stop your crying' (Uuwat 6)
- (48) *hinne bishkée-sh bahó koow-ii-ak ittákaa*
 this dog-DET bark finished-CAUS-SS merely
hawass-biláat-aachi-k
 around-moan-APPROX-DECL
 'this dog stopped barking and just sort of whined' (Sees 23)

13.4. Benefactive *kuú*

When the verb *kuú* 'give' is an incorporator, it has the effect of adding a goal (beneficiary) argument to the semantics of the clause.⁹ As is the case with the incorporating progressives, incorporating *kuú* is preceded by the continuative marker *a* (see §13.3.1). The following are examples of benefactive incorporation:

- (49) *hinne káalee-sh isbaapite baláxxii-kaashi-m-nak*
 this old.woman-DET her.grandchild bow-real-DET-and
alúút-kaas-uu-m-nak dia-(a)-kuu-ak
 arrow-real-PL-DET-and make-CONT-give-SS
 'this old woman made a bow and some arrows for her grandchild'
 (Isahkáa 3)

⁹ Cognates of *kuú* serve as the benefactive in Hidatsa and Mandan.

- (50) *báalee hám-mish-taahili-m baaala-shee-lée xaxúa*
 year some-exist-truly-DET REL-say-2A everything
día-waa-itchi-w-aa-(a)-wa-la-k(u)-ak
 do-1A-good-1A-CAUS-CONT-1A-2B-give-SS
baa-lía-waa-(a)-wa-la-ku-k
 INDEF-do-1A-CONT-1A-2B-give-DECL
 'for many years I have done well for you everything that you have told me, I have worked for you' (Lk 15:29)
- (51) *bilaxpáakee-m dí-ss-baa-kaan-nak kuu-a-kuú-h*
 person-DET 2B-GOAL-INDEF-ask.for-COND give-CONT-give-IMPER
 'if a person asks for something from you, give it to him' (Mt 5:42)

Example (51) shows that *kuú* 'benefactive' can incorporate the verb *kuú* 'give'.

13.5. Purpose complements

In the purpose construction a matrix verb (usually a motion verb) incorporates the head of its clausal complement. This construction requires that the subjects of both verbs be coreferential, and both verbs are inflected for person of subject. Examples of incorporation with purpose complements are seen in (52)–(55):

- (52) *kalakoón iisáakshe hawáta-m áashe kuss-fish-dee-k*
 then young.man one-DET river GOAL-get.water-go-DECL
 'then one of the young men went to the river to fetch water' (Bachee 4)
- (53) *chiláakshi-lak baa-wah-chimmi-waa-lée-w-ii-k shóota-?*
 tomorrow-DET INDEF-1A-count-1A-go-1A-will-DECL how-INTERR
 'how would it be if I go to school tomorrow?' (Emilysh 15)

(Since (53) is headed by a modal auxiliary, it contains two instances of incorporation, with all three verb stems inflected for person of subject.)

- (54) *is-báalee axpákaawa-m kalakoon awaxaawé*
 3POS-year sixteen-DET then mountains
*kuss-bilisshíssaanee-lee-k*¹⁰
 GOAL-fast-go-DECL
 'when he was sixteen years old he went to the mountains to fast' (AB 53)

¹⁰ *Bilisshíssaanee* 'fast' is a lexicalized, derived stem composed of *bili* 'water,' *isshii* 'drink', *ssaa* 'negative', and *n-nee* (?).

- (55) *dáa-(a)k hinne baakáate chichíln-naa-(aa)la-h*
 go-SS this child look.for-go-PL-IMPER
 'go, go look for this child' (Mt 2:8)

In another variety of purpose complement, the verb that is incorporated is an obligatorily bound stem, *kúnnaa* 'to fetch', as illustrated in (56) and (57):

- (56) *ak-disshé iiláp-uu-lak duú-laa dii-ak "d-iluu-h*
 REL-dance two-PL-DET come.PL-SS reach.PL-SS 2A-stand-IMPER
dii-lil-wah-kúnnaa-wuu-o-k" huu-k
 2PRO-2B-1A-fetch-1A.PL.come-PL-DECL say.PL-DECL
 'two of the dancers came, they reached him, "stand up, we have come to fetch you" they said' (Baapaalissúua 19)
- (57) *dák-kisshe xuáhchee-kisshi-m óo-kaashee-sh kalaaxtá-m*
 child-SPORT skunk-SPORT-DET bring-AUG-DET forget-DS
óotchia-heelapee-n baa-chiláa-(a)k bah-kúnnaa-waa-u-k
 night-middle-LOC 1A-get.up-SS 1A-fetch-1A.PL.go-PL-DECL
 'when he forgot the toy skunk that he brought everywhere, we got up in the middle of the night and went after it' (Hinne Káal 13)

13.6. Verbal adverbs

I use the term "verbal adverbs" to refer to incorporations with the causativized forms of *itchi* 'good' and *xawii* 'bad', as well as *káatche*, the causativized verb derived from the diminutive suffix *káata*. With *itchee* and *xawíia* the incorporating verbs function as manner adverbials. *Káatche* marks the subject of the clause as diminutive; although it is adverbial in the sense that it is morphologically combined with the verb, it is semantically a subject modifier. Syntactically these verbs are incorporators, while semantically they are modifiers either of the matrix verb (*itchi* and *xawii*) or the subject (*káatche*).

Like the other incorporation constructions that we have looked at, there is a requirement that the subjects of both verbs be coreferential. Examples (58)–(61) illustrate this construction with *itchee* and *xawíia*:

- (58) *is-bilaxpáake dia-itchee-k*
 3POS-people do-good-CAUS-DECL
 'he treated his people well' (AB 12)
- (59) *baaleetdák baa-láh-chimme d-iháan-nak*
 if INDEF-2A-count 2A-finish-COND

baa-lia-laa-itchi-l-aa-l-immah

INDEF-do-2A-good-2A-CAUS-2A-would

'if you had finished school you would have a good job'

- (60) *Henry huua-sh ikaa-itt-aach-ee-ssaa-k*
 H. say.PL-DET see-good-APPROX-CAUS-NEG-DECL
 'he was not very happy to see Henry' (Sees 26)

- (61) *bilaxpáakee-m dii-lia-kxawii-a(a)-lak¹¹*
 person-DET 2B-do-evil-CAUS-COND
d-ihch-ahchihpashi-ssaa-h
 2-REFL-revenge-NEG-IMPER
 'if a person treats you badly, don't revenge yourself' (Mt 5:39)

Examples (62)–(64) illustrate *káatche*:

- (62) *hinne baachilaxchi-káatee-sh koon xapi-hk-uu-lak koon*
 this baby-DIMIN-DET there lie-CAUS-PL-DS there
daach-káatch-ee-k huu-k
 remain-DIMIN-CAUS-DECL say.PL-DECL
 'they laid this little baby there and he (a little one) remained there, they say' (Lk 2:7)
- (63) *hilaá diili-kaatch-ee-m dakáak-kaate óoshtat-ak*
 just walk-DIMIN-CAUS-DS bird-DIMIN gather-SS
haw-aashúua áakee-n awáat-doo-m
 some-her.head top-LOC sit-!.PL-DS
 'when she (being little) had just started walking, some birds flocked together and some of them sat on her head' (Hinne Káal 2)

Sentences (62) and (63) also provide examples of *káata* as a nominal suffix, without the causative. *Káata* is causativized only when it is in construction with active verbs. Often *kaatche* is not strictly diminutive in meaning; sometimes it adds a note of affection, as in (64):

- (64) *bah-chiwakii-t Apsáalook-tatchia*
 1A-pray-HAB Crow-every
bah-chiwakáa-(a)-wa-k(u)-kaat-b-aa-i-k
 1A-pray-CONT-1A-give-DIMIN-1A-CAUS-HAB-DECL
 'when I pray, I pray for all the Crows' (Baapiiháake 4)

¹¹ The initial segment of *xawii* 'bad' is sometimes pronounced as an affricate rather than a fricative; hence the spelling *kxawii*.

In (64) the diminutive conveys the speaker's affection for his fellow tribesmen. Note also that *káatche* bears first person inflection in this example.

13.7. Comitative *áxpá*

Áxpá 'be with, marry' is an active transitive verb stem that occurs in several different constructions. It may appear as an independent stem meaning 'marry', as in (65):

- (65) *is-báalee dúhpaa-pilak-axpi-shoopa-m hilaá Isahké*
 3POS-year twice-ten-left.over-four-DET then her.mother
Éhchee-sh huua áxpá-k
 know-DET say.PL marry-DECL
 'when he was twenty-four he married [a woman] named Knows Her Mother' (AB 78)

Áxpá 'be with' often appears as an independent stem followed by the same-subject marker *ak*, as in (66) and (67):

- (66) *iikuxp-ák Jesus áxp-ak aasiúua kuss-dée-k*
 get.down-SS J. be.with-SS his.house GOAL-go-DECL
 'he got down, he went with Jesus to his house' (Lk 19:6)
- (67) *baap-tatchée dik bii-al-áxp-ak dii-hileelá-k*
 day-every 2PRO 1B-2A-be.with-SS 2B-be.here-DECL
 'as for you, you are here with me every day' (Lk 15:31)

If *áxpá* 'be with' were only attested in sentences like (65) and (66), *áxpak* could be analyzed as a comitative postposition. However, in (67) *áxpá* has both a pronominal second person subject (*al*) and a first person object (*bii*), evidence that it is a transitive verb. When *áxpá* is followed by the same-subject marker as in (66) and (67), it generally denotes accompaniment.

It is also possible for *áxpá* to be incorporated by the verb that follows it, as in (68) and (69). (Note that, unlike other elements discussed in this chapter, *áxpá* is not itself an incorporator.)

- (68) *hinne bacheé Jesus ak-baa-kawii-hile ko sapihkaa-(a)k*
 this man J. REL-INDEF-evil-do PRO favor-SS
áx(p)-baa-luushi-k
 be.with-INDEF-eat-DECL
 'this man Jesus favors sinners and eats with them' (Lk 15:2)

- (69) *d-lilapxe aw-áx(p)-b-állí-lít-bia-waa-lak*
 2POS-father 1A-be.with-1A-speak-APPROX-want.to-1A-COND
*kootá-k hée-?*¹²
 all.right-DECL AFFIRM-INTERR
 'if I wanted to talk to your father, it would be all right, wouldn't it?'
 (Sees 3)

(*Áx* in (68) and (69) is a reduced form of *áxpá*.) Again, without the evidence of sentences like (69), it would be possible to analyze *áx(pa)* as an incorporated postposition. Since, however, the verb in (69) bears the active subject pronominal *aw*, it is clear that *áx(pa)* retains its status as a verb. While postpositions in Crow may be inflected, they always bear B-set, object inflection, not active subject inflection.

There is, however, some evidence that *áxpá* is being reanalyzed as a postposition, as in (70):

- (70) a. *dii-ax-baa-lée-wia-waa-k*
 2B-with-1A-go-want.to-1A-DECL
 'I want to go with you'
 b. *bii-ax-da-lée-wia-laa-?*
 1B-with-2A-go-want.to-2A-INTERR
 'do you want to go with me?'

In these examples, *ax* bears no marking for person of subject, and has also lost its inherent lexical accent. Thus in (70) *ax* formally resembles other inflected postpositions in Crow, whose object can be a B-set pronominal (e.g., *bii-wakúte* 'next to me', *dii-wakúte* 'next to you').

Sentences like those in (70) are considered questionable by older speakers, but such forms do occur, especially in the speech of younger speakers. The "standard" forms of (70a–b), accepted by older speakers, would be (71a–b):

- (71) a. *dii-aw-áx-baa-lee-wia-waa-k*
 2B-1A-with-1A-go-want.to-1A-DECL
 'I want to go with you'
 b. *bii-ál-áx-da-lee-wia-laa-?*
 1B-2A-with-2A-go-want.to-2A-INTERR
 'do you want to go with me?'

¹² *Hée* is an interrogative particle that is used when an affirmative response is expected.

These data suggest that *áxpá* is in the process of being reanalyzed as an incorporated postposition. A likely motivation for this reanalysis is the fact that third person subject marking is zero in Crow: when the subject of *áxpá* is third person, there is no overt pronominal, thus making *áxpá* formally identical to a postposition. These facts also imply that other Crow postpositions might have a verbal origin.

A verb that resembles *áxpá* semantically is *ihchiss* 'be without, leave behind', which may be termed a "negative comitative." *Ihchiss*, like *áxpá*, is an active transitive verb that occurs in dependent clauses, although it is not followed by the same-subject marker. Unlike *áxpá*, *ihchiss* is never incorporated. The semantics of *ihchiss* suggest that it might also undergo reanalysis as a postposition meaning 'without'. Examples are seen in (72) and (73):

- (72) *hinne awá-m itchi-kaashee-sh aw-ihchiss*
 this land-DET good-AUG-DET IA-leave.behind
baa-lée-w-isshi-ssaa-k
 IA-go-IA-ready.to-NEG-DECL
 'I am not ready to leave this beautiful land behind' (Harold II 7)
- (73) *shia-(aa)h-aachi-m Shiipdeeta-sh Awashée ihchiss*
 long-DISTR-APPROX-DET No.Vitals-DET Hidatsa leave.behind
duát-ak dée-k
 break.camp-SS go-DECL
 'after some time No Vitals moved camp, leaving the Hidatsa behind'
 (AB 3)

13.8. Impersonal verbs

In this section we discuss a small class of impersonal verbs that require noun phrases or clausal complements as their incorporated subjects. This class includes the existential verbs *bishí* 'exist' and *deetá* 'not exist', as well as *chichée* 'seem, resemble'. Phonologically they are suffixes, but they have the syntax of impersonal verbs.

13.8.1. *bishí* 'exist' and *deetá* 'not exist'

Both *bishí* and *deetá* are incorporating verbs that occur with incorporated noun phrases or nominalized clauses. It is not, strictly speaking, accurate to say that *bishí* and *deetá* incorporate noun phrases and clauses; rather it is the head of the noun phrase or clause that is incorporated.

In this construction *bishí* and *deetá* function as predicates of existence or nonexistence, respectively, as illustrated in (74)–(77):

- (74) *b-asahkáale huu-káwe-h iilakahte*
 1POS-grandmother come-POL-IMPER over.there
baa-hám-mishi-k
 INDEF-some-exist-DECL
 ‘come, grandmother, there is something over there’ (Isahkáa 37)
- (75) *baapé-lak óotchia-lak ak-baa-iassee-wishi-hkaa-(a)k*
 day-and night-and REL-INDEF-watch-exist-CAUS-SS
 ‘he made sure that there were guards both day and night’ (lit., ‘he caused guards to exist’) (AB 12)
- (76) *ihée an-nii-wah-kuxshi-leeta-k*
 other REL-2B-1A-help-not.exist-DECL
 ‘there is no other way for me to help you’ (Issihii 4)
- (77) *hawass-ikaa-(aa)h-aat-dee-lak*
 around-look-DISTR-APPROX-!-DS
baa-iis-éhche-leet-taahili-k
 INDEF-face-know-not.exist-at.all-DECL
 ‘he looked around here and there, and to his surprise, he didn’t recognize anyone’ (Baapaalissúua 21)

The fact that the first clause in (77) terminates in the different-subject marker supports the claim that *bishí* and *deetá* are impersonal verbs, since the subject of *deetá*, here the nominalized clause *baaiiséhche* ‘he recognized someone’, is not coreferential with the third person subject of *ikaa* ‘look’, although the subjects of *ikaa* and *éhche* are coreferential.

Bishí and *deetá* often function as the equivalents of verbs of possession (‘have’) and nonpossession (‘not have’), respectively, as illustrated in (78)–(80):

- (78) *dis-balaa-kaat-bishi-?*
 2POS-money-DIMIN-exist-INTERR
 ‘do you have any money?’ (lit., ‘does your money exist?’)
- (79) *bilaxpáake ahú-m it is-ashtáal-uu-wishi-m íchi-k*
 people many-DS still 3POS-teepee-PL-exist-COMP good-DECL
 ‘there are many people; it is good that they still have teepees’ (lit., ‘it is good that their teepees exist’) (Harold II 14)

- (80) *áashe bin-neet-uu-k* *balee-is-bin-neeti-immaachi-k*
 river water-not.exist-PL-DECL 1B.PL-3POS-water-not.exist-will-DECL
 'the rivers are dry; we won't have any water' (lit., '... our water will not exist') (Harold IV 12)

Constructions with *bishí* and *deetá* display a tendency towards lexicalization and not-fully-compositional semantics. For example, *chim-mishi* 'married, having a husband' is derived from *chiláa* 'husband' plus *bishí*. This form is phonologically irregular: the rules of word formation predict that the form should be **chiláawishi*. Another lexicalization is *iilápx-am-mishi* 'adopted father', derived from *iilápxa* 'his father' plus *ala* 'relativizer' plus *bishí*. The use of *ammishi* as a plural marker is discussed in §10.6.

Expressions with *bishí* may also convey the notion 'in the region of', as in (81) and (82):

- (81) *hinne ich-am-mishée-n* *iisuukaat-dak chóop-datchi-lak*
 this his.feet-REL-exist-LOC mouse-DET squeak-continue-DS
 'a mouse kept squeaking around this one's feet' (Isshii 3)

(In (81), *ich-am-mishée-n* is literally translated 'at where his feet are'.)

- (82) *bii-isáa-t-bis-aah-nak* *héelee-taa*
 rock-large-DISTR.PL-exist-DISTR-DET among-PATH
bach-ilitt-uu-lak
 RECIP-race-PL-DS
 'they were racing along in an area where there were large rocks here and there' (Heettaa 15)

Both *bishí* and *deetá* can bear additional verbal suffixal morphology, which strengthens the claim that they are verbs. In (83), *bishí* is followed by the habitual suffix:

- (83) *iisashpíte is-awus-úu-wishi-i-lu-k*
 rabbits 3POS-den-PL-exist-HAB-PL-DECL
 'rabbits have dens' (Animals 24)

In (84), *bishí* is followed by a modal auxiliary:

- (84) *ba(a)-ák ákian harwéese baa-chiwéé-woo-k-bah* *kúk*
 1A.reach-SS those the.rest 1A-tell-INCL-DECL-obviously PRO
ala-kuxshi-wishi-o-mmaachi-k
 REL-help-exist-PL-will-DECL
 'let's go back and tell the rest of them; as for them, there will be some way for them to help' (Uuwat 6)

In (85), *bishi* is followed by the approximative suffix *aachi*:

- (85) *shia-ssáa ammuúá baa-xachii-wis-aat-ak*
 long-NEG.PUNCT below INDEF-move-exist-APPROX-SS
 'for a little while something was moving down below' (Uuwat 6)

In most of the examples in my data, *bishi* and *deetá* are not followed by the plural morpheme (though note (80) and (84) above); rather, plurality is marked on the nominal subject of these impersonal verbs, as in (86):

- (86) *buá am-maa-luus-úu-leeta-k*
 fish REL-INDEF-eat-PL-not.exist-DECL
 'there is no food for the fish' (Harold IV:9)

In (86) the subject of *deeta* is *buá ammaaluusúu* 'fishes' food'.

There are also examples in the data where plural marking is found both on the nominal subject and on the impersonal verb or its suffix:

- (87) *húulee-sh bacheé iilápuu-m báashee-m awúua-l-uu-m*
 yesterday-DET men two-DET boat-DET inside-be.at-PL-DS
is-dáxxaa-u-wis-uu-k
 3POS-gun-PL-exist-PL-DECL

'yesterday two men were in a boat; they had guns' (Harold II 3)

- (88) *baa-chiláa-u-leet-uu-k*
 INDEF-fear-PL-not.exist-PL-DECL
 'they aren't afraid of anything' (Animals 16)

- (89) *amnia koon is-awus-úu-wishi-i-lu-k*
 river.bank LOC 3POS-den-PL-exist-HAB-PL-DECL
 'they have their dens on river banks' (Animals 32)

(In (89), plural marking occurs both on the nominalized subject of *bishi* and on the habitual suffix.) This phenomenon, which we might term "plural spreading," may be explained by the strong tendency in Crow for plural marking to occur as close as possible to the end of the verb complex.

There is a second construction with *bishi* and *deetá*, in which these forms serve as markers of perfect aspect, with the verb interpreted not only as past, but as having an effect on the present, as illustrated in (90):

- (90) a. *aw-ákaa-k* 'I saw it'
 b. *aw-ákaa-wishi-k* 'I have seen it'

Examples (91) and (92) are taken from texts:

- (91) *ala-kool-úua baá-wishi-m é-wa-hche-k*
 REL-be.there-PL 1A.reach-exist-COMP STEM-1A-know-DECL
 'I know that I have been to the place where they are' (Uuwat 2)
- (92) *kusskó kuú-k it hilihtée hii-leeta-?*
 long.time return-DECL yet here arrive-not.exist-INTERR
 'he came back a long time ago; hasn't he gotten here yet?' (Uuwat 4)

In this construction *bishí* and *deetá* are functioning not as verbs, but as simple aspectual suffixes.

13.8.2. *chichée* 'seem, resemble'

Chichée 'seem, resemble' is an impersonal verb that takes a clause as its subject, and incorporates the head of that clause, as in (93) and (94):

- (93) *xawii-w-a(a)-áhi-chichee-k*
 bad-1A-CAUS-PUNCT-seem-DECL
 'I seem to have made a mistake' (Sees 7)
- (94) *sas-da-chilee-chichee-wi-k*
 soon-2A-get.up-seem-EXCL-DECL
 'it seems that you've gotten up early!' (Sees 26)

There is no evidence of nominalization in the incorporated clauses.

Chichée also occurs as an independent stative verb stem, as in (95):¹³

- (95) *bishká-m isáa-kaashi-m shiilishpit-ak Old Tuck chichée-k*
 dog-DET big-AUG-DET brown-SS O. T. resemble-DECL
 'it was a large brown dog, it resembled Old Tuck' (Sees 30)

The fact that *chichée* occurs as an independent verb lends support to the claim that the incorporating stem is also a verb.

The derivational suffix *ta* 'resemble, appear to be' (see §5.6.12) is similar to *chichée*. However, *ta* apparently has no effect on the syntax of the clause: for purposes of switch reference marking (§§16.3–16.4), clauses where *ta* is suffixed to the verb behave as if *ta* were not a verb—that is, it is the subject of the verb to which *ta* is suffixed that controls switch reference marking in the clause. An example is seen in (96):

- (96) *bía-sh iluú-hkaa-(a)k balá-m ihchipshia-hchee-m*
 woman-DET stand-CAUS-SS wood-DET propped.up-CAUS-DS

¹³ When it occurs as an independent stem, *chichée* is accented.

shée-ssee-t(a)-ak daachi-m lilaxp-awako óossh-ee-m
 die-NEG-appear-SS remain-DS her.lip-lower burnt-CAUS-DS
káalichee-ta-k
 smile-appear-DECL

'she stood the woman up, supporting her with a stick [so that] she appeared to be alive, she blackened her lower lip [so that] the woman appeared to be smiling' (Bitáa 1)

In this sentence the clauses *shéesseetak* and *daachim* are linked by the same-subject marker, indicating that their subjects are coreferential (both refer to the woman). Omitting *ta* in this instance would not affect the coding of cross-clause reference maintenance.

13.9. Causatives

As discussed in §6.3.2.4, there are two causative verbs in Crow: *ee* 'direct causative' and *hche* 'indirect causative.' From a morphological viewpoint they are suffixes to the verb stems that they causativize; they combine with a verb stem to form a verb stem subcategorized for an additional argument. Both intransitive and transitive stems may be causativized.

A first or second person agent (causer) is marked by an A-set pronominal prefix to the causative stem. Causees and any other objects present in the clause are coded with the B-set (nonactive) pronominals. These B-set pronominals are prefixed not to the causative stem, but to the whole verb (see example (98) below), and are freely ordered (see §9.5.2, especially example (83)).

13.9.1. Simple causatives

An example of a direct causative with the stative stem *ítchi* 'good' is shown in (97):

- (97) *déelaa kal-am-milaxpáake kulussáa-(a)k itch-ee-k*
 then now-REL-live change-SS good-CAUS-DECL
 'he changed his way of living, he made it good' (AB 67)

In (98) we have an indirect causative with the transitive stem *día* 'do, make':

- (98) *hinne b-asooké baatachxaxúa bittách*
 this 1POS.younger.sister everything 1PRO.alone

bii-díá-hkaa-(a)k

1B-do-CAUS-SS

'this younger sister of mine makes me do everything by myself' (Lk 10:40)

And (99) is an indirect causative with the intransitive active stem *dáakua* 'go home':

(99) *eehk da-láak-uua baailishe chia kala-shia-k*

that 2POS-child-PL suffer too already-long-DECL

kan dáakua-wa-hche-woo-k

now go.home-1A-CAUS-INCL-DECL

'that child of yours has been suffering too long; let's send him home now' (Baapaalissúua 25)

Causative formation may apply iteratively, as in (100):

(100) *hinne is-baa-waakuhpée-sh óochia-hche-hche-k*

this 3POS-INDEF-sick-DET healed-CAUS-CAUS-DECL

'he, had him, cure this sick one of his,' (Lk 7:3)

There is evidence involving reflexives that supports the claim that causativization is a derivational rather than a syntactic process, and that causative constructions are monoclausal: the object of the "lower clause" is reflexivized when it is coreferential with the subject of the "higher" causative verb, as in (101) and (102). In (101) the subject of the causative verb, a null anaphor referring to the mole, must be interpreted as coreferential with the reflexive, an argument of the "lower clause":

(101) *kalakoon Issaatshiile dútt-ak kummiilii-ak axúa*

then Yellow.Leggings take-SS transform-SS his.body

ihch-ikuxx-ii-ak awé awúua-taa aa-lée-lak

REFL-equal-CAUS-SS ground inside-PATH PORT-go-DS

'then [the mole], took Yellow Leggings, he, transformed him, he, made his, body the same size as his, own, he, took him, along under the ground' (Ishii 9)

Although the protagonists in (102) are coded with null discourse anaphors, the context clarifies their roles. Here the subject of the higher causative *hche*, Two Leggings, is coreferential with the object of the lower causative *ee*; the lower object appears as the reflexive *ihchi*:

- (102) *baasshússuua ii ihchi-láak-ee-hche-wia-k*
 Tobacco.Society INSTR REFL-child-CAUS-CAUS-try.to-DECL
 '[Two Leggings,] was trying to have [Sees the Living Bull,] adopt him
 through the Tobacco Society' (AB 67)

If these examples were multiclausal, we would expect the reflexives to be bound by the subject of the lower clause. Since the reflexives are not so bound, I take these sentences as evidence that causatives are monoclausal in Crow.

As to semantics, the direct causative conveys the notion that the causer directly brings about the effect. This verb emphasizes the closeness between the action of the causer and the effect. Examples of direct causatives are given in (103)–(105):

- (103) *Baháa Awúuasshiitua awáxaa-(a)k*
 Thrown.Into.the.Spring bend.down-SS
baa-chilasshihk-a-lahkú-lee-m kukaaxp-ák
 INDEF-think.over-CONT-continue-!-DS grab-SS
ala-xachii-leetch-ee-m
 REL-move-not.exist-CAUS-DS
 'Thrown Into the Spring bent down, he kept thinking things over; [his brother] grabbed him and made it impossible for him to move' (lit., '... caused a way for him to move not to exist') (Bitáa 7)

(In (103), Thrown Into the Spring is being physically restrained by his brother; hence the appropriateness of the direct causative.)

- (104) *sáapii dis-baaaxussee ii d-ihchi-waailishe-l-aa-?*
 why 2POS-clothes INSTR 2-REFL-be.upset-2A-CAUS-INTERR
 'why get yourselves upset over your clothes?' (Mt 6:28)
- (105) *dii-ala-kawii-leet-taahil-ee-wia-h*
 2B-REL-bad-not.exist-at.all-CAUS-try.to-IMPER
 'try to be perfect' (lit., 'try to make the way you are bad not exist at all')
 (Mt 5:48)

The direct causative can combine with inalienably possessed noun stems with the meaning 'cause to be one's X', as in (106):

- (106) *baaishtashiile kúh iilápaat-aa-(a)k dáashdee-k*
 white.man PRO his.friend-CAUS-SS be.kind-DECL
 'as for the white people, he made them his friends, he was kind to them'
 (AB 47)

With the indirect causative the relationship between causer and effect is less direct and the causer has less control; the causee ordinarily

plays some role in bringing about the effect. The indirect causative covers a range of meanings: it may be translated 'let, permit, allow, have'. Examples of sentences with indirect causatives are seen in (107)–(109):

- (107) *aksée kuhtée aa-lii-ak baaluu-káat-dak koón*
 his.parents there PORT-reach-SS beads-DIMIN-DET there
dúushii-hkuu-k huu-k
 put.down-CAUS.PL-DECL say.PL-DECL
 'his parents brought him there and had him put some little beads down, they say' (Uuwat 21)
- (108) *baappaa-liss-úua kuú-ak is-bilaxpáake*
 daytime-dance-PL give-SS 3POS-people
kuss-aa-chisshii-hkuu-k
 GOAL-PORT-go.back-CAUS.PL-DECL
 'they gave him the Day Dance and had him take it back to his people' (Baapaalissúua 29)
- (109) *bii-koon-nak isshia*
 1B-be.there-COND her.hair
púmmi-kaatch-ee-wa-hche-ssaa-w-immaachi-k
 short-DIMIN-CAUS-1A-CAUS-NEG-1A-would-DECL
 'if I had been there, I would not have let her cut her hair short' (Kaschube 1978:54.12)

Example (109) is another instance of recursive causativization: the direct causative is applied to *púmmikaata* 'short', giving *púmmikaatchee* 'make short'; the indirect causative, in turn, is applied to this stem, giving *púmmikaatcheewahche* 'I allow to make short'.

The distribution of the causatives corresponds fairly closely to the active and stative verb classes in Crow: direct causatives most often combine with stative verbs, indirect causatives with active verbs. Since active verbs have an agentive subject, their causativization is more likely to involve less direct or mediated causation.

Nevertheless, it is possible to elicit minimal pairs where both the causative verbs occurs with the same stem, with a clear difference in meaning:

- (110) a. *bas-lilaalee xachii-w-aa-k*
 1POS-car move-1A-CAUS-DECL
 'I moved my car' (e.g., by pushing it; direct causative)

- b. *bas-lilaalee xachii-wa-hche-k*
 IPOS-car move-1A-CAUS-DECL
 'I moved my car' (e.g., by turning the ignition key and starting the engine; indirect causative)

13.9.2. Causatives with locative *la* 'be at'

There are several other Crow constructions that inflect as causatives; all these involve the direct causative.

The first involves the locative verb *la* 'be at'. The ordinary noncausative use of this verb is illustrated in (111):

- (111) *bishéechiile iichiilaasuua ko ashkawúua-l(a)-uu-k*
 cows barn PRO inside.building-be.at-PL-DECL
 'the cows are in the barn' (Sees 15)

The causative construction consists of a noun, postposition, or deictic stem plus *la* plus the direct causative. This construction can be translated 'be situated or located at X' or 'situate oneself at X', as illustrated in (112) and (113):

- (112) *iisaxpúatahchewishke ak-chiliché awachúhka-l(a)-ii-ak*
 sheep REL-herd field-be.at-CAUS-SS
 'shepherds were located in a field' (Lk 2:8)
- (113) *kala-héele baatcháache bii-ssaa-(a)k kala-héele kawii-kaate*
 PREF-among outstanding 1B-NEG-SS PREF-among bad-DIMIN
*bii-ssaa-m kuá amméaxxee-m-m-aa-i-k*¹⁴
 IPRO-NEG-DS middle among-be.at-1A-CAUS-HAB-DECL
 'I'm not the best and I'm not the worst; I'm situated right in the middle'
 (Harold II 5)

Since the causative increases valence, we would expect an object to occur if this construction with *la* were a fully productive causative. One might conceivably interpret the semantic structure of examples like (112)–(113) as involving a reflexive object: 'I situate myself'. However, this putative reflexive object in the semantic structure is not reflected in the morphology. This is grounds for thinking that the combination of *la* plus causative is distinct from the productive causative construction.

There are examples in the data where the construction with *la* plus causative does occur with the expected object, as in (114). These can be treated as productive causatives.

¹⁴ The *l* of *l(a)* becomes *m* before *m*.

- (114) *Jeffrey-sh isahchiite ishúushe áakee-l(a)-li-ak*
 J.-DET his.younger.sister his.knee on.top-be.at-CAUS-SS
xachii-a-k
 move-CAUS-DECL
 'Jeffrey has placed his little sister on his knee and is rocking her' (Hinne Káal 9)

In other examples the locative expression combines directly with the causative, without the locative verb *la*, as in (115) and (116). (These examples again are interpreted as reflexives but lack an overt reflexive morpheme, like (112)–(113).)

- (115) *bii-koosáhta-kaatt-aa-(a)k bii-ikaa-(a)k daachi-k*
 1B-near-DIMIN-CAUS-SS 1B-look.at-SS remain-DECL
 'he was situated close to me; he kept looking at me' (Harold III 13)
- (116) *am-máak-kaashe kuht-íi-ak*
 REL-high-AUG there-CAUS-SS
 'he situated himself on the highest point' (AB 53)

13.9.3. Causatives with the goal postposition

The second variety of lexicalized causative consists of a postposition followed by the goal postposition *ss* followed by the direct causative, as illustrated in (117) and (118). The resulting predicates take objects (e.g., *baaiihulishoopé* in (117) and *bilé* in (118)) just as causatives of intransitive verbs do.

- (117) *Henry baaté shúa-kaat-uu-lak dútt-ak baaiihulishoopé*
 H. dish blue-DIMIN-PL-DET get-SS table
áaka-ss-ee-lak
 top-GOAL-CAUS-DS
 'Henry got some blue dishes and put them on the table' (Sees 11)
- (118) *Henry huua-sh baat-dák bilé awuú-ss-íi-ak*
 H. say.PL-DET dish-DET water inside-GOAL-CAUS-SS
awé koon dúushii-k
 ground LOC put.down-DECL
 'Henry put water in a dish and set it on the ground' (Sees 37)

13.9.4. Causatives with the path postposition

The third lexicalized causative construction consists of a postposition or a possessed body part plus *t(aa)* 'path postposition' plus the direct

causative. These causativized stems can take objects. This construction is illustrated with a postposition in (119) and a body part in (120):

- (119) *baliiché shóoshiw-ii-ak bikkée áakee-t-ii-ak*
 willow in.a.row-CAUS-SS grass top-PATH-CAUS-SS
 'he put willows in a row, he put grass on them' (Isshii 3)
- (120) *b-áalee-t-ii-ak dakaá-k*
 1POS-arm-PATH-CAUS-SS pull-DECL
 'she took me by the arm and pulled me'

One way to treat the causatives in §§13.9.2–13.9.4 would be to list each causativized stem that can occur in each of the three constructions in the lexicon. Such an approach, however, would fail to recognize the productivity of these constructions: the first type can occur with any locative expression, the second and third with a variety of postpositions, and the third with any semantically compatible body part. What are lexicalized, and hence part of the Crow speaker's knowledge, are the construction types rather than the individual stems.

13.10. Mirative *dee*

The suffixal verb *dee* (inflected exactly like *dee* 'become' [§6.3.2.2]) can be called a "mirative" or "surprise marker": it alerts the addressee to the fact that the following clause contains a surprising, unusual, or unexpected development. It can usually be translated with something like 'and to his/her surprise' or 'and what do you know!' In most of the examples in my data it is followed by the different-subject marker *m*; occasionally it is followed by the subordinate temporal clause marker *t*. The examples of *dee* in (121)–(123) are taken from texts:

- (121) *baa-lasshihk-ák dáa-lam-nee-m dakáak-kaatee-sh kalatchii*
 INDEF-think.about-SS go-continue-!-DS bird-DIMIN-DET again
húu-laa hii-ák
 come-SS reach-SS
 'he went along thinking, and to his surprise, the little bird again came and reached him' (Isahkáa 17)
- (122) *baaku-ss-aw-aka(a)-áh-mee-m bii-koosáhta-kaatt-aa-(a)k*
 above-GOAL-1A-see-PUNCT-1A.!-DS 1B-close.to-DIMIN-CAUS-SS
bii-íkaa-(a)k daachi-k
 1B-see-SS remain-DECL

'I looked up and to my surprise he was located close to me, he kept looking at me' (Harold III 13)

- (123) *hinne iilápaachee-sh ischá-xachi-a(a)-lit-ak*
 this his.friend-DET his.hand-move-CAUS-APPROX-SS
duusa(a)-áh-nee-m Peelatchiwaaxpáa-sh isché xapp-ée-m
 put.down-PUNCT-!-DS Medicine.Crow-DET his.hand fall-PUNCT-DS
 'this friend of his shook hands with him, and when he put his hand down,
 he was amazed to see Medicine Crow's [fake] hand fall off' (AB 60)

An example of *dee* followed by the habitual subordinator *t* is seen in (124):

- (124) *iaxassee ah-nák kool-úu-lak bilaxpáake ihám-noo-t*
 snakes many-DET be.there-PL-DS people sleep-!-PL-TEMP
axú-o dahpi-i-lu-k huu-k
 their.body-PL enter-HAB-PL-DECL say.PL-DECL
 'there were a lot of snakes there; when people were sleeping—
 surprise!—they would enter their bodies' (Bitáa 15)

The mirative is inflected for person of subject, indicating that it is a verb, as in (122) above, and in (125):

- (125) *kalakoón b-aluu-ák b-ipatt-ák baa-wee-m kala*
 then 1A-stand-SS 1A-look.back-SS 1A.notice-1A-!-DS then
áxxaashe asii-wiá-m
 sun rise-about.to-DS
 'then I stood up and looked back, and to my surprise I noticed that the
 sun was about to rise' (Baapiiháake 1)

It may also be marked for plural, another indication of verbal status, as in (124) above, and in (126):

- (126) *hinne kuss-basée-sh Dakkoótee dúhpapee-a(a)-(a)k*
 this GOAL-run-DET Sioux frightened-CAUS-SS
kaláa-loo-m haaw-a(a)-áhi-o-k
 run.away-!-PL-DS destroyed-CAUS-PUNCT-PL-DECL
 'this run of his terrified the Sioux, they ran away, and what do you know,
 [the Crows] slaughtered them' (AB 60)

The mirative often follows the verb *hee* 'notice, realize', as in (125) and in (127):

- (127) *awé baapaalée-m hee-lee-m hinne ballaxxi-m áakinnee-sh*
 earth dawn-DS realize-!-DS this driftwood-DET ride-DET

ihkulussáa-(a)k iichili-k
REFL.change-SS horse-DECL

'as it was getting towards morning he realized that this driftwood that he was riding had been transformed into a horse!' (Isahkáa 19)

(Both verbs are inflected for person; see paradigm in table 6.20.) To my knowledge *hee* only occurs in conjunction with *dee*.

In the majority of cases *dee* may be viewed semantically as a clause-level predicate that indicates that the subject is surprised or amazed, as in all the examples above except (124). In (124), and in (128) and (129), it is clear from the context that it cannot be the subject of *dee* that is surprised. In (128), *dee* cannot be referring to the man's surprise or amazement, since he was sleeping when the mice returned and it was only after they sang and danced that he woke up:

(128) *hilám-nee-m hileen iisuukaatee-sh chissáa-(a)k dúu-laa*
sleep-!-DS these mice-DET return-SS come-SS
kalatchi baláx-ak diss-úu-k baláx-uua aa bachée-sh
again sing-SS dance-PL-DECL sing-PL until man-DET
itchée-m
wake.up-DS

'he was sleeping, and what do you know, these mice returned, they came, they sang and danced again; they sang until the man woke up' (Cleorash 15)

Example (129) is taken from a story written for the bilingual program in which a mother is talking about her children, describing their behavior and telling stories about them. It is not a traditional tale where we might expect birds to be exhibiting behavior typical of human beings, and it is therefore difficult to see how *doo* can be interpreted as conveying the sense that the birds were surprised:

(129) *dakáak-kaate óoshtat-ak haw-aashúua áakee-n awáat-doo-m*
bird-DIMIN flock-SS some-her.head on-LOC sit-!.PL-DS
chili-ssaa
afraid-NEG

'some birds flocked around, they sat on her head, and what do you know, she wasn't afraid' (Hinne Káal 2)

The above data suggest that *dee* is a verb, although a peculiar one, with idiosyncratic morphological, syntactic and semantic properties.

13.11. Discussion

I turn now to an analysis of the above data. Under the general rubric of “verb incorporation” I have described a number of constructions that involve two or more morphologically compounded verb stems. This descriptive notion of verb incorporation needs to be refined and clarified, and the differences between the various constructions need to be spelled out.

From the standpoint of the morphology, there are three basic types of compound verb constructions:

- compounds where only the **final verb** is inflected for person of subject (causatives);
- compounds in which only the **first verb** bears subject marking (compounds of statives plus modal auxiliaries, and compounds with *chichée*, *deetá*, and *bishí*); and
- compounds in which **both verbs** are inflected for subject (all other types).

From the standpoint of the syntax and semantics we may distinguish six types of constructions:

- **causatives**, which I am treating as inert lexical compounds;
- **modal auxiliary and purpose constructions**, where the incorporator, an auxiliary or motion verb, is the head of a complement;
- **benefactives and verbal adverbs**, where the incorporator is a semantic argument or adjunct;
- **comitatives**, where the incorporated element is an adjunct;
- **continuatives, completives, existentials, and *chichée***, where the incorporator is, from a semantic standpoint, an aspectual or speaker attitude marker; and
- **the mirative (surprise marker) *dee***, an idiosyncratic verb that fits into none of the above categories.

Discussion below is organized in terms of the six semantic-syntactic types, except that comitatives are considered together with benefactives and verbal adverbs.

13.11.1. Causatives

Causatives are morphological compounds. In other words, it is not the case that a syntactic verb combines with a causative suffix; rather, a lexical verb stem combines with a causative verb, with the resulting compound functioning as a single verb.

One effect of causativization is to increase the valence of the verb: causativized intransitives become transitive, causativized transitives become ditransitive, and causativized ditransitives become tritransitive. And since there is only a two-way case opposition in Crow (active vs. nonactive), all pronominals in causative constructions, apart from the causer, occur in the nonactive case form.¹⁵

There is morphological evidence that causativization is a derivational rather than a syntactic process: in the causative construction only the causative stem is inflected for person of subject. In this respect causatives differ from all the other constructions discussed in this chapter.

Syntactic evidence for a morphological, monoclausal analysis is provided by the data on reflexivization, where the subject of the causative is coreferential with the object of the "lower" verb, as discussed above in §13.9.1.

The claim that causativization is a morphological process is also supported by the fact that there are several lexicalized causatives in Crow with noncompositional semantics, i.e., with semantic structures elements of which are not reflected in the morphology of the construction.

13.11.2. Modal auxiliaries and purpose constructions

We have seen that when modals combine with stative verbs, only the stative, and not the modal, is inflected for person. When modals combine with active verbs, both stems are inflected.

Syntactically, the modal is the head of the construction. Thus modal auxiliaries that combine with stative verbs can be considered impersonal verbs that incorporate a clausal subject, and modals that combine with active verbs can be considered heads that incorporate a clausal complement.

¹⁵ According to Wallace, these prefixes are freely ordered: "A striking feature of Crow which is quite unusual crosslinguistically is that when more than one clitic is attached to the verb, or when a clitic cooccurs with an incorporated noun, these elements are usually freely ordered" (1993:53).

There are also some facts about the scope of auxiliaries that support this analysis. As discussed in §16.4.1, modals (and also negatives) may have scope over a series of preceding clauses linked by the same-subject marker. This suggests that a modal is a syntactic heads that may take as complement a sequence of clauses over which it has scope.

Purpose constructions can also be treated as complement constructions. In this construction both verbs are inflected for person. The subject person marker on the lexical verb that combines with the modal or motion verb in these constructions can be viewed as a syntactically inert copy—a morphological element that is not relevant to syntax—while the original subject of the lexical verb raises to become the subject of the modal or motion verb. Treating both person markers as syntactic formatives would be problematic for a phrase structure analysis, since the “constituents” that are combined in the morphology are a verb and its associated subject, and verb-plus-subject is not an allowable constituent in any syntactic framework that I am familiar with. However, in an autolexical framework there is no problem in claiming that morphological formatives have null syntax.

13.11.3. Benefactives, comitatives, and verbal adverbs

We turn, then, to the third type of construction, where one or the other of the compounded verbs is a semantic argument or adjunct of the other. This class includes a variety of constructions.

First, there is the benefactive verb *kuú*. When *kuú* is compounded with a preceding verbal stem it adds a beneficiary argument to the semantics of the clause—the person for whom something is done. Although it has the morphology and syntax of a verb and is marked for person of subject and goal object, it does not have the semantics of a verb. Semantically *kuú* functions as a benefactive postposition, and the goal object of *kuú* functions as the object of this postposition that is morphologically and syntactically a verb. I conclude, then, that this construction with *kuú* involves a mismatch between verbal morphology and syntax and nonverbal semantics.

Comitative *áxpá* is a verb that can be incorporated by the verb that follows it; it may also occur as an independent stem meaning ‘be with’ or ‘marry’. A case can also be made that *áxpá* involves a mismatch between morphology on the one hand, and syntax and semantics on the other. In its comitative sense, *áxpá* occurs either incorporated or in a same-subject construction; it has the morphology of a finite verb stem inflected for person of subject. However, it has the syntax and semantics

of a comitative postposition. The subject marking on *áxpá* is redundant, contributing nothing to the syntax and semantics.

The innovating construction exemplified in (70), where *áxpá* appears as an incorporated postposition without person marking, can be viewed as a restructuring that serves to bring the morphology, syntax, and semantics into closer alignment.

The verbal adverbs are so named because they function as manner adverbial modifiers of the verbs that they follow in the morphology, or, in the case of *káatche*, as a diminutive modifier of the subject of the clause. The verbal adverbs are inflected for person of subject by means of the causative, although that person marking is semantically and syntactically redundant. I treat these also as mismatches between the morphology, on the one hand, and the syntax and semantics on the other. In the case of *káatche*, the fact that it can be inflected for subject is particularly surprising, since *káata* may cooccur with nouns as a simple derivational affix.

From the standpoint of the semantics, the verbs in question serve to add adjuncts or arguments to the clause. In the case of *kuú* a beneficiary argument is added to the clause; in the case of *áxpá*, a comitative adjunct; and in the case of the adverbial verbs, either a manner adverbial or a diminutive noun-phrase modifier.

13.11.4. Continuatives, completives, existentials, and *chichée*

In the fourth type of verb-compounding, the incorporator functions as a grammatical aspectual or speaker attitude marker.

The continuative verbs and *koowée* 'finish, cease an activity' may occur either as independent verbs or as incorporators of this type. When they are incorporators, they function as markers of aspect: progressive or durative in the case of the continuative verbs, and completive in the case of *koowée*. In these constructions, then, the continuatives and *koowée* are morphological and syntactic verbs that have the semantics of aspectual markers. Syntactically, they are incorporators.

As discussed above, *bishi* and *deetá* are existential verbs that combine either with noun phrases or with clauses. When they combine with clauses, they function as markers of perfect aspect.

Chichée 'seem, resemble' may be viewed as an incorporating impersonal verb that combines syntactically with a clausal subject complement. On the other hand, *chichée* may also be treated as an attitude marker, for two reasons: it immediately precedes the sentence-final speech act marker, a position where other attitude markers occur; and semantically, it is a marker of speaker attitude.

13.11.5. Mirative *dee*

Next I consider the mirative or surprise marker *dee*, a verb quite unlike any other in Crow. *Dee* has unusual syntactic, semantic, and morphological properties. From the standpoint of the morphology it is a verb, in that it is inflected for person of subject and may bear plural marking. However, it may not occur as an independent predicate; it is obligatorily suffixed to the verb that precedes it. Also, unlike almost all other lexical verb stems in Crow, it lacks inherent accent.

It has the syntactic properties that its subject must be coreferential with the subject of the verb that it is in construction with, and it may not be followed by a sentence-final speech act marker or a same-subject marker; it is followed by either the different-subject marker *m* or the habitual marker *t*.

Dee has the semantics of a marker of speaker attitude: the speaker is alerting the addressee that something surprising or unexpected is going to happen. Often *dee* can be interpreted as a verb that also predicates an attitude of surprise or amazement of its subject. However, as we have seen above in (124), (128), and (129), there are cases where the context makes it impossible to construe *dee* as predicating surprise of its subject. In these examples it can only be interpreted as a marker of speaker attitude.

Since *dee* is a bound form that is obligatorily suffixed to the preceding verb stem, and since the subjects of the two verbs must be coreferential, I view *dee* as an incorporator in the syntax.

From the viewpoint of the semantics a case could be made for viewing the following clause as the complement of *dee* (e.g., 'John was surprised that X'). However, there is no syntactic or morphological evidence to support this suggestion: complements in Crow always precede their heads. If anything, *dee* is a marker of discontinuity rather than an indicator of a syntactic and semantic relationship: it acts more like a conjunction than a verb. It serves to remind the hearer to shift mental gears, to be prepared for something unusual or unexpected.

13.11.6. Diachronic and functional motivation

Finally, I speculate on the diachronic and functional motivation for the constructions we have been discussing. From a diachronic perspective all these constructions can be reduced to two different syntactic sources: either they are derived from structures in which a verb takes a clausal complement (causatives, auxiliaries, purpose clauses, existentials, *chichee*, *dee*), or they are reductions of same-subject constructions (*ápa* and *kuú*).

Both patterns involve a reduction in complexity, in that they reflect a tendency to reduce multiclausal structures to monoclausal ones. Morphological or syntactic incorporation involves a loss (partial or complete) of full clausal status.

Munro (1976) suggests two functional motivations for these reductions: monoclausal structures are easier to process than multiclausal ones; and personal subjects are easier to process than clausal subjects. Munro discusses several Mojave constructions that are similar to the ones we have seen in Crow in that person marking on more than one verb is semantically and syntactically unmotivated. She sees these inflectional patterns as stages in a diachronic process whereby multiclausal structures are reanalyzed into complex unitary clauses.

It appears that both Crow and Mojave share a morphological requirement that inhibits this process from playing itself out to its fullest extent, namely the requirement that all verbs be inflected for person. When the movement toward clause reduction is thus inhibited, the result is a construction where both verbs are inflected for person, although the semantics and syntax do not require double inflection.

We have seen many examples of such constructions in Crow: continuatives, comitatives, benefactives, completives, and adverbial verbs can all be viewed as biclausal constructions that have been reduced to monoclausal ones, with one of the clauses reinterpreted as an adjunct or argument of the other.

The continuative auxiliaries also provide evidence of the inhibiting effect that the finite verb requirement has had on diachronic clause reduction. There is strong evidence that the continuatives, referred to in the Siouan literature as "positionals," can be reconstructed for Proto-Siouan, and according to Rankin, "the verbs quite apparently denoted continuing action from the beginning" (2004:203). But even these very old auxiliaries retain personal inflection. It is evident, then, that they have been quite resistant to reanalysis and loss of verbal status in Crow.

Turning to the constructions with clausal subjects, we can see two different diachronic processes that result in their reduction in Crow. The first process involves the development of auxiliaries. I suggest that at an earlier stage of the language, auxiliaries were impersonal verbs with clausal complements. This stage is represented synchronically by the stative plus auxiliary construction, where the auxiliary is not inflected for person but has a clausal subject. At a later stage the person marking of the complement headed by an active verb was copied onto the auxiliary, in order to eliminate the impersonal clausal subject.

Such an explanation would also account for examples like (4), where the optative auxiliary *ih* is inflected for person even though its

complement is impersonal, as well as examples like (87)–(89), where *bishí* and *deetá*, along with their complements, are marked for plural number. G. H. Matthews (p.c. 1987) has suggested that the mirative *dee* was originally an impersonal verb or even a nonverbal suffix that later acquired person marking.

The next stage of this process would be the loss of person marking on either the auxiliary or the head of its complement. However, as mentioned above, one of the factors that inhibits this third stage of development, where inflection is lost, is the strong tendency in Crow to disallow nonfinite verbs.

There is a second process that has the effect of eliminating clausal subject complements. In constructions with *bishí*, *deetá*, and *chichee*, the impersonal verb can be interpreted as a grammatical marker. The subject of the complement is raised, becoming the subject of the matrix clause, and the verb of the complement becomes the verb of the matrix clause. I have suggested that such a process may be the source of the aspectual markers *áhi* ‘punctual’¹⁶ and *i* ‘habitual’. From a diachronic perspective these can be viewed as verbs that have been reanalyzed as grammatical derivational suffixes.

¹⁶ J. Koontz (1991) has described a complex of auxiliary constructions in Mississippi Valley Siouan compounded of motion and positional stems with the meaning ‘suddenly’.

14 Adverbial subordinate clauses

14.1. Introduction

This chapter discusses only adverbial subordinate clauses in Crow; these include temporal, manner, reason, conditional, and concessive clauses. Relative clauses are discussed in chapter 11, and complement clauses in §10.5. Clauses marked for switch reference (cosubordinate clauses) are discussed in §§16.3–16.4.

Some adverbial clauses are marked with clause-final suffixes, others by clause-final independent words. Except for *sh*, which combines with the citation form, the suffixes combine with stems.

Sections 14.2–14.6 list the adverbial subordinate clauses found in Crow according to semantic type, with examples of each. Analysis and conclusions follow in §14.7. In examples in this chapter, subordinate clauses are enclosed in brackets and subordination markers are in bold type.

14.2. Temporal clauses

There are a number of different kinds of temporal clauses in Crow.

14.2.1. *dak* ‘when, while’ (future, hypothetical)

Future and hypothetical temporal clauses are marked by the clause-final suffix *dak* ‘conditional’:

- (1) [*Baaxawuaashé bii-koon-nak*] *b-aasúua*
Crow.Agency 1B-be.there-COND 1POS-house
chichikaa-(a)-wa-ku-h
watch-CONT-1B-give-IMPER
‘watch my house for me while I’m in Crow’

- (2) [*hinne bacheé-m ak-iichiil-aakinee-sh binnaxché*
 this man-DET REL-horse-ride-DET fence
kala-koosaa-huu-lák
 now-close-come-COND
 'when this man who was riding horseback comes close to the fence'
 (Sees 3)

Temporal clauses with *dak* may be introduced by *shóon* 'when', as in (3):

- (3) [*shóon b-asahké kuu-lák*] *óoshe-hili-immah*
 when IPOS-mother return-COND cook-do-will
 'when my mother comes back she'll cook'

14.2.2. *sh* 'when, after' (past, realized)

Temporal clauses whose time reference is past begin with a demonstrative, and the clause-final subordinator is the definite determiner *sh* (following the citation form). Both properties are evidence of nominalization.

- (4) [*ákiom koowát-ee-ak iláa-attuua-sh*] *dúu-laa*
 those get.together-CAUS-SS speak-continue-DET come.PL-and
 'after those ones got together and discussed it, they came' (Isahkáa 30)
- (5) [*hinne Jesus Galilee kuss-chisshia-sh*] *kalakoon*
 this J. G. GOAL-return-DET then
kala-hawass-dáaw-ak
 then-around-travel-SS
 'after Jesus' return to Galilee he traveled around' (Mt 4:17)
- (6) [*hinne óhchikaapee-sh*] *iilápaache-lak áxpíisshii-lak iláa-(a)k*
 this find-DET her.friends-and neighbors-and talk-SS
 'when she has found it she will talk to her friend and neighbors' (Lk 15:9)

14.2.3. *t* 'when, whenever' (habitual)

The subordinator *t* marks a habitual time clause: the matrix clause describes the habitual or generic state of affairs or action that takes place whenever the action or state described in the *t*-marked subordinate clause holds true. It generally, though not always, cooccurs with the habitual aspectual suffix *i*, which is suffixed to the verb of the matrix clause, as in (7). In this example, the combination of temporal clause

plus matrix clause with habitual marking describes a universal state of affairs (at least for the geographical area inhabited by the Crows):

- (7) [báalaa-*t*] biihpi-*t-k*
 winter-TEMP snow-HAB-DECL
 'it snows in winter'

Example (8), from a discussion of the typical behavior of antelope, borders on being a universal statement since it is describing their instinctual behavior:

- (8) [úuxkaashe baa-luus-úu-*t*] hawátee-*t* baa-iassee-*i-k*
 antelope INDEF-eat-PL-TEMP one-DET INDEF-watch-HAB-DECL
 'when antelope eat, one of them keeps watch' (Animals 14)

In (9) and (10) the *t*-clause presents the condition or situation that holds when the habitual activity takes place:

- (9) [bah-chiwakii-*t*] Apsáalook-tatchia
 1A-pray-TEMP Crow-all
 bah-chiwakáa-(a)-wa-k(u)-kaat-b-aa-*i-k*
 1A-pray-CONT-1A-give-DIMIN-1A-CAUS-HAB-DECL
 'whenever I pray I pray for all the Crows' (Baapiiháake 4)
- (10) [ashé koolá-*t*] is-baapáttatchia aw-ákaa-*i-k*
 home be.at-TEMP 3POS-wagon 1A-see-HAB-DECL
 'when he is at home I always see his wagon' (Sees 18)

In (11) it is not a habitual or regularly repeated activity or state that is referred to, but simply a repeated activity:

- (11) [istamnée Jesus iché áaka-ss-xapi-*t*] isshiiá ii
 her.tears J. his.feet on-GOAL-fall-TEMP her.hair INSTR
 úutt-aa-(a)k Jesus iché iispáht-a-lahku-*i-k*
 dry-CAUS-SS J. his.feet kiss-CONT-continue-HAB-DECL
 'when her tears fell on Jesus' feet she kept drying them with her hair and kissing them' (Lk 7:38)

There are instances in the data of several consecutive *t*-clauses, as in (12):

- (12) [baakáate baáchuu-lit-uu-*t*] [iassaa-waa-*t*]
 child berries-pick-PL-TEMP watch-1A-TEMP
 b-asitchi-waa-*i-k*
 1A-like-1A-HAB-DECL

'when the children pick berries and I watch them, I feel good' (Harold 19)

In (12) the subject of the first *t*-clause, *baakáate* 'children', and the null object of *iassaawaat* 'when I watch' are coreferent. However, since the *t*-clauses in (12) are identical in form and since there is no evidence that one is embedded within the other, I view them as two coordinate subordinate clauses conjoined by juxtaposition.

14.2.4. *m* 'when, while' (simultaneous)

Temporal clauses representing events simultaneous with the matrix clause event are marked with the clause-final suffix *m*:

- (13) [*baa-isáa-te* *baa-iláa-u-m*] *baakáate awéeele-taa*
 INDEF-big-DISTR.PL. INDEF-talk-PL-SIMULT children outside-PATH
iiwaanni-o-k
 play-PL-DECL

'while the adults were meeting the children were playing outside'

- (14) [*baap-al-ikuxxa-hkuua-sh* *hii-m*] *lish-dúupta-ssee-sh*
 day-REL-fitting-CAUS.PL-DET arrive-SIMULT face-both-GOAL-DET
al-ih-uua dakaáá-(a)k kan-núu-o-k
 REL-bet-PL lead-SS now-come.PL-PL-DECL

'when the time that they had agreed upon arrived, the Two Faces came leading their bets' (Isahkáa 11)

14.2.5. *an* 'while, as, after'

Temporal clauses with the clause-final suffix *an* may represent events that are simultaneous with or precede the matrix clause event.

- (15) [*hiliakk-ée-an*] *isaashkakaáshe Old Tuck huua-sh*
 think-PUNCT-as his-dog O. T. say.PL-DET
chichéhka(a)-áh-ak
 remember-PUNCT-SS

'as he was thinking, he remembered his dog Old Tuck' (Sees 2)

- (16) [*hinne iisáakshee-sh* *illi-ssaa* *ikaa-kaashi-an*] *iháa*
 this young.man-DET speak-NEG see-AUG-after different.ones
kuss "dii-wachée-?" *he-m*
 GOAL. 2B-man-INTERR say-DS

'this young man didn't say anything; after he looked around, he said to different ones, "are you a man?"' (Bachee 8)

- (17) [*káalee-sh asaál-ák kuss-íkee-an*] "ala
 old.woman-DET go.out-SS GOAL-see-after well
bii-láh-kalatche-ssaa-l-immaachi-htaa ákian ak-shée-sh
 1B-2A-believe-NEG-2A-will-although those REL-die-DET
koó-u-m chil-úu-k
 PRO-PL-DET rise-PL-DECL

'after the old woman went out and looked toward [the old campsite], [she said], "well, you're not going to believe me, but those are the ones who have died, they've risen"' (Isahkkaa 37)

14.2.6. *sheetaa* 'when X begins/began to'

The subordinator *sheetaa* 'when X begins/began to' is comparatively rare.

- (18) *baa-xalússhi-sheetaa*
 1A-run-when.begin.to
 'when I start to run'
- (19) [*b-iichiweé-sheetaa*] "éeh" *haa-att-aala-h*
 1A-tell.story-when.begin.to yes say-continue-PL-IMPER
 'when I start telling the story, keep saying "yes"' (Bachee 2)

There is an independent adverb *désheetaa* 'right away, at the beginning, from the beginning' that is related to this subordination marker.

14.2.7. *ko* 'while, as'

The subordinator *ko* 'while, as' is also rare.

- (20) [*kan-née-ko*] *iiwaa-(a)-lam-nak*
 now-go-as cry-CONT-continue-DS
 'as he was going he kept crying' (Isshii 11)

14.2.8. *it* . . . *ssaa* 'before'

Another temporal clause construction consists of the proclitic adverb *it* 'still, yet' preceding the verb, and the negative marker *ssaa* following, as in (21)–(23):

- (21) [*it da-lée-ssaa*] *it hawáta-m dii-waa-chiweé-w-ii-lu-k*
 yet 2A-go-NEG yet one-DET 2B-1A-tell-1A-want.to-PL-DECL
 'before you go, there is still one thing I want to tell you' (Uuwat 14)

The position of *it* is variable. Often it occurs immediately before the verb, as in (22), but it may also occur earlier in the clause, as in (23):

- (22) [áxxaashe *it* *iiwaxpi-ssaa*] *kalatchii ash-héela-ss-dee-lak*
 sun yet set-NEG again lodge-among-GOAL-go-DS
 'before sunset he went to the town again' (Mt 20:6)
- (23) *heehtaa* [*áashiisee it dakáake dúuhpaa dichí-ssaa*]
 but before.dawn still bird two.times crow-NEG
hinne óotchia dáhmiia-taahilia bii-leé-ssaa-(a)k
 this night three.times-AUG 2B-OWN-NEG-SS
bii-láh-chiweewaxua-l-ihmaachi-k
 1B-2A-deny-2A-will-DECL
 'but this very night, before the cock crows twice before dawn, you will disown me, you will deny me three times' (Mk 14:30)

14.2.9. *bassée* 'when first'

The ordinal numeral *bassée* 'first' may be suffixed to a verb to create a temporal clause with the meaning 'when . . . for the first time', as in (24)–(26):

- (24) [*úuxee-sh aw-ákaa-wassee*] *iluu-ák daachi-k*
 deer-DET 1A-see-first stand-SS remain-DECL
 'when I first saw the deer it was standing still'
- (25) [*áatche dée-wassee*] *ishtá-wishi-hcheilu-k*
 over go-first his.eye-exist-REPORT-DECL
 'after he went over the first time, he opened his eyes, they say' (Héettaa 19)
- (26) *Henry huua-sh* "[*íak chóosee-sh aw-ákaa-wassee*]
 H. say.PL-DET that grey-DET 1A-see-first
bii-willaal-ak 'bishkée-m b-eé-w-ih' baa-(a)k" *hee-lak*
 1B-wish-SS dog-DET 1A-OWN-1A-OPT 1A.say-SS say-DS
 'Henry said, "when I first saw that grey I made a wish, I said, 'may I have a dog'"' (Sees 10)

14.2.10. *kootáa* 'as soon as'

Another form that behaves in some respects as a subordinating conjunction is the adverb *kootáa* 'right away, immediately, as soon as'. Clauses with *kootáa* resemble other subordinate clauses that relate the time of the subordinate clause to that of the main clause.

There are two different constructions with *kootáa*: in the first type, illustrated in (27) and (28), *kootáa* is an adverb in the second clause, and the first clause is syntactically cosubordinate, terminating in one of the switch reference markers *m* or *ak*. (See §§16.3–16.4 for a discussion of cosubordinate clauses.)

- (27) *shikáake xúhchi-m ikaa-(a)k kootáa kala-kal-úu-k*
 boys skunk-DET see-SS right.away now-run.away-PL-DECL
 'the boys saw a skunk; immediately they ran away' or 'as soon as the boys saw a skunk, they ran away'
- (28) *Ammalapáshkuua-ss-da(a)-áh-nee-m kootáa kam-míihpi-k*
 Billings-GOAL-go-PUNCT-!-DS right.away then-snow-DECL
 'she left for Billings and what do you know, it immediately started to snow' or 'as soon as she left for Billings it started to snow'

In the second type, the first clause ends in the citation form, and is immediately followed by *kootáa*, as in (29)–(31):

- (29) [*sapéelak huu-lák iikukkó kootáa*]
 someone come-DET hear as.soon.as
iikussa(a)-áh-nee-lak
 turn.around-PUNCT-!-DS
 'when he heard someone coming he immediately turned around' (Sees 22)
- (30) [*iilápxe isbaa-itchiik-aah-aache kootáa*] *húu-laa*
 his.father his.clothes-put.on-DISTR-APPROX right.away come-SS
Henry huua-sh hii-lák
 H. say.PL-DET reach-DS
 'as soon as his father put on his clothes he came, he met Henry' (Sees 24)
- (31) *iixaxúa [ikuua kootáa] bach-áaka-ss-kal-uu-k*
 all see.PL as.soon.as RECIP-top-GOAL-run.away-PL-DECL
 'as soon as they saw him, they all fell on top of each other trying to get away' (Bachee 10)

These sentences suggest that an adverb is being reanalyzed as a subordinating conjunction. In the first stage, illustrated in (27) and (28), *kootáa* is clearly a member of the second clause. In (29)–(31), however, the fact that the verbs of the first clause occur in the citation form—*iikukkó* in (29), *isbaaitchiikahaache* in (30), and *ikuua* in (31)—supports an interpretation of these clauses as nominalized and therefore

subordinate. In (32) *kootaa* loses its status as an independent word and is suffixed to the verb stem rather than the citation form.

- (32) [*biléeli-kootaa*] *baa-luushi-k*
 enter-as.soon.as INDEF-eat-DECL
 'as soon as she entered, she ate'

14.2.11. *aa* 'until'

Aa 'until' differs from the above subordinate clause markers in that the subordinate clause ends in the citation form and is not phonologically joined to *aa*. The citation form provides evidence that the clause is nominalized.

Although *aa* can be glossed as 'until', the relationship between the syntax and the semantics is the reverse of English adverbial clauses with 'until'. What would be the main clause in English is the syntactic subordinate clause in Crow, and the subordinate clause in English is the main clause in Crow.

Examples with *aa* are given in (33)–(37):

- (33) [*dáa-lawe aa*] *háakse iché haam-nák*
 go-continue until finally his.feet worn.out-DS
 'he went along until finally his feet were worn out' (Baapaalissúua 7)
- (34) [*baachilaxchikáate ilísaa-latche aa*] *is-áachiwile kuú-o-m*
 baby cry-continue until 3POS-milk give-PL-DS
hilaá koowí-k
 finally stop-DECL
 'the baby kept crying until they gave him his milk, and he finally stopped'
- (35) *baapí-m lishdúuptassee-sh hawáta-m shikáak-kaatee-sh íkaa-(a)k*
 day-DET Two.Faces-DET one-DET boy-DIMIN-DET see-SS
 [*piisshe dée aa*] *hii-ák*
 after go until reach-SS
 'one day one of the Two Faces saw the little boy and followed him until he reached him' (Isahkaa 6)
- (36) [*baapée-sh bim-ma-hp-ák hawass-b-iikus-k-aáh-aache*
 day-DET STEM-1A-swim-SS around-1A-come.out-DISTR-APPROX
aa] *b-ashlá-wis-aat-bee-m bittáchi-k*
 until 1POS-eye-exist-APPROX-1A.!-DS 1PRO.alone-DECL

'today I was swimming; I was coming in and out here and there until I opened my eyes, and to my surprise I was alone' (Harold III 11)

(In (36) there are two subordinate clauses linked by the same-subject marker *ak*, with *aa* serving to subordinate both.)

- (37) [*baa-láa-(a)-waa-lawe aa*] *b-asaashké iiwaa-aw-iaschin-nak*
 1A-go-CONT-1A-continue until 1POS-horse STEM-1A-sell-COND
 'if I keep going around until I sell my horse' (Sees 6)

The evidence that clauses in *aa* are nominalized is not particularly strong. Unlike instrumental adverbials, *aa* never occurs with simple noun phrases, it never occurs with demonstratives or *ko*, and it never occurs with relative clauses. Also, clauses in *aa* can contain their own adverbial modifiers, as in (35) (*piisshe* 'after him'), which is evidence of their clausal status. The only evidence of nominalization is the fact that the final verbs of *aa*-clauses occur in the citation form.

The main argument for claiming that the citation form constitutes evidence of nominalization is one of distribution: noun phrases occur in the citation form if there is no overt determiner, while verbs that are predicates in matrix clauses, cosubordinate clauses, or clauses that are clearly subordinate never occur in the citation form; the verbs in these clauses occur in the stem form followed by a clause-final evidential or speech act marker in the case of independent clauses, or a switch reference marker in the case of cosubordinate clauses (§§16.3–16.4).

If clauses in *aa* are viewed as nominalized, they can be treated as postpositional phrases, with *aa* viewed as a postposition. It should be emphasized, however, that they are among the least nominalized clauses in Crow.

In Crow texts *aa* is usually written as an independent word. However, it can occur as proclitic to the following word, as in (38):

- (38) [*baleanniile sáam-nak hawass-dáam-nahko aa*]-*laachian*
 mile some-DET around-go-continue until-finally
biláx-dít-uu-m iikukkú-k
 drum-beat-PL-COMP hear-DECL
 'he kept going around for some miles until finally he heard them beating a drum' (Cleorash 7)

14.2.12. *koowée* 'after . . . finished'

Koowée is an independent active verb meaning 'finish' or 'complete': it is the causative of the stative verb *koowí* 'be finished, be complete'. It is used to form the equivalent of a temporal adverbial clause. *Koowée*

may occur as an independent verb stem, as in (39), or as an incorporator (§13.3.2), as in (40) and (41):

- (39) [*hinne bishkée-sh bahó koow-í-ak*] *ittákkaa*
 this dog-DET bark finished-CAUS-SS merely
hawass-biláat-aachi-k
 around-moan-APPROX-DECL
 'after this dog stopped barking it just sort of moaned' (Sees 23)
- (40) [*baa-wuúsh-koom-m-aa-(a)k*] *kam-maa-xapí-k*
 INDEF-1A.eat-finished-1A-CAUS-SS then-1A.lie.down-DECL
 'after I finished eating I went to bed'
- (41) [*Emily-sh baaaxuawaalaáche ikaa-koow-ii-ak*] *chitchip-ak*
 E.-DET pictures see-finished-CAUS-SS close-SS
 'after Emily had finished looking at the pictures, she closed [the album]
 (Emilysh 15)

The fact that *koowée* loses its accent when it is an incorporator—the form in (40) is *baawuúsh-koommaak* instead of the expected *baawuush-koómmaak*—is evidence of an especially close juncture in this construction, since even in verb incorporation the final verb does not usually lose its accent.

Koowée differs from the other subordinating conjunctions that we have discussed in that it is a full verb inflected for person rather than a simple clitic; it resembles other subordinators in function, however, since it marks the action of the main clause as taking place after the completion of the activity of the subordinate clause.

Since clauses with *koowée* are followed by the same-subject marker, they are best viewed as cosubordinate (§16.3) rather than subordinate. They are included in this section on the basis of their semantics.

14.2.13. Temporal clauses with zero marking

Temporal clauses may occur without any overt subordinator, as in (42)–(44):

- (42) [*Jesus it awé áakaa-le*] *bilaxpaake ala-hawass-daáw-uua*
 J. still earth on-be.there people REL-around-travel-PL
baalúu-k huu-k
 hard-DECL say.PL-DECL
 'at the time that Jesus was still on earth, travel was difficult for people,
 they say' (Jesus Ammaaikee 3)

- (43) [*hinne biishée-sh shia-ssaa*] *ilúú-k*
 this crawl-DET long-NEG stand-DECL
 'after crawling for a little while he stood up' (Isshii 3)
- (44) [*baa-kxawíia dáappii-a-lahkuua*] *háakse baá-m*
 INDEF-bad 2A.kill-CONT-2A.continue finally INDEF-DET
dia-laa-l-o-mmaachi-k
 do-2A-2A-PL-will-DECL
 'if you keep on killing bad things, finally you will do something' (Bitáa 21)

14.3. Reason clauses

14.3.1. *dassheen* 'because'

Clauses formed with the clause-final suffix *dassheen* 'because' give a reason for the activity or situation described in the main clause, as illustrated in (45)–(47):

- (45) [*shikáakee-sh ahkúx-uu-leet-dassheen*] *ashée-sh*
 boys-DET ear-PL-not.exist-because lodge-DET
kuss-daá-u-k
 GOAL-go-PL-DECL
 'because the boys had no ears (didn't listen), they went to the lodge' (Bitáa 15)
- (46) [*baa-waap-shia xakáa-(a)-lam-nassheen*] *apásshe-k*
 INDEF-day-long move-CONT-continue-because tired-DECL
 'because she had been traveling around all day, she was tired' (Baleiichiweé 31)
- (47) [*baaláax-uu-lassheen*] *balapáalee-sh kuss-daá-u-k*
 crazy-PL-because tree-DET GOAL-go-PL-DECL
 'because they were crazy they went to the tree' (Bitáa 15)

14.3.2. *ii* 'because'

Reason clauses may also be formed with the instrumental marker *ii*, which like *aa* may be a proclitic. The verbs in these clauses most often are in the citation form. Examples are given in (48)–(50):

- (48) [*baa-waaláaxe ii*] *baapi-m ichuuké* *JR-sh*
 INDEF-crazy INSTR day-DET his.younger.brother JR-DET

isshiiá datchuuchi-k
his.hair cut-DECL

'because he was crazy, one day he cut his brother JR's hair' (Hinne Káal 6)

- (49) [*iichiil-ilisshit-akinn-uu-lak diss-úu-lak aw-ák-uu-leete*
horse-wild-ride-PL-and dance-PL-and I A-see-PL-not.exist

ii] *ba-lás-xawii-k*
INSTR I POS-heart-bad-DECL

'I feel bad because we didn't see the rodeo and the dancing' (Harold II 15)

- (50) [*bii-piisshe da-luú-o ii]* *dii-waatcheesh-kaáss-aa-(a)k*
I B-after 2A-come.PL-PL INSTR 2B-pitiful-AUG-CAUS-SS
'because you are my followers, they will really persecute you' (Lk 21:12)

In other examples, the clauses that appear with *ii* are clearly nominalized and are marked with noun phrase-final determiners, as in (51) and (52):

- (51) [*bía-isitchee-sh ii]-ihchi-shée-a-k*
woman-like-DET INSTR-REFL-die-CAUS-DECL
'he brought about his own death because of his liking for women' (Isshii 20)

- (52) [*hinne baa-m baatcháachi-m díash-sh ii]*
this INDEF-DET outstanding-DET do-DET INSTR
ishuú-hil-uu-k
his.song-make-PL-DECL
'because of this outstanding thing that he did they made a song for him'
(AB 47)

In (51) and (52) *ii* is best viewed as a postposition whose object is a noun phrase: in (51) *bíaisitcheesh* is a nominalization, and in (52) *hinne baam baatcháachim díash* is an internally-headed relative clause.

14.4. Manner clauses

Manner clauses are formed in Crow with *kúmmaam* or *kummah* 'as if', as in (53) and (54):

- (53) "*kuss-dée-ssaa-(aa)la-h*" *he-m* [*kúmmaam* "*kan-náa-(aa)la-h*"
GOAL-go-NEG-PL-IMPER say-DS as.if now-go-PL-IMPER

- he-laht] dée-laa*
 say-even.if go-SS
 “don’t go”, he said, and as if he had said “go,” they went’ (Bitáa 13)
- (54) [*kummah iisaxpúatahchewishke ahkaásh-dak*
 as.if sheep many-COND
ak-iassii-o-leet-ak ak-chilit-úu-leet-dak]
 REL-care.for-PL-not.exist-SS REL-shepherd-PL-not.exist-COND
kalakoon baa-ik baachimmihche-hcheilu-k
 then INDEF-things teach-REPORT-DECL
 ‘they were like sheep without anyone to care for them and shepherd them; then he taught them’ (Mark 6:34)

Examples (53) and (54) show that *kúmmaam/kummah* is different from the subordinators that we have considered thus far. First, it precedes rather than follows the subordinate clause, and second, it always co-occurs with another subordinator (*laht* in (53) and *dak* in (54)). Thus it is better viewed as a simple adverb rather than an adverbial clause marker.

14.5. Conditional clauses

14.5.1. Simple conditional clauses

Irrealis conditional clauses are formed with *dak*, which is suffixed to the verb of the subordinate clause, as illustrated in (55)–(58):

- (55) [*bas-iilaalee aliatdeet-dak*] *Baáhpúuo-ss-baa-lee-wia-waa-k*
 1POS-car all.right-COND Pryor-GOAL-1A-go-will-1-DECL
 ‘if my car is OK I’ll go to Pryor’
- (56) [*baakáate kúh ik-uu-lak*] *isítche-ommaachi-k*
 children PRO see-PL-COND like-will.PL-DECL
 ‘if the children see it, they will like it’ (Emily 15)
- (57) [*bia-m is-bálee xapii-a-lak*] *biláakishe*
 woman-DET 3POS-money lost-CAUS-COND light
aláxxii-a-(a)k aláasho kootáataahilia chilakax-ák
 burn-CAUS-SS floor entirely sweep-SS
 ‘if a woman loses her money, she lights a lamp and sweeps the entire floor’ (Lk 15:8)
- (58) [*iiwaa-aw-iaschili-ssaa-lak*] *bulúaka-ssee*
 STEM-1A-sell-NEG-COND downstream-GOAL

it-baa-lée-w-immaachi-k
still-1A-go-1A-will-DECL

'if I don't sell it, I will go still further north'¹ (Sees 6)

An example of two conditional clauses conjoined by simple juxtaposition is seen in (59):

- (59) [*sapéelahtaa iisaxpúatahchewishke pilakisée-m ee-lák*]
someone sheep hundred-DET have-COND
[*héelee-n hawátee-m xapii-lak*]
among-LOC one-DET lost-COND

'if someone has a hundred sheep and one of them is lost' (Lk 15:4)

14.5.2. Counterfactual conditionals

Counterfactual conditionals involve the use of the lexeme *baaleetdák* in addition to the conditional marker *dak*, as in (60)–(62):

- (60) [*húulee-sh diss-úua dii-koon-nak baaleetdák*]
yesterday-DET dance-PL 2B-be.there-COND COUNTERFACTUAL
dii-aw-ákaa-w-immah
2B-1A-see-1-would

'if you had been at the dance yesterday, I would have seen you'

- (61) [*hinne bishké baaleetdák dáak-bish-kaat-dak*]
this dog COUNTERFACTUAL child-exist-DIMIN-COND
hawátee-m ba-la-kóo-w-ihmaachi-k
one-DET 1A-2B-give.PUNCT-1-would-DECL

'if this dog had had puppies, I would have given you one'

- (62) [*baaleetdák achi-ssuu-lak*] *akissatdee*
COUNTERFACTUAL join-NEG.PL-COND soldier
haaw-ée-o-mmaachi-k
finished-CAUS-PL-would.have-DECL

'if [the Crows and Shoshones] had not joined [the whites], [the Sioux and Cheyenne] would have beaten the soldiers' (AB 40)

Baaleetdák is composed of *baa* 'indefinite' + *deetá* 'not exist' + *dak* 'conditional'. Note that in (60) *baaleetdák* follows the verb of the conditional clause, while in (61) and (62) it precedes.

¹ Since the rivers on the Crow Reservation run from south to north, 'downstream' is north.

14.6. Concessive clauses

14.6.1. Simple concessive clauses

Simple concessive clauses are formed by suffixing *ht(aa)* 'although, even though' to the final verb of the subordinate clause, as in (63)–(66):

- (63) [*Johnny-sh baakuhpáa-htaa*] *kootáa baachimmi-lée-wa-hche-k*
 J.-DET sick-although anyway study-go-1A-CAUS-DECL
 'even though Johnny was sick I sent him to school anyway'
- (64) [*b-iilápaache ahú-htaa*] *héele aw-áchisshe*
 1POS-friend many-although among 1A-like
shikáak-kaata-m Joe huu-k
 boy-DIM-DET J. say.PL-DECL
 'although I have many friends, the one I like the most is a boy named Joe' (Baleiichiweé 3)
- (65) [*áxxaashe it asii-ssée-htaa*] *kam-maa-xiassaa-m*
 sun yet appear-NEG.PUNCT-although now-INDEF-clear-DS
 'although the sun had not yet risen, it was already light enough to see'
 (Uuwat 7)
- (66) [*it baa-w-ilishsi-htaa*] *kan baa-litchiláat-deeta-m*
 still STEM-1A-afraid-although now INDEF-dangerous-not.exist-COMP
é-wa-hche-k
 STEM-1A-know-DECL
 'although I was still frightened, I knew now that there was nothing dangerous' (Harold III 15)

In some examples the form of the concessive conjunction is *ht*, with the final long vowel deleted, as in (67) and (68):

- (67) [*ee-wa-k(u)-biá-waa-ht*]
 food-1A-give-want.to-1A-although
ammaa-ishóochi-ssaa-w-aa-leeta-k
 REL-before-GOAL-1A-CAUS-not.exist-DECL
 'I wanted to give him some food, but I didn't have anything to set before him' (Lk 11:6)
- (68) *bik* [*hilaakée iichiim-maa-chiil-aachi-ssaa-ht*]
 1PRO now horse-1A-seek-APPROX-NEG-even.though
dii-wah-kuxshí-w-ii-k
 2B-1A-help-1A-will-DECL

'as for me, even though I'm not looking for a horse now, I will help you'
(Sees 4)

Ht(aa) also occurs as an noun-phrase-final clitic, in which case it is glossed as 'even' (see §3.1.1.7). An example is seen in (69):

- (69) *ik ee-kuú-ssuu-lak aliishe ii daxpitcheeúuxe*
 PRO food-give-NEG.PL-DS hungry INSTR pig
ammaaluusúua-ht óolichi-k
 food-even envy-DECL
 'as for him, they didn't give him any food; because he was hungry, he
 envied even the pig's food' (Lk 15:16)

Htaa may be suffixed to the semantically empty discourse connective *he*, in which case it functions as a coordinating adversative conjunction translated as 'but'. In these cases, however, the first conjunct terminates with a sentence-final clitic, so it is clear that the clause preceding *hehtaa* is an independent sentence rather than a cosubordinate or subordinate clause. Examples of this construction are seen in (70) and (71):

- (70) *Daxpitcheehisshi-sh baa-isáa-kaashi-ssaa koolá-ssaa-k*
 Red.Bear-DET INDEF-big-AUG-NEG be.there-NEG-DECL
hehtaa ala-koolá-ssee kúh baatcháachi-k
 but REL-be.there-NEG PRO outstanding-DECL
 'Red Bear died while he was still a relatively young man, but the way he
 died was quite unusual' (AB 28)
- (71) *"eeh aw-ákaa-k heht shóot-b-aa-(a)k*
 yes 1A-see-DECL but how-1A-CAUS-SS
bah-kuxs-úu-k héé-?" he-m
 1A-help-PL-DECL AFFIRM-INTERR say-DS
 "'yes, I saw him, but how can we help him" he said' (Uuwat 6)

14.6.2. Concessive conditional clauses

Concessive conditional clauses, translated 'even if', are formed with final *daht(aa)*, as in (72)–(74):

- (72) [*xalaa-láhtaa*] *bim-ma-hpi-weé-woo-k*
 rain-even.if STEM-1A-swim-1A.PL.go-INCL-DECL
 'even if it rains, we'll go swimming'

- (73) [*dii-koolé éhk-uu-laht*] *dii-ikaa-ssaa-ommaachi-k*
 2B-be.there know-PL-even.if 2B-see-NEG-will.PL-DECL
 'even if they know where you are, they will not see you' (Isshii 11)
- (74) [*Apsáalooke hawát-taali-kaat-dahtaa*] *it ala-koóm-mishi-ih*
 Crow one-truly-DIMIN-even.if still REL-be.there-exist-OPT
he-k
 say-DECL
 'even though there is only one Crow left, I want him to still have land, he said' (AB 39)

Like *htaa*, *dahtaa* may occur as *daht*, with the final vowel deleted:

- (75) *Péelatchiwaaxpáa-sh* "[*kal-ii-waásh-koo-laht*]" *haa-(a)k*
 Medicine.Crow-DET now-INSTR-1A.die-COP-even.if say-SS
táxxee héelee-taa-wasaa-k
 gunfire among-PATH-run-DECL
 'saying "even though I may die because of this", Medicine Crow ran through the gunfire' (AB 60)
- (76) [*bilaxpáakee-m shée-laht*] *kaka-chilé-ihmah*
 person-DET die-even.if again-rise-will
 'even if a person dies, he will rise again' (Lk 20:37)

14.7. Syntax of adverbial subordinate clauses

The most common syntactic structure for adverbial clauses is given in (77):

(77) [ADVERBIAL CLAUSE + SUBORDINATOR] MAIN CLAUSE

This is the structure that we expect to find in a verb-final, head-marking language. Furthermore, the subordinator is most commonly a suffix to the verb of the subordinate clause. In the case of *aa* 'until' and *ii* 'instrumental', the subordinate clause marker may be a proclitic to the following clause, as in (33)–(38) in §14.2.11 and (48)–(52) in §14.3.2.

There are several other possibilities. Subordinate clauses can occur without an overt marker of subordination, as in (42)–(44) in §14.2.13. In (42) and (44) the verb is in the citation form, and in (43) it terminates with the negative morpheme *ssaa*. The same is true of temporal clauses with *it* . . . *ssaa* 'before', as in (21)–(23) in §14.2.8.

We have also seen clauses terminating in the incorporating verb *koowée*, as illustrated in (39)–(41) in §14.2.12. These clauses end in the same-subject marker *ak*, so that syntactically they are cosubordinate

(see §16.3) rather than subordinate, although they may be semantically subordinate.

Several clause types also involve additional forms, such as *kummaam* for manner clauses (§14.4), and *baaleetdák* for counterfactual conditionals (§14.5.2). These, however, do not affect the basic syntax of the clauses.

14.7.1. Coordination of adverbial subordinate clauses

An equivalent of coordination for adverbial subordinate clauses is achieved by linking them with the same-subject marker *ak*, as in (78):

- (78) [*Alvin piishee-n baa-láa-(a)k*] [*Taro-sh ishóochee-n*
 A. behind-LOC 1A-go-SS T.-DET before-LOC
baa-lée-t] *ba-lás-itchi-i-k*
 1A-go-TEMP 1POS-heart-good-HAB-DECL
 ‘when I go behind Alvin and in front of Taro, I’m happy’ (Harold II 13)

In this example two temporal clauses are linked by *ak*, and the subordinator *t* appears only after the second clause. We have also seen an example of two subordinate clauses conjoined by simple juxtaposition, as in (59) (§14.5.1).

14.7.2. Extraposition of adverbial subordinate clauses

Adverbial subordinate clauses may be postposed, as in (79):

- (79) *Jesus hileen bilaxpáakee-sh kalátche-taahil-aachi-ssaa-k*
 J. these people-DET believe-really-APPROX-NEG-DECL
 [*bilaxpáake daas-úua-sh ak-éhche koó-lassheen*]
 people heart-PL-DET REL-know COP-because
 ‘Jesus didn’t really believe these people, because he was the one who knew what was in their hearts’ (Jn 2:24–5)

14.7.3. Grammaticalization in adverbial subordinate clauses

Several of the adverbial clause markers provide us with some insights into the process of grammaticalization. Consider (80)–(82):

- (80) [*shikáake xuhchi-m íkaa-(a)k*] *kootáa*
 boys skunk-DET see-SS immediately
kala-kal-uu-k
 then-run.away-PL-DECL.

'the boys saw a skunk, and immediately they ran away'

- (81) [*iixaxúa ik-uua kootáa*] *bach-áaka-ss-kal-uu-k*
 all see-PL as.soon.as RECIP-top-GOAL-run.away-PL-DECL
 'as soon as they saw him, they all fell on top of each other trying to get away' (Bachee 10)
- (82) [*biléeli-kootaa*] *baa-luushi-k*
 go.in-as.soon.as INDEF-eat-DECL
 'as soon as he went in, he ate'

In (80) we have two cosubordinate clauses joined by the same-subject marker *ak*, and *kootáa* is an adverb modifying the verb of the second clause. In (81) the verb of the first clause ends in the citation form (the same pattern we saw with *aa* 'until' and *ii* 'instrumental' clauses), and *kootáa* is a marker of subordination in the first clause. In (82), *kootaa* loses its accent and is incorporated as a clause final clitic. It is interesting that these three stages of the grammaticalization process are present synchronically in Crow.

A partially similar process occurs with *koowée*, as illustrated in (83) and (84):

- (83) [*Mary-sh óossee koow-íl-ak*] *is-ak-ash-biléele*
 M.-DET food finished-CAUS-SS 3POS-REL-lodge-enter
baa-luushi-hche-k
 INDEF-eat-CAUS-DECL
 'after Mary finished cooking she fed her visitors'
- (84) [*Mary-sh óossee-koowíiak*] *isakashbiléele baaluushihchek*
 (same gloss)

In (83) *koowíiak* is an independent word, while in (84) it is an incorporator and loses its accent. Both versions are accepted by speakers.

In her grammar of Biloxi, an extinct Siouan language, Einaudi (1976:163) discusses a similar construction in which the clause *dé-hed-hə* 'this finished and' is used as a subordinate clause marker, as in (85):

- (85) BILOXI
 [*dukučké dé-hed-hə*] *tumóčkanádi*
 tie this-finished-and Ancient.of.Wildcats
xáninatí kdé
 roll.off for.some.time
 'when he had tied it, the Ancient of Wildcats rolled it along for some time' (Dorsey and Swanton 1912:27; transcription modernized)

Bybee, Perkins, and Pagliuca (1994:107–15) discuss two types of formal changes that occur in grammaticalization: phonetic reduction, and fusion of the grammaticizing material to the surrounding material. Loss of stress or accent is characteristic of the beginning stages of phonetic reduction. Loss of accent occurs with *koowéé*, *kootáa*, and *bassée*; *sheetaa* shows both loss of accent and loss of the initial syllable *dé*. In all four cases the subordinator is phonologically fused with the preceding verb.

14.7.4. Nominalization of adverbial clauses

We turn now to the question of nominalization. There is evidence that in other Siouan languages subordinate adverbial clauses are nominalized.

According to Rood and Taylor's sketch of Lakshota, "[s]entences used as adverbs (adverbial clauses) are first topicalized; they are then the equivalent of a noun in absolute use. Following this nominal use a time adverb or a postposition" (1996:453). An illustration is given in (86):

- (86) LAKHOTA
 [h'okhá kǝ hí pi k'ʉ] héhǝ wáchipi kǝ iyáye
 singers the arrive PL the.past then dance the start
 'when the singers came, the dance began' (Rood and Taylor 1996:453)

In his Omaha-Ponca sketch, Koontz analyzes adverbial clauses of the type we have been discussing as postpositional phrases. He remarks: "Some of the postpositions can be made into adverbial clause-marking conjunctions by prefixing a demonstrative. The demonstrative is presumably present to mark the nominalization of the clause" (1984:211). An example is given in (87):

- (87) OMAHA-PONCA
 éte éskanǝ dépǝ á-tǝ
 with.respect.to OPTATIVE you.call.to.him GENERIC-REASON
 'in that regard, hopefully because you call him in' (Koontz 1984:215)²

Koontz also notes that there are clauses without overt nominalization, such as 'although' clauses (1984:217).

Turning to Crow, we can say that at least some adverbial subordinate clauses show evidence of a degree of nominalization.

² In this example, GENERIC glosses a generic demonstrative.

First, many of the Crow subordinators are identical to Crow determiners: *m*, *dak*, *sh*, and *t*. In fact, these same markers show up in a number of different grammatical contexts, as illustrated in table 14.1. (For determiners, see also §10.3.)

TABLE 14.1. DETERMINERS AND SUBORDINATORS

	<i>m</i>	<i>sh</i>	<i>dak</i>	<i>t</i>
DETERMINER	X	X	X	X
SUBORDINATOR	X	X	X	X
COMPLEMENTIZER	X	X	X	–
S-FINAL EVIDENTIAL	–	X	X	–

As a determiner, *m* marks a noun phrase as indefinite specific. As a subordinator and a complementizer, it indicates that the action of the subordinate clause or complement is simultaneous with the action of the main clause. *Dak* marks a noun phrase or clause as irrealis; *sh* marks a noun phrase or clause as definite, realized, or past; *t* occurs with both noun phrases and subordinate clauses as a marker of habitual aspect.

Temporal subordinate clauses in *sh* are clearly nominalized. They begin with a demonstrative such as *hinne* 'this' or *ákian* 'those', and end with the definite determiner *sh*, as illustrated in (5), repeated here as (88):

- (88) [*hinne Jesus Galilee kuss-chisshia-sh*] *kalakoon*
 this J. G. GOAL-return-DET then
kala-hawass-dáaw-ak
 then-around-travel-SS
 'after Jesus' return to Galilee he traveled around' (lit., 'after this return of Jesus to Galilee . . .') (Mt 4:17)

Like *sh*, the concessive marker *htaa* occurs with noun phrases as well as with clauses; an example of it in a noun phrase is seen in (89):

- (89) *b-axúa kootáa kala-chía-(a)k b-aashúua-htaa*
 IPOS-body entirely now-white-SS IPOS-horns-even
kala-haawi-káat-uu-k
 now-worn.out-DIMIN-PL-DECL
 'my body is entirely white now, even my horns are worn out' (Uuwat 6)

In nominal contexts *htaa* can usually be translated 'even'.

Furthermore, the instrumental marker *ii* can occur with both noun phrases and clauses, as illustrated with a noun phrase in (90) and a clause in (91):

- (90) *hinne shikáakee-sh baap-tatchée [iseé ii]*
 this boy-DET day-every his.arrows INSTR
ihchi-lasshihk-a-lahkú-k
 REFL-practice-CONT-continue-DECL
 'every day this boy kept practicing with his arrows' (Isahkáa 8)
- (91) [*Zacchaeus isítche ii*] *iiwaachissaa-kaas-ak iikuxp-ák*
 Z. like INSTR hurry-AUG-SS get.down-SS
 'because Zacchaeus liked it, he got down in a hurry' (Lk 19:6)

In (90) *ii* is a postposition with an inalienably possessed noun as its object. The object, *iseé* 'his arrows', occurs in the citation form. In (91) the object of *ii*, namely *Zacchaeus isítche* 'Zacchaeus liked it', is a clause, and the verb *isítche* also occurs in the citation form, which is evidence of nominalization.

Some clauses with *ii* appear to show less evidence of nominalization, as in (92) and (93). In (92) the verb of the instrumental clause appears to end in the same-subject marker *ak*, followed by the discourse deictic pronoun *ko*, which refers back to something in the previous discourse, followed by the instrumental marker *ii*:

- (92) *Báakkaa-wachee Dáak-bachee hawat-uu-m xapáa-u-sh*
 above-man son-man some-PL-DET lost-PL-DET
chichiil-ak il-ée-wia-(a)k ko ii húu-k
 look.for-SS live-CAUS-want.to-SS PRO INSTR come-DECL
 'the Son of Man wants to seek out and save the ones who are lost; that is why he has come' (Lk 19:6)

In (93) the instrumental clause ends with the different-subject marker *m*, followed by the instrumental marker:

- (93) *éehk iichiilikaashee-sh bii-lappeé-hk-uu-m*
 that elk-DET I B-kill-CAUS-PL-DS
ala-koox-b-ii-leeta-m ii-woó-laa
 REL-STEM-1 A-get.close-not.exist-DS INSTR-1 A.come-SS
 'they sent me to kill that elk, but there is no way for me to get close; that is why I came' (Isshii 7)

Under my analysis, the instrumental phrase in (92) is simply *ko ii*, and in (93) the instrumental phrase consists of a null noun phrase object plus

ii; what appears to be an instrumental subordinate clause in these two sentences is actually cosubordinate, and is not itself the object of *ii*.

In other words, *ii* can be uniformly treated as a postposition that governs a noun phrase object: either a simple noun phrase, or a nominalized clause, or the pronoun *ko*, or a null object.

'Until' clauses with *aa* are similar in form to instrumental clauses like (91), having the verb of the subordinate clause in the citation form. Since the citation form is evidence of nominalization, *aa* is best treated as a postposition with a nominalized clause as its object.

Finally, clauses ending with *dassheen*, *sheetaa*, *bassee*, *htaa*, and *dahtaa* given no evidence of nominalization.

We might summarize this section by listing the various types of adverbial subordinate clauses according to their degree of nominalization, from the most nominalized to the least:

- clauses with *sh* (begin with demonstratives; end with the definite determiner);
- *ii*-instrumentals, *aa* 'until' clauses, unmarked clauses, some *kootáa* clauses (verb in citation form);
- clauses with *m*, *dak*, *t*, and *htaa* (same markers occur with noun phrases);
- clauses with *dassheen*, *an*, *sheetaa*, *bassee*, *dahtaa*, *it* . . . *ssaa*, and *koowée* (no formal signs of nominalization).

It is obvious from this discussion that adverbial subordinate clauses do not form a unified morphosyntactic category in Crow. Some are fully nominalized, others exhibit a degree of nominalization, and still others are fully verbal. There is evidence of a similar pattern in other Siouan languages like Lakhota and Omaha-Ponca, where at least some subordinate clauses are nominalized.

15 Postpositional phrases

15.1. Introduction

This chapter treats the structure of postpositional phrases in Crow. While the details of postpositional phrase formation are quite involved, the general pattern of the construction is clear: a postpositional phrase consists of a noun phrase followed by a postposition, as in (1) (with the postpositional phrase in brackets and the postposition in bold):

- (1) *bacheé-o-m kúh [Jesus áttattaa] is-baawatbakálaa-u*
man-PL-DET PRO J. on.either.side 3POS-cross-PL
pátt-uua-sh hawát-dak kúh Jesus kuss-illí-kxawii-a-(a)k
stick.in-PL-DET one-DET PRO J. GOAL-speak-evil-CAUS-SS
'one of the men whose crosses were stuck in the ground on either side of
Jesus talked bad to him' (Lk 23:39)

In (1) *áttattaa* 'on either side' is the postposition, and *Jesus* is its nominal object.

Commonly, the postposition is complex, consisting of a noun or postposition followed by a postpositional suffix, as in (2):

- (2) *hileen ak-disshee-sh hinne iisáakshee-sh ... [biláxe*
these REL-dance-DET this young.man-DET drum
bakútee-n] awáachi-hkuu-k
next.to-LOC sit-CAUS.PL-DECL
'these dancers seated this young man next to the drum' (Baapaalissúua
21)

In (2) *bakútee-n* is a complex postposition consisting of a postposition followed by the locative suffix *n*, and *biláxe* is its object.

The complex postposition may be incorporated by the verb, as illustrated in (3):

- (3) *hinne bachúa-sh [bilée héela-s(s)]-shiichi-k*
 this sinew-DET fire middle-GOAL-throw-DECL
 'he threw this sinew into the middle of the fire' (Uuwat 16)

In (3) the complex postposition *héela-ss*, consisting of the postposition *héela* 'middle' plus the goal suffix *ss*, is incorporated by the verb *shiichi* 'throw'.

The remainder of this chapter will be, for the most part, a discussion of possible variations on these three construction types.

15.2. Independent postpositions

Postpositional phrases with independent lexical postpositions are illustrated in (4)–(7).

- (4) *iisko am-malee-wilaxpáake kala-kootá-ssaa-(a)k [bishée*
 formerly REL-1B.PL-live now-like.that-NEG-SS buffalo
áappaa] dée-k¹
 with go-DECL
 'our old way of life is gone, it went with the buffalo' (AB 80)
- (5) [*chiis-uua aák] bin-nit-úu-t*
 their.tail-PL with water-hit-PL-TEMP
b-itta(a)-áhi-i-k²
 1A-wake.up-PUNCT-HAB-DECL
 'when they hit the water with their tails, I wake up right away' (Harold III 7)
- (6) *ilakaan [amnia-m biaxsée] bilé dáawuu-m*
 over.there bank-DET under water deep-DS
 'under that bank over there the water is deep' (Bitáa 17)
- (7) *da-lée-lak [dii-píisshe] beé-w-ii-lu-k³*
 2A-go-COND 2B-after 1A.PL.go-1A-will-PL-DECL
 'when you go, we will go after you' (Uuwat 7)

¹ Hidatsa has a stem *áapi* 'along with'. The Crow form *áappaa* is derived from this stem plus the adverbial formative *haa* (see §7.2.1).

² *Aák* is derived from the verb *ee* 'have, possess, own' plus the same-subject marker *ak*; *ee* ablauts to *aa* before *ak*. See §15.11 for evidence that *aák* is nonetheless a postposition.

³ *Píisshe* is undoubtedly derived from the postposition *piishi* 'behind, back'; it occurs only as an independent lexical postposition.

Calling these postpositions “independent” simply means that they have the status of independent words, and do not occur with the bound postpositional suffixes. It is not meant to exclude the occurrence of incorporated pronominal objects, such as the second person pronominal object *dii* in (7).

15.3. Bound postpositions

There is a small set of bound postpositional suffixes in Crow. These are listed, with their glosses and descriptions, in table 15.1. The first four postpositions in the table convey general notions of goal, path, location and source; the other four are more specialized. For simplicity in glossing of examples, I leave several common combinations of demonstrative with bound postposition unsegmented; thus *kuss(eé)*, based on the demonstrative *ku*, is glossed simply GOAL.

TABLE 15.1. BOUND POSTPOSITIONS

POSTPOSITION	CHARACTERIZATION
<i>ss(aa)</i> ‘to, toward; from’	goal or source
<i>taa</i> ‘along’	path
<i>n</i> ‘at, on; from’	location or source
<i>kaa</i> ‘from’	source
<i>hchée</i> ‘here and there, scattered over an area’	distribution in space, vague area
<i>chiisaa</i> ‘right there’	specific location
<i>htée</i> ‘right there’	specific location
<i>ko</i> ‘at, to, or from an area or region’	general location

Sections 15.3.1–15.3.8 below briefly exemplify the forms of the bound postpositions; §15.3.9 treats their semantics, and §15.3.10 their combinatorics.

15.3.1. *ss(aa)* ‘to, toward; from’ (goal and source)

If the goal and source suffix *ss(aa)* is not incorporated by the verb that follows it, the citation form *ssee* is found, as illustrated in (8):

- (8) *baa-láawee-t* [*kal-ihá(a)-ssee*]
 INDEF-read-TEMP PREF-other-GOAL

baa-lasshihchi-ssaa-i-k⁴

INDEF-think.about-NEG-HAB-DECL

'when she was reading she didn't think about anything else' (Hinne Káál 5)

If *ss(aa)* does not incorporate its object, it combines with the discourse deictic *ku/ko* to form the complex postposition *kuss(aa)* or *kussee* (citation form), as illustrated in (9) and (10):

- (9) [*hinne biláx-dit-uua-sh al-iikukkó kussaa-liché*] *dáa-lawe*
 this drum-beat-PL-DET REL-hear GOAL-APPROX go-continue
 'he kept going in the direction of where he heard the drumming'
 (Cleorash 9)

(In (9), *kussaa* is followed by the approximative suffix *liché*.)

- (10) [*binnaxché kussee*] *bii-piisse da-lóo-l-ii-?*
 fence GOAL 1B-after 2A-go-2A-will-INTERR
 'will you follow me to the fence?' (Sees 1)

If the goal suffix is part of a complex postposition and is also incorporated by the verb, its form is *ss*:

- (11) *hinne iisáakshi-kaatee-sh awán [ashi-ss]-chishshii-k*
 this young.man-DIMIN-DET on.foot home-GOAL-go.back-DECL
huu-k
 they.say-DECL
 'this young man went back home on foot, they say' (Baapaalissúua 3)

To sum up, the goal postposition may occur in six different shapes: *ssaa*, *ssee*, *ss*, *kussaa*, *kussee*, and *kuss*.

15.3.2. *taa* 'along' (path)

The path suffix *taa* combines with the citation form of its object rather than with the stem, as illustrated in (12) and (13):

- (12) [*bin-náaskee-taa*] *biis-ák húu-k*
 water-edge-PATH crawl-SS come-DECL
 'he came crawling along the bank'
- (13) [*bikkée héelee-taa*] *b-iaxuá-(a)k iiwaam-m-ia-i-lu-k*
 grass among-PATH 1A-hide-SS STEM-1A-play-HAB-PL-DECL
 'we would hide in the grass and play' (Harold 17)

⁴ *Ssaa* 'goal' is identical in form to *ssaa* 'negative'.

The stems of ‘edge’ in (12) and ‘among’ in (13) are *dáaska* and *héela*; *dáaskee* and *héelee* are citation forms.

15.3.3. *n* ‘in, at’ (location)

Like *taa* ‘path’, the location suffix *n* combines with the citation form. (Thus, e.g., the form meaning ‘middle’ in (14) has the stem *héelapa*.)

- (14) *[óotchia héelapee-n]*
 night middle-LOC
 ‘in the middle of the night’ (Mt 2:14)
- (15) *basahkáale, éehk [bal-(h)éelee-n] iisashpit-dak baappeé-k*
 grandmother there wood-among-LOC rabbit-DET 1A.kill-DECL
 ‘grandmother, I killed a rabbit in those woods’ (Isahkáa 13)

The location suffix *n* is related to the verb *la* ‘be at a place’, which derives verbs from locative expressions. Verbs in *la* are discussed in §4.9 and §13.9.2.

15.3.4. *kaa* ‘from’ (source)

The source suffix *kaa* combines with a limited set of deictic and interrogative stems: *ku-kaa* ‘from’, *shóo-kaa* ‘from where’, and *akú-kaa* ‘from the other side’. Examples are seen in (16) and (17):

- (16) *[akú-kaa]-wah-chisshii-lak dii-iiwishdia-waa-w-ii-k*
 there-SOURCE-1A-return-COND 2B-pay-1A-1A-will-DECL
 ‘when I return from there I will pay you’ (Lk 10:35)
- (17) *[púae balé ala-satché ko kukaa] húu-ssaa-k*
 smoke wood REL-thick PRO SOURCE come-NEG-DECL
 ‘the smoke isn’t coming from the forest (where the trees are thick)’
 (Harold II 19)

15.3.5. *hchée* ‘here and there’ (distribution in space)

The distributive suffix *hchée* is also restricted in its distribution: it occurs only with a few deictic stems. Sometimes the form is *hkaa*, e.g., *shóo-hkaa* ‘somewhere’.

- (18) *iaxpáalia kuhchée-luushii-lak*
 his.medicine here.and.there-lay.down-DS
 ‘he laid his medicines down in different spots, here and there’ (Isshii 22)

15.3.6. *chiisaa* 'at' (specific location)

Another postpositional suffix of restricted distribution is the specific location suffix *chiisaa*:

- (19) [*shée piish-chiisaa*] *xaxúa koot-úu-k*
 death after-SPECLOC everything like.that-PL-DECL
 'after his death everything happened like that (as he had predicted)' (AB 19)

(In (19) the reference of *chiisaa* is temporal rather than locative; see §15.5.)

- (20) *baakáata-m chichiil-uua-sh* [*ala-koolé aakaa-chiisáa*]
 child-DET look.for-PL-DET REL-be.there top-SPECLOC.PUNCT
xachii-ssaa-lak
 move-NEG-DS
 'it stopped right over the place where the child that they had been looking for was' (Mt 2:11)

In (20) the form is *chiisáa* rather than *chiisaa*. *Chiisáa* is an irregular combination of *chiisaa* plus the punctual aspectual marker *áhi*; thus in *chiisáa* 'punctual' is marked twice.

15.3.7. *htée* 'at' (specific location)

Hté is a postpositional suffix that combines only with the discourse anaphor *ku*, and with several deictic and interrogative stems. Like *chiisaa*, it refers to a specific location. In (21), *htée* combines with the discourse anaphor *ku* to form a complex postposition:

- (21) [*hinne awé ala-kuss-kashée-sh kuhtée*] *xalá-ssaa-(a)k*
 this land REL-GOAL-move.to-DET SPECLOC rain-NEG-SS
 'in this country that he had moved to there was no rain' (Lk 15:14)

In (22) *htée* occurs with the interrogative stem *shóo* 'where', and in (23) with the proximal deictic stem *hili*:

- (22) [*shóo-hte*]⁵ *ko koón baa-l-áas-uu-?*
 where-SPECLOC PRO LOC INDEF-2A-hunt-PL-INTER
 'just where did they hunt?' (Uuwat 4)

⁵ When final and unaccented, *ee* is often written as *e*. Recall that all mid vowels are phonologically long (see §2.6.1).

- (23) *da-láakku-lak* [hili-*htée*] *da-láa-lak* *b-axúá*
 2A-come.back-COND here-SPECLOC 2A-reach-COND 1POS-body
bii-láh-kuk-ak
 1B-2A-give.back-SS
 'when you come back, when you arrive here, you will give me back my
 body' (Isshii 13)

Htéé is the citation form; when not word-final, it surfaces as *htáa*:

- (24) [*kuhtáa*]-*iishii-o-k*
 SPECLOC-camp-PL-DECL
 'they camped right there' (Uuwat 2)

In (24) *kuhtáa* is incorporated by the verb. *Htéé* may also cooccur with derivational suffixes (again in its stem form *htáa*), as in (25) and (26):

- (25) [Dayton Wyoming *kuhtaa-liché*] *koon shichi-m*
 D. W. SPECLOC-APPROX LOC hill-DET
dúusaa-u-k
 bury-PL-DECL
 'they buried him on a hill around Dayton, Wyoming' (AB 24)
- (26) *Awé Kúá-l-awaachi-sh⁶* [1795 *kuhtáa-(aa)h-aache*] *koon*
 ground middle-LOC-sit-DET 1795 SPECLOC-DISTR-APPROX then
bishi-k
 born-DECL
 'Sits in the Middle of the Ground was born around 1795' (AB 38)

15.3.8. *ko* 'at' (area or region)

Ko refers to an area or region rather than a specific location. It combines readily to form complex postpositions, as in (27) and (28):

- (27) *iisa-kuss-dáa-u-htaa* [∅ *piish-ko*]
 face-GOAL-go-PL-even.though (PRO.PL) behind-area
baa-ikaa-i-lu-k
 INDEF-see-HAB-PL-DECL
 'even though they were going forward, they could see behind them'
 (Isahkáa 5)

⁶ Here the location suffix *n* surfaces as *l* because it occurs between vowels.

- (28) *aashúua* [*ashkawúua-ko*] *páttatchia-(a)k dée-k*
 her.head inside.of.lodge-area roll-SS go-DECL
 'her head went rolling (around) the inside of the lodge' (Isshii 20)

Ko may also combine with noun stems to form nouns, as in (29) and

- (30). In (29) *ii-laxpawako* is the object of a transitive verb:

- (29) *ii-laxp-awa-ko* *óssh-ee-m*
 mouth-skin-lower-area burn-CAUS-DS
 'she blackened her lower lip' (Bitáa 1)

In (30) *alápasshiko* is the object of a postposition:

- (30) *iahk hilaakée bii-ala-koolée-sh kala-koon*
 that now 1B-REL-be.there-DET PREF-SOURCE
awaxaawi-hísshe al-ápasshi-ko kuss-baa-xalúss-ak baa-lée-k
 mountain-red REL-touch-area GOAL-1A-run-SS 1A-go-DECL
 'I went running from the place where I now live in the direction of the red mountain' (Baapiiháake 1)

Finally, *ko* may combine with the punctual suffix *áhi*, as in (31):

- (31) *bia-m* [*ashi-m aweela-kóo*] *koolii-ak*
 woman-DET lodge-DET outside-area.PUNCT be.located-SS
 'a woman was located in the area right outside the lodge' (Uuwat 19)

The accent on *kóo* shows that the punctual marker is present. (See §5.6.1 for the formation of the punctual.)

15.3.9. Semantic relations

Four basic semantic relations are marked by the set of bound postpositions: goal (*ss(aa)*), path (*taa*), location (*n*), and source (*kaa*). Two of the postpositions, *ss(aa)* and *n*, may also mark source in addition to their basic meaning. The remaining suffixes, *htée*, *hchée*, *chiisaa*, and *ko*, are more specialized in reference. *Htée* and *chiisaa* have a specific (or punctual) locative sense, *hchée* is distributive in meaning, and *ko* refers to an area or region rather than a specific point. (See table 15.1. As discussed in §15.5, all these postpositions except *taa* and *hchee* may have a temporal rather than a locative interpretation.)

The verb of the clause in which a postposition occurs disambiguates the semantics to a large extent: if a phrase with *n* is an adjunct to a motion verb, it has a source reading, while if it occurs with a nonmotion verb it has a locative reading. Likewise, if a phrase with *ss(aa)* is an

adjunct to a motion verb, it is interpreted as a goal, but if it occurs with a nonmotion verb, it is generally interpreted as a source.

The following examples are meant to exemplify the semantic ranges of the postpositions; at this point we are not concerned with their various combinatory possibilities, which will be discussed in §15.3.10.

Ss(aa) is interpreted as a goal in examples (32) and (33):

- (32) *hileen [ak-húua-sh kuss]-ikaa-(a)k daachi-k*
 these REL.-come-DET GOAL-look-SS remain-DECL
 'he kept looking in the direction of those who were coming' (Sees 3)
- (33) *hinne iisákshi-kaatee-sh awán [ashi-ss]-chishshii-k*
 this young.man-DIMIN-DET on.foot lodge-GOAL-go.back-DECL
 'this young man went back in the direction of home on foot'
 (Baapaalissúua 3)

In (34) and (35), *ss(aa)* marks the source relation:

- (34) *[áxxaashe ko kuss]-dútchi-k iaxpáaliia*
 sun PRO SOURCE-get-DECL his.medicine
 'he got his medicine from the sun' (AB 24)
- (35) *iilaa [ak-iaxpáalii-wishe hawa-kuss]-xapáalia-m*
 PRO REL-their.medicine-exist some-SOURCE-medicine-DET
iaschili-xxo baashiam-mish-bia-lak
 buy-or dream-exist-should-COND
 'he should purchase a medicine from someone who has one or else he should have a dream' (AB 66)

This use of *ss(aa)* to mark source is comparatively rare. In most cases it marks the goal relation.

Examples (36) and (37) illustrate the use of *taa* to mark the 'path' relation:

- (36) *[baáhpe héelahkee-taa]-wassaa-i-lu-k*
 rock side-PATH-run-HAB-PL-DECL
 'they run alongside the rocks' (Animals 17)
- (37) *kalakoón [awé awúua-taa] dée-k huu-k*
 then earth inside-PATH go-DECL say.PL-DECL
 'then he went along the inside of the earth, they say' (Isshii 7)

The use of *n* to mark location is illustrated in (38) and (39):

- (38) *b-asahkáale [éehk bal-(h)éélee-n] iisashpít-dak*
 1POS-grandmother that wood-among-LOC rabbit-DET

baappé-k

1A.kill-DECL

'grandmother, I killed a rabbit in those woods' (Isahkaa 13)

- (39) *bacheé dúxxii-laa-u-t Issaatxalúa-sh ik*
 man war.party-go-PL-TEMP Two.Leggings-DET PRO

[*ashee-n*]-*naat-ák*
 home-LOC-remain-SS

'when the men went on war parties Two Leggings would stay at home'
 (AB 67)

And in (40) and (41), *n* encodes the source relation:

- (40) *shikáak-kaata-m [bitáalasshia alitchia-n] iikust-ák*
 boy-DIMIN-DET lodge.screen behind-SOURCE come.out-SS
 'the little boy came out from behind the lodge screen' (Bitáa 3)

- (41) *hinne Mary Magdalene huua bale-iláax-xawiiia sáhpua-lak*
 this M. M. say.PL DEPOS-spirit-evil seven-DET
 [*axúa awúua-n*] *bitáaxia-k*
 her.body inside-SOURCE remove-DECL
 'he removed seven evil spirits from inside the body of this Mary Magdalene' (Lk 8:2)

Example (42) illustrates the use of *hchéé* 'distributive locative':

- (42) *baaláhchittuua dútt-ak [hawa-hchéé] aaxu-ák*
 nuts take-SS some-DISTR.LOC hide-SS
 'they take nuts and hide them here and there' (Animals 27)

Ko also encodes several different semantic relations. It has a locative sense, as in (43):

- (43) *isáhka-lak aashúua chiiia-kaat-dak*
 old.man-DET his.head very.white-DIMIN-DET
 [*ashkawachúu-uþpa-ko*] *awáat-ak*
 side.of.lodge-south-area sit-SS
 'an old man whose hair was very white was sitting on the south side of the lodge' (Isshii 5)

When incorporated by the verb, *ko* has goal semantics (i.e., movement into an area or region), as in (44) and (45). In this construction *ko* combines with the citation form of the preceding noun or postposition.

- (44) *iisuukaata-m [balé héelee-ko]-lee-m aw-ákaa-k*
 mouse-DET wood midst-area-go-COMP 1A-see-DECL
 'I saw a mouse going into the brush' (Harold III 9)
- (45) *bii tawée-kaashe [áapchee-ko]-lee-hkuu-m sa(a)-áhi-k*
 rock hot-AUG throat-area-go-CAUS.PL-DS die-PUNCT-DECL
 'they put very hot rocks into his throat, and he died' (Bitáa 21)

Ko also appears in temporal expressions, as in (46) and (47):

- (46) *[hinne dáalee-sh héelap-ko]*
 this travel-DET middle-area
 'during this journey'
- (47) *[bassáa-ko] Apsáalooke it díat-ak*
 first-area Crows still move.camp-SS
hawahchée-iisshii-o
 here.and.there-camp-PL
 'in the old days when the Crows were still moving camp and camping here and there' (Uuwat 1)

15.3.10. Formations with postpositional suffixes

The postpositional suffixes are not free in their combinatory possibilities; they do not simply combine with a noun phrase to form a postpositional phrase. Rather, they may combine with postpositions, as in (48); with deictic stems, as in (49); with interrogative-indefinite stems, as in (50); or with the discourse-anaphoric pronominal *ku/ko* 'it', as in (51):

- (48) a. *baapi-m sas-káat asaál-ák dée-laa [shichi-m allíchia-n]*
 day-DET early-DIMIN go.out-SS go-SS hill-DET behind-LOC
iaxuá-(a)k
 hide-SS
 'early one day he went out, he went, he hid behind a hill' (Bitáa 5)
- b. *[bikkée héelee-taa] b-iaxuá-(a)k*
 grass among-PATH 1A-hide-SS
iiwaa-m-mía-i-lu-k
 STEM-1A-play-HIAB-PL-DECL
 'we would hide in the grass and play' (Harold I 7)
- (49) a. *dis-bilaxpaake chiwáá-(a)k aliis-uu-lak*
 2POS-people tell-SS hungry-PL-COND

[*hili-ss*]-*huu-hkaa-h*

here-GOAL-come-CAUS-IMPER

'tell your people, if they are hungry, let them come here' (Uuwat 15)

b. [*ilakaa-n*] *amnia-m biaxsée bilé dáawuu-m*

over.there.LOC bank-DET under water deep-DS

'under a bank over there the water is deep' (Bitáa 17)

(50) a. *shóo-kaa-la-loo-?*

where-SOURCE-2A-come-INTERR

'where did you come from?'

b. [*shóo-n*]-*aa-wa-hku-w-ii-lu-?* *biiluk*

where-LOC-STEM-1A-stay-1A-shall-PL-INTERR 1PRO.PL

'as for us, where shall we stay?' (Isáakawuattee 13)

(51) a. *hinne bachée-sh dáakbachee baa-isa(a)-áhe kúk*

this man-DET his.son INDEF-big-PUNCT PRO

[*is-datshía koo-n*] *baahil-ák*

3POS-garden PRO-LOC work-SS

'this man's older son was working in his garden' (Lk 15:25)

b. *púáee [balé ala-satché ko ku-kaá] húu-ssaa-k*

smoke wood REL-thick PRO PRO-SOURCE come-NEG-DECL

'the smoke didn't come from the forest (where the wood is thick)'

(Harold II 19)

The bound postpositions vary considerably in their combinatory possibilities: *ss(aa)* and *n* are the most productive, combining with all four of the classes exemplified in (48)–(51). *Ko* combines with both nouns and postpositions. *Chiisaa* combines with postpositions. *Kaa* combines only with *ku*, with interrogative *shóo* 'where', and with the postposition *akú* 'beyond'. Likewise, *hchéé* is extremely limited in distribution, occurring in my data only with *hawa* 'some', *iháa* 'other, different',⁷ and *ku*. *Htéé* is found only with *ku* and several of the deictic and interrogative stems. On the other hand, *taa* 'path' combines freely with postpositions and nouns, but does not occur with any of the deictic or interrogative stems.

Locative and temporal adverbials formed by combining the postpositional suffixes with deictic stems, such as *hili-ssee* 'this way, in

⁷ While *hawa* 'some' and *iháa* 'other, different' are formally stative verbs, they may occur as heads of noun phrases in the absence of a lexical noun. This is the justification for treating them as members of the class of nominals that combine with bound postpositions.

this direction', *éehkoo-n* 'there,' *iilaka-htee* 'right over there', etc., are discussed further in §§4.4–4.6. Interrogative-indefinite locative and temporal adverbials based on the stem *shóo* 'where' (*shóo-n* 'where, at what place, from where', *shóo-ssee* 'which direction', *shóo-hte* 'exactly where', *shóo-hkaa* 'somewhere', *shóo-kaa* 'from where?') are discussed in §17.3.4.

15.4. Stems that combine with postpositional suffixes

Lexemes that combine with the postpositional suffixes are listed in (52):

- (52) *áaka* 'top surface'
áakkaa 'across'
áaxxaa 'around'
akú 'beyond'
aláachki 'along'
alápasshi 'touching, next to, in the direction of'
alii 'back'
alitchia 'behind'
amméaxa 'amid, among'
ammuú 'down'
ashi 'lodge, home'
ashkawú, ishkawú 'inside lodge, home, building'
awá 'earth, down'
awú 'inside'
báaku 'above'
bakúta 'beside, next to'
biaxsáa 'under'
bimmuú 'in water'
bitáa 'behind'
bulúaka 'downstream, north'
chúu 'middle, through'
dáaska 'edge, border'
doosá 'near side'
dúusahpa 'alongside'
háaka 'last'
hawá 'some, here and there'
héela 'middle, midst, among'
héelahka 'side'
héelapa 'waist, middle'
huchi 'wind'
iháa 'different, elsewhere'
iisá 'face, front, facing, forward'
iláhchisa 'left side'

ilapá 'right side'
ishóochi 'front, in front of, before'
issí 'top, on top of'
itcháa 'side'
kúa 'middle; in the middle'
plíshi 'behind, back'
uhpá 'upper end, tip; upstream, south'
úushi 'base, rectum, bottom, lower end'

Some of these are more clearly nominal (*ashí* 'lodge', *awá* 'earth', *iisá* 'face', *úushi* 'base'); others are predominantly postpositional (*áakkaa* 'across', *áaxxaa* 'around', *biáxsáa* 'under', *bitáa* 'behind'). A few are stative verbs: *hawá* 'some', *háaka* 'last', and *iháa* 'different'. Most will be need to be listed in the lexicon as both nouns or verbs and postpositions. These lexemes form a subclass based on the fact that they may combine directly with the postpositional suffixes *n*, *ss*, and *taa*. Semantically, most refer to locations or spatial orientations.

There are also a few place names that can combine directly with *ss*, and thus are members of this class:

- (53) *Ammalapáshkuua* 'Billings'
Baáhpuuo 'Pryor'
lilápxisaahkuua 'Washington, D.C.'

15.5. Temporal postpositional phrases

As is evident from the glosses of some of the sentences above, postpositional phrases may serve as temporal as well as locative adjuncts. First, the bound postpositions *ss*, *n*, and *kaa* may mark temporal relations, as in (54)–(56): *ss* 'up to that time, until', *n* 'at that time, then', *kaa* 'since that time'.

- (54) [*Thursday kuseé*] *bii-koolá-k* *Bozeman*
 T. until 1B-be.at-DECL B.
 'I'll be at Bozeman until Thursday'
- (55) [*hinne baa-ikee-sh kala-koon*] *al-iishhii-o* *kuss-chishhii-m*
 this INDEF-see-DET PREF-after REL-camp-PL GOAL-return-DS
 'after this vision he returned to camp' (AB 24)
- (56) [*is-báalee axpíchiaxxu-m kukaá*] *kan-núxxii-laa-(a)k*
 3POS-year fifteen-DET since then-war.party-go-SS
 'ever since he was fifteen he went on war parties' (AB 59)

It is quite common to find two postpositional phrases, the first marked with *n* and the second with *ss*, meaning 'from . . . until', as in (57):

- (57) [1840 *kala-koon*] [1851 *kusseē*] *Binnéesappeele*

1840 PREF-from 1851 until River.Crows

is-bacheeit-uua koó-k

3POS-chief-PL COP-DECL

'from 1840 until 1851 he was the chief of the River Crows' (AB 24)

Forms with *ko*, *htée*, and *chiisaa* also occur in temporal expressions, as in (58)–(60): *ko* 'during that time, while', *htée* 'right at that time, just then', *chisaa* 'right at that time'.

- (58) *Henry huua-sh kaka-áachiwin-nuchkit-ak dahkó [héelap-ko]*
H. say.PL-DET again-milk-squeeze-SS continue middle-area
'while Henry was milking again' (Sees 16)

- (59) *Daxpicheehisshi-sh huua 1807 kuhtáa-(aa)he koon*

Red.Bear-DET say.PL 1807 then-DISTR then

bishi-k

be.born-DECL

'Red Bear was born about 1807' (AB 28)

- (60) [*dáak-bachee-kaate bishé pūsh-chiisaa*] *kaka-chim-mishi-k*
child-man-DIMIN born after-right again-husband-exist-DECL
'right after her son was born she married again' (Uuwat 1)

15.6. Pronominal objects of postpositions

The only bound postposition that can directly govern a pronominal object is *ss*, as illustrated in (61)–(63):

- (61) *axée baa-m [dí-ss]-shee-waa-w-ii-k*

father INDEF-DET 2B-GOAL-say-1A-1A-want.to-DECL

'father, I want to say something to you' (Lk 15:29)

- (62) [*dii-lu-ssee-sh*] *ahóom-m-uu-k⁸*

2B-PL-GOAL-DET thanks-1A-say.PL-DECL

'we thank you (pl.)'

⁸ In expressions with *ahóohee* 'say thank you', the postpositional phrase is followed by the definite determiner.

- (63) *Alvin [bi-ss]-chitchila(a)-áh-ak*
 A. 1B-GOAL-whisper-PUNCT-SS
 'Alvin whispered to me' (Harold IV 1)

The paradigm for pronominal objects of *ssaa* is given in table 15.2.

TABLE 15.2. PRONOMINAL OBJECTS OF *ssaa*

1SG	<i>bi-ss(aa)</i>	1PL	<i>biilu-ss(aa)</i>
2SG	<i>di-ss(aa)</i>	2PL	<i>diilu-ss(aa)</i>
3SG	<i>ku-ss(aa)</i>	3PL	<i>ku-ss(aa)</i>

Pronominal objects may also be prefixed to complex postpositions, as in (64) and (65):

- (64) [*dii-wakútee-n*]-*maa-kalaa-ssaa-i-k*
 2B-side-SOURCE-1A-flee-NEG-HAB-DECL
 'I do not flee from your side' (AB 29)
- (65) [*dii-héel-uua-n*] *hawáta-m bu-lupía-k*
 2B-among-PL-LOC one-DET 1A-dislike-DECL
 'there is one among you that I don't like' (AB 29)

As illustrated in (65), if the pronoun is plural in number, the plural morpheme occurs between the stem and the postpositional suffix.

Reflexives and reciprocals may also occur prefixed to complex postpositions, as in (66) and (67):

- (66) *iichil-aakinnee-t isshiiá [ihch-ishóochee-n] dúushii-i-k*
 horse-ride-TEMP his.hair REFL-front-LOC let.down-HAB-DECL
 'when he rode horseback he would let down his hair in front of him' (AB 18)
- (67) *iixaxúa ikuua kootáa [bach-áaka-ss]-kaluu-k*
 all see.PL as.soon.as RECIP-top-GOAL-run.away-DECL
 'as soon as they saw him, they all ran away to each other's top' (i.e., 'they were climbing all over each other trying to get away') (Bachee 10)

Several of the postpositions have irregular pronominal forms:

- (68) *b-ashóochee-n* 'in front of me'
d-ishóochee-n 'in front of you'
Ø-ishóochee-n 'in front of her/him'

- (69) *ba-pshée-n* 'behind me'⁹
dá-pshee-n 'behind you'
Ø-piishee-n 'behind him/her'

15.7. Instrumental *ii*

In §14.3.2 we discussed the use of *ii* in forming subordinate clauses. *Ii* may also be used as a postposition, as in (70) and (71):

- (70) *hinne shikáakee-sh baap-tatchée [iseé ii]*
 this boy-DET day-every his.arrows INSTR
ihchilasshihk-a-lahkú-k
 practice-CONT-continue-DECL
 'every day this boy kept practicing with his arrows' (Isahkáa 8)
- (71) *dáappii-ak aa-la-lóo-lak [aashúua ii]-húppii-lia-waa-k*
 2A.kill-SS PORT-2A-go-COND its.head INSTR-soup-do-1A-DECL
 'if you kill it [the elk] and bring it, I will make soup with its head' (Isshii 6)

In (72) the object of *ii* is a relative clause:

- (72) [*hinne baa-m baatcháachi-m díá-sh ii*]
 this INDEF-DET outstanding-DET do-DET INSTR
ishuú-hil-uu-k
 his.song-make-PL-DECL
 'because of this outstanding thing that he did they made a song for him'
 (AB 60)

The discourse anaphor *ko* often follows the noun phrase object of *ii*, in which case *ko* can be viewed syntactically as a noun phrase in apposition to the object, as in (73) and (74):

- (73) *hinne da-láak-bachee [baaala-kxawíia ko ii]-lis-balee*
 this 2POS-child-man REL-evil PRO INSTR-2POS-money
haaw-ii-ak
 finished-CAUS-SS
 'this son of yours used up your money on evil things' (Lk 15:30)

⁹ The regular forms *bii-plishee-n* (first person) and *dii-plishee-n* (second person) also occur and are considered acceptable, but the forms in (68) are viewed by at least some Crow speakers as more correct.

- (74) *Paula Frances kúk* [“Frank” *huua ko*
P. F. PRO F. say.PL PRO

ii]-wa-lasáashi-i-lu-k

INSTR-1A-name-HAB-PL-DECL

‘as for Paula Frances, we call her “Frank”’ (literally, ‘we name her by means of “Frank”’) (Hinne Káal 9)

Often *ko* alone is the object of *ii*, as in (75):

- (75) *ii-ah-kaás-ak baatcháat-uu-m Dakkoótee kúk*
PREF-many-AUG-SS very.many-PL-DS Sioux PRO

kootá-ssuu-k [ko ii] baaishtashiile áx(p)-baahil-ak
like.that-NEG.PL-DECL PRO INSTR white.man with-work-SS

is-aw-úua dúuxaas-uu-k

3POS-land-PL hang.on.to-PL-DECL

‘there was a very large number of [whites]; as for the Sioux, they were not like that; that is why [the Crows] worked with the whiteman and hung onto their land’ (AB 39)

In sentences like (75), *ko* serves as a resumptive discourse anaphor for the situation or event referred to in the previous clause: ‘because of this, namely, the fact that there were very many whites and not so many Sioux, the Crows worked with the whitemen and saved their land’. In these contexts *ko ii* can often be translated ‘that is why’ or ‘this is why’.

In other cases the object of *ii* is null:

- (76) *is-binnaache koon báashu-m xapi-m [Ø ii] éhche-k*
3POS-shield from feather-DET fall-DS INSTR know-DECL

‘a feather fell off of his shield; that is how he knew’ (AB 35)

- (77) *éehk iichiilikaashee-sh bii-lappeé-hkuu-m*
that elk-DET 1B-kill-CAUS.PL-DS

ala-koox-b-ii-leeta-m [Ø ii]-woó-laa

REL-STEM-1A-get.close-not.exist-DS INSTR-1A.come-SS

‘they sent me to kill that elk, but there is no way for me to get close; that is why I came’ (Isshii 7)

A full clause can also serve as the object of *ii*, as in (78):

- (78) [*Zacchaeus isitche ii*] *iiwaachissaa-kaas-ak iikuxp-ák*
Z. like INSTR hurry-AUG-SS get.down-SS

‘because Zacchaeus liked it, he hurried, he got down’ (Lk 19:6)

In (78) the fact that the clause-final verb ends in the citation form provides evidence of nominalization. Therefore, constructions of this type

can be treated as postpositional phrases with a nominalized clause as object.

15.8. Syntactic structure of postpositional phrases

The structure of postpositional phrases (PP) is given in (79):

- (79) $_{PP}[NP \text{ } _P[(X-P)]$

As we have seen above, a postposition (P) may be an independent lexeme, or it may be complex, composed of a postposition, noun, or verb followed by a postpositional suffix.

A phrase with a simple postposition is given in (80), and one with a complex postposition in (81):

- (80) [*alúute aák*] *bii-áxpim-mi-o-k*
 arrows with 1B-compete-will-PL-DECL
 'they will compete with us with arrows' (Isahkáa 7)
- (81) *shikáak-kaata-m* [*bitáalasshia [alitchia-n]*] *iikust-ak*
 boy-DIMIN-DET lodge.screen behind-LOC come.out-SS
 'a little boy came out from behind the lodge screen' (Bitáa 3)

In (81) the complex postposition consists of the postposition *alitchia* plus the locative suffix *n*. In both (80) and (81) the structure is the same: a noun phrase followed by a postposition.

As we have seen above, the postpositional suffixes also combine with the discourse anaphor *ku* to yield complex postpositions: *kuss(aá)* 'toward', *ku-kaa* 'from', *koo-n* 'at', *ku-htée* 'right there', and *ku-hchéé* 'here and there'. These are the forms that occur when there is no suitable postposition, noun, deictic, or interrogative for the suffixes to combine with. In other words, lacking a suitable host, the postpositions are suffixed to a semantically bleached pronominal. In these forms *ku* has little or no semantic content, and the pronominal occupies the syntactic position otherwise filled by a postposition.

15.9. Incorporation of (*ku*)*ss*

We turn now to a discussion of the postpositions that are themselves incorporated by the verb. The postposition *ss* 'goal', either as *ku-ss*, or as part of a complex postposition, or as part of a complete postpositional phrase, is regularly incorporated by the verb that it is in construction with, as in (82)–(84):

- (82) [*hileen ak-húua-sh kuss*]-*ikaa-(a)k daachi-k*
 these REL-come-DET GOAL-look-SS remain-DECL
 'he kept looking in the direction of those who were coming' (Sees 3)
- (83) *hinne iisáakshi-kaatee-sh awá-n* [*ashi-ss*]-*chisshii-k*
 this young.man-DIMIN-DET earth-LOC home-GOAL-return-DECL
 'this young man went back to his home on foot' (Baapaalissúua 3)
- (84) *hawáte* [*bahée awúua-s(s)*]-*shiichi-k*¹⁰
 one spring inside-GOAL-throw-DECL
 'she threw one inside the spring' (Bitáa 1)

In (82) it is only the postposition *kuss* that is incorporated, while in (84) a complex postposition, *awúua-ss*, is incorporated, and in (83) a complete postpositional phrase, *ashi-ss*, is incorporated. (Below, for simplicity I will speak of postpositions being incorporated, although strictly speaking in many cases it is a complex postposition or a postpositional phrase that is incorporated into the verb.)¹¹

As is the case with other types of incorporation, evidence that (*ku*)*ss* is incorporated consists in the fact that there is a single accent on the word containing the incorporated postposition and that there is no possibility of a break in the stream of speech between (*ku*)*ss* and the following verb.

(*Ku*)*ss* will only be incorporated if it immediately precedes the verb: incorporation is blocked by an intervening derivational suffix, as in (85), by an intervening adverb, as in (86), or by an intervening postpositional phrase, as in (87).

- (85) [*am-maa-luus-úua kussaa-liche*] *dée-lee-lak*
 REL-INDEF-eat-PL GOAL-APPROX go-!-DS
 'he went in the general direction of the kitchen, and to his surprise' (Sees 6)
- (86) *iiwaa-aw-iaschili-ssaa-lak* [*bulúaka-ssee*]
 STEM-1A-sell-NEG-COND downstream-GOAL
it-baa-lée-w-ihmaachi-k
 still-1A-go-1A-will-DECL
 'if I don't sell it, I'll go further north' (Sees 6)

¹⁰ Here *ss* is reduced to *s* to avoid a three-consonant cluster.

¹¹ Note also that it is possible to combine nouns or postpositions plus *ss* directly with the causative, forming a ditransitive verb (§9.3.1.3).

- (87) [*binnaxché kusseé*] *bii-piishe da-lóo-l-ii-?*
 fence GOAL 1B-after 2A-come-2A-will-INTERR
 'will you follow me to the fence?' (Sees 3)

There are also examples where I would have expected *(ku)ss* to be incorporated but it is not, which suggests that this process is not obligatory. Consider (88) and (89):

- (88) *Texas kukaá aw-iaschil-ak kalakoón [bulúaka-ssee]*
 T. SOURCE 1A-buy-SS from.there downstream-GOAL
baa-laa-waa-lawi-k
 1A-go-1A-continue-DECL

'I buy horses from Texas; from there I keep going north' (Sees 7)

- (89) *baa-láawee-t [kal-ihá(a)-ssee]*
 INDEF-read-TEMP PREF-other-GOAL
baa-lasshihchi-ssaa-i-k
 INDEF-pay.attention.to-NEG-HAB-DECL

'when she was reading she didn't pay attention to anything else' (Hinne Káal 5)

In neither of these examples is there any structural barrier to incorporation, yet *(ku)ss* fails to be incorporated.

(Ku)ss also appears unincorporated before direct quotations, as (90) and (91). Note that in this context the form is *kuss* rather than the full independent form *kusseé*.

- (90) *hinne isahchiit-kaatee-sh kuss "dáa-h hii-ák*
 this his.younger.sister-DIMIN-DET GOAL go-IMPER reach-SS
chiwáa-h ... " he-hcheilu-k
 tell-IMPER say-REPORT-DECL

'then he said to his little sister, "go, reach them, tell them ...'" (Héettaa 17)

- (91) *chiláakshe hinne isáahkee-sh uá kuss "día-h*
 morning this old.man-DET his.wife GOAL do-IMPER
chila(a)-ák bilée xachii-litt-aa-h ... " he-k
 get.up-SS fire move-APPROX-CAUS-IMPER say-DECL

'in the morning this old man said to his wife, "go on, get up, stir the fire ...'" (Isshii 5)

(Ku)ss can be a prefix to the verb complex, as in (82)–(84). There are at least two possible analyses: *(ku)ss* is incorporated by its syntactic governing head, the verb; alternatively, *(ku)ss* is a derivational prefix

that combines with a verb stem to form a complex stem subcategorized for an additional (goal) object. There are difficulties with both analyses.

The difficulty encountered by the incorporation analysis is that, strictly speaking, (*ku*)*ss* combines not with its verbal head, but with the morphological word that contains the head. A pronominal subject or object or an incorporated nominal object may intervene between (*ku*)*ss* and the verb stem, as in (92)–(95). In (92) the object pronominal *dii* occurs between *ss* and the derived verb stem *aalée* ‘take’:

- (92) *ak-ammalapáshkuua-ss-dii-aa-lee-waa-chiin-moo-k*
REL-Billings-GOAL-2B-PORT-go-1A-look.for-INCL-DECL
‘we’ll look for someone to take you to Billings’

In (93) the A-set pronominal *da* occurs between *ss* and the verb stem:

- (93) *ammalapáshkuua-ss-da-lee-?*
Billings-GOAL-2A-go-INTERR
‘are you going to Billings?’

In (94) and (95) the incorporated objects *ilúka* ‘meat’ and *óosshee* ‘food’ occur between *kuss* and the verb stem:

- (94) *Joe-sh kuss-ilúk-kaali-k*
J.-DET GOAL-meat-ask.for-DECL
‘she asked Joe for some meat’
- (95) *Jesus áxpammishee-sh kúk iischiisaa ashalahó*
J. companions-DET PRO before town
kuss-óosshee-iaschin-naa-u-k
GOAL-food-buy-go-PL-DECL
‘before this, Jesus’ companions had gone to town to buy food’ (Jn 4:8)

The lexical derivation analysis faces the problem that, since *kuss* does not necessarily occur adjacent to the verb stem—as mentioned above, subject and object pronominals as well as incorporated objects can intervene—the lexicalist hypothesis that derived stems are islands not transparent to the syntax would be violated. Moreover, the fact that under some circumstances the postpositional phrase and the pronominal object may occur in either order, as in (96)–(97) (with the postpositional phrase in bold type), suggests that we are dealing with syntactic formatives rather than frozen derivations:

- (96) *ak-dii-**ammalapáshkuua-ss-aa-lee-waa-chiin-moo-k***
REL-2B-Billings-GOAL-PORT-go-1A-look.for-INCL-DECL
‘we’ll look for someone to take you to Billings’

- (97) *ak-ammalapáshkuua-ss-dii-aa-lee-waa-chiin-moo-k*
(same gloss)

If *ammalapáshkuuassaalee* 'take to Billings' were a lexically derived verb, we would not expect the object pronominal to occur between the postpositional phrase and the verb stem, as in (97).¹²

The solution that I will adopt is to treat incorporation in Crow as a process whereby a syntactic head combines with the *word* that contains the head that governs it. In the case of *(ku)ss*, the head of a postpositional phrase combines with the word that contains its governing head, the matrix verb of the clause.

The notion "word containing the verb" is not necessarily an ad hoc solution, since it is needed elsewhere in Crow grammar to account for the position of the sentence-final speech act markers. These are not strictly clause-final; rather, they occur as enclitics on the word that contains the matrix verb of the clause. An example is seen in (98):

- (98) *aashúua ilússhishi-k hinné*
his.head broken-DECL this.one
'this one's head is broken' (Héettaa 9)

Here a possessor NP, *hinné* 'this one', in construction with *aashúua* 'his head', is right-dislocated, yet the sentence-final marker remains on the word containing the verb, *ilússhishi* 'broken'.

If this solution is adopted, the rule governing incorporation of postpositions will require both a morphological and a syntactic component: in the morphology, the postposition combines with the word that contains its syntactic head.

How, then, do we account for the linear order of the incorporated postpositions in the verb complex? There are as many as three B slots in the verb template, and (as was discussed in §9.5.2) elements in these slots are free to occur in any order. Incorporated postpositions like *(ku)ss* occupy one of the B-set slots, and thus may either precede or follow a B-set pronominal, as in (96) and (97).

The order of the goal postposition and the pronominal object is not the only case where two different orderings can occur in verb structure. Another is the order of *baa* 'indefinite' relative to the pronominal object, as in (99) and (100):

¹² Crow speakers insist that both (96) and (97) are grammatical, and that the difference between them is a matter of emphasis. This suggests that there may be pragmatic factors involved.

- (99) *hinne baa-lit-waa-chiweé éhkaa-h*
 this INDEF-2B-1A-tell understand-IMPER
 'understand what I am telling you' (Jn 4:21)
- (100) *am-malee-waa-la-chiwee-sh kuttách*
 REL-1B.PL-INDEF-2A-tell-DET only
ii-wah-kalátche-ssuu-k
 INSTR-1A-believe-NEG.PL-DECL
 'we do not believe only because of what you told us' (Jn 4:42)

Chiweé 'tell' is a ditransitive verb; in (99), *baa* follows the pronominal object, while in (100) it precedes.

15.10. Incorporation of other locative postpositions

The bound postpositions *n*, *taa*, *kaa*, *htée*, *hchéé*, and *ko* can also be incorporated by the verb, though not as regularly as (*ku*)*ss*. Examples are seen in (101)–(106):

- (101) *bas-baatcháat-uua [bassáa-n]-nee-k*
 1POS-outstanding-PL first-LOC-go-DECL
 'our most outstanding one went first' (Harold II 5)
- (102) *baáhpe [héelahkee-taa]-wasaa-i-lu-k*
 rock side-PATH-run-HAB-PL-DECL
 'they run alongside the rocks' (Animals 17)
- (103) *[akú-kaa]-chissaa-(a)k duú-o-m*
 beyond-SOURCE-return-SS come-PL-DS
 'they came back from beyond [the hill]' (Isahkáa 29)
- (104) *[kuhtáa]-iisshii-o-k*
 right.there-camp-PL-DECL
 'they camped right there' (Uuwat 2)
- (105) *bassáa-ko Apsáalooke it-dúat-ak [hawahchéé]-iisshii-o*
 first-LOC Crow still-move.camp-SS here.and.there-camp-PL
 'in olden times when the Crows were still moving camp and camping here and there' (Uuwat 1)
- (106) *bii-tawée-kaashe [áapche-ko]-lee-hkuu-m*
 rock-hot-AUG throat-GOAL-go-CAUS.PL-DS
 'they put very hot rocks into his throat' (Bitáa 21)

It is not clear what the conditions are that allow or disallow incorporation of such postpositional phrases. It is possible that the con-

ditioning is at least in part lexical: e.g., *basáa* 'run' and *dawí* 'move' will incorporate *taa*, as in (107) and (108), while *ihchipúa* 'jump', *biishí* 'crawl', and *xalússhi* 'run' will not incorporate *taa*, as in the elicited sentences in (109)–(111).

- (107) [*bin-náaskee-taa*]-*waa-wasaa-(a)k baa-lée-k*
 water-shore-PATH-1A-run-SS 1A-go-DECL.
 'I went running along the shore'
- (108) [*bin-náaskee-taa*]-(*a*)-*lawi-t* *isítche-i-k*
 water-shore-PATH-CONT-move-TEMP like-HAB-DECL
 'he enjoys going along the shore'
- (109) a. [*bin-náaskee-taa*] *ihchipúa-(a)-law-ak dée-k*
 water-shore-path run-CONT-move-SS go-DECL
 'he went jumping along the shore'
- b. *[*bin-náaskee-taa*]-*ihchipua-(a)-law-ak dée-k*
 ('he went jumping along the shore')
- (110) a. [*bin-náaskee-taa*] *biis-ák húu-k*
 water-shore-PATH crawl-SS come-DECL
 'he came crawling along the shore'
- b. *[*bin-náaskee-taa*]-*wiis-ak húu-k*
 ('he came crawling along the shore')
- (111) a. [*bin-náaskee-taa*] *xalússa-a-law-ak dée-k*
 water-shore-PATH run-CONT-move-SS go-DECL
 'he went running along the shore'
- b. *[*bin-náaskee-taa*]-*xalussa-a-law-ak dée-k*
 ('he went running along the shore')

As far as incorporation of *hchée* is concerned, it may be that the factor allowing incorporation is the general tendency to incorporate non-specific, nonreferential noun phrases: both *hawahchéé* 'here and there' and *kuhchéé* 'in different places, here and there' are nonspecific in reference. *Ko* is only incorporated when it has goal semantics.

To sum up: in the case of (*ku*)*ss*, incorporation is the rule and nonincorporation is the exception, while with the other postpositions nonincorporation is the rule and incorporation is the exception. It appears that the decision whether to incorporate or not is at least to some extent under the control of the speaker.

Other postpositions that may be incorporated are *áatche* 'over' and *koosaa* 'close to, near to'. Examples with *áatche* are seen in (112) and (113):

- (112) *uhpá-ss-baa-(a)k* [*Canada áatche*]-*waa-u-k*
 upper.end-GOAL-1A.PL.GO-SS C. over-1A.PL.GO-PL-DECL
 'we went south, we went over Canada' (Harold II 9)
- (113) *hinne al-ikee-sh koot-áa-(a)k* [Ø *áatche*]-*ihchipua-(a)k*
 this REL-see-DET like-CAUS-SS over-jump-SS
 'he did it the way he had seen, he jumped over [him]' (Héettaa 19)

Incorporation with *áatche* is not obligatory, as can be seen in (114):

- (114) [*bilé áatche*] *aa-lée-lak*
 water over PORT-go-DS
 'he took him over the water' (Isshii 13)

Examples with *koosaa* are seen in (115) and (116):

- (115) *hinne baapúxtee-sh [áashe koosaa]-láa-(a)k* *ipatt-ák*
 this otter-DET river close.to-go-SS look.back-SS
 'this otter went close to the river and looked back' (Uuwat 20)
- (116) [*Apsáalooke is-aw-úua kala-koosaa*]-*wuú-o-k*
 Crow 3POS-land-PL now-close.to-1A.PL.come-PL-DECL
 'now we are coming close to the land of the Crows' (Harold II 14)

15.11. Incorporation of *ii* and *aák*

The instrumental postposition *ii* can also be incorporated:

- (117) *dáappii-ak aa-la-lóo-lak* [*aashúua*]
 2A.kill-SS PORT-2A-come-COND its.head
ii]-*húppii-lia-waa-k*
 INSTR-soup-make-1A-DECL
 'if you kill it and bring it, I will make soup with its head' (Isshii 6)
- (118) *hinne baliaxxii-sh dútt-ak* [*ko ii*]-*lia-lak*
 this driftwood-DET take-SS PRO INSTR-do-DS
 'he took this [piece of] driftwood and used it' (Isshii 26)

(The combination of *ii* plus *día* 'do, make', seen in (118), is best translated 'use'; this construction is semilexicalized.)

The morpheme analysis in (117) and (118) assumes that *ii* is incorporated in the same way that, for example, (*ku*)*ss* is. In the case of *ii*, however, the phonological evidence is not as convincing. *Ii* has a long high vowel, and in such cases it is not always easy to tell whether this morpheme is actually incorporated or is a separate word, since there is

no possibility of an accent shift. Therefore, the only difference between *ii*-VERB and *ii* VERB is the existence of (or the potential existence of) a break in the flow of speech.

In the written Crow texts that I have studied, *ii* is sometimes written as a separate word, and sometimes as a single word with the following verb. This suggests that the writers of these texts were not always sure whether to treat *ii* as a separate word or not.

There are, however, a few pieces of evidence that suggest that *ii* is often, if not always, incorporated. There are several examples in the data where *ii* immediately precedes the verb but is separated from its object, as in (119) and (120). In (119) the words *Uuwatisaa huuash ii* 'because of Big Metal' form a syntactic constituent, yet they are not adjacent in linear order, being separated by the subject of the clause, *lisaxpúatahcheaashe* 'Big Horn River':

- (119) *Uuwat-isaá huua-sh lisaxpúatahche-aashe ii*
 metal-big say.PL-DET big.horn.sheep-river INSTR
ilashi-k
 be.named-DECL

'the Big Horn River got its name because of Big Metal' (Animals 17)

In (120) the constituents of the phrase *istamnéé ii* 'with her tears' are discontinuous, and once again *ii* occurs in immediate preverbal position:

- (120) *hinne bia kúk húu-laa istamnéé b-aché ii iishuw-ak*
 this woman PRO come-SS her.tears I POS-foot INSTR wash-SS
isshiiá ii úutch-ee-k
 her.hair INSTR dry-CAUS-DECL

'as for this woman, she came and washed my feet with her tears; she dried them with her hair' (Lk 7:44)

In both (119) and (120) *ii* is attracted to its head, the verb. I take these examples as evidence supporting an incorporation analysis for *ii*.

Incorporation with *ii* can be considered an example of a looser type of incorporation in which the incorporated element does not necessarily lose its status as an independent phonological word. This type of incorporation is equivalent to what Mithun terms "composition by juxtaposition" (1984:849), and what Miner calls "loose incorporation" (1986:251–52).

Another postposition with an instrumental or comitative sense that behaves similarly to *ii* is *aák*, illustrated in (121) and (122):

- (121) [*aliúte aák*] *bii-áxpim-mi-o-k*
 arrows with 1B-compete-intend.to-PL-DECL
 'they intend to compete with me with arrows' (Isahkáa 7)
- (122) *chilée* [*hinne baakáatee-sh aák*]-*hawass-dáaw-aat-ak*
 her.husband this child-DET with-around-travel-APPROX-SS
 'her husband would travel around with this child' (Uuwat 2)

There is some evidence that *aák* is actually a verb rather than a postposition. Crow has a verb stem *eé* (ablauting to *aa* before morphemes with initial *a*) that is glossed 'have, own'; *aák* could be interpreted as the same-subject form of *eé* (i.e., *aa* + *ak*). Under this analysis, (121) could be translated 'they will have arrows, they will compete with me', and (122) could be translated 'having this child, her husband would travel around'.

While it is likely that *aák* is derived from *eé*, it seems better to treat it as a postposition synchronically, for the following reason. There are sentences in the data where *aák* and its object are discontinuous:

- (123) *éehk baakáate-lak isahké-lak* *Egypt kuss-aák-kaláa-h*
 that child-and his.mother-and E. GOAL-with-flee-IMPER
 'flee to Egypt with that child and his mother' (Mt 2:13)
- (124) *al-al-ihee küh balee-aák óol-ak daachi-h*
 REL-2A-bet PRO 1B.PL-with wait.for-SS remain-IMPER
 'wait for us with your bet' (Isahkáa 6)

In (123) the coordinate noun phrase *éehk baakáatelak isahkélak* 'that child and his mother' is the object of *aák*, and in (124) *alalíhee* 'your bet' and *aák* form a postpositional phrase. In both examples *aák* is separated from its object. If *aák* and its object formed clausal rather than phrasal constituents, such a word order would be impossible, since discontinuous word order is only possible within clauses, but not between them.

Examples (123) and (124) also provide evidence that *aák* is incorporated, since in both sentences the postposition immediately precedes the matrix verb of the clause.¹³

There are other examples, however, where *aák* immediately precedes a noun phrase, as in (125) and (126):

¹³ Note that in (123) there are actually two incorporated postpositions. *kuss* and *aák*.

- (125) [*is-uhpatté aák*] *awé dúukaax-ak áash-dia-k*
 3POS-digging.stick with earth scratch-SS river-make-DECL
 'she scratched the earth with her digging stick, she made rivers'
 (Isáahkawuattee 14)
- (126) *Alaxchiiiaahu-sh [iitché aák] daákshe dit-aát-deelee-m*
 Plenty.Coups-DET his.cane with coup hit-APPROX-pretend-DS
 'Plenty Coups pretended to count coup with his cane' (AB 82)

And the nonincorporated version of (124), as in (127), is also considered acceptable by Crow speakers:

- (127) [*al-al-ihee aák*] *balee-óol-ak daachi-h*
 REL-2A-bet with 1B.PL-wait.for-SS remain-IMPER
 'wait for us with your bet' (Isahkáa 6)

I take these data as evidence that incorporation of *aák* is not obligatory.

As was the case with *ii*, *aák* is an example of "loose incorporation," since it may retain a degree of phonological independence. Again, the high accent on the final mora of the long vowel makes it difficult to determine whether or not *aák* is fully incorporated phonologically.

It should be noted that the discontinuous word order where the postposition is separated from its object, as in (119), (120), (123), and (124), is fairly common with *ii* and *aak*. With other postpositions it is rare. An example is seen in (128):

- (128) *hinne balapáale hawát-kaatee-sh chihchaxiikáata-m koon*
 this tree one-DIMIN-DET chickadee-DET LOC
ihchisshee díá-k
 nest make-DECL
 'a chickadee made its nest in this one tree' (AB)

Here the locative postposition *koon* is separated from its object *hinne balapáale hawátkaateesh* 'this one tree' by the subject of the sentence, *chihchaxiikáatam* 'a chickadee'.

16 Independent and cosubordinate clauses

16.1. Introduction

In this chapter I treat two types of clauses: independent clauses (sentences) (§16.2), and dependent clauses marked for switch reference (cosubordinate clauses) (§§16.3–16.4). Complement clauses are discussed in §10.5, and adverbial subordinate clauses in chapter 14.

With very few exceptions, Crow clauses terminate in clause-final clitics that carry a variety of different types of information; these clitics are the glue that holds Crow discourse together. The clitics that terminate independent clauses are markers of illocutionary force (sentence type) and evidentiality, while the switch reference markers maintain reference across clauses.

16.2. Independent clauses

In order to constitute an independent utterance in Crow, a clause must terminate with one of a small closed set of final clitics. A number of different terms have been used in the literature to describe markers of this type. They can be called markers of illocutionary force; alternatively they can be referred to as speech act markers. In a more traditional grammatical framework, they are called mood markers (declarative, interrogative, optative, etc.). In describing Crow, a number of these clitics can be termed markers of evidentiality, since they indicate the source and strength of the evidence on which the speaker bases his assertion.

There is phonological evidence that the speech act markers are clitics rather than suffixes: unlike suffixes, they do not cause a stem-final short vowel preceded by a single consonant to delete, as seen in (1) and (2):

- (1) a. *duushi-sho* 'she must have eaten'

b. **duush-shó*

(2) a. *kootá-wis* 'it's probably like that'

b. **koot-bis*

The speech act markers are not invariably sentence-final: when a constituent of the sentence follows the verb—e.g., as the result of right extraposition—the final clitic remains at the end of the word that contains the verb complex, as exemplified in (3) and (4):

(3) *aashúua ilúsheechi-k hinné*
 his.head broken-DECL this.one
 'this one's head is broken' (Héettaa 9)

(4) *shóon-aa-w-ahku-w-ii-lu-? biiluk*
 where-STEM-1A-stay-1A-shall-PL-INTERR 1PRO.PL
 'as for us, where shall we stay?' (Isáahkawattee 13)

In discussing the speech-act markers, we need to distinguish between the basic paradigmatic set of clitics, which are mutually exclusive, and a small set of "attitude markers" (the term is borrowed from Sadock and Zwicky [1985]). While these markers of speaker attitude carry much the same type of information as the sentence-final clitics, they do cooccur with them, and thus cannot be treated as members of the same paradigmatic set.

There is a set of three sentence-final clitics that mark the three basic speech act types, shown in table 16.1. (Both interrogative ? and declarative *h* are often unrealized phonetically in fast speech.)

TABLE 16.1. BASIC SENTENCE-FINAL CLITICS

<i>k</i>	declarative
<i>h</i>	imperative/optative
?	interrogative

Examples are given in (5):

(5) a. *Johnny-sh búupchee-sh kuléé-k* (declarative)
 J.-DET ball-DET hold-DECL
 'Johnny is holding the ball'

b. *Johnny-sh búupchee-sh kuléé-?* (interrogative)
 J.-DET ball-DET hold-INTERR
 'is Johnny holding the ball?'

- c. *Johnny búupchee-sh kulaá-h* (imperative)
 J. ball-DET hold-IMPER
 'Johnny, hold the ball'

The markers in table 16.2 are best viewed as a subset of the declarative type. Members of this set do not cooccur with declarative *k*. The evidence for treating *k* 'declarative' as basic, and these others as subclasses of the declarative, is distributional: *k* is by far the most frequent; the others are relatively rare.

TABLE 16.2. ADDITIONAL DECLARATIVE ENCLITICS

<i>sho</i>	indirect evidential
<i>sh</i>	strong assertion
<i>wis</i>	probability
<i>dak</i>	possibility
<i>sh</i>	definite

The attitude markers that cooccur with the sentence finals are listed in table 16.3, along with the sentence-finals with which they most commonly appear.

TABLE 16.3. ATTITUDE MARKERS

<i>wi-(k)</i>	exclamative
<i>(k) huuk</i>	reportative
<i>hcheilu-(k)</i>	reportative (elevated style)
<i>(k)-bah</i>	'obviously'
<i>káwe-(h)</i>	polite imperative
<i>wa-(h)</i>	emphatic imperative
<i>i-(h)</i>	optative
<i>(k) hée(-?)</i>	tag question expecting affirmative response
<i>xxu(-?)</i>	dubitative

16.2.1. Declarative markers

In this section we examine the declarative sentence-finals (§§16.2.1.1–16.2.1.5) and the attitude markers that cooccur with the declarative (§§16.2.1.6–16.2.1.9). Basic declarative sentences terminating in *k* need no further discussion; there are numerous examples throughout the grammar.

16.2.1.1. *sho* 'indirect evidential'

This sentence-final indicates that the speaker is basing his statement on circumstantial evidence or inference. For instance, if I come into a room and see the remains of a meal, I know that someone has eaten. In that situation I might say *duushi-sho* 'she must have eaten'. The following are examples with *sho*:

- (6) *ala b-achuukée-sh* *kala-shée-sho*
 well IPOS-younger.brother-DET already-die-INDIR
kala-húu-ssee-sh *shía-k*
 already-come-NEG-DET long.time-DECL
 'well, my younger brother must have died, he has not come back for a long time' (Lowie 1960a:204.23 [orthography modernized here])
- (7) *Issaatxáúa-sh* *am-maaxpée it kulee-lit-shóo¹* *éehk*
 Two.Leggings-DET REL-powerful still have-APPROX-INDIR that
Chichúche *chichiáxxaawasua* *kuss-iiummishi-m*
 Hardin fairgrounds GOAL-curse-DS
 'Two Leggings must have still had medicine power; he put a curse on the Hardin fairgrounds' (AB 68)
- (8) *bú-o* *isítche-sho* *baakoón* *daachi-k*
 fish-PL like-INDIR peacefully remain-DECL
 'he must like fish; he stays there peacefully' (Harold II 11)

A case could be made from (6)–(8) that *sho* is actually a subordinate clause-final clitic, since the clauses marked with *sho* are immediately followed by independent clauses, and since in all three examples the two clauses are obviously connected, with the second clause presenting the evidence for the conclusion given in the first clause.

On the other hand, since it is possible to elicit examples with *sho* as independent utterances, and since its meaning is clearly evidential, I believe there is sufficient justification for treating *sho* as a sentence-final. It would not be surprising, however, if *sho* should develop into a subordinate clause marker, since the discourse frame in which it regularly occurs is identical to the frame in which a subordinate clause occurs.

¹ In this example, and in several elicited examples, *sho* appears as *shóo*, with the vowel lengthened and accented. I suggest that this is a combination of *sho* plus punctual *áhi*. *Shóo* would be the predicted outcome of this combination. (See §5.6.1 for a discussion of *áhi*.)

16.2.1.2. *sht* 'strong assertion'

When a speaker uses *sht*, he is strongly vouching for the truth of his statement; he is claiming that the statement is true beyond a doubt.

- (9) *shoo-kké-lit-dak* *balee-lasshipi-sht* *baakoón*
 where-SOURCE.PUNCT-APPROX-COND 1B.PL-surpass-SDECL calmly
kaá-(aa)la-h *haám-m-aa-w-o-mmaachi-k*
 remain-PL-IMPER destroyed-1A-CAUS-1A-PL-will-DECL
 'somehow he surpassed us; take it easy, we will destroy him' (Isahkáa 24)
- (10) *iháa-taa* *kuss* "dii-wachée-?" *he-m* *iixaxúa* "ééh
 other-DISTR.PL GOAL 2B-man-INTERR say-DS all yes
bii-wachée-sht *huua* *aa*
 1B-man-SDECL say.PL until
 "'are you a man?" he said to different ones; each of them said "yes, of course I am a man" until. . .' (Bachee 8)
- (11) *shee-láa-m* *attak* *kootá-sht* *haa-(a)k*
 say-2A-DET well like.that-SDECL say-SS
 'well, it is definitely as you say, he said' (Issii 23)
- (12) *baa-isshii-m* *é-wa-hche-sht* *aw-ákaa-sht*
 INDEF-drink-DET STEM-1A-know-SDECL 1A-see-SDECL
 'I know that he drinks; I saw him'

It is not entirely clear to me what the force of statements marked with *sht* is based on. Examples (9) and (12) suggest that it is visual evidence that supports the assertion; i.e., the speaker is vouching for the truth of the statement based on what he or she has actually seen.

16.2.1.3. *wis* 'probably, possibly, perhaps' (weak declarative)

Although I have found no tokens of *wis* in the texts, it is common in conversation and can be easily elicited. *Wis* is a weak assertion; it claims that the utterance is probably or possibly true. Once I was driving in the mountains with a friend and we were not sure which trail to take. I suggested that we turn, and he replied *ítchiwis* 'that's probably good, that's probably the right way to go':

- (13) *ítchi-wis*
 good-probably
 'it's probably good'

- (14) *kootá-wís*
 like.that-probably
 'it's probably so'

16.2.1.4. *dak* 'dubitative'

Dak is best treated as an irrealis marker that can fill a variety of syntactic slots: it occurs as a noun phrase determiner, as a complementizer, and as a conditional or temporal subordinate clause marker.

There are a few examples in my data where *dak* terminates an independent clause, as in (15):

- (15) *baaleetdák sáak-b-aa-lak dik sáak-d-aa-k*
 if what-1A-say-DUB 2PRO what-2A-say-DECL
hée-?
 AFFIRM-INTERR
 'if [I had been there, I wonder] what I would have said; as for you, what would you have said?' (Bachee 10)

(*Baaleetdák* is a lexeme that marks the antecedent ('if') clause of counterfactual conditionals (§14.5.2); in this example, most of the antecedent clause remains unexpressed.)

16.2.1.5. *sh* 'definite'

There is evidence that the definite determiner can be used as a declarative marker, as in (16) and (17). In (16) there does not seem to be any reason to interpret the first clause ending in *óowiakuuash* 'he showed it to them' as either a nominalization or a subordinate clause:

- (16) *John ak-áxp-hawass-daawe bale-ala-chiwakii-kaata-m*
 J. REL-with-around-travel DEPOS-REL-pray-DIMIN-DET
óowia-kuua-sh Akbaahawassée-ssheeh biiluh hawátee-m
 show-give-DECL Lord-VOCATIVE 1PRO.PL one-DET
balee-óowia-(a)-kuu-kawe-h
 1B.PL-show-CONT-give-POL-IMPER
 'John showed his followers a way to pray. Lord, please show us one, too'
 (Lk 11:1)

The direct quotation in (17) consists of two statements, the first concluding with *k*, the unmarked declarative clitic, and the second with *sh*:

- (17) "*ala éehk bah-kalaaxt-ée-k awáakiiwilaxpaake hillate*
 well that 1A-forget-PUNCT-DECL human.being this.kind
duushi-ssuua-sh" he-k huu-k
 eat-NEG.PL-DECL say-DECL say.PL-DECL

“well, I forgot that; humans don’t eat this kind”, she said, they say’
(Isshii 5)

The fact that the quotation ends with *sh* is evidence that this is an independent sentence rather than a subordinate nominalized clause. Thus, it seems that the definite determiner can also serve as a sentence-final clitic.²

The following sections discuss the attitude markers that can cooccur with declarative sentences.

16.2.1.6. *wí* ‘exclamative’

The clause-final element *wik* marks an exclamation or emphatic statement. (It seems likely that the final *k* of *wik* is the declarative marker, though I do not always segment this form in examples.) The exclamative violates the regular rule that a word contains a single accented syllable: words that terminate in *wik* have two accents, and the syllables between the two accents are low in pitch. Examples are seen in (18) and (19):

- (18) *sas-da-chilee-chichee-wí-k*
early-2A-get.up-seem-EXCL-DECL
‘it seems you have gotten up early!’ (Sees 26)
- (19) *al-iisshii-o-sh hii-m hileen áxpee-sh*
REL-camp-PL-DET reach-DS these companion-DET
“*shóon-na-lee-m dii-shía-wí-k*” *huu-m*
where-2A-go-DS 2B-long.time-EXCL-DECL say.PL-DS
‘he reached the camp, and these companions of his said, “wherever you went, you’ve been [gone] a long time!”’ (Bachee 8)

16.2.1.7. *huuk* ‘reportative’

I have termed the form *huuk* the ‘reportative’; it is used in telling stories to indicate that the speaker did not personally witness or experience the events he is reporting. It is transparently composed of the verb *huu* ‘they say’ plus the declarative sentence final *k*. Although this is identical to the structure employed in reporting direct speech in Crow, it is clear that what is conveyed by this construction is not anyone’s exact words; rather, the speaker is conveying to his audience that he is narrating the story as it was told to him. Hence we call it a reportative rather than a quotative. The use of *huuk* is illustrated in (20) and (21):

² The same pattern is found in Lakhota, where the definite determiners *kj* ‘generally recognized fact or personal opinion’ and *k’v* ‘strongly asserted fact’ can also function as sentence-final enclitics (Rood and Taylor 1996:475).

- (20) *shikáak-kaat-dak isahchiit-bish-kaat-dak Apsáalooke héelee-n*
 boy-DIMIN-DET his.sister-exist-DIMIN-DS Crows among-LOC
baa-ak-ee-leet-káat-uu-lak
 INDEF-REL-own-not.exist-DIMIN-PL-DS
ash-ala-kool-úu-leeta-k huu-k
 lodge-REL-be.there-PL-not.exist-DECL say.PL-DECL
 'among the Crows, it is said, there was a boy who had a younger sister;
 they were orphans, they had no home' (Héettaa 1)
- (21) "awawáta-m kúkkán da-la(a)-áhi-k" he-k huu-k
 season-DET in.turn 2A-reach-PUNCT-DECL say-DECL say.PL-DECL
 "'you have reached the next season", he said, they say' (Héettaa 11)

Example (21) provides evidence that the reportative differs from a quotative, since here a direct quotation terminating in *hek* 'he said' is followed by the reportative *huuk* 'they say'.

Huu 'reportative' may also cooccur with *sht* 'strong assertion', as illustrated in (22):

- (22) *chiwee-lák kalakoón dée-k huu-sht hinne*
 tell-DS then go-DECL say.PL-SDECL this
iisáakshee-sh
 young.man-DET
 'she told him, and then this young man went, they say' (Isshii 6)

16.2.1.8. *hcheilu* 'reportative'

The form *hcheilu* is also a reportative; it is found in traditional narratives. On the basis of its distribution we may consider it as one of the characteristic features of the elevated style. Although it appears to be composed of the indirect causative *hche* plus the habitual plural aspectual marker *ilu*, it is semantically noncompositional. (Note that reportative *huuk* [§16.2.1.7] is preceded by clause ending in declarative *k*, while *hcheilu* is only followed, not preceded, by the declarative marker.)

It is not uncommon for *huuk* and *hcheilu* to appear in the same text as reportative markers, with no apparent difference in meaning. Sentences with *hcheilu* are illustrated in (23) and (24):

- (23) *kal-am-milaxpáak-aat-uu-hcheilu-k*
 then-REL-live-APPROX-PL-REPORT-DECL
 '[that is] how they lived then' (Héettaa 5)
- (24) "baaala-kxawii-an-nia-l-uua-sh kulussáa-(a)k an-nii-wilaxpáak-uua
 REL-evil-REL-do-2A-PL-DET change-SS REL-2B-live-PL

itchi-a-(a)ala-h'' he-hcheilu-k
 good-CAUS-PL-IMPER say-REPORT-DECL

‘‘change whatever evil you do and make your way of living good,’’ he said’ (Mt 4:17)

16.2.1.9. *bah* ‘obviously’

Bah is an attitude marker that is suffixed to *k*; it conveys the notion that whatever is asserted is something that should be obvious, known, or evident to the hearer. Examples are seen in (25) and (26):

(25) *baá-(a)k ákian hawésee baa-chiwéé-woo-k-bah*
 reach-SS those the.rest 1A-tell-INCL-DECL-obviously
 ‘obviously we should go and tell the rest of them’ (Uuwat 6)

(26) ‘‘*baa-aw-ákaa-leeta-k-bah*’’ *he-k shikáakee-sh*
 INDEF-1A-see-not.exist-DECL-obviously say-DECL boy-DET
 ‘‘I didn’t see anything’’, said the boy’ (Uuwat 3)

In the stretch of discourse preceding (26), the father tells his son that if he looks over the edge of the cliff he will see some mountain sheep. The boy does so, and tells his father that he doesn’t see anything. When the father tells him to look again, the boy does so, and then says *baaawákaaleetakbah* ‘I didn’t see anything’. By adding *bah*, the boy conveys the message that what he is saying is already known to the father, and hence there should be no need to repeat it.

16.2.2. Interrogative markers

16.2.2.1. Glottal stop

The glottal stop is the final marker of an interrogative sentence, although it often remains phonetically unrealized. There are other phonetic effects that mark an interrogative: utterance-final front and back high and mid vowels may be lowered and lax to [æ] and [ɔ] respectively, and short vowels are lengthened. (Sometimes constituents are extraposed to utterance-final position, like *iahk* ‘that’ in (27), so that the glottal stop marker is not literally the last element in the sentence.)

(27) ‘‘*sáapaa-? iahk*’’ *huu-lak*
 what-INTERR that say.PL-DS
 ‘‘what is that?’’ they said’ (Héettaa 17)

Questions involve no inversions or word order shifts in Crow; interrogative words, whether arguments or modifiers, occur in situ within the clause, as in (28)–(30). In (28), *sáawi* ‘how many’ is a modifier of *baleanniile* and follows it in word order:

- (28) *baleanniile kala-sám-nia-l-uu-?*
 hour now-how.many-do-2A-PL-INTERR
 'how many hours did you work?'

In (29), *sáapa* 'what' is the object of *día*, and reflecting Crow SOV order, it precedes the verb:

- (29) *káale hinné ii-sáap-dia-laa-i-?*
 old.woman this INSTR-what-do-2A-IIAB-INTERR
 'old woman, what do you use this for?' (Bitáa 11)

(Note, moreover, that *sáawi* in (28) and *sáapa* in (29) are incorporated: *sáawi* because it is a quantifier (see §12.6), and *sáapa* because it is an indefinite nonspecific object.) In (30) the interrogative appears preceding the verb, the slot where a postpositional phrase is ordinarily found:

- (30) *itshé shóo-ssee ko dée-lit-uua-taa-?*
 its.tracks where-GOAL PRO go-APPROX-PL-appear-INTERR
 'which way do its tracks appear to go?' (Sees 32)

Two questions can be linked with the same-subject marker *ak* (semantically equivalent to coordination), as in (31):

- (31) *diileen ammúua-n-n-aa-(a)k hileen kukúve*
 2PRO down-be.at-2A-CAUS-SS these pumpkin
dée-wa-hche-lak di-lútchi-l-ii-?
 go-1A-CAUS-COND 2A-get-2A-will-INTERR
 'as for you, will you go down there and grab these pumpkins when I send them?' (Sees 12)

In (31) the coordinate conjuncts are *ammúuannaak* 'you go down' and *dilútchilii* 'you will get them'.

16.2.2.2. *hée* 'affirmative tag question'

There are two attitude markers that can cooccur with interrogatives. The first of these is *hée*, which functions as a tag question that presupposes an affirmative response, as in (32) and (33):

- (32) *"bia-iishee-k hée-? hinné" haa-(a)k*
 woman-very.much-DECL AFFIRM-INTERR this say-SS
kootáa daasaass-áa-(a)-lahku-k huuk
 right.on call.by.name-PUNCT-CONT-continue-DECL say.PL-DECL
 "'she's quite a woman, isn't she?' she said, she kept right on calling his name, they say' (Isshii 17)

- (33) *éeh aw-ákaa-k heeht shóot-b-aa-(a)k*
 yes 1A-see-DECL but how-1A-CAUS-SS
bah-kuxs-úu-k hée-?
 1A-help-PL-DECL AFFIRM-INTERR
 'yes, I saw him, but how can we help him?' (Uuwat 6)

Hée may also occur without a preceding declarative marker, as in (34):

- (34) *baaté aw-iisshum-m-ii-hée-?*
 dishes 1A-wash-1A-shall-AFFIRM-INTERR
 'shall I wash the dishes?' (affirmative response expected)

Constructions with *hée?* might be considered counterexamples to the claim that sentence-final clitics do not cooccur in the same sentence, since in examples like (32) and (33) *hée?* cooccurs with declarative *k*. The solution that I adopt is to treat this construction as two sentences, one declarative and one interrogative, that constitute a single utterance.

16.2.2.3. *xxu* 'dubitative'

The dubitative attitude marker is identical in form to the coordinating conjunction *xxo* 'or' (citation form of *xxu*). When used with an interrogative, *xxu* conveys the implication that the interrogator should know the answer to the question but does not, as in (35):

- (35) *dáash-saak-iio-xxu-?*
 her.name-what-say.PL-DUB-INTERR
 'what is her name? (I should know, but I've forgotten)'

16.2.3. Imperative markers

The morphology of imperative formation is treated in more detail in §6.6.

16.2.3.1. *h* 'unmarked imperative'

The imperative sentence-final clitic is *h* or *ah*; its usage is illustrated in (36) and (37):

- (36) *dia-h d-ishta-wishi-h kal-isshé b-ii-o-k*
 do-IMPER 2POS-eye-exist-IMPER now-top 1A-reach.PL-PL-DECL
 'go on, open your eyes, we have reached the top' (Uuwat 9)
- (37) *xachii-ssa(a)-áh-ah*
 move-NEG-PUNCT-IMPER
 'stop right now' (Uuwat 9)

The plural form of the imperative is *aalah*, as in (38) and (39):

- (38) *doos-s(s)áa-luu-(a)ala-h*
 this.side-GOAL.PUNCT-come.PL-IMPER
 'come this way' (Uuwat 6)
- (39) *dáa-h d-ihkammissaa-(a)k bacheeitch-is-baaaxuassee-o*
 go-IMPER 2A-hurry-SS chief-3POS-clothing-PL
itchi-kaashee-m aa-luú-ak hinné
 good-AUG-DET PORT-come.PL-SS this.one
ii-lia-hkaa-(aa)la-h
 INSTR-do-CAUS-PL-IMPER
 'his father said to his servants, "go, hurry, bring really fine chief's
 clothing and have this one use them' (Lk 15:22)

16.2.3.2. *káwe* 'polite imperative'

Káwe is an attitude marker that cooccurs with the imperative; it is a marker of politeness, as in (40):

- (40) *káalee-sh "dáawi-kawe-h" he-m deé-laa dii-loo-m*
 old.woman-DET go-POL-IMPER say-DS go-SS reach.PL-!.PL-DS
 'the old woman said, "please go", they went, they reached it, and to their
 surprise . . .' (Isahkkaa 14)

16.2.3.3. *wa* 'emphatic imperative'

The attitude marker *wa* generally implies that the speaker has authority over the addressee. It is an emphatic command, often used by parents and other adults in speaking to children. An example is seen in (41):

- (41) *b-ihám-mia-wuu-m d-iháw-ak daachi-wa-h*
 1A-sleep-try.to-1A.PL-DS 2A-sleep-SS remain-EMPH-IMPER
 'we're trying to sleep, go to sleep!' (Isshii 17)

16.2.3.4. *i* 'optative'

The combination of *h* with the modal verb *i* (written unhyphenated here; see §§6.3.2.2, 13.2.1) serves as a marker of the optative, as in (42)–(44):

- (42) *aaláa chiláakshi-lak hilaá daáku-oh*
 maybe tomorrow-DET then come.home-PL.OPT
 'maybe they won't come back until tomorrow' (Sees 23)
- (43) *baa-lée-lak kalatchi bakkú-ssaa-w-ihmaachi-k hiliachi-ih*
 1A-go-COND again 1A.return-NEG-1A-will-DECL think-OPT
 'if I go, he might think that I'm not coming back again' (Sees 24)
- (44) *aaláa akú-kaa bah-chissáa-u-lak aw-óochia-w-oh*
 maybe beyond-from 1A-return-PL-COND 1A-stop-1A-PL.OPT
 'maybe we'll stop on the way back' (Harold II 15)

16.3. Cosubordinate clauses

The second type of clause that can be distinguished in Crow is what I have called “cosubordinate,” following Van Valin (1985:384). These clauses cannot stand alone as complete sentences, but on the other hand they are not semantically dependent upon any other clause. They end in a switch reference marker, not in one of the sentence-final clitics, and so are not independently marked for speech act type (declarative, interrogative, imperative) or evidentiality; the speech act type of the final clause in the sentence determines that of all the cosubordinate clauses that precede it. To use Longacre’s apt metaphor, “this final clause is like an engine that pulls a string of cars” (1985:264).

Crow clause sequences of this type—often a quite lengthy series of clauses, only the last of which bears a sentence-final clitic—are an example of what Thompson and Longacre term clause-chaining. According to these authors, the characterizing feature of clause chains is that “each clause relates to the one preceding it and the one following it, but not necessarily to the final clause” (1985:176).

Examples (45) and (46) illustrate clause-chaining in Crow. The first, a passage taken from the parable of the Prodigal Son in the Gospel of Luke, consists of four cosubordinate clauses ending in the same-subject marker *ak*, followed by a clause marked with declarative *k*, followed by reportative *huuk*:

- (45) *alápasshi-ss-basaa-(a)k dáakbachee-sh hii-ák kukaaxp-ák*
 direction-GOAL-run-SS his.son-DET reach-SS embrace-SS
óhchikaap-ak iispáschi-k huu-k
 greet-SS kiss-DECL say.PL-DECL

‘he ran toward him, he reached his son, he hugged him, he greeted him, he kissed him’ (Lk 15:28)

From a discourse perspective, it is clear that all of these clauses are equally important; each contributes to the development of the narrative from *alápasshissbasaak* ‘he ran toward him’ to *iispáschik* ‘he kissed him.’ I take (45) to be a single declarative sentence.

The main narrative sequence in example (46) consists of a series of ten clauses. The first nine of these clauses are cosubordinate clauses marked with *ak*, while the last clause of the sentence is marked with declarative *k* (these clause-final markers are in bold type). The passage is a description of the traditional method of catching eagles, with each cosubordinate clause outlining a different step in the process. This text also includes three subordinate clauses that modify different cosubor-

dinate clauses; these are enclosed in brackets. (The second subordinate clause itself contains a cosubordinate clause ending in *ak*.)

- (46) *bassée* "dakaak-dutt-uua" *huua* *alachée-t* *koon* *awé*
 formerly bird-get-PL say.PL ridge-DEF there earth
xakúpp-aa-(a)k *baliiché* *shóoshiw-ii-ak* *áakee-n* *bikkée*
 hole-CAUS-SS willow lay.in.row-CAUS-SS top-LOC grass
dúusaa-(a)k *iisché* *áakee-n* *dúusaa-(a)k* *kalakoón* *hinne*
 put.down-SS rabbit top-LOC put.down-SS then this
xakúpee-sh *awúua-l-ii-ak* [*dakaake* *shilashoonn-áa-(a)k*]
 hole-DET inside-be.at-CAUS-SS bird whoosh-PUNCT-SS
duú-o-t [*ich-íassii-ak*] [*hinne* *iischée-sh*]
 come-PL-TEMP REFL-watch-SS this rabbit-DET
dútchi-wi-o-t] [*ichkíiseetii-ak* *awúú-ss-dakaa-(a)k*]
 get-would-PL-TEMP take.by.ankle-SS inside-GOAL-pull-SS
áap-uua *dúurwiil-ak* *kalakoon* *dútchi-i-lu-k*
 their.neck-PL twist-SS then get-HAB-PL-DECL

'in the old days when they would catch eagles, they would dig a hole on a ridge, lay willows over it, put grass on top, and lay a rabbit on top; then they would get into this hole, and when the eagles came flapping their wings, they would watch carefully, and when the eagles tried to get this rabbit, they would grab them by the feet, pull them inside, and twist their necks, and then they would have them' (Isshii 1)

One might question whether *(a)k* should be written in this passage, as well as in other places in this grammar. In other words, what is the evidence that surface clause-final *k* is same-subject *ak* and not declarative *k*? In most cases, the morphophonemic properties of *ak* are sufficient to resolve any ambiguity. Unlike declarative *k*, the clitic *ak* triggers *ii* to *aa* ablaut: *dúushii* 'put down' becomes *dúusaa* before *ak*. *Ak* also triggers *ee* to *ii* ablaut with causatives: *awuulée* 'situate oneself inside' becomes *awuulii* before *ak*. Thirdly, *ak* triggers *ch* → *t* and *sh* → *s* alternations: *dútchi* 'get' plus *ak* becomes *dúttak*, and *óoshii* 'dip' plus *ak* becomes *óosaak*. With some stems, to be sure, there can be genuine ambiguity: considered in isolation, *dakaak* 'pull' can represent the combination of the stem *dakaá* with either *k* or *ak*. However, since in this passage *dakaak* occurs within a series of clauses linked with *ak*, I interpret it as containing a token of *ak* rather than of *k*. The morphological properties of the two suffixes are different as well. Declarative *k* can be preceded by the plural marker *uu* (or its morphophonemic variants). A verb with same-subject *ak*, however, cannot contain the plural suffix, even if the subject's reference is understood as plural (see

§16.4.1). This can be seen in (46), in which the subjects of all the same-subject clauses are understood as plural, but none of those clauses contains the plural marker; only the final, declarative-marked, verb has a plural marker.

16.4. Switch reference

Consider, now, the following sentence:

- (47) *bía-sh iluú-hkaa-(a)k balá-m ichipshia-hche-m*
 woman-DET stand-CAUS-SS wood-DET propped.up-CAUS-DS
shée-ssee-ta-(a)k daachí-m iilaxp-awako óossh-ee-m
 die-NEG-resemble-SS remain-DS lip-lower burnt-CAUS-DS
káalichee-ta-k
 smile-resemble-DECL

'she, [Red-Eyed Woman] stood the woman, up, she, propped her, up against a stick, she, appeared to be alive, she, blackened her, lower lip, she, appeared to be smiling' (Bitáa 1)

The two protagonists in this passage, Red-Eyed Woman (a wicked "witch") and the woman she has just killed, are marked only by null pronouns (with the exception of *bíash* 'the woman', the object of the first clause). In order to enable the reader to track the referents across these clauses, I have used subscripts in the translation.

Some of the cosubordinate clauses in this text are marked with *m* rather than *ak*. The cosubordinate marker *m* 'different subject' signals a change of subject in the following clause; it marks the clauses that it connects as having noncoreferential subjects, whereas *ak* 'same subject' marks the connected clauses as having coreferential subjects. That is, the two clause-final clitics *ak* and *m* are switch reference markers: they enable the listener or reader to track shifts of subject across clauses.

Consider also (48), another passage from the same text:

- (48) *Baháa Awúua-ss-(s)hit-uua awáxaa-(a)k it*
 spring inside-GOAL-throw-PL bend.down-SS still
baa-chilasshihk-a-lahkú-lee-m kukaaxp-ák
 INDEF-think.about-CONT-continue-!-DS embrace-SS
ala-xachii-leetch-ee-m dáapxi-wia-lee-m baattáchee-sh
 REL-move-not.exist-CAUS-DS bite-try.to-!-DS rawhide-DET

chúu-ss-dee-ssaa-k³
through-GOAL-go-NEG-DECL

'Thrown-Into-the-Spring, bent down, while he, was still thinking it over, [his brother], grabbed him, he, made it impossible for him, to move, he, tried to bite him, but to his surprise [his teeth] wouldn't go through the rawhide' (Bitáa 7)

In (48) we see frequent shifts in subject with no overt indication of the change except for the alternation between *ak* and *m*.

There are other texts in which the different-subject marker is *dak* rather than *m*, as illustrated in (49):

- (49) *biléen-nee-lak isáahka-lak aashúua chiila-kaat-dak*
enter-!-DS old.man-DET his.head white-DIMIN-DET
ashkawachúu-uhpako awáat-ak "dáawi-h
side.of.lodge-south sit-SS go-IMPER
asshóo-l-ii-ah" he-lak
back.of.lodge-be.at-CAUS-IMPER say-DS
asshóo-l-ee-k huu-k
back.of.lodge-be.at-CAUS-DECL say.PL-DECL

'he, went in, and to his surprise, an old man, whose head was very white was sitting on the south side of the lodge; he, said, "go on, sit at the back of the lodge," and he, went and sat at the back of the lodge' (Isshii 5)

The difference between texts where *m* marks a change in subject and texts where *dak* performs this function is a matter of discourse genre or style: *m*, the unmarked different-subject clitic, is found in ordinary conversation, while *dak* is found in traditional narratives, which are characterized by a more formal style. Texts where *dak* marks different subject generally have *huuk* or *hcheiluk* as evidentials; this is another marker of traditional narrative.

Support for this claim that the difference between *m* and *dak* is basically a matter of style or genre, rather than morphosyntactic, is found in the fact that in texts where *dak* is the usual different-subject marker, *m* nonetheless marks change of subject within direct quotations that occur in these texts to report conversation. An example is (50), taken from the same text as (49):

- (50) "ée éehk iichiilikaashee-sh bii-lappeé-hk-uu-m
yes that elk-DET 1B-kill-CAUS-PL-DS

³ It is not clear to me what should be considered the subject of the last clause of this example; perhaps the zero pronominal subject refers to 'his teeth'.

ala-koox-b-ii-leeta-m *ii-woó-laa*
 REL-STEM-1A-approach-not.exist-DS INSTR-1A.come-SS

b-íiwaa-(a)-waakaa-(a)k *aaláa*
 1A-cry-CONT-1A.continue-SS perhaps

*am-mii-láh-kuxshi-wish-d-iih-m-aliat-ak*⁷
 REL-1B-2A-help-exist-2A-might-1A-think-SS

“yes, they are making me kill that elk, there is no way for me to get close to him, that is why I have come, I kept crying, I thought that perhaps there would be some way for you to help me” (Isshii 7)

Since *deeta* ‘not exist’ is an impersonal verb whose subject in (50) is the nominalized clause *alakooxbii*, the subjects of the first and second clauses of (50) are noncoreferential, and the different-subject marker is required; here that marker is *m* rather than *dak*, which otherwise marks change of subject in this particular text.

Note that in the third clause of (50), *iiwoólaa* ‘that is why I have come’, the same-subject marker is *laa* rather than *ak*. This is a special form that occurs only with motion verbs. That is, the choice between the same-subject markers *ak* and *laa* is morphologically governed, not stylistic. (Another example of *laa* as a same-subject marker is seen in (52) below.)

Although *m/dak* and *ak* are parallel with respect to their function as switch reference markers, they exhibit different syntactic properties. The following sections examine their syntax in more detail.

16.4.1. Clauses linked with *ak* ‘same subject’

Clauses linked with *ak* (or *laa* after motion verbs) are more tightly bound to each other than clauses linked with *m* in several respects. First, verbs in clauses with final *ak* do not mark number of subject by the plural morpheme *uu* (surface form also *o* or *u*). (They are, however, marked for person of subject, as can be seen in (53) and (54) below, which have first person subjects.) It is only the last in a series of coreferent-subject clauses (a clause, therefore, that terminates not in same-subject *ak*, but in either the different-subject marker (51) or a sentence-final clitic (52)) that allows plural *uu*.

- (51) *iisáaks-uu-m* *dáale*
 young.man-PL-DET line.of.march
itchúa-taa-(a)-laalii-o-sh *ikaa-(a)k* *paá-(a)k*
 alongside-PATH-CONT-continue-PL-DET see-SS shout-SS

ilúu-o-m

continue-PL-DS

'some young men who were going alongside the line of march saw it, they kept shouting' (Uuwat 17)

In (51) only the final verb in the series, *ilúuom* 'they continued', which is marked for change of subject, is marked plural; *ikaak* '(they) saw' and *paák* '(they) shouted' bear no plural marking, although the subject of all three verbs is the same.

- (52) *hilám-nee-m hileen iisuukaatee-sh chissáa-(a)k duú-laa*
 sleep-!-DS these mouse-DET return-SS come-SS

kalatchii baláx-ak diss-úu-k
 again sing-SS dance-PL-DECL

'he was sleeping, and what do you know!—the mice returned, they came, once again they sang and danced' (Clearash 15)

The subject of the three verbs with a same-subject marker *ak* or *laa* in (52) is understood as plural, but again none of them have plural *uu*. Although *duúlaa* 'came' in (52) uses the suppletive plural stem of the verb (the singular is *húu* 'come'), this form nonetheless does not bear the plural suffix *uu*, as it would (in the surface form *o*) if the plural stem were followed by the different-subject marker (*duú-o-m*) or the declarative marker (*duú-o-k*).

Second, a modal within a chain of clauses linked by same-subject markers can have scope over all preceding clauses in the chain, as exemplified in (53) and (54):

- (53) *bah-chikittáa-(a)k baa-wakii-wia-waa-(a)k*

1A-worship-SS 1A-ask.for-want.to-1A-SS

aw-ákaa-wuu-o-k

1A-see-1A.PL.come-PL-DECL

'we want to worship him, to ask him for things, we have come to see him' (Mt 2:2)

In (53) the modal verb *bia* 'want to, try to' has scope over both *bahchikittáak* 'we worship him' and *baawakii* 'we ask him for things'.

- (54) *basahkáale baa-láa-(a)k hawass-baa-láw-aah-aat-ak*

grandmother 1A-go-SS around-1A-travel-DISTR-APPROX-SS

boó-w-ii-k

1A.come-1A-will-DECL

'grandmother, I'm leaving, I'm going to travel around here and there, I will come back' (Isahkâa 16)

In (54), the young man is informing his grandmother of his plans, and the modal auxiliary in the last clause, *ii* 'future intent', has scope over the entire sentence.

To be sure, it can also happen that the modal clearly does not have scope over the previous clause even though the two clauses are linked by *ak*; this is exemplified in (55) and (56):

- (55) *hinne bachée-sh xalússhi-kaas-ak shikáakee-sh*
 this man-DET run-AUG-SS boy-DET
páachile-wia-lee-m awaxa(a)-áh-uu-m
 push-try.to-!-DS bend.down-PUNCT-PL-DS
 'this man ran very fast, he tried to push the boys, but to his surprise, they bent down' (Bitáa 17)

In (55), the modal *wia* 'try' applies only to the second clause ('he tried to push the boys'); in the first clause, the man actually did run fast, rather than merely trying to run fast.

- (56) *iisaxpúatahchee-o-m aw-ákaa-(a)k piisshe baa-lée-wia-waa-(a)k*
 mountain.sheep-PL-DET 1A-see-SS after 1A-go-want.to-1A-SS
kuiú-wa-hche-m
 return-1A-CAUS-DS
 'I saw some mountain sheep, I wanted to go after them, [and so] I sent [the boy] home' (Uuwat 4)

In (56) the idea is that the man saw some sheep and then wanted to go after them, not that he wanted to see some sheep. The first clause, then, cannot be included in the scope of the modal auxiliary.

Like modals, a negator can have scope over a chain of clauses bearing same-subject marking, as in (57) and (58):

- (57) *baa-awuússii-ak baa-talia-hkaa-(a)k*
 INDEF-plant-SS INDEF-spill-CAUS-SS
ee-kulushii-ssuua-htaa
 food-put.aside-NEG.PL-even.though
 'even though they do not sow or reap or lay aside provisions' (Mt 6:26)
- (58) *bale-waaaxúassee-lak bale-ammaa-luushé-lak*
 DEPOS-clothes-and DEPOS-REL-eat-and
ammaa-ii-wale-wilaxpáake baannátchiihaa-(a)k ii
 REL-INSTR-DEPOS-live worry.about-SS INSTR

d-ihchi-waailishe-a-ssaa-(aa)la-h
 2-REFL-be.upset-CAUS-NEG-PL-IMPER

'don't worry about your clothes, what you will eat, how you will live,
 don't be upset about [these things]' (Mt 6:25)

Also like modals, a negator is not required to take scope over a chain of clauses bearing same-subject marking. In (59), the negative has scope only over the final clause:

- (59) *kam-maa-xap-ák baa-xachii-ssaa-woo-k*
 now-1A-lie.down-SS 1A-move-NEG-INCL-DECL
 'let's lie down and not move [be quiet]' (Isahkää 36)

Example (58) also shows that an imperative marker may take scope over a preceding same-subject clause. (Subjects of such clauses will necessarily be understood as second person, since imperatives invariably have a second person subject.) Other examples are (60) and (61). The passage in (60) is a series of six linked clauses that are understood as imperative. The first five are marked with *ak*, and the final clause bears the imperative sentence-final *h*:

- (60) *ákian xaxúa daas-úua-lak isht-úua-lak it-úua-lak dútt-ak*
 those all head-PL-and hand-PL-and foot-PL-and take-SS
bachiishii-a-(a)k úutt-aa-(a)k dasht-ák aa-láa-(a)k éehk
 mixed-CAUS-SS dried-CAUS-SS pound-SS PORT-go-SS those
dis-bilaxpaak-uu-m dappii-o-sh
 2POS-people-PL-DET kill-PL-DET
ala-chiwakála-hk-uua kuhtáa dúusaa-h
 REL-go.back.and.forth-CAUS-PL there put.down-IMPER
 'take all their heads, hands, and feet, mix them up, dry them, pound them
 up, take them, and put them down at the place where your people who
 were killed used to go back and forth' (Isahkää 33)

Example (61) consists of four clauses linked with *ak*; again, the final imperative takes scope over all of them:

- (61) *b-aashúua dútt-ak bii-áaka-ss-xap-d-aa-(a)k*
 1POS-horns grab-SS 1B-top-GOAL-fall-2A-CAUS-SS
d-istaxpua-(a)k bii-lúuxaash-kaashi-h he-k
 2A-close.eyes-SS 1B-hang.onto-AUG-IMPER say-DECL
 'grab my horns, fall down on top of me, close your eyes, and hang on
 tight, he said' (Uuwat 8)

Same-subject *ak* can also link nominalized clauses. In (62), *ak* links two clauses that together form the object complement of a verb of perception:

- (62) [*hileen ak-iláa-(a)-latchee-sh* *baáhpe héelahkee-taa*
 these REL-talk-CONT-continue-DET rock side-PATH
chetchekkée-ta-(a)k daá-u-m] *iikukkú-k*
 click-resemble-SS go-PL-DET hear-DECL
 'he heard these ones who were talking going along clicking their hooves
 alongside the rocks' (Uuwat 6)

In (63), two clauses linked with *ak* serve as the nominalized object of the instrumental postposition *ii*:

- (63) *bih [am-mah-chikittáa-(a)k baa-wakii-wia-wee-sh] ii*
 1PRO REL-1A-worship-SS 1A-beg-want.to-1A-DET INSTR
aw-ákaa-waa-lee-wia-waa-k
 1A-see-1A-go-want.to-1A-DECL
 'as for me, I want to go to see him so that I may worship him and ask for
 things from him' (Mt 2:8)

Relative clauses may also be linked with *ak*, as in (64) and (65):

- (64) *hinne [hawáta-m uáke* *dútt-ak áxpee-sh] kalakoon*
 this one-DET his.sister.in.law take-SS marry-DET then
dáak-uu-wish-dak
 his.child-PL-exist-COND
 'if this one who took and married his sister-in-law then has children' (Lk
 20:28)
- (65) *Peelatchiwaaxpáa-sh baashial-ak [sáap-dak shipit-ak iihulé*
 Medicine.Crow-DET dream-SS what-COND black-SS its.legs
chichiáx-uu-m] Iisaxpúatahche-aashe Aliakáate
 round-PL-DET Big.Horn-valley Little
bulúaka-ssaa-lee-m *ikaa-k*
 downstream-GOAL-go-DET see-DECL
 'Medicine Crow had a dream; he saw something that was black and had
 round wheels going down the Little Big Horn valley' (AB 59)

Ak can also link subordinate adverbial clauses, as in (66):

- (66) [*Alvin piishee-n baa-láa-(a)k Taro-sh ishóochee-n*
 A. after-LOC 1A-go-SS T.-DET in.front.of-LOC

baa-lée-tj ba-lás-itchi-i-k
 1A-go-TEMP 1POS-heart-good-HAB-DECL

'when I go behind Alvin and in front of Taro, I'm happy' (Harold II 13)

Linkage by *ak* seems to be relatively rare in subordinate adverbial clauses.

We see, then, that *ak* links clauses in a cosubordinate relation in a variety of syntactic contexts, and with relatively few exceptions (to be discussed below), it requires that the subjects of the linked clauses be coreferential.

16.4.2. Clauses linked with *m* 'different subject'

Clauses linked with *m* are less closely joined than clauses linked with *ak*. As we have already seen (in the introduction to §16.4), clauses linked with *m* ordinarily have noncoreferential subjects, though there are exceptions, as we shall see below. Clauses with final *m* cannot be included in the scope of a following modal auxiliary or negative. Additionally, clauses with final *m* may be independently marked for plural number. In (67), the verb of the clause marked with *m* is plural, and the verb of the following clause is singular:

- (67) *it dii-ssáa óochi-o-m hawáta-m áxpe*
 yet reach-NEG.PUNCT stop-PL-DS one-DET companion
kuss-iláa-(a)k
 GOAL-speak-SS
 'just before they reached him they stopped, and one of them said to his companions' (Uuwat 7)

There are numerous examples where clause-final *m* clearly marks a change of subject, as in (68):

- (68) *ilakaan amnia-m biaxsée bilé dáawuu-m bacheé-m*
 over.there bank-DET under water deep-DS man-DET
koola-k
 be.there-DECL
 'over there under the bank the water is deep; there is a man there' (Bitáa 17)

In (68), *bilé* 'water' is the subject of the first clause, marked with final *m*, and *bacheém* 'a man' is the subject of the second.

In addition to its function as a switch reference marker, however, there are examples where *m* appears to mark a subordinate adverbial

clause, translated as 'when, while, because, after'. Examples are seen in (69) and (70):

- (69) [*baa-íá-m*] *baashíal-ak ishshíá al-apáale kala-ko*
 INDEF-small-SIMULT dream-SS his.hair REL-grow PREF-PRO
ii bachee-waatcháachi-immaachi-m íkaa-k
 INSTR man-outstanding-would.be-COMP see-DECL
 'when he was young he had a dream, he saw that he would be an
 outstanding man because of the growth of his hair' (AB 18)
- (70) [*ash-bacheeíchi-m*] *Apsáalooke kuxshi-kaás-ak*
 lodge-chief-SIMULT Crows help-AUG-SS
ak-baaiilápxisaahkuua-ss-dee-sh héelee-la-k
 REL-Washington-GOAL-go-DET among-be.at-DECL
 'as a reservation chief he really helped the Crows, he was among those
 who went to Washington [as tribal delegates]' (AB 75)

In (69) and (70) the clauses marked with *m* appear to be circumstantial adverbial clauses. Consider also (71) and (72):

- (71) *baa-ísáa-te baa-iláa-u-m baakáate awéelee-íaa*
 INDEF-large-DISTR.PL INDEF-speak-PL-DS children outside-PATH
iiwaanni-o-k
 play-PL-DECL
 'while the adults were meeting the children were playing outside' or 'the
 adults were meeting, and the children were playing outside'
- (72) *baap-al-ikuxxa-hk-uua-sh hii-m Iishdúuptassee-sh*
 day-REL-equal-CAUS-PL-DET arrive-DS Two.Faces-DET
al-ih-uua dakaáá-(a)k kan-nuú-o-k
 REL-bet-PL lead-SS now-come.PL-PL-DECL
 'when the time that they had agreed upon arrived, the Two Faces came
 leading their bets [the horses they were going to bet]' or 'the time that
 they had agreed upon arrived, and the Two Faces came leading their
 bets' (Isahkáa 11)

The clauses marked with *m* in (71) and (72) may plausibly be translated either as subordinate clauses or as conjoined (cosubordinate) clauses. In examples like these there does not appear to be any formal basis for distinguishing the two types; the difference is simply an artifact of the translation.

Note, however, that in (69) and (70) the subjects of the two clauses linked by *m* are coreferential—evidence that *m* does not require that the subjects of the linked clauses be noncoreferent, but merely permits it.

16.4.3. Exceptional switch reference marking

Although it is clear that *m* and *ak* function as switch reference markers in cosubordinate clauses, it is also evident that there are a number of exceptions—i.e., sentences with a change of subject after *ak*, and other sentences with coreferential subjects following *m*. Unless these counterexamples can be accounted for, the validity of the claim that Crow possesses a switch reference system can very well be called into question.

Let us therefore examine more closely the kinds of exceptions that occur. First, there are a number of examples where the subjects of clauses linked by *ak* are not coreferential, but are related to each other as possessor and possessum. Consider examples (73)–(75). In (73) the three clauses enclosed in brackets are linked with *ak*; however, the subject of the first clause is *alaxchiia* ‘his coups’, while the subject of the other two clauses is *hinne shikáakeesh* ‘this boy’, the possessor of *alaxchiia* in the first clause:

- (73) *iilápxisaahke baashial-ak [hinne shikáakee-sh alaxchiia*
 his.grandfather dream-SS this boy-DET his.coups
ah-ák bacheeitt-ak xaalia-kaati-immaachi-k] haa-(a)k
 many-SS chief-SS old-DIMIN-would.be-DECL say-SS
 ‘his grandfather had a dream, he said that this boy would count many
 coups, he would be a chief, he would live to be old’ (AB 78)

Example (74) consists of three clauses linked by *ak*. The subject of the first clause is *bashté* ‘my ‘eyes’, an inalienably possessed noun; the subject of the second is *ammaawiiukukkó* ‘how I hear things’ or ‘my hearing’, a relative clause; the subject of the third is *ammaawasshihché* ‘how I think things’ or ‘my mental powers’, another relative clause. Although the subjects of the three clauses are not coreferential, the semantic possessor is the same in all three.

- (74) *b-ashté itt-ak am-maa-w-iikukkó itt-ak*
 IPOS-eye good-SS REL-INDEF-1A-hear good-SS
am-maa-wasshihché-haa baatcháachi-k
 REL-INDEF-1A.think-even outstanding-DECL

'my eyesight is good, my hearing is good, even my mental powers are outstanding' (Uuwat 11)

In (75) the subject of the headless relative clause *baaannía* 'everything he did, all his deeds' is coreferential with the subject of the first two clauses, and all three clauses are linked with *ak*, the same-subject marker:

- (75) *xusshi-hil-ak ilápitchi-hil-ak baaan-nía xaxúa*
 swift-very-SS good.shot-very-SS REL-do all
baatcháachi-k
 outstanding-DECL
 'he was fast, he was a good shot, everything he did was outstanding'
 (Isshii 1)

These constructions may be viewed as a variety of possessor raising: although the syntactic subjects are not coreferential, they are either possessed by the same possessor or themselves stand in the possessor-possessum relationship, and are treated as "same subjects" for purposes of cross-clause reference maintenance.

In other instances the same-subject marker links clauses where the subjects, while not strictly coreferential, are in some sense parallel, or refer to the same topic, as in (76)–(78). In (76) the two clauses linked with *ak* constitute a parallel construction whereby a contrast is established between the horses belonging to the Two Faces, which were outstanding, and the horses belonging to the little boy (*eé* 'his belongings, his possessions'), which were 'not like that' (*kootássuum*):

- (76) *hinne shikáak-kaatee-sh lishdúuptassee-sh aktáa-u*
 this boy-DIMIN-DET Two.Faces-DET their.mounts-PL
baatcháat-ak ik eé kootá-ssuu-m
 outstanding-SS PRO his like.that-NEG.PL-DS
 'the Two Faces' mounts were excellent, this boy's horses were not like that' (Isahkáa 13)

In (77) the two clauses linked with *ak* are the object complement of *iikukkú* 'hear'. In the first clause, the subject of the impersonal verb *bishi* 'exist' is the incorporated noun phrase *baaxachii* 'something moving'. In the second clause, the subject is a null third person anaphor. 'they'. The parallel here is between the two types of sound that were heard—the sound of movement and the sound of voices. Moreover, the sounds are being made by the same creatures (in this example, mountain sheep).

- (77) *shia-ssáa ammuúá [baa-xachii-wis-aat-ak*
 long.time-NEG.PUNCT below INDEF-move-exist-APPROX-SS
iláa-watt-uu-m] iikukku-htaa
 talk-continue-PL-DET hear-although
 'although after a short time he heard movement and voices below him'
 (Uuwat 6)

In (78) the two clauses that we are concerned with, *ashé ahák* 'there were lots of lodges' and *bilaxpáake chiwakálaak* 'people were going back and forth', are parallel in that together they specify what the boy saw when he looked toward the old campsite:

- (78) *chiláakshé shikáakee-sh asaál-ák kuss-ikaa-lee-m ashé ah-ák*
 morning boy-DET go.out-SS GOAL-look-I-DS lodge many-SS
bilaxpáake chiwakálaa-(a)k dahkú-m
 people go.back.and.forth-SS continue-DS
 'in the morning the boy went out, he looked in the direction of [the old campsite], and to his surprise, there were lots of lodges, and people going back and forth' (Isahkáa 37)

Examples of possessor raising or parallelism of topic account for virtually all the apparent counterexamples where *ak* is involved. There are, however, a number of examples in the data where clauses linked with *m* clearly have coreferential subjects, as in (79)–(82):

- (79) *Déaxitichi-sh ashkáamne-m 1846 koottalée-sh koon*
 Pretty.Eagle-DET Piegan(?) 1846 that.time-DET then
bishi-k
 born-DECL
 'Pretty Eagle was a member of the Piegan clan; he was born in 1846'
 (AB 50)
- (80) *ihchipúa-lawe aa haawi-m óochia-k*
 jump-continue until exhausted-(?) stop-DECL
 'he kept jumping until he was exhausted, he stopped' (Uuwat 8)
- (81) *alúut-dee-hk-uu-m kalakoon bat-baa-aashtát-uu-k*
 arrow-go-CAUS-PL-(?) then RECIP-INDEF-quarrel-PL-DECL
 'they threw arrows, then they got into a fight' (Bitáa 7)
- (82) *chichiil-ak baatcháatt-aa-(a)k óolapi-ssuu-m daákaa-u-k*
 look.for-SS outstanding-CAUS-SS find-NEG.PL-(?) go.home-PL-DECL
 'they searched for him long and hard, they didn't find him, they went home' (Uuwat 4)

In (80)–(82) one might claim that the clauses marked with *m* are actually subordinate, but for sentences like (79) such an interpretation seems less plausible. At any rate, the *m* clause in (79) clearly cannot be interpreted as a ‘when’ clause.

With regard to the functions of *ak* and *m*, it may be more fruitful to consider these clitics not as markers of same vs. different syntactic subject, but as markers of “continuity” vs. “discontinuity”, or to put it another way, “close juncture” vs. “loose juncture.” Lowie characterizes *m* as an “oral comma rather than [a] full stop” (1960b:389). While this description is not couched in standard grammatical terminology, it is certainly to the point: *m* quite often occurs in a Crow text at a point where one would want to insert a comma in written English; it marks an internal break or pause within a longer sequence of clauses.

On the other hand, *ak* marks the clause it terminates as particularly closely joined to the following clause. This close relationship includes coreferentiality of subjects, with the qualifications discussed above concerning possessor raising and topical parallelism. This relationship also allows a modal auxiliary or negative to include a series of *ak*-linked clauses within its scope.

16.5. Conclusion

In the light of the above discussion, let us now attempt to present a more accurate taxonomy of Crow clause types. All Crow clauses consist of (minimally) a predicate plus a final clitic. That clitic is the final element in the word that contains the verb complex. Since Crow is a verb-final language, the clitic is normally final in the clause also, with the exception of marked constructions like right extraposition. These clitics can be divided into two classes: those that mark speech act type and evidentiality, and those that link clauses with no indication of speech act type or evidentiality.

While a Crow sentence consists minimally of a clause plus a sentence-final clitic, it may, and often does, consist of a chain of nonindependent clauses, with only the final clause in the chain coded with a speech act marker. These linked dependent clauses are the ones we have termed cosubordinate.

It is noted in §16.4.1 that cosubordinate clauses linked with *ak* are more tightly bound to each other and to the final clause in the series than clauses linked with *m*: clauses linked with *ak* have coreferential subjects, are not marked for plurality of subject, and may be under the scope of a modal or negative in the final clause in the series. On the

other hand, cosubordinate clauses with final *m* pattern morphosyntactically with adverbial subordinate clauses. We have seen that in examples like (50) above the only difference between a cosubordinate clause with final *m* and an adverbial subordinate clause with final *m* is the English translation. It appears, then, that cosubordinate clauses are not a unified morphosyntactic category. (Same-subject and different-subject constructions both can normally be translated into English as coordination ['and'], to be sure, but that need not reflect their structural status in Crow.)

On the basis, then, of their morphosyntax, we are led to posit a three-way taxonomy of clause types: (i) independent clauses, (ii) *ak*-clauses, and (iii) subordinate clauses, including cosubordinate *m*-clauses and adverbial subordinate clauses (see chapter 14).

I would further claim that the Crow switch-reference system operates on the discourse-functional level of grammar, and serves a definite discourse-pragmatic function. Since there is zero marking for third person subjects and objects, ambiguity can arise quite easily in Crow discourse. Consider (83):

- (83) *uá* \emptyset - \emptyset -*dappeé-k*
 his.wife 3B-3A-kill-DECL
 'his wife killed him' or 'he killed his wife'

This sentence is ambiguous as to whether *uá* is the subject or the object. In context, the switch-reference markers would serve to disambiguate this sentence, as in (84a)–(84b):

- (84) a. *bachée-sh húu-laa uá dappeé-k*
 man-DET come-SS his.wife kill-DECL
 'the man came and killed his wife'
 b. *bachée-sh húu-m uá dappeé-k*
 man-DET come-DS his.wife kill-DECL
 'the man came and his wife killed him'

The interplay of *ak*-clauses and *m*-clauses makes it easier for the hearer or reader to follow a conversation or discourse. Personally, I found it much easier to process Crow texts and follow Crow conversations once I discovered that there was a switch reference system in play.

The switch reference system operates at the discourse level of organization, and facilitates the maintenance of reference across clauses. From this perspective it make sense to speak of cosubordinate clauses. In the unmarked case, clauses with *m* mark change of subject, and clauses with *ak* mark continuity of subject, or at the very least,

continuity of topic. However, the cases where the coding of clauses is not fully consistent indicate that switch reference marking is not fully grammaticalized in Crow, i.e., it does not operate perfectly at the morphosyntactic level of grammar.

17 Interrogatives

17.1. Introduction

This chapter deals with the various types of interrogatives in Crow. It considers two basic types of interrogative sentences: yes-no questions (§17.2) and information questions (§17.3). The section on information questions illustrates use of question words as indefinites as well as interrogatives.

Both yes-no questions and information questions ordinarily end in a glottal stop. They have falling intonation—the same pattern found in declarative and imperative sentences. It is not unusual for final front high and mid vowels to lower to [æ], and final short vowels often lengthen. (See §16.2.2 for discussion of sentence-final interrogative markers.)

17.2. Yes-no questions

17.2.1. Neutral yes-no questions

Neutral yes-no questions have no expectation of either a positive or a negative answer.¹

- (1) *d-isáhke ashé koolá-?*
2POS-mother home be.there-INTERR
'is your mother at home?'
- (2) *it hilihtée hii-leetaa-?*
yet here arrive-not.exist-INTERR
'hasn't he arrived here yet?' (Uuwat 4)

¹ In (1) the final vowel of *koolá* is lengthened, with falling pitch; in (2) the vowel lengthening of *deeta* is reflected in the spelling.

17.2.2. Questions expecting an affirmative answer

Questions expecting an affirmative answer are formed by placing *hee?* after a sentence ending in the declarative marker *k*. It is likely that *hee* is derived from *ee* 'yes', with *h* simply reflecting aspiration of the declarative marker *k*.

- (3) *d-aliishi-k hee-?*
 2B-hungry-DECL AFFIRM-INTERR
 'you're hungry, aren't you?'
- (4) *sas-káat báalaa-immachi-k hee-?*
 soon-DIMIN winter-will.be-DECL AFFIRM-INTERR
 'winter is coming soon, isn't it?'

17.2.3. Negative questions

Negative questions are not marked formally in any special way. However, the pattern of response differs from English. In responding to a negative question like "John didn't go to Billings, did he?," the expected answer for an English speaker would be "No" ("John didn't go to Billings"). A Crow speaker would answer "yes" ("Your assumption that John didn't go to Billings is true"). The English speaker responds to the truth of the real-world situation, while the Crow speaker responds to the truth of the assertion. At the present time, usage in this regard varies, with the English pattern tending to gain ground.

17.2.4. Questions with *xxu*

Questions marked with the conjunction *xxu* 'whether, or' imply that the questioner should know the answer but does not:

- (5) *da-láak-bia-kaate dáash-saak-ii-o-xxu-?*
 2POS-child-woman-DIMIN name-what-say-PL-whether-INTERR
 'what do they call your daughter; what is your daughter's name? (I should remember but I don't)'

17.3. Information questions

Crow has a small set of stems that serve as bases for interrogative and indefinite constructions:

- (6) *sapée* 'who, whose, whoever, someone'
sáapa 'what, whatever, something'
sáak- (in *saak-ée* 'say what')

shóo 'where, when, wherever, somewhere'

sáawi 'how much, how many, some'

Sapée and *sáapa* are best treated as noun stems. When incorporated they have the syntax of noun phrases, and when independent they combine with further morphology—e.g., the plural morpheme and the determiners—as do noun stems. *Shóo* is basically adverbial, and patterns morphosyntactically with the demonstrative deictics (see chapter 4). *Sáawi* 'how much, how many' can be treated as a quantifier (see chapter 8).

All of these stems are used to form information questions. We will treat each in turn, and also give examples of their use as indefinites.

17.3.1. *sapée* 'who, whose, whoever, someone'

Sapée refers only to humans. It may serve as a predicate, as in (7), but since it may cooccur with the agent marker *n* and with the determiner *dak* to form noun phrases, it is best treated as a noun stem.

- (7) *iilawe bia-kalishte sapée-?*
 that.one.going.by woman-young who-INTERR
 'who is that young woman going by?'

- (8) *éehk sapée-aasuu-?*
 that whose-house-INTERR
 'whose house is that?'

In (8) *sapée* is a possessor noun phrase, and it is incorporated.

When *sapée* is the subject of an active verb, it takes a special agentive form *sapéen*; this is parallel to the agentive form of the discourse anaphor *kon*.

- (9) *sapéen díá-?*
 who do-INTERR
 'who did it?'
- (10) *John iichiili-m ma-kóo-sh sapéen ataali-?*
 J. horse-DET 1B-give-DET who steal-INTERR
 'who stole the horse John gave me?'

The plural form of *sapée* is *sapéeo*, as in (11):

- (11) *Henry huua-sh iilápxe sapée-o-lak dúú-o-lak*
 H. say.PL-DET his.father someone-PL-DET come.PL-PL-COMP

ikaa-k

see-DECL

'Henry's father saw some people coming' (Sees 3)

Sapée can occur as an indefinite pronoun, as in (11) and in (12)–(14):

- (12) *dii-sapée-lak huu-ák bii-áx(pa)-baa-luushi-h*
 2B-who-COND come-SS 1B-be.with-INDEF-eat-IMPER
 'come, whoever you are, and eat with me' (Bitáa 3)
- (13) *John iichíli-m ma-kóo-sh sapée-lak ataali-k*
 J. horse-DET 1B-give-DET who-DET steal-DECL
 'someone stole the horse John gave me'
- (14) *sapée-lahtaa iisaxpúatahchewishke pilakisée-m ee-lák*
 who-even.if sheep hundred-DET have-COND
 'if someone has a hundred sheep' (Lk 15:4)

Examples (10) and (13) illustrate the contrast between the interrogative and indefinite uses of *sapée*.

17.3.2. *sáapa* 'what, whatever, something'

Sáapa is a noun stem that is usually glossed 'what', 'whatever', or 'something'.

- (15) *daasé kúhkan dússhikh-ak "hinné kúk sáapa-?" he-m*
 its.heart in.turn touch-SS this PRO what-INTERR say-DS
 'next he touched [the water monster's] heart; "what's this?" he said'
 (Bitáa 13)
- (16) *"hileén sáap-uu-?" he-m*
 these what-PL-INTERR say-DS
 "'what are these?" he said' (Bitáa 13)

When *sáapa* is an object it is incorporated, since it is nonreferential, as in (17) and (18):

- (17) *sáap-balee-lia-la-hche-wia-laa-?*
 what-1B.PL-do-2A-CAUS-want-2A-INTERR
 'what do you want to have us do?' (Isáahkawuattee 3)
- (18) *káale hinné ii-sáap-dia-laa-i-?*
 old.woman this INSTR-what-do-2A-HAB-INTERR
 'old woman, what do you use this for?' (Bitáa 11)

Sáapa is the base for a number of derived forms, as in (19)–(26). *Baasáapeht* consists of *baa* ‘indefinite’ plus *sáapa* plus *ht* ‘even, even if’:

- (19) *baa-sáapee-ht buushi-i-lu-k*
 INDEF-what-even 1A.eat-HAB-PL-DECL
 ‘we eat whatever [is available]’ (Harold I 13)

Saapdak can be glossed ‘something’ or ‘whatever’:

- (20) *óo-wa-h sáap-dak baa-waa-chiláa-u-leeta-m*
 bring-EMPH-IMPER what-COND INDEF-1A-fear-PL-not.exist-DS
huu-k
 say.PL-DECL
 ‘bring it, whatever it is; we’re not afraid of anything’ (Bachee 8)

In (21), *sáapa* occurs with the approximative suffix *aachi*:

- (21) *baa-sáap-aat-deeta-k*
 INDEF-what-APPROX-not.exist-DECL
 ‘nothing happened’ (Harold III 13)

In (22), the indefinite nonspecific determiner (*ee*)*m* is suffixed to *sáapa*:

- (22) *baa-m sáapee-m dia-laa-wia-laa-lak bii-xaxúa*
 INDEF-DET what-DET do-2A-want-2A-COND 1B-all
balee-wakáa-h
 1B.PL-ask.for-IMPER
 ‘if you want to do anything at all, call upon all of us’ (Uuwat 12)

When *sáapa* occurs with the indefinite specific determiner *m*, it is glossed as ‘why?’:

- (23) *sáapa-m ashkawuú chilia-?*
 why-DET inside.house cold-INTERR
 ‘why is it cold inside?’ (Uuwat 19)
- (24) *sáapa-m d-íiwaa-(a)-laa-lawi-?*
 why-DET 2A-cry-CONT-2A-continue-INTERR
 ‘why do you keep crying?’ (Isshii 11)

Sáapa also combines with the instrumental postposition *ii*; this combination is also glossed as ‘why’:

- (25) *saap-ii hinne shikáake dáh-kuxshi-ssuu-?*
 what-INSTR this boy 2A-help-NEG.PL-INTERR
 ‘why don’t you help this boy?’ (Uuwat 10)

- (26) *óoppii-lak saap-ii balee-illii-ssaa-?*
 smoke-COND what-INSTR 1B.PL-speak-NEG-INTERR
 'if he is smoking, why didn't he tell us?' (Uuwat 19)

A verb based on *sáapa* is *sáap-hili* 'do what'. It is inflected as in table 17.1. In the first and second person forms *sáapa* combines with the verb *día* 'do, make', while in the third person forms it combines with the stem *hili* 'do', which does not exist as an independent verb in Crow, although it does in Hidatsa.

TABLE 17.1. INFLECTION OF *sáap-hili* 'DO WHAT?'

1SG	<i>sáap-dia-waa</i>	1PL	<i>sáap-dia-wuu</i>
2SG	<i>sáap-dia-laa</i>	2PL	<i>sáap-dia-luu</i>
3SG	<i>sáap-hili</i>	3PL	<i>sáap-hil-uu</i>

Examples of *sáap-hili* are seen in (27) and (28):

- (27) *sáap-dia-laa-wia-laa-?*
 what-do-2A-want.to-2A-INTERR
 'what do you want to do, what are you going to do?'
- (28) *ákian shikáake sáap-hil-uu-?*
 those boys what-do-PL-INTERR
 'what are those boys doing?'

17.3.3. *saakée* 'say what'

The verb *saak-ée* 'say what' is based on the stem *sáak* rather than *sáapa*. This stem combines with the direct causative to give the paradigm in table 17.2.

TABLE 17.2. INFLECTION OF *saakée* 'SAY WHAT?'

1SG	<i>sáak-baa</i>	1PL	<i>sáak-buu</i>
2SG	<i>sáak-daa</i>	2PL	<i>sáak-duu</i>
3SG	<i>saak-ée</i>	3PL	<i>saak-iio</i>

Saakée is illustrated in examples (29) and (30).

- (29) *sáak-daa-?*
 what-2A.say-INTERR
 'what did you say?'

- (30) *awateé-o-m saak-ii-o-lak alaaxtá-k*
 far-PL-DS what-say-PL-COND not.know-DECL
 'they were far away, and he didn't know what they said' (Uuwat 6)

17.3.4. *shóo* 'where, wherever, somewhere; when, whenever'

Shóo is an adverbial stem that can occur both as an independent word and as a base for further derivation (see also table 4.1). It forms temporal as well as locative expressions.

- (31) *dii-shóo-?*
 2B-where-INTERR
 'where are you?'
- (32) *shóo-? ba-laak-bachéé kúk*
 where-INTERR IPOS-child-man PRO
 'where is my son?' (Uuwat 4)

17.3.4.1. *shóo* with postpositional suffix

Shóo can combine with various postpositional suffixes (§15.3) to form postpositional phrases, as in (33)–(38). The element *kaa* in (33) is identical to the *kaa* in the source postposition *kukaá* 'from':

- (33) *shóo-kaa-la-loo-?*
 where-SOURCE-2A-come-INTERR
 'where did you come from?'

In (34) and (35), as in (33), locative postpositional phrases based on *shóo* (with suffixes *ss* 'goal' and *n* 'locative') are incorporated:

- (34) *shóo-ss-da-lee-wia-laa-?*
 where-GOAL-2A-go-going.to-2A-INTERR
 'where are you going to go?'
- (35) *shóo-n-ni-lutchi-kaat-d-aa-?*
 where-LOC-2A-get-DIMIN-2A-CAUS-INTERR
 'where did you get it from?' (Isahkáa 20)

In (36), *shóon* is not incorporated, since the following word is a noun rather than a verb triggering incorporation:

- (36) *shóo-n al-ih-uua dúusaa-u-lak*
 when-LOC REL-bet-PL lay.down-PL-COND
 'when they lay down their bets' (Isahkáa 10)

In (37) *shóokaa* is not incorporated as it was in (33):

- (37) *púae shóo-kaa huu-lák balee-alaaxtá-k*
 smoke where-SOURCE come-COMP 1B.PL-not.know-DECL
 'we don't know where the smoke is coming from' (Harold II 19)

(While *shóoss* and *shóon* are regularly incorporated, I am not sure of the conditions governing incorporation of *shóokaa*.) In (38), *shóo* combines with the locative suffix *htaa* 'specific location':

- (38) *shóo-htee ko koon baa-l-áas-uu-?*
 where-SPECLOC PRO there INDEF-2A-hunt-PL-INTERR
 'just where did they hunt?' (Uuwat 4)

17.3.4.2. *shóo* with *sh* and *dak*

Two other derived expressions based on *shóo* are temporal expressions, involving a contrast between past (realis) with *sh* and future (irrealis) with *dak*:

- (39) *shóo-hta-lee-sh da-lóo-?*
 when-SPECLOC-be.at-DET 2A-come-?
 'when did you come?' (past)
- (40) *shóo-htee-n-nak da-lóo-wia-laa-?*
 when-SPECLOC-be.at-DET 2A-come-going.to-2A-INTERR
 'when are you going to come?' (future)

17.3.4.3. *shóoke* 'which one'

Another interrogative derived from *shóo* is *shóoke* 'which one', as in (41):

- (41) *hileén Emily-sh is-bilaxpáake koó-u-k shóoke*
 these E.-DET 3POS-people COP-PL-DECL which.one
koó-u-lak é-la-hche-?
 COP-PL-COMP STEM-2A-know-INTERR
 'these are Emily's family. Which ones do you know?' (Emilysh 14)

17.3.4.4. *shóola* 'be where'

Shóola 'to be where' is an interrogative verb derived from *shóo*, as exemplified in (42)–(44). Its noninterrogative counterpart is *koolá* 'be there':

- (42) *d-ichúuke shóola-?*
 2POS-younger.brother be.where-INTERR
 'where is your younger brother?'

- (43) *Joe-sh shóon-nak baa-laaxtá-k*
 J.-DET be.where-COMP 1A-not.know-DECL
 'I don't know where Joe is'
- (44) *d-áasua shóo-htee-la-?*
 2POS-house where-SPECLOC-be.at-INTERR
 'just where is your house?' (Sees 6)

In (44), *shóo* combines with the locative suffix *htee* 'specific location', and the derived stem *shóohtee* combines with *la* to form an interrogative locative verb.

Shóola combines with the direct causative to form a verb meaning 'situate oneself where?', inflected as in table 17.3.

TABLE 17.3. INFLECTION OF *shóol-ee* 'SITUATE ONESELF WHERE?'

1SG	<i>shóon-maa</i>	1PL	<i>shóon-muu</i>
2SG	<i>shóon-naa</i>	2PL	<i>shóon-nuu</i>
3SG	<i>shóol-ee</i>	3PL	<i>shóol-iio</i>

An example is seen in (45):

- (45) *shóon-m-aa-w-ii-?*
 where-1A-CAUS-1A-shall-INTERR
 'where shall I situate myself, where shall I sit?'

17.3.4.5. *shóota* 'how, like what'

Shóota 'how, like what?' is another verb derived from *shóo*; it corresponds to *kootá* 'be like that'. Forms based on *shóota* are seen in (46)–(48).

- (46) *ala shóot-aachi-?*
 well how-APPROX-INTERR
 'well, how is it, how goes it, how are you?' (greeting) (Isshii 14)
- (47) *chiláakshi-lak baa-wah-chimmi-waa-lée-w-ii-k shóota-?*
 morning-DET INDEF-1A-count-1A-go-1A-will-DECL how-INTERR
 'how will it be if I go to school tomorrow?' (Emilysh 15)
- (48) *dik an-na-lásaxchi-ia shóota-?*
 2PRO REL-2A-suspect-HAB how-INTERR
 'as for you, how is your suspicion, what do you think?' (Lk 10:26)

Shóota can combine with the direct causative to form a derived verb meaning 'do how, do what', as in (49) and (50):

- (49) *heht shóot-baa-(a)k bah-kuxs-úu-k hée-?*
 but how-1A-CAUS-SS 1A-help-PL-DECL AFFIRM-INTERR
 'but how shall we help him?' (Uuwat 6)
- (50) *bii-ítchi-laa-k shóot-aat-b-aa-w-ii-?*
 1B-good-2A-CAUS-DECL. what-APPROX-1A-CAUS-1A-shall-INTERR
 'you have done good to me; what shall I do?' (Isshii 9)

Forms derived from *shóota* are also used as adverbs, as in (51)–(53):

- (51) *shóot-daht iichiil-itchi-m ak-iaschim-mishi-ihmaachi-k*
 how-even.if horse-good-DET REL-buy-exist-will-DECL
 'somehow there should be a buyer for a good horse' (Sees 4)
- (52) *shóot-daht éhche-immaachi-k*
 how-even.if know-will-DECL
 'somehow he will know' (Uuwat 6)
- (53) *bishké shóotee-ht dáakku-i-lu-k*
 dogs how-even come.back.PL-HAB-PL-DECL
 'dogs come back somehow' (Sees 28)

They are also used as noun phrases, as in (54):

- (54) *shóotee-m ko d-ee-wia-laa-lak chilassihchi-h*
 what.kind-DET PRO 2A-own-want.to-2A-DET think.about-IMPER
 'think about what kind you would like to have' (Sees 10)

Shóoteem is formed from *shóota* plus the indefinite nonspecific determiner. It is translated 'what kind'.

17.3.4.6. *shóohka* 'to what extent, to some extent'

Another interrogative built on the base *shóo* is *shóohka* 'to what extent, to some extent, how much, how long'. Examples are seen in (55)–(59):

- (55) *March 4, 1928 kootée-sh Alaxchíiaahu-sh aasúua*
 (date) like.that-DET Plenty.Coups-DET his.house
ala-koolé awé shóohka-lak Big Horn County kuú-m
 REL-be.there land some.extent-DET B. H. C. give-DS
 'on March 4, 1928, Plenty Coups gave part of the land around his house to Big Horn County' (AB 82)
- (56) *is-awé shóohka-?*
 3POS-land what.extent-INTERR
 'how much land does he have?'
- (57) *dii-wilaxpáak-shoohka-lak baa-sáapee-m dia-laa-lak*
 2B-live-what.extent-COND INDEF-what-DET do-2A-COND

dii-wah-kuxshi-w-o-mmaachi-k
2B-1A-help-1A-PL-will-DECL.

'as long as you live, we will help you in whatever you do' (AB 78)

- (58) *d-iilapxe ala-háchke shóohk-aachi-?*
2POS-father REL-tall what.extent-APPROX-INTERR
'about how tall is your father?'
- (59) *shóohkaa táxxee-m b-aliat-ak baa-aw-óoli-k*
some.extent bang-COMP 1A-think-SS INDEF-1A-wait.for-DECL.
'I thought that there would be something of a bang; I waited for it'
(Harold III 13)

The noninterrogative counterpart of *shóokha* is *kuhká* 'to that extent, that far'. It often occurs as a nominalized form *alakuhká* 'full extent', as in (60) and (61):

- (60) *Henry huua-sh áapch-ala-kuhke aa-i-ák*
H. say.PL-DET voice-REL-full.extent PORT-reach-SS
'Henry raised his voice to its full extent [shouted]' (Sees 4)
- (61) *daachéetaa bilitaachiia ala-kuhké hii-t óotchia*
sometimes moon REL-full.extent reach-TEMP night
hawátee-ht áashe kootáa aakkáphi-i-k
one-even river entirely freeze.quickly-HAB-DECL
'sometimes when there is a full moon the entire river will freeze over in one night' (Harold I 17)

17.3.5. *sáawi* 'how much, how many, some, several'

Sáawi is formally and syntactically a quantifier in that it functions as a stative verb or a noun phrase modifier (see chapter 8). Examples are seen in (62)–(64):

- (62) *éehk ilúke iwíshe sáawi-?*
that meat price how.much-INTERR
'how much does that meat cost?'
- (63) *baleanniile sáam-nak hawass-dáam-nahko aa*
hour how.many-DET around-go-continue until
'he kept wandering around for some hours until . . .' (Cleorash 7)
- (64) *baapé saaw-ée-lich-kaat-dak*
day how.many-PUNCT-APPROX-DIMIN-DET
'several days later'

Sáawi may be incorporated, as in (65) and (66):

- (65) *baleanniile kala-sám-nia-laa-?*
hour PREF-how.many-work-2A-INTERR
'how many hours did you work?'
- (66) *úuxee-m sáaw-al-akaa-?*
deer-DET how.many-2A-see-INTERR
'how many deer did you see?'

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